# 2024 WRANGLER OWNER'S MANUAL

Jeep

# **ROADSIDE ASSISTANCE**

24 HOURS, 7 DAYS A WEEK AT YOUR SERVICE. CALL 1-800-521-2779 OR VISIT CHRYSLER.RSAHELP.COM (USA) CALL 1-800-363-4869 OR VISIT FCA.ROADSIDEAID.COM (CANADA) SERVICES: Flat Tire Service, Out Of Gas/Fuel Delivery, Battery Jump Assistance, Lockout Service and Towing Service Please see the Customer Assistance chapter in this Owner's Manual for further information.

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# Jeep

This Owner's Manual illustrates and describes the operation of features and equipment that are either standard or optional on this vehicle. This manual may also include a description of features and equipment that are no longer available or were not ordered on this vehicle. Please disregard any features and equipment described in this manual that are not on this vehicle. FCA US LLC reserves the right to make changes in design and specifications, and/or make additions to or improvements to its products without imposing any obligation upon itself to install them on products previously manufactured.

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This Owner's Manual is intended to familiarize you with the important features of your vehicle. Your most up-to-date Owner's Manual, Navigation/Uconnect manuals and Warranty Booklet can be found by visiting the website on the back cover.

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| CHASSIS FLUIDS AND LUBRICANTS 347                               |

## CUSTOMER ASSISTANCE

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Dear Customer,

Congratulations on the purchase of your new Jeep® vehicle. Be assured that it represents precision workmanship, distinctive styling, and high quality.

This is a specialized utility vehicle. It can go places and perform tasks that are not intended for conventional passenger vehicles. It handles and maneuvers differently from many passenger vehicles both on-road and off-road, so take time to become familiar with your vehicle. If equipped, the two-wheel drive version of this vehicle was designed for on-road use only. It is not intended for rugged off-road driving or use in other severe conditions suited for a four-wheel drive vehicle. Before you start to drive this vehicle, read this Owner's Manual. Be sure you are familiar with all vehicle controls, particularly those used for braking, steering, transmission, and transfer case shifting. Learn how your vehicle handles on different road surfaces. Your driving skills will improve with experience. When driving off-road, or working the vehicle, don't overload the vehicle or expect the vehicle to overcome the natural laws of physics. Always observe federal, state, provincial and local laws wherever you drive. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or a collision  $\Box$  page 195.

This Owner's Manual has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your vehicle. It is supplemented by customer-oriented documents. Within this information, you will find a description of the services that FCA US LLC offers to its customers as well as the details of the terms and conditions for maintaining its validity. Please take the time to read all of these publications carefully before driving your vehicle for the first time. Following the instructions, recommendations, tips, and important warnings in this manual will help ensure safe and enjoyable operation of your vehicle.

This Owner's Manual describes all versions of this vehicle. Options and equipment dedicated to specific markets or versions are not expressly indicated in the text. Therefore, you should only consider the information that is related to the trim level, engine, and version that you have purchased. Any content introduced throughout the Owner's Information, which may or may not be applicable to your vehicle, will be identified with the wording "If Equipped" or, if applicable, refer to the "Hybrid Supplement" for additional information. All data contained in this publication are intended to help you use your vehicle in the best possible way. FCA US LLC aims at a constant improvement of the vehicles produced. For this reason, it reserves the right to make changes to the model described for technical and/or commercial reasons. For further information, contact an authorized dealer.

When it comes to service, remember that authorized dealers know your Jeep® best, have factory-trained technicians, genuine Mopar® parts, and care about your satisfaction.

# SYMBOLS KEY

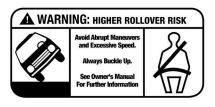
| WARNING!             | These statements apply to operating pro-<br>cedures that could result in a collision,<br>bodily injury and/or death.       |
|----------------------|--|
| CAUTION!             | These statements apply to procedures that could result in damage to your vehicle.  |
| NOTE:                | A suggestion which will improve installa-<br>tion, operation, and reliability. If not fol-<br>lowed, may result in damage. |
| TIP:                 | General ideas/solutions/suggestions on<br>easier use of the product or functionality.                                      |
| PAGE REFERENCE ARROW | Follow this reference for additional infor-<br>mation on a particular feature.   |
|                      | Supplementary and relevant information pertaining to the topic.  |

If you do not read the entire Owner's Manual, you may miss important information. Observe all Cautions and Warnings.

# **ROLLOVER WARNING**

Utility vehicles have a significantly higher rollover rate than other types of vehicles. This vehicle has a higher ground clearance and a higher center of gravity than many passenger vehicles. It is capable of performing better in a wide variety of off-road applications. Driven in an unsafe manner, all vehicles can go out of control. Because of the higher center of gravity, if this vehicle is out of control it may roll over while some other vehicles may not.

Do not attempt sharp turns, abrupt maneuvers, or other unsafe driving actions that can cause loss of vehicle control. Failure to operate this vehicle safely may result in a collision, rollover of the vehicle, and severe or fatal injury. Drive carefully.



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**Rollover Warning Label** 

Failure to use the driver and passenger seat belts provided is a major cause of severe or fatal injury. In fact, the US government notes that the universal use of existing seat belts could cut the highway death toll by 10,000 or more each year and could reduce disabling injuries by two million annually. In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Always buckle up.

# **VEHICLE MODIFICATIONS/ALTERATIONS**

#### WARNING!

Any modifications or alterations to this vehicle could seriously affect its roadworthiness and safety and may lead to a collision resulting in serious injury or death.

# SYMBOL GLOSSARY

Some car components have colored labels with symbols indicating precautions to be observed when using this component. It is important to follow all warnings when operating your vehicle. See below for the definition of each symbol  $\Box$  page 133.

#### NOTE:

Warning and Indicator lights are different based upon equipment options and current vehicle status. Some telltales are optional and may not appear.

|             | Red Warning Lights                          |
|-------------|---|
| <b>X</b> *  | Air Bag Warning Light<br>⊏> page 133        |
| BRAKE       | Brake Warning Light<br>⊏> page 134          |
| <del></del> | Battery Charge Warning Light<br>⊏> page 134 |

| Red Warning Lights   |   |  |  |
|--|---|--|--|
| 文  | Door Open Warning Light<br>⇔ page 134                               |  |  |
| <u></u>  | Electric Power Steering (EPS) Fault Warning Light $ec{1}$ page 134  |  |  |
| )+(  | Electronic Throttle Control (ETC) Warning Light<br>Spage 134        |  |  |
| ; <b>}</b>   | Engine Coolant Temperature Warning Light<br>> page 135              |  |  |
| S  | Hood Open Warning Light<br>⊏> page 135                              |  |  |
| - Charles - Char | Hybrid Electric Vehicle System Service Warning Light<br>⊏> page 135 |  |  |

|    | Red Warning Lights                               | Red Warning Lights                                      |
|----|--|---|
| ᡨᠵ | Oil Pressure Warning Light<br>⊏> page 135        | Traffic Sign Recognition (TSR) Fault Warning Light      |
|    | Oil Temperature Warning Light<br>♀ page 135      | Transmission Temperature Warning Light                  |
| ∎ی | Plug Status Fault Warning Light<br>\$\$ page 135 | Vehicle Security Warning Light                          |
| Ä  | Seat Belt Reminder Warning Light                 | Yellow Warning Lights                                   |
|    | ⊑> page 136<br>                                  | Anti-Lock Brake System (ABS) Warning Light              |
|    | ching acts open ranning ±gint<br>⊊> page 136     | Electronic Stability Control (ESC) Active Warning Light |
|    | Torque Limited Warning Light                     | □   |
|    | ⇔ page 136                                       | Electronic Stability Control (ESC) OFF Warning Light    |

|             | Yellow Warning Lights   | Yellow Wa         | arning Lights                                       |
|-------------|---|-------------------|---|
| <b>E</b> Øİ | Fuel Level Sensor Failure Warning Light<br>¢ page 137                 | Service Adap      | tive Cruise Control Warning Light<br>🖙 page 137     |
| <b>F</b> w  | Loose Fuel Filler Cap Warning Light<br>다> page 137                    | Service Forwa     | ard Collision Warning (FCW) Light<br>다) page 138    |
|             | Low Fuel Warning Light<br>Spage 137                                   | Service Sto       | pp/Start System Warning Light<br>⊏> page 138        |
|             | Low Washer Fluid Warning Light<br>\$\scrime\$ page 137                | Cruise            | Control Fault Warning Light<br>⊏> page 138          |
| ſŢ          | Engine Check/Malfunction Indicator Warning Light (MIL)<br>다> page 137 | SWAY Sway         | / Bar Fault Warning Light<br>⊏> page 138            |
| SERV<br>4WD | Service 4WD Warning Light<br>다> page 137                              | Tire Pressure Mor | nitoring System (TPMS) Warning Light<br>다) page 138 |

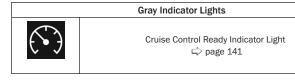
|                                       | Yellow Indicator Lights                                      | Yellow Indicator Lights  |  |
|---------------------------------------|--|--|--|
| <b>4H</b> /₄wd                        | 4WD Indicator Light<br>⊏> page 139                           | Neutral Indicator Light  |  |
| <b>4L</b> /Ł₩₽                        | 4WD Low Indicator Light                                      | OFF<br>ROAD+ Off Road+ Indicator Light   |  |
| <b>4H</b> / <b>4WD</b><br>PARE / TIME | 4WD Part Time Indicator Light<br>⇔ page 139                  | Rear Axle Lock Indicator Light   |  |
| 4 <sub>13</sub> 4<br>₩210             | Axle Locker Fault Indicator Light<br>\$\scrime{c}\$ page 139 | SWAY<br>BAR Sway Bar Indicator Light<br>\$\sigma> page 139   |  |
| S<br>OFF                              | Forward Collision Warning (FCW) OFF Indicator Light          | Green Indicator Lights   |  |
| <b>/</b> /                            | ⊑> page 139<br>Front And Rear Axle Lock Indicator Light      | Adaptive Cruise Control (ACC) Set With No Target Detected<br>Indicator Light<br>$rac{1}{4}$ page 139 |  |
| मिन                                   | ⊂> page 139  | Adaptive Cruise Control (ACC) Set With Target Indicator Light  |  |

|                     | Green Indicator Lights                              | Green Indicator Lights                              |
|---------------------|---|---|
| 4WD/4H<br>AUTO/AUTO | 4WD Auto Indicator Light                            | Stop/Start Active Indicator Light                   |
|                     | Cruise Control SET Indicator Light                  | Turn Signal Indicator Lights<br>다 page 140          |
| 丰D                  | Front Fog Indicator Light<br>Spage 140              | READY Ready To Drive Indicator Light                |
| (7)                 | Max Regeneration Indicator Light                    | White Indicator Lights                              |
| ÷DQ:                | ⇔ page 140<br>Parking/Headlights On Indicator Light | Adaptive Cruise Control (ACC) Ready Indicator Light |
|                     | ⊊> page 140   | 2WD High Indicator Light                            |
| s                   | Plug Status Indicator Light<br>다> page 140          | ⊂> page 141   |
|                     | ,             | Hill Descent Control (HDC) Indicator Light          |

1

|                    | White Indicator Lights               |  |  |
|--------------------|--------------------------------------|--|--|
|                    | Selec-Speed Control Indicator Light  |  |  |
| $(\mathbf{\cdot})$ | Cruise Control Ready Indicator Light |  |  |
| (                  | Cruise Control SET Indicator Light   |  |  |

|    | Blue Indicator Lights                    |  |  |
|----|--|--|--|
| ≣D | High Beam Indicator Light<br>⊏> page 141 |  |  |
|    |  |  |  |



# GETTING TO KNOW YOUR VEHICLE

# **HIGH VOLTAGE BATTERY**

Your vehicle is equipped with a Lithium-ion high voltage battery that is used to power the electric powertrain systems and the 12 Volt vehicle electrical system.

The high voltage battery is located under the rear seat.

Lithium-ion batteries provide the following benefits:

- Lithium-ion batteries are much lighter than other types of rechargeable batteries of the same size.
- Lithium-ion batteries hold their charge; they only lose approximately three percent of their charge per month.
- Lithium-ion batteries have no memory, which means that you do not have to completely discharge them before recharging, as with some other batteries.
- Lithium-ion batteries can be recharged and discharged thousands of times.

#### High Voltage Battery Service Disconnect

The high voltage battery service disconnect is located under the access panel, under the left side rear seat. Only a qualified service technician should access the high voltage battery service disconnect.

If your vehicle requires high voltage battery service, see an authorized dealer.

#### WARNING!

- Never try to remove the high voltage battery service disconnect. The high voltage battery service disconnect is used when your vehicle requires service by a qualified technician at an authorized dealership. Failure to follow this warning can result in electrical shock, toxic emissions, fire, and other hazards which can cause death or serious injury including severe burns, respiratory injuries, and blindness.
- The high voltage battery and battery case have no parts that you or an unqualified technician can service. Under no circumstances should you or an unqualified technician open, disassemble, penetrate, or tamper with the high voltage battery, battery case, their cables, or connectors. Damage to these components can result in electrical shock, toxic emissions, fire, and other hazards which can cause death or serious injury including severe burns, respiratory injuries, and blindness. You should take the vehicle to an authorized dealership for any service or maintenance on these high voltage components.
- The high voltage system can be hot during and after starting, and when the vehicle is shut off or charging. Be careful of both the high voltage and the high temperature. Failure to do so can result in severe burns.

#### Disposal of the High Voltage Battery

Your vehicle's high voltage battery is designed to last the life of your vehicle. See an authorized dealer for information on the disposal of the battery if it should require replacement.

#### WARNING!

Your vehicle contains a sealed Lithium-ion high voltage battery. If the battery is disposed of improperly, there is a risk of electrical shock and toxic emissions which can cause severe burns, respiratory injuries, fires, and other hazards resulting in serious injury or death.

#### **General Information**

The vehicle is also equipped with a Battery Management system that is designed to:

- Ensure safe operation
- Maximize driving range
- Maximize the life expectancy of the high voltage battery

#### NOTE:

During vehicle start up and shut down, a clicking noise may be heard from within the vehicle. When the vehicle is preparing to start, the high voltage battery contactors inside the battery are closed to make the stored electricity inside available for vehicle use. After the vehicle is shut down, the contactors open, to electrically isolate the battery from other vehicle systems. The clicking noise is the sound of these contactors as they open and close during normal operation.

#### WARNING!

In the event of a collision:

- If your vehicle is still drivable, pull off to the side of the road when safe to do so, place the transmission in the PARK position, apply the parking brake, and turn the vehicle off.
- Beware of any exposed high-voltage parts or cables. To avoid electrical shock which can result in serious injury or death, never touch wiring, connectors, and other high-voltage parts, such as the inverter unit and the Lithium-ion battery.
- Leaks or damage to the Lithium-ion battery may result in a fire and toxic emissions which can cause severe burns, respiratory injuries, and other serious injuries or death. If you discover these leaks, contact emergency services immediately. Since the fluid leak may be Lithium Manganate from the Lithium-ion battery, never touch the fluid leak inside or outside of the vehicle. If the fluid contacts your skin or eyes, wash these areas immediately with a large amount of water and obtain immediate medical attention to help avoid serious injury.
- If a fire occurs inside your vehicle, leave the vehicle as soon as possible. Only use a type ABC, BC, or C fire extinguisher that is meant for use on electrical fires. Using a small amount of water, or the incorrect fire extinguisher can result in serious injury or death from electrical shock.
- If you are not able to safely assess the vehicle due to vehicle damage, do not touch the vehicle. Leave the vehicle and contact emergency services. Advise first responders that this is a hybrid-electric vehicle.

#### WARNING!

• In the event of an accident that requires bodywork, refer to an authorized dealership.

# BATTERY CONDITIONING

In extreme temperatures, high or low, the high voltage battery may need to be conditioned, and therefore may require the vehicle to be plugged in.

If the ambient temperature is 5°F (-15°C) or below at vehicle shut down, the instrument cluster will display the message "Plug In Vehicle To Condition Battery".

If the battery temperature is below -22  $^\circ$  F (-30  $^\circ$  C), or 131  $^\circ$  F (55  $^\circ$  C) or above, the vehicle will NOT start:

- If the vehicle is plugged in at these battery temperatures, the instrument cluster will display the message "Please Leave Key In RUN – Battery Conditioning Needed".
- If the vehicle is not plugged in at these battery temperatures, the "Plug In Vehicle To Condition Battery" will be shown in the instrument cluster display.

#### NOTE:

 When the "Please Leave Key In RUN – Battery Conditioning Needed" message is displayed, keep the ignition in the RUN position for the battery to recover. Place the ignition back in the OFF position when the message disappears, and then start the vehicle. When this message is displayed, do not operate any air conditioning controls.

- Under these high or low temperatures, while the vehicle is plugged in and the ignition is in the OFF position, the vehicle may "wake up" to precondition the high voltage battery for use.
- It is recommended that the vehicle be plugged in overnight when possible to maximize the electric range of the vehicle.
- It is recommended that the high voltage battery not be exposed to direct sunlight in high temperature environments while the vehicle is OFF. This may lower the life of the battery.

The messages will only be displayed when the ignition is in the RUN position and the high voltage battery is not ready to provide propulsion power. The messages will also display if there was a failed attempt to achieve READY state when the high voltage battery cell temperatures were either too cold, or too hot.

# OFF-BOARD POWER PANEL — IF EQUIPPED

#### WARNING!

IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO RISK OF FIRE OR ELECTRIC SHOCK: This publication contains important instructions and warnings that should be followed during the use of the Off-Board Power Panel feature. Before using the Off-Board Power Panel, make sure to check the equipment for any leaks or water damage. Failure to follow these warnings and instructions can result in electrical shock and fire which can cause death or serious injury.

#### WARNING!

- The engine may idle during use to power the outlets. A running engine emits exhaust containing carbon monoxide, which can cause injury or death if inhaled. Never use in closed or confined spaces.
- Never use the Off-Board Power Panel, vehicle charging port, or 3-pin outlet power plug while in use with wet hands. Always handle the Off-Board Power Panel with dry hands. Never use or allow the Off-Board Power Panel to get wet. Do not use it in wet or damp locations, and do not submerge it in water. Only use electrical equipment with a waterproof function/ rating, or use it in a waterproof environment. Do not use in environments with rain or high humidity.
- Never insert metal objects into the Off-Board Power Panel connectors, or in the vehicle charging port, as this action can damage the connection terminals.
- Never disassemble the Off-Board Power Panel.
- Do not overload electrical extension cords.
- If there is a risk of lightning, do not use the Off-Board Power Panel system outside the vehicle.
- When the Off-Board Power Panel is in operation, the vehicle's cooling fan can operate automatically even if the vehicle is turned off. Do not put your hands near the cooling fan while it is operating.
- Never use electrical equipment that requires a continuous power supply, such as medical equipment. The power supply may be interrupted depending on the vehicle's condition.

The Off-Board Power Panel enables the transfer of energy from the vehicle to the external load (utility tools, electric toaster, dryer, or camping equipment), which is connected to a power socket on the Off-Board Power Panel.

#### NOTE:

- When the Off-Board Power Panel is plugged in, and the button is not pushed on the panel, the vehicle will not receive the needed information for providing power to the load. The vehicle will alert an "External issue detected" pop up and fault indications. When the button on the power panel is pressed, the faults will be cleared and the power transfer will happen.
- Once the Off-Board Power Panel is enabled, and the power transfer does not begin for 60 minutes, the authentication will time out. Turn on the vehicle to re-authenticate use of the Off-Board Power Panel.
- During the 60 minutes the authentication is valid, and when power transfer is not in progress, the Off-Board Power Panel may transition to sleep mode. In that case, pushing the Off-Board Power Panel button will turn the feature on and loads can be connected to draw power.
- The Off-Board Power Panel will be reset to OFF every time the Off-Board Power Panel assembly is unplugged.
- When the Off-Board Power Panel assembly is plugged in, the vehicle will not be able to achieve a drive ready state.
- When the Off-Board Power Panel is activated, re-authenticating the key will be required to achieve a drive ready state.

The Off-Board Power Panel provides maximum flexibility in powering off-board loads using the high voltage system under three modes of operation:

- 1. Hybrid Mode
  - Hybrid Mode offers a balance of efficiency and duration of power availability.
  - Press the Max Regeneration button and once illuminated Hybrid mode is activated.

- Defaults to engine-on as the mode is entered (if not already running). Runs for a minimum of five seconds then shuts off if required conditions are met
- Battery charges till minimum threshold percentage is reached, then the engine shuts off. Hybrid charging/depletion cycle commences and the engine runs as necessary and turns on/off periodically
- A low-fuel warning is displayed on the instrument cluster display, and the engine shuts off. The panel draws power from the battery until minimum SOC is reached (engine never restarts)

#### 2. Electric Mode

- Available if the SOC is above the minimum threshold
- O High voltage battery provides power until depleted, then the panel deactivates
- O Engine never turns on

#### 3. Generator Mode

- Engine runs to charge the battery and power the system (run post-start required)
- Engine runs, while charging the battery, until a low fuel-level is reached or the battery SOC is maxed
- Low-fuel warning displayed on the instrument cluster display or the battery SOC is reached.
   The engine shuts off and the panel draws power from the battery until the minimum SOC is reached if engine never restarts

#### NOTE:

If the off-board power panel is in Hybrid Mode and the Max Regeneration button is pressed for a second time, the off-board power panel will default to Generator Mode if the engine is ON and running. The off-board power panel will default to Electric Mode if the battery SOC is above the minimum threshold plus the engine is off. If the engine is off and the SOC is below the minimum threshold the system will fault and will turn off.

#### CAUTION!

#### IMPORTANT SAFETY INSTRUCTONS PERTAINING TO POWER PANEL USE AND OPERATION: It is important to follow these instructions and cautions of the Off-Board Power Panel's overall use and operation. Failure to follow these instructions may result in damage

to the Off-Board Power Panel, vehicle, and/or appliance.

- Never leave electrical equipment/appliances connected and operating on the Off-Board Power Panel unattended.
- It is recommended to plug electrical equipment/ appliances directly into the Off-Board Power Panel.
- Never use high power electrical equipment/ appliances such as an air conditioner, washing machine, or dryer.
- This product contains lithium-ion battery and should be disposed appropriately to avoid fire and environmental impact. Do not dispose with regular household garbage.

The energy to support the loads are provided by the high voltage battery in the vehicle. The inverter in the vehicle will convert the direct current (DC) power from the high voltage battery to alternating current (AC) power to support the loads.

The Off-Board Power Panel has an internal rechargeable battery that will start the Off-Board communications with your electric vehicle. Should the internal battery be low/discharged, you will need to use an external USB Type C power source to start up the Off-Board Power Panel.

#### NOTE:

Ensure you have a Type C USB power source or external adapter that can provide 5V/2A to the Type C connector.

#### **Battery Check Mode**

In this procedure, the Off-Board Power Panel cannot be connected to the vehicle:

- Push the AC ON button on the power panel for one second and release to start up the Off-Board Power Panel internal power. The power indicator will turn ON then OFF.
- Push the AC ON button again one time and release. The ignition indicator will flash one time and continue to flash three times to indicate there is sufficient power to start the Off-Board Power Panel.

#### NOTE:

If it does not flash three times, it means the internal battery is low. Use an external Type C, or use a Type C USB power source to charge the internal battery.

#### Normal Operation Mode

#### NOTE:

The vehicle has to be on in order to enable this feature.

- 1. Connect the Off-Board Power Panel electric plug to your electric vehicle.
- 2. Push the AC ON button one time and release. The Off-Board Power Panel power indicator will turn ON then OFF, and the vehicle indicator light will flash.

- Engage your vehicle's V2L function to provide AC power to the Off-Board Power Panel. Once enabled, this will permit the use of the Off-Board Power Panel to be used with your vehicle.
- 4. The Off-Board Power Panel is ready to provide AC power to the AC outlets.

#### NOTE:

Ensure your electrical equipment/appliance's power switch is in the OFF position before inserting the plug into the power outlet of the Off-Board Power Panel.

#### CAUTION!

Power off and disconnect and Off-Board Power Panel if any electrical equipment/appliance has a strange odor, or begins to smoke while they are powered ON or operating.

To disable the AC power to the AC outlets, push the AC ON button one time and release. The AC power to the outlets will be disconnected.

#### NOTE:

The vehicle will turn off the V2L function and stop providing power to the Off-Board Power Panel power.

#### **Resetting The Off-Board Power Panel**

- 1. If the ground fault circuit interrupter (GFCI) is triggered, it will shut off AC power into latch mode and the power LED will flash for 20 seconds.
- 2. To reset the V2L, unplug the EV coupler for 10 seconds and plug it in again.
- 3. Push the AC ON button for the control pilot signal to communicate with the vehicle to restart and Off-Board Power Panel power on process.

# REGENERATIVE BRAKING SYSTEM (RBS)

Your vehicle has a RBS. The RBS replenishes the vehicle's high voltage battery during deceleration, and is particularly useful in stop-and-go city traffic. The electric motors, which propel the vehicle forward, can operate as generators when braking. The RBS recharges the high voltage battery under certain braking conditions by recapturing energy that would otherwise be lost while braking. The electric power that is generated goes back into the high voltage battery for later use, for example when acceleration is desired.

The RBS uses conventional hydraulic friction brakes, regenerative braking, or a combination to slow the vehicle. If the system detects slippery conditions while braking, ONLY friction is used to slow the vehicle. The RBS can result in extended life of the hydraulic service brakes; however, all inspection, scheduled maintenance, and service intervals for the vehicle service brakes must be followed.

#### Max Regeneration

Max Regeneration is a supplemental feature of the RBS. When activated, it will use the RBS to help slow the vehicle when the driver releases the accelerator pedal. This feature allows you to moderately reduce driving speed without pressing the brake pedal. It is always necessary to apply the brake pedal to bring the vehicle to a complete stop.



#### **Max Regeneration Button**

This feature can be activated by pressing the Max Regeneration button, below the radio screen.

#### NOTE:

The Max Regeneration feature will remain on once selected, even after the vehicle is restarted.

# E-SELECT MODE

This system allows the driver to select different modes by pushing the following buttons located below the headlight switch.



E-Select Mode Switch

- Hybrid: Depletes electric range first, then gas range.
  - Automatically switches between using gas and battery for greatest efficiency and performance.
  - Best HVAC and acceleration performance.
  - O Default Mode.
- Electric: Prevents the engine from running, unless you absolutely need it.
  - Acceleration and heating performance may be degraded.
  - Engine will switch on during a Wide Open Throttle (WOT) event, or if cruise control requires it.
  - Vehicle will automatically switch to Hybrid mode upon reaching 0% State Of Charge (SOC) or due to system needs.
  - Not allowed with manual gate operation unless in 4WD Low and Selec-Speed Control (SSC) is active.
- e-Save: Engine only. Saves the current SOC/Electric range for later.
  - SOC/Electric range may increase, but will not decrease under most driving conditions. Under heavy load, such as while pulling a trailer, SOC may decrease.
  - $^{\bigcirc}\,$  Engine may turn off at a stop.

# **HIGH VOLTAGE CHARGING OPERATION**

# SAE J1772 CHARGING INLET

Your vehicle uses an industry standard SAE J1772 charge inlet (vehicle charge inlet) for both AC Level 1 (120 V) and AC Level 2 (240 V) charging.



**Vehicle Charge Inlet Location** 

Open the charge port door by pushing near the rear outer edge of the door, near the center to unlatch. To close the charge port door, engage the door latch by pushing on the rear outer edge near the center.

# AC LEVEL 1 CHARGING (120 VOLT, 12 AMP)

Your vehicle is equipped with a 120 Volt AC, SAE J1772 Level 1 Electric Vehicle Supply Equipment (EVSE), also referred to as a Portable Charging Cordset (EVSE). AC Level 1 charging requires a conventional NEMA 5-15R 120 Volt AC grounded wall outlet along with the Portable Charging Cordset (EVSE) provided with the vehicle.

#### WARNING!

Please be sure to follow the warnings below. Failure to do so may result in serious injury or death

- Discontinue use of the Portable Charging Cordset (EVSE) immediately if the plug or outlet becomes hot to the touch or if you notice any unusual odors.
- Do not use the Portable Charging Cordset (EVSE) in building structures that use fuse-based circuit protection. Use only with electrical circuits protected by circuit breakers.
- Do not use the Portable Charging Cordset (EVSE) if other devices are plugged into the same circuit.
- When unplugging the Portable Charging Cordset (EVSE) from the wall outlet, be sure to pull by the plug, and not the cord.
- Do not pull, twist, bend, step on or drag the cord of the Portable Charging Cordset (EVSE).
- Stop using the Portable Charging Cordset (EVSE) immediately if charging stops before it's completed when the plug or cord is moved or adjusted.
- Do not use the Portable Charging Cordset (EVSE) if the plug has a loose connection with the wall outlet or if the wall outlet is damaged or rusted.
- If in any doubt about the wall outlet and/or circuit, contact a qualified electrician.
- Do not use if a malfunction occurs or if the Portable Charging Cordset (EVSE) has been damaged in any manner. It is recommended that you contact an authorized dealership.

(Continued)

#### WARNING!

 There are no user serviceable parts inside the Portable Charging Cordset (EVSE). Do not attempt to repair or service the Portable Charging Cordset (EVSE), doing so will void the New Vehicle Warranty.



Portable Charging Cordset (EVSE)

#### WARNING!

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK: Electrical shock, fire, and other serious hazards can occur if the Portable Charging Cordset (EVSE) is not used properly. This vehicle uses a high voltage current. Failure to follow the proper charging instructions in this publication can cause serious injury or death. There are no serviceable parts in the Portable Charging Cordset (EVSE). Do not open, disassemble, penetrate, or tamper with the

(Continued)

#### WARNING!

Portable Charging Cordset (EVSE). Failure to follow this warning can result in electrical shock, fire, property damage, and death or serious injury.

The Portable Charging Cordset (EVSE) is stored in the rear cargo area below the load floor. To access this area, lift up the cargo strap of the load floor cover, and remove the Portable Charging Cordset (EVSE) from the storage bag in the bin below.

#### Moving, Transporting, And Storage Instructions

After use, the Portable Charging Cordset (EVSE) should be placed in the storage bag and put back in the cargo storage area. If the Portable Charging Cordset (EVSE) will be left outside the vehicle, be sure to protect the device's connection end from moisture, dirt, and debris accumulation and contamination.



Load Floor Cover

#### NOTE:

The Portable Charging Cordset (EVSE) is used for AC Level 1 charging only.

#### WARNING!

#### IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK: This publica-

tion contains important instructions and warnings that should be followed during charging operations. Failure to follow these warnings and instructions can result in electrical shock and fire which can cause death or serious injury.

- Read this entire publication before using the Portable Charging Cordset (EVSE).
- Do not put fingers or objects into the Portable Charging Cordset (EVSE) connector.
- Do not use the Portable Charging Cordset (EVSE) if the flexible power cord is frayed, broken, has cracked insulation, or any other signs of damage.
- Do not use the Portable Charging Cordset (EVSE) if the enclosure or the connector is broken, cracked, open, or shows any other indication of damage.
- Do not use the Portable Charging Cordset (EVSE) with an extension cord or plug adapters.
- The Portable Charging Cordset (EVSE) may attempt to reset and run after a power interruption.
- There are no user serviceable parts inside the Portable Charging Cordset (EVSE). Do not attempt to repair or service the Portable Charging Cordset (EVSE) yourself – personal injury may result.
- When using a charging station with the Portable Charging Cordset (EVSE) attached, ensure the charging station's cable is not visibly damaged before plugging into the vehicle.

(Continued)

#### WARNING!

- Do not allow children to operate the Portable Charging Cordset (EVSE). Adult supervision is mandatory when children are in proximity to the charge station that is in use.
- Do not use a charge station or vehicle charge inlet that is worn or damaged with the AC Level 2 charging cable. Plugging into worn or damaged receptacles may cause damage to the Portable Charging Cordset (EVSE) and vehicle.
- Ensure that the Portable Charging Cordset (EVSE) is always stored in a safe place. Do not expose the EVSE J1772 vehicle connector to rain or wet conditions. Avoid allowing water or other liquids to pour or drip onto the vehicle connection end of the J1772 EVSE connector. If water penetrates the electrical device, the risk of electrical shock increases. Ensure that all plugs and cables are free of moisture before using the Portable Charging Cordset (EVSE).
- In a collision, a loose Portable Charging Cordset (EVSE) in the vehicle could cause injury. It could fly around in a sudden stop and strike someone in the vehicle. Do not store the Portable Charging Cordset (EVSE) on the cargo load floor, or in the passenger compartment.
- The Portable Charging Cordset (EVSE) has been tested for use in temperatures ranging from -40°F to 122°F (-40°C to 50°C).
- The Portable Charging Cordset (EVSE) should be stored at temperatures between -40°F and 176°F (-40°C and 80°C).
- SAVE THESE INSTRUCTIONS.

## Portable Charging Cordset (EVSE)

The Portable Charging Cordset (EVSE) is compliant with SAE J1772, and applicable for use with vehicles fitted with standard SAE J1772 charge inlets. The Portable Charging Cordset (EVSE) includes:

- A Charge Connector
- A NEMA 6 rated enclosure with a Charge Current Interrupt Device (CCID) with status indicator display
- An AC Power Cord with a NEMA 5–15P right angle plug
- An indoor/outdoor charge cable, EV-rated
- A Status Indicator Display



#### Portable Charging Cordset (EVSE)

- 1 Charge Connector
- 2 Charge Cable
- 3 AC Plug
- 4 EVSE Enclosure
- 5 Status Indicator Display

### **Grounding Instructions**

#### For A Grounded, Cord-Connected Product:

The Portable Charging Cordset (EVSE) must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for an electric current to reduce the risk of electric shock. The Portable Charging Cordset (EVSE) is equipped with a cord having an equipmentgrounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

#### WARNING!

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK: Do not use the Portable Charging Cordset (EVSE) on electrical circuits with two-prong outlets; use with improper outlets could result in electric shock, fire, property damage, and death or serious injury. Check with a qualified electrician if you are in doubt as to whether the wall outlet is properly grounded. Do not modify the plug prongs provided with the Portable Charging Corset (EVSE) – if it does not fit the outlet, you must have a proper outlet installed by a qualified electrician.

## Portable Charging Cordset (EVSE) Installation And Operating Instructions

 Always insert the AC plug prongs of the Portable Charging Cordset (EVSE) into a 15 A, or 20 A, 120 VAC, 60 Hz, grounded wall outlet first. Do not use an extension cord, outlet/plug adapter, or a worn outlet. The Portable Charging Cordset (EVSE) will not operate safely unless it is plugged directly into the wall outlet.

#### NOTE:

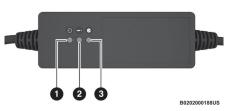
The Portable Charging Cordset (EVSE) should be plugged into a dedicated circuit, not a circuit shared with other devices drawing electricity on the circuit.



#### **AC Plug And Wall Receptacle**

#### WARNING!

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK: Do not use the Portable Charging Cordset (EVSE) on electrical circuits with two-prong outlets; use with improper outlets could result in electric shock, fire, property damage, and death or serious injury. Check with a qualified electrician if you are in doubt as to whether the wall outlet is properly grounded. Do not modify the plug prongs provided with the Portable Charging Corset (EVSE) – if it does not fit the outlet, you must have a proper outlet installed by a qualified electrician. 2. Check to see if the Portable Charging Cordset (EVSE) is ready to charge by reviewing the indicator lights.



#### Portable Charging Cordset (EVSE) Indicator Lights

- 1 AC Power Indicator Light
- 2 Fault Indicator Light
- 3 Check Outlet Indicator Light
- 3. If the Portable Charging Cordset (EVSE) is ready to charge, ensure the vehicle is in PARK, and then connect the charge connector to the vehicle's charge inlet. You will hear a "click" when the charge connector is inserted correctly and coupled with the vehicle's charge inlet.



#### Inserting The Charge Connector Into The Vehicle Charge Inlet

4. When the vehicle commences charging, the green indicator light will turn on.

#### NOTE:

The vehicle should start charging automatically. If not, please check the following:

- Wall Outlet Check whether the wall outlet is functional (no power outage) and/or plug the Portable Charging Cordset (EVSE) into a different wall outlet.
- Charging Schedule Check whether the charging schedules have been enabled. If enabled, check that you are within the scheduled time and day of the week. If a charging schedule has been enabled in the vehicle, and it is outside the time and day of the week, you may override the schedule for this charging event by plugging in the charge connector, unplugging it, and then

plugging it back into the vehicle charge inlet. Complete the double plug sequence within 10 seconds for it to override the set schedule.

- Hood Ajar Check whether the hood is open.
   Charging is disabled while the hood is open, and will resume when the hood closes.
- To stop the charging process, disconnect the Portable Charging Cordset (EVSE) from the vehicle first, and then from the wall outlet. To disengage the vehicle coupler, push the button on the connector.



#### Removing The Charge Connector From The Vehicle Charge Inlet

6. Close the inlet door when a Portable Charging Cordset (EVSE) is not connected to the vehicle.

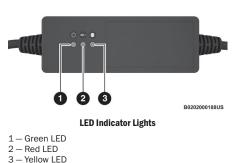
#### NOTE:

It is good practice to keep the ignition in the OFF position while conducting Level 1 charging. This minimizes any additional vehicle loads the Portable Charging Cordset (EVSE) has to support. The additional electrical loads will extend the high voltage battery charging time.

# Troubleshooting Using The Status Indicator Display

If the vehicle is not charging properly, consult the status indicator lights.

The **Green LED** signals correct operation of the system. The **Red LED** signals a failure in the charging system. The **Yellow LED** signals a failure with the outlet.



Any faults in charging are displayed by the LEDs, either steady or flashing, located on the status indicator display of the Portable Charging Cordset (EVSE). Refer to the following troubleshooting table.

|           | Portable Charging Cordset (EVSE) Charging System Failure Troubleshooting   |                            |   |   |  |
|-----------|--|----------------------------|---|---|--|
| Green LED | Red LED  | LED Yellow LED Description |   | Action/Consequences   |  |
| OFF       | OFF  | OFF                        | Portable Charging Cordset (EVSE) not connected to the<br>domestic charging outlet or power failure in the domestic<br>power supply mains. |   |  |
| ON        | OFF OFF OFF There are no faults in the domestic power supply mains, so the Portable Charging Cordset (EVSE) can be connected to the charge inlet on the vehicle. |                            |   |   |  |
| ON        | ON (Flashing)  | ON                         | Overheating at the charging outlet of the domestic power supply mains.  | When the normal temperature is reached, the system will make a new charge attempt at a lower current level. |  |
| ON        | OFF  | ON (Flashing)              | Charging to a lower current level due to overheating of the charging outlet of the domestic power supply mains.                           |   |  |

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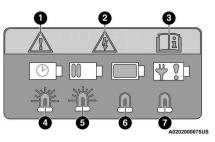
|               | Portable Charging Cordset (EVSE) Charging System Failure Troubleshooting |               |   |  |  |
|---------------|--|---------------|---|--|--|
| Green LED     | Red LED  | Yellow LED    | Description   | Action/Consequences  |  |
| ON            | ON   | ON (Flashing) | Overheating at the charging outlet of the domestic power supply mains.  | Carefully disconnect the Portable Charging Cordset (EVSE) from both the vehicle and power outlet and wait for the plug and outlet to return to normal temperatures. Then, reconnect the Portable Charging Cordset (EVSE) to the power outlet and vehicle and charge again. Contact a qualified electrician in case of a new anomaly. |  |
| ON            | ON (2 Blinks)  | ON (2 Blinks) | Lack of grounding cable in the charging outlet of the domes-<br>tic power supply mains.   | The system will make a new charge attempt after 30 seconds (6 attempts in total).  |  |
| ON            | ON   | ON (2 Blinks) | Lack of grounding cable in the charging outlet of the domes-<br>tic power supply mains.   | The new charge attempt failed. Disconnect the Portable<br>Charging Cordset (EVSE) from the vehicle and the outlet<br>and reconnect it, then try to charge again.<br>Contact a qualified electrician in case of a new anomaly.  |  |
| ON (Flashing) | OFF  | OFF           | Domestic mains power incorrectly supplied.  | The system will make a new charge attempt after 30 sec-<br>onds (6 attempts total).<br>If the fault persists, disconnect the Portable Charging Cord-<br>set (EVSE) from the vehicle and the outlet and reconnect it,<br>then try to charge again.<br>Contact a qualified electrician in case of a new anomaly.                       |  |
| ON            | ON (Flashing)  | OFF           | Charge Current Interrupt Device (CCID) fault trip over one sec-<br>ond after relay closure. Portable Charging Cordset (EVSE) retry-<br>ing to charge the vehicle. | The system will make a new charge attempt after 30 sec-<br>onds (6 attempts in total).   |  |
| ON            | ON   | OFF           | Charge Current Interrupt Device (CCID) fault, Retry<br>Exhausted or Retry is disallowed if trips within one second<br>of relay closure.                           | The new charge attempt failed. Disconnect the Portable<br>Charging Cordset (EVSE) from the vehicle and the outlet<br>and reconnect it, then try to charge again.<br>Contact an authorized dealership in case of a new anomaly.   |  |
| ON            | ON   | OFF           | Dispersion of the electricity on the vehicle.   | Disconnect the Portable Charging Cordset (EVSE) from the vehicle and the outlet and reconnect it, then try to charge again.<br>Contact an authorized dealership in case of a new anomaly.  |  |
| ON            | ON (Flashing)  | OFF           | Electric charging current too high.   | The system will make a new charge attempt after 30 seconds (6 attempts total).   |  |

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|           | Portable Charging Cordset (EVSE) Charging System Failure Troubleshooting |     |   |  |  |
|-----------|--|-----|---|--|--|
| Green LED | Green LED Red LED Yellow LED   |     | Description                               | Action/Consequences  |  |
| ON        | ON (7 Blinks)  | OFF | Electric charging current too high.       | The new charge attempt failed. Disconnect the Portable<br>Charging Cordset (EVSE) from the vehicle and the outlet<br>and reconnect it, then try to charge again.<br>Contact an authorized dealership in case of a new anomaly. |  |
| ON        | ON (2 Blinks)  | OFF | Charging abnormality on the vehicle.      | The system will make a new charge attempt after 30 sec-  |  |
| ON        | ON (3 Blinks)  | OFF |   | onds (6 attempts total).   |  |
| ON        | ON (4 Blinks)  | OFF | Portable Charging Cordset (EVSE) failure. | If the fault persists, disconnect the Portable Charging Cord-<br>set (EVSE) from the vehicle and the domestic power outlet   |  |
| ON        | ON (5 Blinks)  | OFF |   | and reconnect it, then try to charge again.  |  |
| ON        | ON (6 Blinks)  | OFF |   | Contact an authorized dealership in case of a new anomaly.   |  |

Guidelines for preventing fire and electric shock:

- Ensure the Portable Charging Cordset (EVSE) is positioned so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- There are no user serviceable parts inside.
- Do not use the Portable Charging Cordset (EVSE) if it is visibly damaged. Contact an authorized dealership for service.
- Do not place fingers, or any other objects inside the charge connector.
- Do not allow children to operate the Portable Charging Cordset (EVSE). Adult supervision is mandatory when children are in proximity when the Portable Charging Cordset (EVSE) is in use.
- Do not use the Portable Charging Cordset (EVSE) with an extension cord or plug adapters.
- Do not unplug the Portable Charging Cordset (EVSE) from the wall outlet during a charging operation.



#### **Charging Inlet Warning Label**

- 1 Dangerous Situation
- $2-\mathrm{Risk}$  Of Electric Shock
- 3 Reference Owner's Information
- 4 Charging Timer Set
- 5 Charging Procedure In Progress
- 6 Charging Procedure Complete
- 7 Fault In Charging Procedure

#### NOTE:

During normal operation, the charge connector or AC plug may feel warm. If either one feels hot during charging, unplug the Portable Charging Cordset (EVSE) and have a qualified electrician inspect the wall outlet before you continue charging  $\rightrightarrows$  page 352.

#### WARNING!

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK: Do not use the Portable Charging Cordset (EVSE) with an outlet that is worn or damaged. Failure to follow this warning can result in electrical shock, fire, property damage, and death or serious injury.

# AC LEVEL 2 CHARGING (240 VOLT, 40 AMP)

AC Level 2 (240 Volt) charging requires a 240 Volt, Level 2 Electric Vehicle Supply Equipment (EVSE) charging station. A 40 Amp Level 2 EVSE for home installation is recommended.

When using public charging stations, ensure the charging station is ready to provide charge and the vehicle is in PARK before the Level 2 EVSE is plugged into the vehicle's charge inlet. You will hear a "click" when the charge connector is inserted correctly and is coupled with the vehicle's charge inlet.

#### NOTE:

The vehicle should start charging automatically. If not, please check the following:

- Charging Station Check the indications and instructions at the charging station.
- Charging Schedule Check whether the charging schedule is enabled and if so, whether the vehicle is currently within the scheduled charge time/day (weekday/weekend). If the charging schedule is enabled within the vehicle, you may override it for this charging event by plugging in the charge connector, unplugging it, and then plugging it back into the vehicle charge inlet. Complete the double plug sequence within 10 seconds for it to override the set schedule.
- Hood Ajar Check whether the hood is open. Charging is disabled while the hood is open, and will resume when the hood closes.

To stop the charging process:

• Press the "STOP" button located on the front of the EVSE station.

- Press the button located on the Level 2 EVSE vehicle connector.
- Remove the connector from the vehicle charge inlet.
- Plug the charge handle into the Level 2 EVSE station and coil the charging cord onto its holder. Do not leave the charging cord lying on the ground.

## CHARGING TIMES

The following factors determine the time it takes to charge the high voltage battery:

- The high voltage battery's current state of charge
- The type of Electric Vehicle Supply Equipment (EVSE) used (Level 1 – 120 V or Level 2 – 240 V)
- Ambient temperature
- Whether the vehicle's ignition is in the RUN position during charging

#### NOTE:

- The following charging times are estimates based on charging a high voltage battery that has a <1% State Of Charge (SOC) value displayed in the instrument cluster.
- Charging times will vary based on the age, condition, SOC, available current being provided to the charger from its energy source, and temperature of the high voltage battery.
- Charging times may be longer if a thermal selfprotection reduces the charging current from the EVSE being used.
- If the vehicle's ignition is in either the ACC or RUN position, the vehicle charge indicator may not indicate greater than a 99% SOC and will continue to charge the vehicle, due to the vehicle loads.

| Type of EVSE                    | Estimated Charge Time  |
|---------------------------------|------------------------|
| Level 1<br>(120 V/15 A)         | Approximately 12 hours |
| Level 2<br>(240 V/30 A or 32 A) | Approximately 2 hours  |

## VEHICLE CHARGE INDICATORS

#### Instrument Cluster High Voltage Battery Display

There is a battery display indicator located on the instrument cluster. The battery display will indicate the current State Of Charge (SOC) for the high voltage battery; with the percentage value located to the right of the symbol. When plugged in, the battery symbol also indicates the battery level along with messages about the charge or whether the system is waiting to charge due to the charge schedule. These will appear unless there is a charging fault. A green plug telltale will be shown in the cluster, as well as applicable messaging when charging.



**High Voltage Battery Display** 

#### Instrument Panel State Of Charge Indicator

In addition to the battery display in the instrument cluster, your vehicle is equipped with a visual SOC indicator. The SOC indicator is made up of four lights that are mounted to the top center of the instrument panel, which will illuminate when the vehicle is plugged into the charging system.



#### State Of Charge Indicator

The SOC indicator provides a visual indication of the high voltage battery's charge status during charging. It is also used to indicate a charging problem as well as waiting for a scheduled charge to begin.

#### NOTE:

- The lights scroll one at a time when the vehicle is plugged in outside of its charging schedule time/day of the week, and it is waiting on the schedule to begin charging.
- In extreme hot or cold environments, the lights on the SOC indicator may not illuminate. Charge status is available in the instrument cluster display. In the event of an error in the charging process, the outer two lights will blink.

• When the hood is open, the lights on the SOC indicator will not be illuminated.

| Number Of Indicator<br>Lights Illuminated   | Percent Of Battery<br>Charge   |
|---|--|
| 1st light blinks  | 0 - 25%  |
| 1st light on, 2nd light<br>blinks   | 26 - 50%   |
| 1st and 2nd lights on,<br>3rd light blinks  | 51 - 75%   |
| 1st, 2nd, and 3rd lights<br>on, 4th light blinks  | 76 - 99%   |
| All four lights on  | 100%   |
| Two outer lights are<br>blinking  | Indicates an error in the<br>charging process  |
| Lights turn on one at a<br>time from left to right<br>(when looking at the<br>front of the vehicle) | Indicates system is waiting<br>for scheduled time in<br>charge schedule to begin<br>charging |
| All lights turn on, then<br>immediately turn off  | Indicates a successful<br>plug-in  |

#### NOTE:

For each segment of lights illuminated indicating the percent of battery charge, two different blink rates are used. A blink rate of 1 second on/1 second off indicates that the first half is charging. The blink rate will increase to 0.5 second on/0.5 second off to indicate that the second half is charging. When the battery is fully charged, the blinking stops and the lights remain illuminated as charging continues.

Next to the charging inlet, there is an LED that changes color based on charging status.

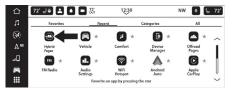


#### Charging Inlet LED Location

| LED Charging Inlet |   |  |
|--------------------|---|--|
| LED Light Color    | Status  |  |
| Blue               | Indicates that the system is wait-<br>ing for a scheduled recharge. |  |
| Flashing Green     | Charging process in place.  |  |
| Solid Green        | Indicates the vehicle is fully charged.                             |  |
| Blinking Red       | Indicates a fault in the charging system.                           |  |

# HYBRID ELECTRIC PAGES

Within your Uconnect system is the Hybrid Electric App that allows you to see your vehicle's power flow, understand your driving history, and set a charging schedule for your vehicle's high voltage battery. To access this app, press the Apps button on the main menu bar of the radio's touchscreen, and locate the Hybrid Electric App. Pressing the app icon brings you to a set of hybrid electric pages: Power Flow, Driving History, Charging Schedule, e-Save, and Charge Settings (if equipped).



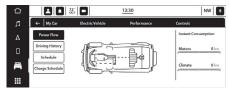
#### **Apps Menu Screen**

#### **Power Flow**

The Power Flow screen shows the current power readings for all of the following:

- Engine Shows the amount of power (in kW) the engine is generating. Based on vehicle operating conditions, this power is used to: propel the vehicle, provide passenger compartment heating, power vehicle electrical loads, and charge the high voltage battery. Engine operation is controlled to maximize fuel economy.
- Battery Shows the amount of power (in kW) the high voltage battery is currently providing/ absorbing. A negative kW indicates the vehicle's high voltage battery is charging.
- Climate Shows the amount of power (in kW) the Climate Control system is using to maintain the current interior temperature.

Power Flow paths are indicated by the direction of the arrows on the touchscreen.

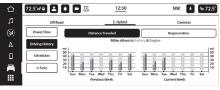


#### Power Flow Screen

## **Driving History**

The Driving History screen shows the miles (km) driven in both Full Electric and Hybrid (battery and engine powered) modes for both the previous week and the current week. The data is displayed in a bar graph: Electric mode in teal and Hybrid mode in blue.

On the bar graph, miles (km) driven on the same day in Electric mode (battery only) are always shown below miles (km) driven in Hybrid mode. When one day of the week exceeds 100 miles (160 km) driven, the values for miles (km) driven in Electric and Hybrid modes will be listed above the bar graph in respective colors (teal for Electric and blue for Hybrid).



**Driving History Screen** 

### **Charging Schedule**

To set a charging schedule, select the Hybrid Electric App on the touchscreen and follow these steps:

1. Select "Schedules".



#### **Charging Schedules Screen**

- Select one of the three charging schedules by pressing the appropriate arrow on the right side of the screen.
- 3. Select if Scheduled Charging should "Charge Until Full".
- 4. Set the Charge Start Time: Hours, Minutes, and AM/PM.

#### NOTE:

This is to occur every week (as long as the vehicle is connected to a Charging Cable).



Set Charge Schedule

#### 30 GETTING TO KNOW YOUR VEHICLE

- When done, press the back arrow. The active schedule will be indicated by the check mark to the right of the schedule event line. The Event Action and Time will be displayed.
- 6. To add another Scheduled Charging event, repeat these steps.

#### NOTE:

A maximum of two independent Scheduled Charging events can be scheduled at a given time.

If "Charge Until Full" is selected, the vehicle must be plugged in within five minutes of the start time. The following are situations in which "Charge Until Full" may not be honored:

- If selected for five days (Monday through Friday), and the vehicle is plugged in five or more minutes after the start time on any of those days, "Charge Until Full" will not be honored for that day. "Charge Until Full" will resume on the next day at the scheduled time.
- If there are multiple plug/unplug events after first being plugged in within five minutes, "Charge Until Full" will not be honored for that day.
- If other schedules (Charge Interval, etc.) are set at a later time in addition to "Charge Until Full" being selected, and the vehicle is plugged in five or more minutes after the scheduled start time, "Charge Until Full" will not be honored for that day. The next available schedule will be followed.

#### NOTE:

 If the charging schedule is not enabled, the vehicle will charge whenever plugged in. It is not necessary to set up the charging schedule to charge the vehicle.

- If the vehicle is plugged in outside of the charging schedule set in the Uconnect system (and Charge Until Full is not selected), the vehicle's battery will not charge. Charging will only begin immediately if the vehicle is plugged in within the time and day of the week set in the schedule. Otherwise, charging will automatically begin when the selected charge time/day of the week occurs or whenever the vehicle is plugged in with no charge schedule set.
- Scheduled Charging may be bypassed and charging will begin automatically if the high voltage battery State Of Charge (SOC) is below its optimal operating point.
- If the vehicle is turned off outside of the charging window, a radio pop-up message will be displayed, which provides an option to begin charging the vehicle immediately. The pop-up message asks the driver if they would like to "Charge Now?" and provides other information, including the next charging schedule start time and estimated time to charge the battery to 100%. If within one hour of selecting "Yes," the vehicle is connected to a powered Charging Cable, the vehicle will immediately begin to charge (temporarily ignoring any set charge schedule). To fully deactivate the charge schedule, refer to the "Schedules" feature within the Hybrid Electric App.
- The charging schedule can also be overridden if the Charging Cable is plugged in, unplugged, and then plugged in a second time to the vehicle. After the first plug in ofthe vehicle, wait until the battery charge indicator on the instrument panel lights up before unplugging. This "double plug sequence" will override the schedule that is set in the radio, and

begin charging the vehicle immediately. The double plug sequence must be completed within 10 seconds for it to override the programmed schedule.

 If "Charge Until Full" is selected, and the vehicle is plugged in after the start time of the schedule, the vehicle will start charging when it reaches the start time the next day. If you would like to begin charging immediately, and continue charging until the vehicle is fully charged, you can select the "Charge Now" option or use the double plug override option.

There is also a Climate Schedule which can be set and managed for climate or cabin conditioning.

#### SCHEDULE BYPASS

#### NOTE:

If the vehicle is turned off outside of the charging window, a radio pop-up message will be displayed. The pop-up message asks the driver if they would like to "Charge Now?" and provides the next charging schedule start time and estimated time to charge the battery to 100%. If within one hour of selecting "Yes", the vehicle is connected to a powered EVSE, the vehicle will immediately begin to charge (temporarily ignoring any set charge schedule). To fully deactivate the charge schedule, select the "Enable Schedule" checkbox until the check mark is removed from the box.

The charging schedule can also be overridden if an EVSE is plugged in, unplugged, and then plugged in a second time to the vehicle. This double plug sequence will override the set schedule in the Hybrid Electric Pages App, and begin charging the vehicle immediately. The double plug sequence must be completed within 10 seconds for it to override the programmed schedule.

## e-Save

The fourth screen within the Hybrid Electric Pages App is the e-Save screen. From this screen, you can specify the behavior of the e-Save drive mode:





 Battery Save - Maintains the high voltage State of Charge at its current level under most driving scenarios.

#### NOTE:

The SOC may increase if there is sufficient energy capture through regenerative braking.

 Battery Charge - Uses additional power from the gas engine to increase the high voltage State of Charge, up to 95% capacity.

#### NOTE:

### Charge Settings — If Equipped

The fifth screen within the Hybrid Electric App is the Charge Setting screen. From this screen, you can select the rate at which your vehicle charges. Rate selections 1 (low rate of charge) through 5 (high rate of charge) are available. The lower the selected rate, the longer it will take for your vehicle to reach a full charge. The Charge Setting can be adjusted by pressing the "+" or "-" buttons, and the estimated time until full charge will update on the right side of the screen to reflect the selected Charge Setting.

#### NOTE:

- The Charge Setting will be saved each time the vehicle is turned off, then back on again.
- For information on jump starting your vehicle, [[REFER: JUMP\_START]].

# KEYS

## KEY FOB

Your vehicle is equipped with a key fob which supports Passive Entry, Remote Keyless Entry (RKE), Keyless Enter 'n Go<sup>TM</sup> (if equipped), and Remote Start (if equipped). The key fob allows you to lock or unlock the doors and swing gate from distances up to approximately 66 ft (20 m). The key fob does not need to be pointed at the vehicle to activate the system. The key fob also contains a mechanical flip key.

#### NOTE:

- The key fob's wireless signal may be blocked if the key fob is located next to a mobile phone, laptop, or other electronic device. This may result in poor performance.
- With the ignition on and the vehicle moving at 2 mph (4 km/h), all RKE commands are disabled.

#### WARNING!

Push the Mechanical Key Release Button only with the key fob facing away from your body, especially your eyes and objects that may be damaged, such as clothing.

#### CAUTION!

The electrical components inside of the key fob may be damaged if the key fob is subjected to strong electrical shocks. In order to ensure complete efficiency of the electronic devices inside of the key fob, avoid exposing the key fob to direct sunlight.



A0204000132US

Key Fob

- 1 Mechanical Key Release Button
- 2 LED Indicator
- 3 Unlock Button
- 4 Lock Button
- 5 Remote Start Button
- 6 Panic Button

#### NOTE:

- In case the ignition switch does not change with the push of a button, the key fob may have a low or fully depleted battery. A low key fob battery condition may be indicated by a message in the instrument cluster display, or by the LED light on the key fob. If the LED key fob light no longer illuminates from key fob button pushes, then the key fob battery requires replacement.

# To Lock/Unlock The Doors And Swing Gate

Push and release the unlock button on the key fob once to unlock the driver's door, or twice to unlock all the doors and swing gate. To lock all the doors, push the lock button once.

When the doors are unlocked, the turn signals will flash. When the doors are locked, the turn signals will flash and the horn will chirp.

#### NOTE:

All doors can be programmed to unlock on the first push of the unlock button through the Uconnect Settings  $\Box$  page 201.

## Key Left Vehicle Feature

If a valid key fob is no longer detected inside the vehicle while the vehicle's ignition system is in the ON/RUN or START position, the message "Key Fob Has Left The Vehicle" will be shown in the instrument cluster display along with an interior chime. An exterior audible and visual alert will also be activated to warn the driver.

The vehicle's horn will rapidly chirp three times along with a single flash of the vehicle's exterior lights.

#### NOTE:

- The doors have to be open and then closed in order for the vehicle to detect a key fob. The Key Left Vehicle feature will activate when the first door is closed and no key fob is detected in the vehicle. If the warning has been activated, and the other doors are closed, no other warnings will be issued.
- These alerts will not be activated in situations where either the vehicle's engine is left running with the key fob inside, or the key fob's wireless signals are blocked.

## **Using The Panic Feature**

To turn the Panic feature on or off, push the Panic button on the key fob. When the Panic feature is activated, the turn signals will flash, the horn may pulse on and off (if equipped with horn alarm), and the interior lights will turn on.

The Panic feature will stay on for three minutes unless you turn it off by either pushing the Panic button a second time or drive the vehicle at a speed of 15 mph (24 km/h) or greater.

#### NOTE:

- The interior lights will turn off if you place the ignition in the ON/RUN position while the Panic feature is activated. However, the exterior lights and horn (if equipped with horn alarm) will remain on.
- You may need to be closer than 66 ft (20 m) from the vehicle when using the key fob to turn off the Panic feature due to the radio frequency noises emitted by the system.

## **Replacing The Battery In The Key Fob**

The recommended replacement battery is CR2450.

#### NOTE:

- Customers are recommended to use a battery obtained from Mopar®. Aftermarket coin battery dimensions may not meet the original OEM coin battery dimensions.
- Perchlorate Material special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate for further information.
- Do not touch the battery terminals that are on the back housing or the printed circuit board.
- When a key fob battery is low, a warning will be indicated on the vehicle's instrument cluster, and the fob LED will no longer illuminate with a button press.
- Remove the back cover of the fob by inserting a flatblade screwdriver into the slot on the bottom of the fob. Pry until the cover unsnaps being careful not to damage the seal. Proceed counterclockwise to pry the remaining snaps until the battery cover can be removed.



A0204000136US

1-3 - Back Cover Pry Points

2. Remove the depleted battery by inserting a small flat-blade screwdriver into the battery removal slot and sliding the battery forward and up being careful not to damage the electronic board underneath.



#### **Battery Replacement**

- Install the new battery into the key fob, making sure the positive (+) side is facing up. Slide the battery until it is seated securely below the tabs.
- 4. Reassemble the back cover making sure it is properly aligned before snapping it back in place.

#### WARNING!

- The integrated key fob contains a coin cell battery. Do not ingest the battery; there is a chemical burn hazard. If the coin cell battery is swallowed, it can cause severe internal burns in just two hours and can lead to death.
- If you think a battery may have been swallowed or placed inside any part of the body, seek immediate medical attention.

#### WARNING!

 Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children.

### Programming And Requesting Additional Key Fobs

Programming the key fob may be performed by an authorized dealer.

#### NOTE:

- Once a key fob is programmed to a vehicle, it cannot be repurposed and reprogrammed to another vehicle.
- Only key fobs that are programmed to the vehicle electronics can be used to start and operate the vehicle.

#### WARNING!

- Always remove the key fobs from the vehicle and lock all doors when leaving the vehicle unattended.
- For vehicles equipped with Keyless Enter 'n Go<sup>™</sup> Ignition, always remember to place the ignition in the OFF position when exiting the vehicle.

Duplication of key fobs may be performed at an authorized dealer. This procedure consists of programming a blank key fob to the vehicle electronics. A blank key fob is one that has never been programmed.

#### NOTE:

- When having the Sentry Key Immobilizer system serviced, bring all vehicle keys with you to an authorized dealer.
- Key fob with mechanical flip key must be ordered to the correct key cut to match the vehicle locks.

# SENTRY KEY

The Sentry Key Immobilizer system prevents unauthorized vehicle operation by disabling the engine. The system does not need to be armed or activated. Operation is automatic, regardless of whether the vehicle is locked or unlocked.

The system uses a key fob, keyless push button ignition and a Radio Frequency (RF) receiver to prevent unauthorized vehicle operation. Therefore, only key fobs that are programmed to the vehicle can be used to start and operate the vehicle. The system cannot reprogram a key fob obtained from another vehicle.

After placing the ignition in the ON/RUN position, the Vehicle Security Light will turn on for three seconds for a bulb check. If the light remains on after the bulb check, it indicates that there is a problem with the electronics. In addition, if the light begins to flash after the bulb check, it indicates that someone attempted to start the engine with an invalid key fob. If a valid key fob is used to start the engine but there is an issue with the vehicle electronics, the engine will start and shut off after two seconds.

If the Vehicle Security Light turns on during normal vehicle operation (vehicle running for longer than 10 seconds), it indicates that there is a fault in the electronics. Should this occur, have the vehicle serviced as soon as possible by an authorized dealer.

#### 34 GETTING TO KNOW YOUR VEHICLE

#### CAUTION!

The Sentry Key Immobilizer system is not compatible with some aftermarket Remote Start systems. Use of these systems may result in vehicle starting problems and loss of security protection.

All of the key fobs provided with your new vehicle have been programmed to the vehicle electronics  $\Box$  page 352.

#### NOTE:

A key fob that has not been programmed is also considered an invalid key.

# **IGNITION SWITCH**

# KEYLESS ENTER 'N GO™ IGNITION

This feature allows the driver to operate the ignition switch with the push of a button as long as the key fob is in the passenger compartment.

The START/STOP ignition button has several operating modes that are labeled and will illuminate when in position. These modes are OFF, ACC, RUN, and START.



#### START/STOP Ignition Button

| 1 – OFF |  |
|---------|--|
| 2 – ACC |  |
| 3 — RUN |  |

The push button ignition can be placed in the following modes:

#### OFF

- The engine is stopped.
- Some electrical devices (e.g. power locks, alarm, etc.) are available.

#### ACC

- Engine is not started.
- Some electrical devices (e.g. climate controls, heated seats, etc.) are available.

#### RUN

- Driving position.
- All electrical devices are available.

#### START

· The engine will start.

#### NOTE:

In case the ignition switch does not change with the push of the START/STOP ignition button, the key fob may have a low or depleted battery. In this situation, a backup method can be used to operate the ignition switch. Put the nose side of the key fob (side with the mechanical flip key) against the START/STOP ignition button and push to operate the ignition switch.

#### CAUTION!

- Do not press the mechanical key against the START/STOP ignition button.
- Do not use sharp metal objects (e.g. screwdriver etc.) to pry the button out of the ignition switch. This button comes as an assembly, and is not removable. This can damage the silicone shield.



**Backup Starting Method** 



#### **Do Not Use Mechanical Key**

#### WARNING!

- When exiting the vehicle, always remove the key fob from the vehicle and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the Keyless Enter 'n Go<sup>™</sup> Ignition in the ON/RUN position. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

#### CAUTION!

An unlocked vehicle is an invitation for thieves. Always remove key fob from the vehicle and lock all doors when leaving the vehicle unattended.

#### NOTE:

- When opening the driver's door with the ignition in the ON/RUN position (engine not running), a chime will sound to remind you to place the ignition in the OFF position. In addition to the chime, the message will display "Ignition Or Accessory On" in the cluster.

### KEYLESS ENTER 'N GO™ IGNITION – PHEV ONLY

This feature allows the driver to operate the ignition switch with the push of a button as long as the key fob is in the passenger compartment.

#### NOTE:

This vehicle is equipped with an automatic shutdown feature. If the vehicle is left with the ignition in the RUN position (engine not running) with gear selector in PARK for 30 minutes, it will automatically turn off the vehicle. If the driver door is opened, then closed while propulsion is active and the vehicle is in PARK, the vehicle will shut down. Notifications have been designed into this feature to raise awareness of the timed event by showing messages in the instrument cluster display.

The instrument cluster display will also show the message "Ready to Drive" accompanied with three audible chimes while the driver door is opened while the ignition state is in READY mode. The interior warnings will occur regardless of whether the key fob remains in the vehicle or is removed. The horn will sound three times, and the turn signals will flash, if the key fob is removed from the vehicle while the ignition state is in READY mode.

To restart the vehicle, follow the normal process for starting your vehicle.

The Keyless Push Button Ignition has several operating modes that are labeled and will illuminate when in position. These modes are OFF, ACC, RUN, and START.

#### NOTE:

- Pushing the START/STOP ignition button may only activate the Electric Propulsion system and not start the vehicle's engine (if running the engine is not currently required by the Hybrid system). READY will show in the instrument cluster display whenever the vehicle is operating in Electric mode and the vehicle is stationary.
- If the vehicle's ignition is in either ACC or RUN, the vehicle charge indicator may not display a value greater than 99% state of charge due to vehicle loads.



**Keyless Push Button Ignition** 

1 - OFF2 - ACC3 – RUN

The ignition can be placed in the following positions: **OFF** 

- The vehicle is stopped
- Some electrical devices are available

#### ACC

- Some electrical devices are available
- Mechanical power (vehicle propulsion) is not available
   RUN

#### RUN

- Driving position
- All electrical devices are available
- As long as READY appears in the instrument cluster display, it does not matter if the engine is running or not, vehicle propulsion is available

#### START

• The vehicle will start

#### NOTE:

Vehicle propulsion is only available after the vehicle has passed through the START position.

#### Conditions Which May Cause The Engine To Run

- When the Hybrid Battery State of Charge (SOC) has reached  ${<}1\%$
- When applying maximum vehicle acceleration
- While maintaining the Exhaust System Catalyst Temperature in Hybrid or e-Save modes
- When the hood is open with the ignition in RUN, post-START mode
- When Manual Mode/Tip Mode is in use
- When the engine is temporarily operating in Fuel and Oil Refresh Mode (e.g. if the system detects a stale fuel or aged oil condition after a long period without combustion engine operation)

- When the vehicle is started in very cold ambient temperatures
- When the vehicle is in a lower ambient temperature and may need to support passenger compartment heating

In case the ignition switch does not change with the push of the START/STOP ignition button, the key fob may have a low or depleted battery. In this situation, a backup method can be used to operate the ignition switch. Put the nose side of the key fob (side with the mechanical flip key) against the START/STOP ignition button and push to operate the ignition switch.

#### CAUTION!

- Do not press the mechanical key against the START/STOP ignition button.
- Do not use sharp metal objects (e.g. screwdriver etc.) to pry the button out of the ignition switch. This button comes as an assembly, and is not removable. This can damage the silicone shield.

#### NOTE:

In extreme climates (hot or cold environments), the vehicle will need to be plugged in prior to starting the vehicle, or the vehicle may not start.

#### WARNING!

- When leaving the vehicle, always remove the key fob from the vehicle and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.

(Continued)

#### WARNING!

- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the Keyless Enter 'n Go™ Ignition in the ACC or RUN position. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

#### CAUTION!

An unlocked vehicle is an invitation for theft. Always turn the vehicle off, remove the key fobs from the vehicle, and lock all the doors when leaving the vehicle unattended.

#### NOTE:

If the brake is pressed and the ignition is placed in the RUN position with an EVSE connected to the vehicle, the instrument cluster display will not display the READY state. When the Electric Vehicle Supply Equipment (EVSE) is unplugged from the vehicle, the vehicle will go into the READY state. If the vehicle is not shifted out of PARK 30 minutes after being unplugged, the vehicle will disable the READY state. After an additional 30 minutes with no change in ignition status, the ignition will turn off and the vehicle will power down.

# **REMOTE START — IF EQUIPPED**



This system uses the key fob to start the engine conveniently from outside the vehicle while still maintaining security. The system has a range of approximately 328 ft (100 m).

Remote Start is used to defrost windows in cold weather and to reach a comfortable climate in all ambient conditions before the customer enters the vehicle.

#### NOTE:

- The vehicle must be equipped with an automatic transmission to be equipped with Remote Start.

#### WARNING!

- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains carbon monoxide which is odorless and colorless. Carbon monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep key fobs away from children. Operation of the Remote Start system, windows, door locks or other controls could cause serious injury or death.

## HOW TO USE REMOTE START

Push and release the Remote Start button on the key fob twice within five seconds. The vehicle doors and swing gate will lock, the turn signals will flash twice, and the horn will chirp twice. Pushing the Remote Start button again will shut the engine off.

#### NOTE:

- With Remote Start, the engine will only run for 15 minutes.
- Remote Start can only be used twice.
- If an engine fault is present or fuel level is low, the vehicle will start and then shut down in 10 seconds.
- The park lamps will turn on and remain on during Remote Start mode.
- For security, power window operation is disabled when the vehicle is in the Remote Start mode.
- The ignition must be placed in the ON/RUN position before the Remote Start sequence can be repeated for a third cycle.

All of the following conditions must be met before the engine will remote start:

- · Gear selector in PARK
- Doors closed
- Hood closed
- · Swing gate closed
- · Hazard switch off
- · Brake switch inactive (brake pedal not pressed)
- Battery at an acceptable charge level
- Panic button not pushed
- System not disabled from previous Remote Start event
- · Vehicle Security system indicator flashing
- Ignition in OFF position
- Fuel level meets minimum requirement
- All removable doors must not be removed
- Malfunction Indicator Light (MIL) not illuminated

#### WARNING!

- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains carbon monoxide which is odorless and colorless. Carbon monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep key fobs away from children. Operation of the Remote Start system, windows, door locks or other controls could cause serious injury or death.

# TO EXIT REMOTE START MODE

To drive the vehicle after starting the Remote Start system, either push and release the unlock button on the key fob to unlock the doors, or unlock the vehicle using Keyless Enter 'n Go<sup>TM</sup> – Passive Entry via the door handles, and disarm the Vehicle Security system (if equipped). Then, prior to the end of the 15 minute cycle, push and release the START/STOP ignition button.

The Remote Start system will turn the engine off if the Remote Start button on the key fob is pushed again, or if the engine is allowed to run for the entire 15 minute cycle. Once the ignition is placed in the ON/RUN position, the climate controls will resume previously set operations (temperature, blower control, etc.).

#### NOTE:

- To avoid unintentional shutdowns, the system will disable for two seconds after receiving a valid Remote Start request.
- For vehicles equipped with the Keyless Enter 'n Go™
   — Passive Entry feature, the message "Remote Start
   Active Push Start Button" will display in the instrument
   cluster display until you push the START/STOP
   ignition button.

## REMOTE START FRONT DEFROST ACTIVATION — IF EQUIPPED

When Remote Start is active, and the outside ambient temperature is  $40^{\circ}$ F ( $4.5^{\circ}$ C) or below, the system will automatically activate front defrost for 15 minutes or less. The timing is dependent on the ambient temperature. Once the timer expires, the system will automatically adjust the settings depending on ambient conditions. See "Remote Start Comfort Systems – If Equipped" in the next section for detailed operation.

## REMOTE START COMFORT SYSTEMS – IF EQUIPPED

When Remote Start is activated, the front and rear defroster will automatically turn on in cold weather conditions. The heated steering wheel and driver heated seat feature will turn on if programmed in the Comfort menu screen within Uconnect Settings ⇔ page 201. In warm weather, the driver vented seat feature will automatically turn on when Remote Start is activated, if programmed in the Comfort menu screen. The vehicle will adjust the climate control settings dependent on the outside ambient temperature.

#### NOTE:

If the vehicle is equipped with a rear climate system, it will remain off to allow for optimal front row performance.

#### Automatic Temperature Control (ATC) - If Equipped

The climate controls will automatically adjust to the optimal temperature and mode settings dependent on the outside ambient temperature. This will occur until the ignition is placed in the ON/RUN position where the climate controls will resume their previous settings.

#### Manual Temperature Control (MTC) - If Equipped

- In ambient temperatures of 40°F (4.5°C) or below, the climate settings will default to maximum heat, with fresh air entering the cabin. If the front defrost timer expires, the vehicle will enter Mix mode.
- In ambient temperatures from 40°F (4.5°C) to 78°F (26°C), the climate settings will be based on the last settings selected by the driver.
- In ambient temperatures of 78°F (26°C) or above, the climate settings will default to MAX A/C, Bi-Level mode, with Recirculation on.

For more information on ATC, MTC, and climate control settings, see  $\Box$  page 74.

#### NOTE:

These features will stay on through the duration of Remote Start, or until the ignition is placed in the ON/RUN position. The climate control settings will change, and exit the automatic defaults, if manually adjusted by the driver while the vehicle is in Remote Start mode. This includes turning the climate controls off using the OFF button.

### REMOTE START WINDSHIELD WIPER DE-ICER ACTIVATION — IF EQUIPPED

When Remote Start is active and the outside ambient temperature is less than  $33^{\circ}F(0.6^{\circ}C)$ , the Windshield Wiper De-Icer will activate. Exiting Remote Start will resume its previous operation. If the Windshield Wiper De-Icer was active, the timer and operation will continue.

# REMOTE START CANCEL MESSAGE

One of the following messages will display in the instrument cluster display if the vehicle fails to remote start or exits Remote Start prematurely:

- Remote Start Canceled Door Open
- Remote Start Canceled Hood Open
- Remote Start Canceled Fuel Low
- Remote Start Canceled Swing Gate Open
- Remote Start Canceled Time Expired
- Remote Start Canceled System Fault
- Remote Start Disabled Start Vehicle To Reset

The instrument cluster display message stays active until the ignition is placed in the ON/RUN position.

# REMOTE START — IF EQUIPPED (PHEV Only)

#### NOTE:

Remote Start while the vehicle is plugged in may not always start the engine.



This system uses the key fob to start the vehicle conveniently from outside the vehicle while still maintaining security. The system has a range of 328 ft (100 m).

Remote Start also activates the Climate Control system in temperatures above 80°F (26.7°C), and the heated seats (if equipped) and heated steering wheel (if equipped) in temperatures below 40°F (4.4°C).

#### NOTE:

Obstructions between the vehicle and key fob may reduce this range.

## HOW TO USE REMOTE START

All of the following conditions must be met before the vehicle will remote start:

- Gear selector in PARK
- · Doors closed
- Hood closed
- Swing gate closed
- · Hazard switch off
- Brake switch inactive (brake pedal not pressed)
- 12 Volt battery at an acceptable charge level
- Key fob Panic button not pushed
- System not disabled from previous Remote Start event
- Vehicle Security system indicator flashing
- Ignition in OFF position
- Fuel level meets minimum requirement
- All removable doors must not be removed
- Malfunction Indicator Light (MIL) is off while the vehicle's propulsion system is active

#### WARNING!

- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains carbon monoxide (CO) which is odorless and colorless. Carbon monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep key fobs away from children. Operation of the Remote Start system, windows, door locks or other controls could cause serious injury or death.

# TO ENTER REMOTE START MODE

Push and release the Remote Start button on the key fob twice within five seconds. The vehicle doors will lock, the turn signals will flash twice (if enabled in Uconnect Settings), and the horn will chirp twice (if enabled in Uconnect Settings). Then the engine/vehicle will start, and the vehicle will remain in the Remote Start mode for a 15 minute cycle.

#### NOTE:

- The vehicle can be started two consecutive times (two 15 minute cycles) using the key fob. After two Remote Start events have occurred, the ignition must be placed in the RUN position before any additional Remote Start requests can be received.
- The parking lights will turn on and remain on during Remote Start mode.
- For security, power window operation is disabled when the vehicle is in the Remote Start mode.

# TO EXIT REMOTE START MODE WITHOUT DRIVING THE VEHICLE

Push and release the Remote Start button one time or allow the Remote Start cycle to complete the entire 15 minute cycle.

In addition, the ignition can be placed in the RUN (Propulsion System Available) position by pushing the ignition button with the key fob inside the vehicle, and then pushing the ignition button one more time to place the ignition in the OFF position.

#### NOTE:

- To avoid unintentional shutdowns, the system will disable for two seconds after receiving a valid Remote Start request.
- For additional functions of the Remote Start system, see 
  page 38.

# SCHEDULED CABIN CONDITIONING (SCC)

This feature allows the driver to pre-condition (warm up or cool down) the passenger cabin based on a planned departure time. The target temperature is preset to the same values used by the Remote Start feature. Unlike Remote Start, the driver does not need to initiate the cabin conditioning by pushing the Remote Start button, instead, a programmed departure time will be used. Also, all scheduled cabin conditioning will be powered by the vehicle's high voltage battery working in conjunction with any EVSE connected to the vehicle. Unlike Remote Start, in SCC the vehicle's gas engine will not start to provide power or heat for cabin conditioning.

In order to conserve the vehicle's high voltage battery power, the driver can choose between allowing the battery to be drained of power down to <1%, or to stop the SCC when the high voltage battery has been depleted to 25% State Of Charge (SOC). The battery percentages are displayed in the instrument cluster display.

A maximum of three independent schedule event timers are available for use by the SCC feature and Scheduled Charging feature for charging the high voltage battery. The timers may be used in any combination for SCC and Scheduled Charging, but only three total timers are available.

The SCC event times are used to wake up the vehicle so that the Climate Control system can condition the passenger cabin prior to the scheduled departure time. Based on vehicle operating conditions, ambient temperature, and the next programmed departure time, the vehicle will determine when to begin cabin conditioning. Cabin conditioning can begin up to 30 minutes prior to the scheduled departure time, provided the stated high voltage battery conditions are met.

The SCC will continue for a maximum of 15 minutes after the scheduled departure time.

Once a scheduled event has been created, it can be applied to one or more days of the week. The scheduled event can also be set to occur only during the current week, or repeat every week until the feature is turned off or the event is changed.

All of the following conditions must be met before the vehicle will initiate a scheduled SCC event:

- Gear selector in PARK
- Doors Closed
- Hood Closed
- Liftgate Closed
- · Hazard switch off
- 12 Volt battery at an acceptable charge level
- Key fob not located inside the vehicle
- Ignition in the OFF position
- Remote Start has not been activated

#### Scheduling An SCC Event:

- 1. Select the Hybrid Electric App on the touchscreen.
- 2. Select "Schedules".



#### Schedules Screen

- Select the schedule to be set (1,2, or 3) by pressing the appropriate arrow on the right side of the touchscreen.
- 4. Choose "Climate Schedule".



#### Select Climate Schedule

- Select if SCC should stop when the high voltage battery drops to 25% or lower.
- 6. Set the Departure Time: Hours, Minutes, and AM/PM.



#### Set Climate Schedule

 Select the days that this SCC event will occur. The "Repeat" indicator illuminates to indicate that SCC will occur every week on the selected day(s), at the selected time.

If you uncheck the "Repeat" option, all the days of the week will be grayed out and the vehicle will perform only one SCC event, which will occur at the next available time that matches the SCC event time (regardless of what day it was originally set to occur before "Repeat" was unchecked).

8. To schedule another SCC event, press the X and repeat these steps.

# VEHICLE SECURITY SYSTEM — IF EQUIPPED

The Vehicle Security system monitors the vehicle doors for unauthorized entry and the ignition switch for unauthorized operation. When the alarm is activated, the interior switches for door locks are disabled. The Vehicle Security system provides both audible and visible signals. If something triggers the alarm, the Vehicle Security system will provide the following audible and visible signals: the horn will pulse, the park lamps and/or turn signals will flash, and the Vehicle Security Light in the instrument cluster will flash.

# TO ARM THE SYSTEM

Follow these steps to arm the Vehicle Security system:

- 1. If any doors or windows are open, close them.
- 2. Make sure the vehicle's ignition is placed in the OFF position.

- 3. Perform one of the following methods to lock the vehicle:
  - Push lock on the interior power door lock switch with the driver and/or passenger door open.
  - O Push the lock button on the exterior Passive Entry door handle with a valid key fob available in the same exterior zone ⊑> page 42.
  - O Push the lock button on the key fob.

#### NOTE:

The Vehicle Security system will not arm if you lock the doors using the manual door lock.

## TO DISARM THE SYSTEM

The Vehicle Security system can be disarmed using any of the following methods:

- Push the unlock button on the key fob.
- Grab the Passive Entry door handle (if equipped)
- Cycle the vehicle ignition system out of the OFF position.

#### NOTE:

- The driver's door key cylinder cannot arm or disarm the Vehicle Security system.
- When the Vehicle Security system is armed, the interior power door lock switches will not unlock the doors.

The Vehicle Security system is designed to protect your vehicle. However, you can create conditions where the system will give you a false alarm. If one of the previously described arming sequences has occurred, the Vehicle Security system will arm regardless of whether

you are in the vehicle or not. If you remain in the vehicle and open a door, the alarm will sound. If this occurs, disarm the Vehicle Security system.

If the Vehicle Security system is armed and the battery becomes disconnected, the Vehicle Security system will remain armed when the battery is reconnected; the exterior lights will flash, and the horn will sound. If this occurs, disarm the Vehicle Security system.

## REARMING OF THE SYSTEM

If something triggers the alarm and no action is taken to disarm it, the Vehicle Security system will turn the horn off after a 29 second cycle (with five seconds between cycles and up to eight cycles if the trigger remains active) and then rearm itself.

# SECURITY SYSTEM MANUAL OVERRIDE

The Vehicle Security system will not arm if you lock the doors using the manual door lock.

# DOORS

#### CAUTION!

Careless handling and storage of the removable door panels may damage the seals, causing water to leak into the vehicle's interior.

### MANUAL DOOR LOCKS

All doors are equipped with an interior rocker-type door lock lever. To lock a door when leaving your vehicle, push the rocker lever forward to the lock position and close the door. To unlock the door, push the rocker lever rearward.



**Manual Door Lock** 

#### NOTE:

The mechanical key can be used to lock or unlock the doors, swing gate (if equipped with a lock), glove compartment, and console storage.

#### WARNING!

- For personal security reasons and safety in a collision, lock the vehicle doors when you drive, as well as when you park and exit the vehicle.
- When exiting the vehicle, always switch off the ignition and remove the key from the vehicle. Unsupervised use of vehicle equipment may cause severe personal injuries and death.

#### WARNING!

- Never leave children alone in a vehicle, or with access to an unlocked vehicle.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.

# POWER DOOR LOCKS – IF EQUIPPED

The power door lock switch is located on each front door panel. Push the switch forward to unlock the doors, and rearward to lock the doors.



**Power Door Lock Switch** 

#### WARNING!

- For personal security reasons and safety in a collision, lock the vehicle doors when you drive, as well as when you park and exit the vehicle.
- When exiting the vehicle, always switch off the ignition and remove the key from the vehicle. Unsupervised use of vehicle equipment may cause severe personal injuries and death.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.

# KEYLESS ENTER 'N GO™ --PASSIVE ENTRY (IF EQUIPPED)

The Passive Entry system is a feature that allows you to lock and unlock the vehicle's door(s) and swing gate without having to push the key fob lock or unlock buttons.

#### NOTE:

- Passive Entry may be programmed on/off within the Uconnect Settings  $\Box$  page 201.
- The key fob may not be detected by the vehicle Passive Entry system if it is located next to a mobile phone, laptop, or other electronic device; these devices may interfere with the key fob's wireless signal and prevent the Passive Entry system from locking/unlocking the vehicle.
- Passive Entry Unlock initiates illuminated approach (low beams, license plate lamp, parking lights) for whichever duration is set between 0, 30, 60 or 90 seconds. Passive Entry Unlock also initiates two flashes of the turn signals.
- If wearing gloves, if it has been raining/snowing, or there is salt/dirt covering the Passive Entry door handle, the unlock sensitivity can be affected, resulting in a slower response time.
- The doors may unlock when water is sprayed on the Passive Entry door handles, if the key fob is located outside of the vehicle within 5 ft (1.5 m) of the handle.
- If the vehicle is unlocked by Passive Entry and no door is opened within 60 seconds, the vehicle will relock and, if equipped, will arm the Vehicle Security system.

#### To Unlock From The Driver or Passenger Side

With a valid Passive Entry key fob within 5 ft (1.5 m) of the door handle, grab the handle to unlock the vehicle. Grabbing the driver's door handle will unlock the driver door automatically. Grabbing the passenger door handle will unlock all doors and the swing gate automatically.



#### **Grab The Door Handle To Unlock**

#### NOTE:

Either the driver door only or all doors will unlock when you grab hold of the front driver's door handle, depending on the selected setting in the Uconnect system  $\Box_{2}^{2}$  page 201.

# Frequency Operated Button Integrated Key (FOBIK-Safe)

To minimize the possibility of unintentionally locking a Passive Entry key fob inside your vehicle, the Passive Entry system is equipped with an automatic door unlock feature which will function only if the ignition switch is in the OFF position.

FOBIK-Safe only executes in vehicles with a START/ STOP ignition. There are three situations that trigger a FOBIK-Safe search in any Passive Entry vehicle:

- A lock request is made by a valid Passive Entry key fob while a door is open.
- A lock request is made by the Passive Entry door handle while a door is open.
- A lock request is made by the door panel switch while the door is open.

When any of these situations occur, after all open doors are shut, the FOBIK-Safe search will be executed. If it detects a Passive Entry key fob inside the vehicle, the vehicle will unlock and alert the customer. If Passive Entry is disabled using Uconnect system, the key fob protection described in this section remains active/functional.

#### NOTE:

The vehicle will only unlock the doors during a FOBIK-Safe operation when a valid Passive Entry key fob is detected inside the vehicle. The vehicle will not unlock the doors when any of the following conditions are true:

- A second valid Passive Entry key fob is detected outside of the vehicle (within 5 ft (1.5 m) of a Passive Entry door handle).
- The doors are manually locked using the door lock knobs.
- Three attempts are made to lock the doors using the door panel switch, and then the doors are closed.

#### To Lock The Vehicle's Doors And Swing Gate

With one of the vehicle's Passive Entry key fobs within 5 ft (1.5 m) of the driver or passenger front door handles, pushing the Passive Entry lock button will lock the vehicle doors and the swing gate.



#### **Push The Door Handle Button To Lock**

#### NOTE:

DO NOT grab the door handle when pushing the door handle lock button. This could unlock the door(s).



#### DO NOT Grab The Door Handle When Locking

The vehicle doors can also be locked by using the lock button located on the vehicle's interior door panel.

#### To Unlock/Enter The Swing Gate

The swing gate Passive Entry unlock feature is built into the swing gate handle. With a valid Passive Entry key fob within 5 ft (1.5 m) of the swing gate handle, grab the swing gate handle to unlock the swing gate automatically, and pull the swing gate to open.



#### Swing Gate Passive Entry Lock Button

#### To Lock The Swing Gate

With a valid Passive Entry key fob within 5 ft (1.5 m) of the swing gate handle, pushing the Passive Entry lock button will lock the vehicle doors and the swing gate.

#### NOTE:

- After pushing the door handle button, you must wait two seconds before you can lock or unlock the doors, using any Passive Entry door handle. This is done to allow you to check if the vehicle is locked by pulling the door handle without the vehicle unlocking.
- If Passive Entry is disabled using the Uconnect Settings, the key fob protection described in "Frequency Operated Button Integrated Key (FOBIK-Safe)" remains active/functional.

# AUTOMATIC DOOR LOCKS – IF EQUIPPED

The Automatic Door Lock feature default condition is enabled. When enabled, the door locks will lock automatically when the vehicle's speed exceeds 15 mph (24 km/h). The Automatic Door Lock feature can be enabled or disabled by an authorized dealer per written request of the customer. Please see an authorized dealer for service.

# CHILD-PROTECTION DOOR LOCK SYSTEM — REAR DOORS

To provide a safer environment for small children riding in the rear seats, the rear doors are equipped with a Child-Protection Door Lock system.

To use the system, open each rear door, use a flatblade screwdriver (or mechanical flip key) and rotate the dial to the lock or unlock position.



Child-Protection Door Lock Function

#### NOTE:

- When the Child-Protection Door Lock system is engaged, the door can be opened only by using the outside door handle even though the inside door lock is in the unlocked position.
- After disengaging the Child-Protection Door Lock system, always test the door from the inside to make certain it is in the unlocked position.
- After engaging the Child-Protection Door Lock system, always test the door from the inside to make certain it is in the locked position.
- For emergency exit with the system engaged, move the lock lever rearward (located on the door trim panel), lower the window and open the door with the outside door handle.

#### WARNING!

Avoid trapping anyone in a vehicle in a collision. Remember that the rear doors can only be opened from the outside when the Child-Protection locks are engaged (locked).

#### NOTE:

Always use this device when carrying children. After engaging the child lock on both rear doors, check for effective engagement by trying to open a door with the internal handle. Once the Child-Protection Door Lock system is engaged, it is impossible to open the doors from inside the vehicle. Before getting out of the car, be sure to check that there is no one left inside.

# FRONT DOOR REMOVAL

#### WARNING!

Do not drive your vehicle on public roads with the doors removed as you will lose the protection they can provide. This procedure is furnished for use during off-road operation only. Failure to follow this warning can result in death or serious personal injury.



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#### Door Removal Warning Label

#### WARNING!

- Do not store detached doors inside of the vehicle, as they may cause personal injury in the event of an accident.

Outside rearview mirrors are mounted on the doors. If you choose to remove the doors, see an authorized dealer for a replacement cowl-mounted outside mirror. Federal law requires outside mirrors on vehicles for on-road use.

#### NOTE:

- Doors are heavy; use caution when removing them.
- When front doors are removed, the message "Blind Spot Alert Temporarily Unavailable" will display in the instrument cluster display. Power Mirrors and Power Door Locks will also be unavailable.

To remove the front doors, proceed as follows:

- 1. Roll down the glass window to prevent any damage.
- 2. Remove the hinge pin screws from the upper and lower outside hinges (using a #T50 Torx head driver).

#### NOTE:

The hinge pin screws and nuts can be stowed in the rear cargo tray located under the rear load floor.



**Hinge Pin Screw** 

 Remove the plastic wiring access door under the instrument panel by sliding the plastic panel along the door frame toward the seats until the tabs are detached.

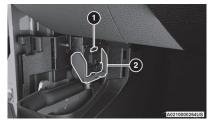


#### Wiring Access Door

#### NOTE:

Do not force open; this will break the plastic cover.

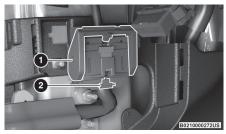
4. Pull up on the red locking tab to unlock the wiring harness.



#### **Closed Wiring Harness**

- 1 Red Locking Tab
- 2 Wiring Harness Lever (Closed Position)

 Push and hold down the black security tab under the wiring harness, and lift the harness lever into the open position.

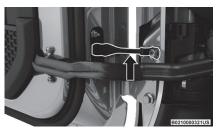


**Open Wiring Harness** 

- 1 Wiring Harness Lever (Open Position)
- 2 Black Security Tab
- 6. With the wiring harness open, pull **straight** downward on the wiring connector to unplug. Store the wiring connector in the lower door basket.
- 7. With the door in the open position, remove the check screw from the door check attachment on the bodyside (using a #T40 Torx head driver).

#### NOTE:

Keep the check arm in the extended position for easier reinstallation. See the note later in this section if the check arm gets pushed into the door while the door is off.



#### **Door Check Arm**

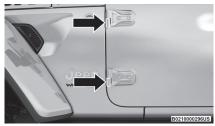
 With the door open, lift the door with the help of another person, to clear the hinge pins from their hinges and remove the door.

#### To Install The Front Doors

1. Locate the upper and lower hinge pins on the door, and lower them into the body hinges on the vehicle.

#### NOTE:

The upper hinge pin is longer, which can be used to assist in guiding the door into place during installation.



**Hinge Pin Locations** 

- With the door in the open position, align the door check bracket with the hole on the bodyside. Insert the check screw and tighten using a #40 Torx head driver to 19.9 ft lb (27.0 Nm).
- Insert the upper and lower hinge pin screws into the body hinges. Tighten the screws using a #T50 Torx head driver to 3.8 ft-lb / 5.2 N·m.

#### NOTE:

If the check arm is stuck inside the door, follow these instructions to install the check arm.

- Insert the check arm screw into the check arm bracket. Ensure the screw is in the correct orientation.
- Slowly pull on the screw to draw the check arm out until you encounter increased resistance. Do not attempt to pull the check arm all the way out.
- While sitting inside the vehicle, hold the door partially closed and insert the screw into the hole on the body.
- Using your fingers, turn the screw clockwise at least two full turns. Gently pull on the screw to ensure it is secure.
- Using the door handle, slowly push the door open. The check arm will be pulled out of the door. You may hear the check arm pop against the screw.
- 6. Fully tighten the screw as instructed.

#### WARNING!

To avoid personal injury be sure to keep your arms, hands, fingers and all objects clear of the check arm area during the removal and installation procedures.

#### CAUTION!

- Do not close the door before reattaching the door check to the body. Damage may occur to the door check.
- Do not overtighten Torx fasteners, damage to the vehicle's parts will occur.
- Hinge pins can break if overtightened during door install (Max Torque: 6.0 ft lb/8.1 N·m).

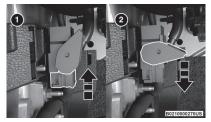
#### **Replacing The Wiring Connector Into The Wiring Harness**

To reinstall the wiring connector on the vehicle's door into the harness just inside the vehicle, proceed as follows:

#### NOTE:

Make sure there is plenty of slack on the wiring connector during installation. Close the door slightly to provide more slack if needed.

 With light finger pressure, seat the wiring connector straight into the wiring harness until the wiring harness lever starts to lower with the latching pin.



#### **Connecting The Wiring Harness**

- 1 Seat Connector Straight Into Harness
- 2 Wiring Harness Lever Starts To Lower

#### CAUTION!

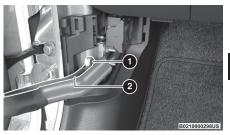
Failure to correctly reconnect the wiring connector into the harness will result in damage that is not covered by the New Vehicle Warranty.

 After the harness lever has started to move with the pressure of seating the wiring connector, continue by lowering the wiring harness lever to the fully closed position.



#### **Fully Closed Position**

- 3. Push the red locking tab downward to lock into place.
- 4. Attach the cloth strap of the door onto the metal hook just inside the vehicle.



#### **Cloth Strap Attachment**

1 – Metal Hook

2 – Cloth Strap

5. Replace wiring access doors.

# REAR DOOR REMOVAL (FOUR-DOOR MODELS)

#### WARNING!

Do not drive your vehicle on public roads with the doors removed as you will lose the protection they can provide. This procedure is furnished for use during off-road operation only. Failure to follow this warning can result in death or serious personal injury. 2



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#### **Door Removal Warning Label**

#### WARNING!

- All occupants must wear seat belts during off-road operation with doors removed. For off-road driving tips, see □ page 195.
- Do not store detached doors inside of the vehicle, as they may fly around and cause personal injury or death in the event of a sudden stop, rough terrain, or a collision.

#### NOTE:

- Doors are heavy; use caution when removing them.

To remove the rear doors, proceed as follows:

- 1. Roll down the glass window to prevent any damage.
- 2. Remove the hinge pin screws from the upper and lower outside hinges (using a #T50 Torx head driver).

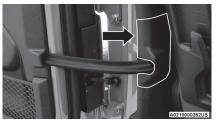
#### NOTE:

The hinge pin screws and nuts can be stowed in the rear cargo tray located under the rear load floor.



#### **Hinge Pin Scre5**

- 3. Slide the front seat(s) fully forward.
- 4. Pry open and remove the plastic wiring access door from the bottom of the B-pillar.

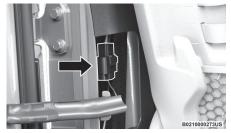


Wiring Access Door

5. Unplug the wiring connector.

#### NOTE:

Squeeze the tab on the base of the wiring harness. This will unlock the connector tab, allowing the wiring connector to be unplugged.



#### Wiring Connector

6. With the door in the open position, remove the check screw from the door check attachment on the body (using a #T40 Torx head driver).

#### NOTE:

Keep the check arm in the extended position for easier reinstallation.



**Door Check Arm** 

With the door open, lift the door with the help of another person, to clear the hinge pins from their hinges and remove the door.

To reinstall the door(s), perform the previous steps in the reverse order.

#### NOTE:

The upper hinge has a longer pin, which can be used to assist in guiding the door into place when reinstalling.

# 

If equipped with the Door Off Mirror Kit, exterior rearview mirrors can be installed on to the upper body door hinges after the front doors have been removed.

#### WARNING!

#### WARNING!

 Do not store detached doors inside of the vehicle, as they may fly around and cause personal injury or death in the event of a sudden stop, rough terrain, or a collision.

# Use this QR code to access your digital experience.

To install the Door Off Mirrors, proceed as follows:

1. Remove both front doors see  $\Box$  page 45.



#### **Door Off Mirror**

2. Remove the cowl bolt closest to the door opening using a #40 Torx head driver, and store in a safe location.





2

 Push the mirror bracket forward onto the A-pillar, making sure to align the bottom of the bracket with the upper door hinge, and the hole from the removed cowl bolt.



Push Bracket Onto A-pillar

(Continued)

 Place the bracket bushing behind the mirror bracket (over the cowl bolt hole), then insert the bracket bolt into the mirror bracket, through the bracket bushing.



Attaching Mirror Bracket To The Vehicle

- 1 Bracket Bushing
- 2 Bracket Bolt
- Insert the hinge shoulder bolt through the bottom of the upper door hinge up into the mirror bracket, then rotate the bracket knob toward the rear of the vehicle to secure the mirror bracket to the A-pillar.



#### **Attaching Mirror Bracket To The Vehicle**

- 1 Bracket Knob
- 2 Hinge Shoulder Bolt
- Tighten both the bracket bolt and the hinge shoulder bolt with a #40 Torx head driver. Recommended torque specification for the bracket bolt is 6 ft-lb (8 N·m), and 7.5 ft-lb (10 N·m) for the hinge shoulder bolt.
- 7. Lower the mirror assembly onto the mirror bracket.



Lower Mirror Assembly Onto Bracket

 Insert the three mirror screws into the mirror assembly, and tighten into the mirror bracket using a #30 Torx head driver. Recommended torque specification for the mirror screws is 4 ft-lb (5.5 N·m).



#### **Mirror Screw Locations**

9. Repeat the steps on the other side of the vehicle.

#### NOTE:

If this kit is being installed with the optional lamp bracket, the bracket bushing from step 4 is not needed. Use the spacer from the lamp bracket.

## 

#### CAUTION!

• Do not run half-doors through an automatic car wash. This may result in scratches and wax buildup on the windows.

(Continued)

#### CAUTION!

- Careless handling and storage of the half-doors may damage the seals resulting in water leaks into the interior of the vehicle.
- The upper half-doors must be positioned properly to ensure sealing. Improper installation can cause water leaks into the interior of the vehicle.
- Store the zipper pulls of the upper half-door windows at the upper B-pillar area for both front and rear doors to avoid damage to the windows when not in use.
- Do not attempt to operate the half-door zipper in temperatures of 41°F (5°C) or below. Damage to the window may occur.

Scan me

# Use this QR code to access your digital experience.

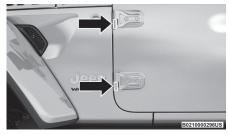
This vehicle may be equipped with halfdoors. To install the half-doors in the vehicle, follow the instruction sheet packaged in the box the doors were received in. Replacement parts may be purchased through Mopar® Service.

To install the front or rear half-doors, proceed as follows:

 Locate the upper and lower hinge pins on the lower half-door, and lower them into the body hinges on the vehicle.

#### NOTE:

The upper hinge pin is longer, which can be used to assist in guiding the door into place during installation.



#### **Lower Half-Door Hinge Pins**

3. Insert the upper and lower hinge pin screws into the body hinges. Tighten the screws using a #T50 Torx head driver to 3.8 ft lb / 5.2 N·m.

#### CAUTION!

- Do not close the door before reattaching the door check to the body. Damage may occur to the door check.
- Do not overtighten Torx fasteners, damage to the vehicle's parts will occur.

(Continued)

#### CAUTION!

- Hinge pins can break if overtightened during door install (Max Torque: 6.0 ft lb/8.1 N·m).
- 4. Attach the cloth strap of the lower half-door to the metal hook just inside the vehicle.



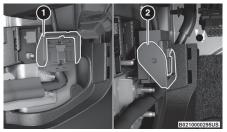
#### **Cloth Strap Attachment**

1 – Metal Hook 2 – Cloth Strap

5. Connect the wiring harness on the lower half-door to the connection just inside the vehicle.

#### NOTE:

For front doors, make sure the wiring harness is closed completely.



**Front Door Wiring Harness** 

- 1-Open Wiring Harness
- 2 Closed Wiring Harness
- 6. Replace wiring access doors.
- When the half-doors are shipped with the vehicle, the lower half-doors will have plugs in the post holes that must be removed prior to upper half-door installation. To remove these plugs, proceed as follows:
  - Locate the service hole in the center of each plug of the lower half-door (two on each front and rear door).
  - b. Place a tool (hook tool or trim stick is recommended) in the service hole.



**Place Tool Into Service Hole Of Plug To Remove** 

- c. Using the tool, slowly pull upwards from the center of the plug to remove.
- Making sure the window on the upper half-door is completely zipped closed, insert the upper half-door into the lower half-door by placing the posts into the post holes.



Lower The Upper Half-Door Into Post Holes

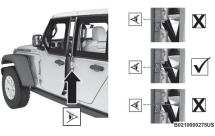
9. Push down firmly on the inside of the upper halfdoor until it is fully seated in the lower half.



Push Down To Fully Seat Upper Half-Door Door Latch Alignment

#### CAUTION!

Upon first installation of the half-doors, slowly set the door almost to the closing position and check how the door latch aligns with the body striker. Touch condition between these components can result in damage to both the door and the striker.



**Check Door Latch And Striker Alignment** 

#### NOTE:

Only adjust the door to fit correctly against the striker. DO NOT adjust the striker, as this could affect the positioning of the full door.

If the door does not center align between the latch and the striker, proceed as follows:

1. Loosen (do not remove) the four bolts on the door hinges using the provided #T50 Torx head driver.



#### **Hinge Bolt Locations**

- With the bolts loose, hold the door in the almost closed position, and check that the latch and striker align.
- With the latch and striker aligned, proceed to close the door softly and tighten the hinge bolts to 20.3 ft lb / 27.5 N·m (Max Torque: 27.3 ft lb / 37 N·m).

#### Lower Door Adjustment

#### CAUTION!

Upon first installation of the half-doors, slowly close each door to check for body contact. Improper setting of the door hinges can cause extreme non-uniform conditions, and result in damage to the body around the door. If the door does not latch properly after installation, if there is interference between the panels, or if a nonuniform gap around the door is observed when the door is closed (example: door position appears to be low and too far rearward), the position of the door on its hinges may need to be adjusted. To do this, proceed as follows:

1. Loosen (do not remove) the four bolts on the door hinges using the provided #T50 Torx head driver.



#### **Hinge Bolt Locations**

#### NOTE:

Do not adjust the body mounted hinges, or any part of the door latch, as modifications to these parts will affect installation of the full door.

- With the bolts loose, the door can be moved forward by pushing the door handle toward the front of the vehicle, and/or upward by grabbing the door handle and lifting towards the roof.
- Once the gaps between the door and vehicle body are uniform around the entire door, tighten the door hinge bolts to 20.3 ft lb / 27.5 N-m (Max Torque: 27.3 ft lb / 37 N-m).

#### Upper Door Adjustment

After installation of the half-doors, if water leaks or wind noise is observed, the seal of the upper half-door to the door opening may need to be adjusted.

To determine if the upper half-door needs to be adjusted, proceed as follows:

- 1. Determine which door is affected.
- Open the affected door and hold a dollar-size piece of paper along the top of the door opening against the vehicle near where the leak/noise was observed. Make sure half of the paper is above the area where the door seal contacts the door opening, while the other half is below.
- Close the door on the paper, then pull the paper upward. If the paper moves with little to no effort, the upper half-door will need to be adjusted in that area to increase seal compression.



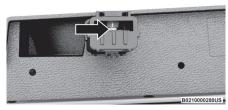
#### **Performing A Paper Test**

There is another optional test that can be performed using a flashlight and the help of another person.

One person should be inside the vehicle, and move the flashlight around the periphery of the door seal, shining outward. The other person should stand outside of the vehicle and check for light passing by the seal. If light is seen through the seal area, the door will need to be adjusted.

To adjust the seal compression, proceed as follows:

- 1. Open the door and lift the upper half-door up and away from the lower half. Lay the upper half-door on a clean, dry surface.
- 2. Using an 8 mm open-end wrench (not provided). loosen the nut located inside the bottom of the upper half-door post, closest to where the "paper test" detected a gap.



Nut Location Inside Bottom Of Post

3. Using a 3 mm Allen wrench (not provided), rotate the screw on the side of the post counterclockwise (while holding the wrench on the loosened bolt) to increase the seal compression. If needed, rotate clockwise to reduce seal compression.





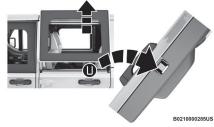
#### **Rotate Screw For Seal Compression**

- 1 3 mm Allen Wrench
- 2-8 mm Open-End Wrench
- 4. Tighten the nut inside the bottom of the post using the wrench and make sure the screw head is flush to the post. Reinstall the upper half-door.



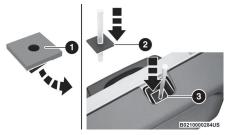
Screw Head Flush To Post

- 5. Close the door and repeat the "paper test". Repeat the adjustment procedure if needed.
- 6. If needed, add the provided shim to a lower halfdoor pocket to seal the upper half-door to the roof:
  - a. Lift upper half-door up and away from lower half.
  - b. Clean the bottom of the door pocket.



#### **Remove Upper Half-Door & Clean Bottom Of Door Pocket**

- c. Slide the shim onto a pencil or similar tool.
- d. Remove the paper backing from the adhesive side of the shim and place the shim with pencil into the pocket.
- e. Press the shim firmly to the bottom of the pocket, and remove the pencil once the shim is firmly in place.



#### Press Shim Firmly Into Bottom Of Pocket

- 1 Remove Paper Backing From Shim
- $2-\mbox{Slide}$  Pencil through Hole In Shim
- 3 Press Pencil With Shim Into Pocket
  - f. Replace upper half-door.

#### NOTE:

If the compression is increased too much on the front upper corner of the rear doors, deformation of the seal will occur.

#### Half-Door Removal

To remove the half-doors, repeat the installation steps in reverse order.

#### NOTE:

When removing the upper half-doors, push upward firmly on the middle of the upper half-door until the posts detach from the lower half.



#### Push Upward On Middle Of Upper Half Door To Remove

### Half-Door Mirror Installation - PHEV Only

In PHEV models, the exterior mirrors for the half-doors are shipped separately and will need to be installed. To install the front door exterior mirrors on the halfdoors, proceed as follows:

1. Locate the wiring harness on the outside of the front half-door.



#### **Wiring Harness Location**

2. Insert the wiring harness firmly into the connection on the driver's side exterior mirror.



**Connect Wiring Harness To Exterior Mirror** 

1 – Wiring Harness 2 – Exterior Mirror

 Place the base of the exterior mirror into the hole on the door, and support it while attaching the three mirror bolts through the inside of the door using a #T40 Torx head driver.



#### Attach Exterior Mirror

1 – Support Mirror From Outside

2 - Attach Three Mirror Bolts From Inside

#### NOTE:

Recommended torque for the mirror bolts is 5.9 ft lb / 8.0 N·m.

4. Repeat steps 1-3 on the opposite side front door.

# **STEERING WHEEL**

# TILT/TELESCOPING STEERING COLUMN

This feature allows you to tilt the steering column upward or downward. It also allows you to lengthen or shorten the steering column. The tilt/telescoping lever is located on the steering column.



#### Tilt/Telescoping Steering Column Lever

To unlock the steering column, push the control handle downward (toward the floor). To tilt the steering column, move the steering wheel upward or downward as desired. To lengthen or shorten the steering column, pull the steering wheel outward or push it inward as desired. To lock the steering column in position, push the control handle upward until fully engaged.

#### WARNING!

Do not adjust the steering column while driving. Adjusting the steering column while driving or driving with the steering column unlocked, could cause the driver to lose control of the vehicle. Failure to follow this warning may result in serious injury or death.

# 



The steering wheel contains a heating element that helps warm your hands in cold weather. The heated steering wheel has only one temperature setting. Once the heated

steering wheel has been turned on, it will stay on until the operator turns it off. The heated steering wheel may not turn on when it is already warm.

The heated steering wheel button is located within the Uconnect system and, if equipped, on the instrument panel below the radio. You can access the button through the Climate or Controls menu of the touchscreen.

- Press the heated steering wheel button once to turn the heating element on.
- Press the heated steering wheel button a second time to turn the heating element off.

#### NOTE:

The engine must be running for the heated steering wheel to operate.

For information on use with the Remote Start system, see  $\Box$  page 38.

#### WARNING!

- Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion, or other physical conditions must exercise care when using the steering wheel heater. It may cause burns even at low temperatures, especially if used for long periods.
- Do not place anything on the steering wheel that insulates against heat, such as a blanket or steering wheel covers of any type or material. This may cause the steering wheel heater to overheat.

# SEATS

Seats are a part of the Occupant Restraint system of the vehicle.

#### WARNING!

- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

### POWER ADJUSTMENT FRONT SEATS — IF EQUIPPED

#### WARNING!

- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.
- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.

Some models may be equipped with a power driver's seat and/or power passenger seat. The power seat switch and power seat recliner switch are located on the outboard side of the seat near the floor. Use the power seat switch to adjust seat height, angle, or forward/rearward position. Use the power seat recline switch to adjust the angle of the seatback.



#### **Power Seat Switches**

- 1 Power Seat Switch
- 2 Power Recline Switch

#### Forward Or Rearward Adjustment

The seat can be adjusted both forward and rearward. Push the seat switch forward or rearward, the seat will move in the direction of the switch. Release the switch when the desired position has been reached.

#### Height Adjustment

The height of the seats can be adjusted up or down. Pull upward or push downward on the seat switch, the seat will move in the direction of the switch. Release the switch when the desired position is reached.

#### Tilt Adjustment

The angle of the seat cushion can be adjusted up or down. Pull upward or push downward on the front of the seat switch and the front of the seat cushion will move in the direction of the switch.

# Reclining The Seatback Forward Or Rearward

The seatback can be reclined both forward and rearward. Push the power recline switch forward or rearward. The seatback will move in the direction of the switch. Release the switch when the desired position has been reached.

#### WARNING!

Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

#### Power Lumbar — If Equipped

Vehicles equipped with power driver or passenger seats may be equipped with power lumbar. The power lumbar switch is located on the outboard side of the power seat. Push the switch forward to increase the lumbar support. Push the switch rearward to decrease the lumbar support. Pushing upward or downward on the switch will raise and lower the position of the support.



**Power Lumbar Switch** 

### MANUAL ADJUSTMENT FRONT SEATS — IF EQUIPPED

# Manual Front Seat Forward/Rearward Adjustment

The seat can be adjusted forward or rearward by using a bar located by the front of the seat cushion, near the floor. While sitting in the seat, lift up on the bar located under the seat cushion and move the seat forward or rearward. Release the bar once you have reached the desired position. Then, using body pressure, move forward and rearward on the seat to be sure that the seat adjusters have latched.



**Adjustment Bar Location** 

#### WARNING!

- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.
- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.

#### Manual Seat Height Adjustment

The driver's seat height can be raised or lowered by using the ratcheting handle, located on the outboard side of the seat. Pull upward on the handle to raise the seat, push downward on the handle to lower the seat. Several strokes may be necessary to achieve the desired position.



Seat Height Adjustment

#### Manual Front Seat Recline Adjustment

To recline the seat, pull on the recline strap and lean forward or backward, depending on the direction you would like the seatback to move. Release the strap when the desired position is reached and the seatback will lock into place.



**Recline Strap** 

#### WARNING!

Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

### Lumbar Support

The lumbar control knob is located on the outboard side of the front driver seat. Rotate the control forward to increase and rearward to decrease the desired amount of lumbar support.



Lumbar Control Knob

### Front Easy Entry Seat - Two Door Models

Pull upward on the easy entry lever located on the outboard side of the seatback, and slide the entire seat forward.



#### Easy Entry Lever

To return the seat to a sitting position, fold the seatback upright until it locks and push the seat rearward until the track locks.

#### NOTE:

- Front seats equipped with power adjustment will not be equipped with an easy entry lever.
- The front seats (if equipped with manual adjustment) have a track memory, which returns the seat to its original position.
- The recline strap and easy entry lever should not be used during the automatic returning of the seat to its sitting position.

### MANUAL ADJUSTMENT REAR SEATS

#### WARNING!

Do not place luggage or cargo higher than the top of the seatback. This could impair visibility or become a dangerous projectile in a sudden stop or collision.

# 60/40 Split Folding Rear Seat — Four Door Models

To provide additional storage area, each rear seat can be folded flat to allow for extended cargo space.

#### NOTE:

- Be sure that the front seats are fully upright and positioned forward. This will allow the rear seat to fold down easily.
- The center head restraints must be in the lowest position to avoid contact with the center console when folding the seat.

#### WARNING!

- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

#### TO FOLD DOWN THE REAR SEAT

There are two release levers located on each upper outboard side of the rear seat. The larger of the two release levers folds down the seat and the head restraint simultaneously. The smaller lever folds down the head restraint independently for improved visibility.

To fold the seat, lift upward on the large release lever and slowly fold down the seatback. The head restraint will fold automatically with the seat when this lever is pulled.



Seatback Release Lever

#### NOTE:

You may experience deformation in the seat cushion from the seat belt buckles if the seats are left folded for an extended period of time. This is normal. By simply unfolding the seats to the open position, the seat cushion will return to its normal shape over time.

#### TO RAISE THE REAR SEAT

Raise the seatback and lock it into place. Then, raise the head restraint until it locks into place. If interference from the cargo area prevents the seatback from fully locking, you will have difficulty returning the seat to its proper position.

#### WARNING!

Be certain that the seatback is securely locked into position. If the seatback is not securely locked into position the seat will not provide the proper stability for child seats and/or passengers. An improperly latched seat could cause serious injury.

### Flip And Fold Rear Seat - PHEV Only

The 60/40 split rear seat can be folded down for added cargo space. To fold the rear seat, proceed as follows:

1. Lift the seat cushion by grabbing the outer edges of the cushion and pulling upward.



Lift Seat Cushion

2. Flip the seat cushion up and forward.



**Flip Seat Bottom Forward** 

3. Pull the seatback release lever upward fully (located on the outboard side of the rear seatback).



#### Lift Seatback Release Lever Up

#### NOTE:

Pulling the lever partway will fold the head restraint forward. Pulling it all the way up will release the seatback.

2

#### 4. Fold the seatback forward against the floor.



**Fold Seatback Down** 

5. Repeat on the other side if desired.

#### To Raise The Rear Seat

1. Raise the seatback and lock it into place.

#### NOTE:

If interference from the cargo area prevents the seatback from fully locking, you will have difficulty returning the seat to its proper position.

- 2. Raise the head restraint until it locks into place.
- 3. Return the seat cushion to its original position.

#### WARNING!

 Be certain that the seatback is securely locked into position. If the seatback is not securely locked into position the seat will not provide the proper stability for child seats and/or passengers. An improperly latched seat could cause serious injury.

(Continued)

#### WARNING!

 Do not store items on top of the battery underneath the seat cushion. The rear seat bottom must not have any obstruction that prevents it from being in the fully lowered position, otherwise the bottom may not lock during frontal impact. If the seat cushion is not fully lowered, serious injury could occur.

# FOLD AND TUMBLE REAR SEAT — TWO DOOR MODELS

NOTE:

- Prior to folding the rear seat, it may be necessary to reposition the front seats.
- Be sure that the front seats are fully upright and positioned forward. This will allow the rear seat to fold down easily.

#### Folding The Rear Seat

1. Lift the seatback release lever and fold the seatback forward.



Rear Seatback Release Lever

2. Slowly flip the entire seat forward.

#### Using The Retention Straps

 There are two retention straps located on the back of the rear seat and two corresponding wire loops located on the back of each B-pillar. Open the hookand-loop fastener on the strap and thread through the wire loop. Fold the hook-and-loop fastener over to keep the seat in the folded position. This should be done on both sides.



#### **Rear Seat Tumble Position Retention Strap**

2. To return the seat to its normal upright position, reverse these steps.

#### **Removing The Rear Seat**

1. Push down on the release bar on each side, and pull the seat out and away from the lower bracket.



#### **Release Bar Location**

- 2. Remove the seat from the vehicle.
- 3. To reinstall the rear seat, just reverse these steps.

#### NOTE:

Do not drive the vehicle without reattaching the rear seat latches.

#### WARNING!

- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

WARNING!

 In a collision, you or others in your vehicle could be injured if seats are not properly latched to their floor attachments. Always be sure that the seats are fully latched.

# REAR SEAT ARMREST — IF EQUIPPED

The center part of the rear seat can also be used as a rear armrest with cupholders. To unfold it, grab the pull strap under the head restraint and pull it forward.



#### **Rear Seat Armrest**

#### NOTE:

The cupholder liner can be removed for cleaning.

#### WARNING!

Be certain that the seatback is securely locked into position. If the seatback is not securely locked into position the seat will not provide the proper stability for child seats and/or passengers. An improperly latched seat could cause serious injury.

# UNFOLDING THE REAR ARMREST — PHEV ONLY

Raise the rear center head restraint, then pull the rear armrest tab to release it from the seat and pull forward.

Pull the rear armrest tab to release it from the seat and pull forward.



#### **Armrest Tab Location**

The center part of the rear seat can also be used as a rear armrest with cupholders.

# HEATED SEATS — IF EQUIPPED



The heated seat control buttons are located on the center instrument panel below the touchscreen and also in the Climate Control touchscreen menu.

- Press the heated seat button once to turn the HI setting on.
- Press the heated seat button a second time to turn the MED setting on.

(Continued)

- Press the heated seat button a third time to turn the LO setting on.
- Press the heated seat button a fourth time to turn the heating elements off.

#### NOTE:

- The engine must be running for the heated seats to operate.
- The level of heat selected will stay on until the operator changes it.

For information on use with the Remote Start system, see  $\Box$  page 38.

#### WARNING!

- Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical condition must exercise care when using the seat heater. It may cause burns even at low temperatures, especially if used for long periods of time.
- Do not place anything on the seat or seatback that insulates against heat, such as a blanket or cushion. This may cause the seat heater to overheat. Sitting in a seat that has been overheated could cause serious burns due to the increased surface temperature of the seat.

### HEAD RESTRAINTS

Head restraints are designed to reduce the risk of injury by restricting head movement in the event of a rear impact. Head restraints should be adjusted so that the top of the head restraint is located above the top of your ear.

#### WARNING!

- All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a crash.
- Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

#### **Front Head Restraints**

To raise the head restraint, pull upward on the head restraint. To lower the head restraint, push the adjustment button located on the base of the head restraint, and push downward on the head restraint. The release button does not need to be pushed to adjust the head restraint.

To remove the head restraint, raise it as far as it can go then push the adjustment button and the release button at the base of each post while pulling the head restraint up. To reinstall the head restraint, put the head restraint posts into the holes and push downward. Then adjust it to the appropriate height.



#### **Front Head Restraint**

1 – Release Button

2 - Adjustment Button

#### WARNING!

- A loose head restraint thrown forward in a collision or hard stop could cause serious injury or death to occupants of the vehicle. Always securely stow removed head restraints in a location outside the occupant compartment.
- ALL the head restraints MUST be reinstalled in the vehicle to properly protect the occupants. Follow the reinstallation instructions prior to operating the vehicle or occupying a seat.

#### NOTE:

Do not reposition the head restraint 180 degrees to the incorrect position in an attempt to gain additional clearance to the back of the head. 2

# Rear Head Restraints — Two Door Models

The rear seat is equipped with non-adjustable, but foldable head restraints.

To fold the outboard head restraint, pull on the release strap located on the upper outboard side of each rear seat.



**Rear Head Restraint Folding Strap Locations** 



To return the head restraint to its upward position, lift up on the head restraint until it locks into place. For information on child seat tether routing, see  $\Box$  page 239.

#### WARNING!

- Do not drive the vehicle without the rear seat head restraints installed while passengers are occupying the rear seat. In a collision, people riding in this area without the head restraints installed are more likely to be seriously injured or killed.
- A loose head restraint thrown forward in a collision or hard stop could cause serious injury or death to occupants of the vehicle. Always securely stow removed head restraints in a location outside the occupant compartment.
- ALL the head restraints MUST be reinstalled in the vehicle to properly protect the occupants. Follow the reinstallation instructions prior to operating the vehicle or occupying a seat.

# Rear Head Restraints — Four Door Models

The rear seat is equipped with nonadjustable, but foldable, outboard head restraints, as well as an adjustable, removable center head restraint.

To fold the outboard head restraint, pull on the inner release lever, located on the upper part of the rear seat.



Rear Head Restraint Lever



**Rear Head Restraint Folded** 

To return the head restraint to its upward position, lift up on the head restraint until it locks into place.

To raise the center head restraint, lift up on the head restraint. To lower the center head restraint, push the adjustment button, located at the base of the head restraint, and push down on the head restraint.

**Rear Head Restraints Folded** 

To remove the center head restraint, push the release button, located on the base of the head restraint, and pull upward on the head restraint.

To install the head restraint, hold the release button while pushing downward on the head restraint. For information on child seat tether routing, see  $\Box$  page 239.

#### NOTE:

Lower the center head restraint to avoid contact with the center console when folding the seat down.

#### WARNING!

- Do not drive the vehicle without the rear seat head restraints installed while passengers are occupying the rear seat. In a collision, people riding in this area without the head restraints installed are more likely to be seriously injured or killed.
- A loose head restraint thrown forward in a collision or hard stop could cause serious injury or death to occupants of the vehicle. Always securely stow removed head restraints in a location outside the occupant compartment.
- ALL the head restraints MUST be reinstalled in the vehicle to properly protect the occupants. Follow the reinstallation instructions prior to operating the vehicle or occupying a seat.

# **UCONNECT VOICE RECOGNITION**

### INTRODUCING VOICE RECOGNITION

Start using Uconnect Voice Recognition with these helpful quick tips. It provides the key Voice Commands and tips you need to know to control your vehicle's Voice Recognition (VR) system.

### BASIC VOICE COMMANDS

The following basic Voice Commands can be given at any point while using your Uconnect system. Push the VR button on the steering wheel. After the beep, sav:

- "Cancel" to stop a current voice session.
- "Help" to hear a list of suggested Voice Commands.
- "Repeat" to listen to the system prompts again.

Notice the visual cues that inform you of your Voice Recognition system's status.

## GET STARTED

The www VR button is used to activate/deactivate your Voice Recognition system.

Helpful hints for using Voice Recognition:

- Reduce background noise. Wind noise and passenger conversations are examples of noise that may impact recognition.
- Speak clearly at a normal pace and volume while facing straight ahead.
- Each time you give a Voice Command, first push the VR button, wait until after the beep, then say your Voice Command.

 You can interrupt the help message or system prompts by pushing the VR button and saying a Voice Command from the current category.



#### **Uconnect Voice Command Buttons**

 $1-\mbox{Push}$  To Start Or Answer A Phone Call And Send Or Receive A Text

2 – Push The Voice Recognition Button To Begin Radio, Media, Navigation, And Climate Functions 3 – Push To End Call

### ADDITIONAL INFORMATION

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For Uconnect system support, call 1-877-855-8400 (24 hours a day 7 days a week) or visit DriveUconnect.com (US) or DriveUconnect.ca (Canada).

# MIRRORS

## INSIDE REARVIEW MIRROR

#### Manual Mirror — If Equipped

The rearview mirror can be adjusted up, down, left, and right. The mirror should be adjusted to center on the view through the rear window.

Headlight glare from vehicles behind you can be reduced by moving the small control under the mirror to the night position (toward the rear of the vehicle). The mirror should be adjusted while set in the day position (toward the windshield).



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#### **Adjusting Rearview Mirror**

#### Automatic Dimming Mirror — If Equipped

The rearview mirror can be adjusted up, down, left, and right. The mirror should be adjusted to center on the view through the rear window.

The mirror automatically adjusts to headlight glare from vehicles behind you.

#### NOTE:

The Automatic Dimming feature is disabled when the vehicle is in REVERSE to improve the driver's view.



#### **Automatic Dimming Mirror**

The Automatic Dimming feature can be turned on or off through Uconnect Settings  $\Rightarrow$  page 201.

#### CAUTION!

To avoid damage to the mirror during cleaning, never spray any cleaning solution directly onto the mirror. Apply the solution onto a clean cloth and wipe the mirror clean.

# ILLUMINATED VANITY MIRRORS

To access an illuminated vanity mirror, flip down one of the visors and lift the cover.



Vanity Mirror

# **OUTSIDE MIRRORS**

The outside mirror(s) can be adjusted to the center of the adjacent lane of traffic to achieve the optimal view.



#### **Outside Rearview Mirror**

#### WARNING!

Vehicles and other objects seen in the passenger side convex mirror will look smaller and farther away than they really are. Relying too much on your passenger side mirror could cause you to collide with another vehicle or other object. Use your inside mirror when judging the size or distance of a vehicle seen in the passenger side mirror.

## OUTSIDE MIRRORS WITH TURN SIGNAL - IF EQUIPPED

Driver and passenger outside mirrors with turn signal lighting contain LEDs, which are located in the upper outer corner of each mirror.

The LEDs are turn signal indicators, which flash with the corresponding turn signal lights in the front and rear of the vehicle. Turning on the Hazard Warning flashers will also activate these LEDs.

# POWER MIRRORS – IF EQUIPPED

The power mirror controls are located on the door panel next to the door handle.



#### Power Mirror Switch

The power mirror controls consist of mirror select buttons and a four-way mirror control switch. To adjust a mirror, push either the L (left) or R (right) button to select the mirror that you want to adjust.

Using the mirror control switch, push any of the four arrows for the direction that you want the mirror to move.

## HEATED MIRRORS - IF EQUIPPED



These mirrors are heated to melt frost or ice. This feature will be activated whenever you turn on the rear window defroster (if equipped)  $\Box$  page 74.

# **UNIVERSAL GARAGE DOOR OPENER** (HomeLink<sup>®</sup>) — IF EQUIPPED



#### HomeLink® Buttons On Sun Visor

Use this QR code to access your digital experience.

· HomeLink® replaces up to three hand-held transmitters that operate devices such as garage door openers, motorized gates, lighting, or home security systems. The

HomeLink® unit is powered by your vehicle's 12 Volt battery.

- The HomeLink® buttons that are located in the overhead console or sun visor designate the three different HomeLink® channels.
- To operate HomeLink®, push and release any of the programmed HomeLink® buttons. These buttons will activate the devices they are programmed to with each press of the corresponding HomeLink® button.
- The HomeLink® indicator light is located above the center button

#### NOTE:

HomeLink® is disabled when the Vehicle Security system is active  $\Box$  page 352.

## **BEFORE YOU BEGIN** PROGRAMMING HOMELINK®

For efficient programming and accurate transmission of the Radio Frequency (RF) signal, it is recommended that a new battery be placed in the hand-held transmitter of the device that is being programmed to the HomeLink® system. Make sure your hand-held transmitter is programmed to activate the device you are trying to program your HomeLink® button to.

Ensure that your vehicle is parked outside of the garage before you begin programming.

It is recommended that you erase all the channels of your HomeLink® before you use it for the first time.



# ERASING ALL THE HOMELINK® CHANNELS

To erase the channels, follow this procedure:

- 1. Place the ignition switch into the ON/RUN position.
- Push and hold the two outside HomeLink® buttons (I and III) for up to 20 seconds, or until the HomeLink® indicator light flashes.

#### NOTE:

Erasing all channels should only be performed when programming HomeLink® for the first time. Do not erase channels when programming additional buttons.

## IDENTIFYING WHETHER YOU HAVE A ROLLING CODE OR NON-ROLLING CODE DEVICE

Before programming a device to one of your HomeLink® buttons, you must determine whether the device has a rolling code or non-rolling code.

#### **Rolling Code Devices**

To determine if your device has a rolling code, a good indicator is its manufacturing date. Typically, devices manufactured after 1995 have rolling codes. A device with a rolling code will also have a "LEARN" or "TRAIN" button located where the antenna is attached to the device. The button may not be immediately visible when looking at the device. The name and color of the button may vary slightly by manufacturer.

#### NOTE:

The "LEARN" or "TRAIN" button is not the button you normally use to operate the device.

#### Non-rolling Code Devices

Most devices manufactured before 1995 will not have a rolling code. These devices will also not have a "LEARN" or "TRAIN" button.

# PROGRAMMING HOMELINK® TO A GARAGE DOOR OPENER

To program any of the HomeLink® buttons to activate your garage door opener motor, proceed as follows:

#### NOTE:

All HomeLink® buttons are programmed using this procedure. You do not need to erase all channels when programming additional buttons.

- 1. Place the ignition switch in the ON/RUN position.
- Place the garage door opener transmitter 1 to 3 inches (3 to 8 cm) away from the HomeLink® button you wish to program, while keeping the HomeLink® indicator light in view.
- Push and hold the HomeLink® button you want to program while you push and hold the garage door opener transmitter button you are trying to replicate.
- Continue to hold both buttons and observe the HomeLink® indicator light. The HomeLink® indicator light will flash slowly and then rapidly. Once this happens, release both buttons.

#### NOTE:

Make sure the garage door opener motor is plugged in before moving on to the rolling code/non-rolling code final steps.

#### Rolling Code Garage Door Opener Final Steps

#### NOTE:

You have 30 seconds in which to initiate rolling code final step 2, after completing rolling code final step 1.

- At the garage door opener motor (in the garage), locate the "LEARN" or "TRAIN" button. This can usually be found where the hanging antenna wire is attached to the garage door opener motor. Firmly push and release the "LEARN" or "TRAIN" button.
- 2. Return to the vehicle and push the programmed HomeLink® button three times (holding the button for two seconds each time). If the garage door opener motor operates, programming is complete.
- Push the programmed HomeLink® button to confirm that the garage door opener motor operates. If the garage door opener motor does not operate, repeat the final steps for the rolling code procedure.

#### Non-Rolling Code Garage Door Opener Final Steps

- Push and hold the programmed HomeLink® button and observe the HomeLink® indicator light. If the HomeLink® indicator light stays on constantly, programming is complete.
- Push the programmed HomeLink® button to confirm that the garage door opener motor operates. If the garage door opener motor does not operate, repeat the steps from the beginning.

#### WARNING!

 Your motorized door or gate will open and close while you are programming the universal transmitter. Do not program the transmitter if people or pets are in the path of the door or gate.

#### WARNING!

 Do not run your vehicle in a closed garage or confined area while programming the transmitter.
 Exhaust gas from your vehicle contains carbon monoxide which is odorless and colorless. Carbon monoxide is poisonous when inhaled and can cause you and others to be severely injured or killed.

# PROGRAMMING HOMELINK® TO A MISCELLANEOUS DEVICE

The procedure on how to program HomeLink® to a miscellaneous device follows the same procedure as programming to a garage door opener ric > page 68. Be sure to determine if the device has a rolling code, or non-rolling code before beginning the programming process.

#### NOTE:

Canadian Radio Frequency (RF) laws require transmitter signals to time-out (or quit) after several seconds of transmission, which may not be long enough for HomeLink® to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to time-out in the same manner. The procedure may need to be performed multiple times to successfully pair the device to your HomeLink® buttons.

# REPROGRAMMING A SINGLE HOMELINK® BUTTON

To reprogram a single HomeLink® button that has been previously trained, without erasing all the channels, proceed as follows. Be sure to determine whether the new device you want to program the HomeLink® button to has a rolling code, or non-rolling code.

- 1. Place the ignition in the ON/RUN position, without starting the engine.
- 2. Push and hold the desired HomeLink® button until the HomeLink® Indicator light begins to flash after 20 seconds. **Do not release the button**.
- 3. Without releasing the button, proceed with Step 2 in "Programming HomeLink® To A Garage Door Opener" and follow all remaining steps.

### CANADIAN/GATE OPERATOR PROGRAMMING

For programming transmitters in Canada/United States that require the transmitter signals to "time-out" after several seconds of transmission.

Canadian Radio Frequency (RF) laws require transmitter signals to time-out (or quit) after several seconds of transmission, which may not be long enough for HomeLink® to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to time-out in the same manner.

It may be helpful to unplug the device during the cycling process to prevent possible overheating of the garage door or gate motor.

1. Place the ignition in the ON/RUN position.

#### NOTE:

For vehicles equipped with Keyless Enter 'n Go™, place the ignition in the RUN position. Make sure while programming HomeLink® with the engine on that your vehicle is outside of your garage, or that the garage door remains open at all times.

 Place the hand-held transmitter 1 to 3 inches (3 to 8 cm) away from the HomeLink® button you wish to program while keeping the HomeLink® indicator light in view.

- Continue to push and hold the HomeLink® button while you push and release (cycle) your hand-held transmitter every two seconds until HomeLink® has successfully accepted the frequency signal. The indicator light will flash slowly and then rapidly when fully trained.
- 4. Watch for the HomeLink® indicator to change flash rates. When it changes, it is programmed. It may take up to 30 seconds or longer in rare cases. The garage door may open and close while you are programming.
- 5. Push and hold the programmed HomeLink® button and observe the indicator light.

#### NOTE:

- If the indicator light stays on constantly, programming is complete and the garage door/device should activate when the HomeLink® button is pushed.
- To program the two remaining HomeLink® buttons, repeat each step for each remaining button. DO NOT erase the channels.

If you unplugged the garage door opener/device for programming, plug it back in at this time.

# Reprogramming A Single HomeLink® Button (Canadian/Gate Operator)

To reprogram a channel that has been previously trained, follow these steps:

- 1. Place the ignition in the ON/RUN position.
- Press and hold the desired HomeLink® button until the indicator light begins to flash after 20 seconds. Do not release the button.
- Without releasing the button, proceed with "Canadian/Gate Operator Programming" step 2 and follow all remaining steps.

# SECURITY

It is advised to erase all channels before you sell or turn in your vehicle.

To do this, push and hold the two outside buttons for 20 seconds until the indicator flashes. Note that all channels will be erased. Individual channels cannot be erased.

The HomeLink  $\ensuremath{\textcircled{}}$  universal transmitter is disabled when the Vehicle Security system is active.

# TROUBLESHOOTING TIPS

If you are having trouble programming  ${\sf HomeLink}({\mathbbm R}),$  here are some of the most common solutions:

- Replace the battery in the garage door opener handheld transmitter.
- Push the LEARN button on the garage door opener to complete the training for a rolling code.
- Did you unplug the device for programming and remember to plug it back in?

If you have any problems, or require assistance, please call toll-free 1-800-355-3515 or visit HomeLink.com for information or assistance.

#### WARNING!

- Vehicle exhaust contains carbon monoxide, a dangerous gas. Do not run your vehicle in the garage while programming the transmitter. Exhaust gas can cause serious injury or death.
- Your motorized door or gate will open and close while you are programming the universal transmitter. Do not program the transmitter if people, pets or other objects are in the path of the door or gate. Only use this transmitter with a garage door

#### WARNING!

opener that has a "stop and reverse" feature as required by Federal safety standards. This includes most garage door opener models manufactured after 1982. Do not use a garage door opener without these safety features.

# **EXTERIOR LIGHTS**

## HEADLIGHT SWITCH

The headlight switch is located on the left side of the instrument panel. This switch controls the operation of the headlights, parking lights, automatic headlights (if equipped), instrument panel lights, interior lights, and fog lights (if equipped).



**Headlight Switch** 

- 1 Headlight Control
- 2 Fog Light Switch
- 3 Dimmer Control



#### Headlight Switch (Vehicles Sold In Canada)

- 1 Headlight Control
- 2 Fog Light Switch
- 3 Dimmer Control

#### NOTE:

Vehicles sold in Canada are equipped with a headlight switch with an AUTO and ON detent but without an OFF detent. Headlights will be deactivated when the headlight switch is placed in the parking lights position. However, the Daytime Running Lights (DRLs) will be activated along with the front and rear marker lights. The DRLs may be deactivated when the parking brake is engaged.

Rotate the headlight switch clockwise to the first detent for parking light and instrument panel light operation. Rotate the headlight switch to the second detent for headlight, parking light, and instrument panel light operation.

#### NOTE:

For vehicles sold in Canada, rotate the headlight switch clockwise from the parking lights and instrument panel lights position to the first detent to turn on headlights, parking lights, and instrument panel lights. Rotate the headlight switch to the second detent for the AUTO position.

(Continued)

# DAYTIME RUNNING LIGHTS (DRLS) — IF EQUIPPED

The Daytime Running Lights are active when the low beams are not on, and the engine is running. DRLs may be deactivated by applying the parking brake.

#### NOTE:

- For vehicles sold in Canada, the Daytime Running Lights will automatically deactivate when the front fog lights are turned on.
- On some vehicles, the Daytime Running Lights may deactivate, or reduce intensity, on one side of the vehicle (when a turn signal is activated on that side), or on both sides of the vehicle (when the hazard warning lights are activated).

# HIGH/LOW BEAM SWITCH

Push the multifunction lever toward the instrument panel to switch the headlights to high beams. The lever will return to the centered position. To return the headlights to low beam, pull the lever toward the steering wheel, or push the lever toward the instrument panel.



Multifunction Lever

# AUTOMATIC HIGH BEAM HEADLAMP CONTROL — IF EQUIPPED

The Automatic High Beam Headlamp Control system provides increased forward lighting at night by automatically controlling the high beams through the use of a camera mounted on the vehicle's header. This camera detects vehicle specific light and automatically switches from high beams to low beams until the approaching vehicle is out of view.

#### NOTE:

- The Automatic High Beam Headlamp Control can be turned on or off by selecting "ON" under "Auto High Beam" within your Uconnect Settings C> page 201, as well as turning the headlight switch to the AUTO position and placing the multifunction lever in the high beam position.
- Broken, muddy, or obstructed headlights and taillights of vehicles in the field of view will cause headlights to remain on longer (closer to the vehicle). Also, dirt, film, and other obstructions on the windshield or camera lens will cause the system to function improperly.

# FLASH-TO-PASS

You can signal another vehicle with your headlights by lightly pulling the multifunction lever toward you. This will cause the high beam headlights to turn on, and remain on, until the lever is released.

# AUTOMATIC HEADLIGHTS – IF EQUIPPED

This system automatically turns the headlights on or off according to ambient light levels. To turn the system on, rotate the headlight switch clockwise to the last detent for automatic headlight operation. When the system is on, the headlight time delay feature is also on. This means the headlights will stay on for up to 90 seconds after you place the ignition into the OFF position. To turn the automatic system off, move the headlight switch out of the AUTO position.

#### NOTE:

The engine must be running before the headlights will come on in the automatic mode.

# LIGHTS-ON REMINDER

If the headlights, parking lights, or cargo lights are left on after the ignition is placed in the OFF position, a chime will sound when the driver's door is opened.

# FRONT FOG LIGHTS – IF EQUIPPED

To activate the Front Fog Lights, turn on the parking lights or low beam headlights and push the fog light switch. Pushing the fog light switch a second time will turn the front fog lights off.



**Front Fog Light Switch** 



Front Fog Light Switch (Vehicles Sold In Canada)

# **TURN SIGNALS**

Move the multifunction lever up or down to activate the turn signals. The arrows on each side of the instrument cluster flash to show proper operation.

#### NOTE:

If either light remains on and does not flash, or there is a very fast flash rate, check for a defective outside light bulb.

# I ANF CHANGE ASSIST -IF EOUIPPED

Lightly push the multifunction lever up or down, without moving beyond the detent, and the turn signal will flash three times then automatically turn off.

# **INTERIOR LIGHTS**

# INTERIOR COURTESY LIGHTS

The courtesy lights will turn on when the front doors are opened, by rotating the dimmer control on the headlight switch fully upward, or, if equipped, when the unlock button is pushed on the key fob.

The interior courtesy lights are located in the center of the vehicle's sport bar, and consist of one large center light and four smaller reading lights. Each reading light can be turned on by pushing the lens. Pushing the lens a second time will turn the light off.



#### **Dome Lights**

When a door is open and the interior lights are on, rotating the dimmer control to the extreme bottom position will cause all the interior lights to turn off. This allows the doors to stay open for extended periods of time without discharging the vehicle's battery.

# DIMMER CONTROL

The dimmer control is part of the headlight switch and is located on the left side of the instrument panel.



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**Dimmer Control** 



#### **Dimmer Control (Vehicles Sold In Canada)**

With the parking lights or headlights on, rotating the dimmer control upward will increase the brightness of the instrument panel lights. Rotating the dimmer control will also adjust the interior and ambient light levels (e.g. courtesy lights in the footwell, illuminated cupholders, and front door handles).

# WINDSHIELD WIPERS AND WASHERS

The windshield wiper/washer control lever is located on the right side of the steering column. The front wipers are operated by rotating a switch, located at the end of the lever.

# WINDSHIELD WIPER OPERATION



#### Windshield Wiper/Washer Operation

- 1 Pull For Front Washer
- 2 Rotate For Rear Wiper Operation (If Equipped)
- 3 Rotate For Front Wiper Operation
- 4 Push Forward For Rear Washer
- 5 Push Up For Mist

Rotate the end of the lever upward to the first detent past the intermittent settings for low-speed wiper operation. Rotate the end of the lever upward to the second detent past the intermittent settings for highspeed wiper operation.

#### CAUTION!

In cold weather, always turn off the wiper switch and allow the wipers to return to the park position before turning off the engine. If the wiper switch is left on and the wipers freeze to the windshield, damage to the wiper motor may occur when the vehicle is restarted.

#### Intermittent Wipers

Use the intermittent wiper when weather conditions make a single wiping cycle, with a variable pause between cycles, desirable. Rotate the end of the lever to the first detent position for one of four intermittent settings. The delay cycle can be set anywhere between 1 to 18 seconds.

#### NOTE:

The wiper delay times depend on vehicle speed. If the vehicle is moving less than 10 mph (16 km/h), delay times will be doubled.

#### Windshield Washers

To use the washer, pull the lever toward you and hold while spray is desired. If the lever is pulled while in the delay range, the wiper will start and continue to operate for two or three wipe cycles after the lever is released. Then, the intermittent interval previously selected will resume.

If the lever is pulled while in the off position, the wipers will operate for two or three wipe cycles. Then, the wipers will turn off.

#### NOTE:

As a protective measure, the washer will stop if the switch is held for more than 20 seconds. Once the switch is released the washer will resume normal operation.

#### WARNING!

Sudden loss of visibility through the windshield could lead to a collision. You might not see other vehicles or other obstacles. To avoid sudden icing of the windshield during freezing weather, warm the windshield with the defroster before and during windshield washer use.

#### Mist

Push upward on the wiper lever to activate a single wipe to clear off-road mist or spray from a passing vehicle. As long as the lever is held up, the wipers will continue to operate.

#### NOTE:

The mist feature does not activate the washer pump; therefore, no washer fluid will be spraved on the windshield. The washer function must be used in order to spray the windshield with washer fluid.

For information on wiper care and replacement, see 

# REAR WINDOW WIPER/WASHER -IF EOUIPPED

A rotary switch on the center portion of the windshield wiper/washer lever controls the operation of the rear wiper/washer function.



Rotate the switch upward to the first detent position for intermittent operation and to the second detent for continuous rear wiper operation.



Push the wiper lever toward the instrument panel to activate the rear washer. The washer pump and wiper will continue to operate as long as the lever is held.

#### NOTE:

As a protective measure, the washer will stop if the switch is held for more than 20 seconds. Once the switch is released the washer will resume normal operation.

If the rear wiper is operating when the ignition is placed in the OFF position, the wiper will automatically return to the parked position. When the vehicle is restarted, the wiper will resume function at whichever position the switch is set at.

# **CLIMATE CONTROLS**

The Climate Control system allows you to regulate the temperature, air flow, and direction of air circulating throughout the vehicle. The controls are located on the touchscreen and on the instrument panel below the radio.

# AUTOMATIC CLIMATE CONTROL DESCRIPTIONS AND FUNCTIONS



Uconnect 5 NAV With 12.3-inch Display Automatic **Climate Controls** 

## MAX A/C Button



Press and release the MAX A/C button on the MAX touchscreen to change the current setting to the coldest output of air. The MAX A/C indicator illuminates when MAX A/C is on. Pressing

the button again will cause the MAX A/C operation to exit.

#### NOTE:

The MAX A/C button is only available on the touchscreen.

MAX A/C sets the control for maximum cooling performance. The button illuminates when MAX A/C is on. In MAX A/C, the blower level and mode position can be adjusted to desired user settings. Pressing other settings will cause the MAX A/C to turn off.

# A/C Button



Press and release this button on the touchscreen, or push the button on the faceplate to change the current setting. The A/C indicator illuminates when A/C is on.

The A/C button allows the operator to manually activate or deactivate the A/C system. When the A/C system is turned on, cool dehumidified air will flow through the outlets into the cabin.

## Recirculation Button



Press and release this button on the touchscreen, or push the button on the faceplate, to change the system between recirculation mode and outside air mode. The Recircula-

tion indicator and the A/C indicator illuminate when the Recirculation button is pressed. Recirculation can be used when outside conditions, such as smoke, odors, dust, or high humidity are present. Recirculation can be used in all modes. Recirculation may be unavailable (button on the touchscreen greved out) if conditions

exist that could create fogging on the inside of the windshield. The A/C can be deselected manually without disturbing the mode control selection. Continuous use of the Recirculation mode may make the inside air stuffy and window fogging may occur. Extended use of this mode is not recommended. Recirculation mode may automatically adjust to optimize customer experience for warming, cooling, dehumidification, etc.

In cold weather, use of Recirculation mode may lead to excessive window fogging.

# AUTO Button

AUTO

Set your desired temperature and press and release the AUTO button on the touchscreen, or push the button on the faceplate. AUTO will achieve and maintain your desired tempera-

ture by automatically adjusting the blower speed and air distribution. Air Conditioning (A/C) may be active during AUTO operation to improve performance. AUTO mode is highly recommended for efficiency. You can press and release this button on the touchscreen, or push the button on the faceplate, to turn AUTO on. The AUTO indicator illuminates when AUTO is on. Toggling this function will cause the system to switch between manual mode and automatic mode  $\Box$  page 76.

## Front Defrost Button



Press and release this button on the touchscreen, or push and release the button on the faceplate, to change the current airflow setting to Defrost mode. The Front Defrost

indicator illuminates when Front Defrost is on. Air comes from the windshield and side window demist outlets. When the defrost button is selected, the blower level may increase. Use Defrost mode with maximum

temperature settings for best windshield and side window defrosting and defogging. When toggling the front defrost mode button, the climate system returns to the previous setting.

## Rear Defrost Button



Press and release the Rear Defrost button on the touchscreen, or push and release the button on the faceplate, to turn on the rear window defroster and the heated outside mirrors (if equipped). The Rear Defrost indicator illuminates when the rear window defroster is on. The rear window defroster automatically turns off after 10 minutes.

### CAUTION!

Failure to follow these cautions can cause damage to the heating elements:

- Use care when washing the inside of the rear window. Do not use abrasive window cleaners on the interior surface of the window. Use a soft cloth and a mild washing solution, wiping parallel to the heating elements. Labels can be peeled off after soaking with warm water.
- Do not use scrapers, sharp instruments, or abrasive window cleaners on the interior surface of the window.
- Keep all objects a safe distance from the window.

## Driver And Passenger Temperature Up And Down Buttons

Provides the driver and passenger with independent temperature control.



Push the red button on the faceplate or touchscreen or press and slide the temperature bar towards the red arrow button on the touchscreen for warmer temperature settings.



Push the blue button on the faceplate or touchscreen or press and slide the temperature bar towards the blue arrow button on the touchscreen for cooler temperature settings.

#### NOTE:

The numbers within the temperature display will only appear if your vehicle is equipped with an Automatic Climate Control system.

## SYNC Button

Press the SYNC button on the touchscreen SYNC to toggle the SYNC feature on/off. The SYNC indicator illuminates when SYNC is on. SYNC synchronizes the passenger temperature setting with the driver temperature setting. Changing

the passenger's temperature setting while in SYNC will automatically exit this feature.

#### NOTE:

The SYNC button is only available on the touchscreen.

## Blower Control



Blower Control regulates the amount of air forced through the Climate Control system. Adjusting the blower will cause automatic mode to switch to manual operation. There

are seven blower speeds available. The speeds can be selected using either the blower control knob on the faceplate or the buttons on the touchscreen.

- Faceplate: The blower speed increases as you turn the blower control knob clockwise from the lowest blower setting. The blower speed decreases as you turn the blower control knob counterclockwise.
- Touchscreen: Use the small blower icon to reduce the blower setting and the large blower icon to increase the blower setting. The blower can also be selected by pressing the blower bar area between the icons.

## Mode Control



Select one of the Mode buttons on the touchscreen or press the Mode button on the faceplate to adjust the airflow distribution. The airflow distribution can be adjusted

so air comes from the instrument panel outlets, floor outlets, defrost outlets, and demist outlets,

## Panel Mode



Air comes from the outlets in the instrument panel. Each of these outlets can be individually adjusted to direct the flow of air. The air vanes of the center outlets and outboard

outlets can be moved up and down or side to side to regulate airflow direction. There is a shut-off wheel located below the air vanes to shut off or adjust the amount of airflow from these outlets.

## **Bi-Level Mode**



Air comes from the instrument panel outlets and floor outlets. A slight amount of air is directed through the defrost and side window demister outlets.

#### NOTE:

Bi-Level mode is designed under comfort conditions to provide cooler air out of the panel outlets and warmer air from the floor outlets.

## Floor Mode



Air comes from the floor outlets. A slight amount of air is directed through the defrost and side window demister outlets.

## Mix Mode



Air is directed through the floor, defrost, and side window demister outlets. This setting works best in cold or snowy conditions that require extra heat to the windshield. This setting is good for maintaining comfort while reducing moisture on the windshield

# Climate Control OFF Button



Press and release the OFF button on the touchscreen, or push the OFF button on the faceplate to turn the Climate Control ON/OFF.

# AUTOMATIC TEMPERATURE CONTROL (ATC) — IF EQUIPPED

## **Automatic Operation**

- 1. Push the AUTO button on the faceplate, or the AUTO button on the touchscreen on the Automatic Temperature Control (ATC) Panel.
- 2. Next, adjust the temperature that you would like the system to maintain by adjusting the driver and passenger temperature control buttons. Once the desired temperature is displayed, the system will achieve and automatically maintain that comfort level.
- 3. When the system is set up for your comfort level, it is not necessary to change the settings. You will experience the greatest efficiency by simply allowing the system to function automatically.

#### NOTE:

- · It is not necessary to move the temperature settings for cold or hot vehicles. The system automatically adjusts the temperature, mode, and blower speed to provide comfort as quickly as possible.
- The temperature can be displayed in US or Metric units by selecting the US/Metric customerprogrammable feature within Uconnect Settings  $\Rightarrow$  page 201.

To provide you with maximum comfort in the Automatic mode during cold start-ups, the blower fan will remain on low until the engine warms up. The blower will increase in speed and transition into Auto mode.

2

## **Manual Operation Override**

This system offers a full complement of manual override features. The AUTO symbol in the front ATC display will be turned off when the system is being used in the manual mode.

# CLIMATE VOICE COMMANDS

Adjust vehicle temperatures hands-free and keep everyone comfortable while you keep moving ahead.

Push the VR button on the steering wheel. After the beep, say one of the following commands:

- "Set the driver temperature to 70 degrees"
- "Set the passenger temperature to 70 degrees"

**Did You Know:** Voice Command for Climate may only be used to adjust the interior temperature of your vehicle. Voice Command will not work to adjust the heated seats or steering wheel if equipped.

# **OPERATING TIPS**

Refer to the chart at the end of this section for suggested control settings for various weather conditions.

## **Summer Operation**

The engine cooling system must be protected with a highquality antifreeze coolant to provide proper corrosion protection and to protect against engine overheating. OAT coolant (conforming to MS.90032) is recommended.

### Winter Operation

To ensure the best possible heater and defroster performance, make sure the engine cooling system is functioning properly and the proper amount, type, and concentration of coolant is used. Use of the Air Recirculation mode during Winter months is not recommended, because it may cause window fogging.

## Vacation/Storage

For information on maintaining the Climate Control system when the vehicle is being stored for an extended period of time, see  $\Box$  page 333.

## Window Fogging

Vehicle windows tend to fog on the inside in mild, rainy, and/or humid weather. To clear the windows, select Defrost or Mix mode and increase the front blower speed. Do not use the Recirculation mode without A/C for long periods, as fogging may occur.

### **Outside Air Intake**

Make sure the air intake, located directly in front of the windshield, is free of obstructions, such as leaves. Leaves collected in the air intake may reduce airflow, and if they enter the plenum, they could plug the water drains. In Winter months, make sure the air intake is clear of ice, slush, and snow.

## **Cabin Air Filter**

The Climate Control system filters out dust and pollen from the air. Contact an authorized dealer to service your cabin air filter, and to have it replaced when needed.

# Stop/Start System — If Equipped

While in an Autostop, the Climate Control system may automatically adjust airflow to maintain cabin comfort. Customer settings will be maintained upon return to an engine running condition.

## **Operating Tips Chart**

The following chart is for Manual Override Operation.

| WEATHER  | CONTROL SETTINGS  |
|--|---|
| Hot Weather And<br>Vehicle Interior Is<br>Very Hot | Set the mode control to<br>(Panel Mode), vc (A/C) on,<br>and blower on high. Roll down<br>the windows for a minute to<br>flush out the hot air. Adjust the<br>controls as needed to achieve<br>comfort. |
| Warm Weather                                       | Turn A/C (A/C) on and set the<br>mode control to<br>(Panel Mode).   |
| Cool Sunny   | Operate in 챼 (Bi-Level Mode).   |
| Cool & Humid<br>Conditions                         | Set the mode control to<br>(Floor Mode) and turn AC (A/C)<br>on to keep windows clear.  |
| Cold Weather                                       | Set the mode control to<br>(Floor Mode). If windshield fog-<br>ging starts to occur, move the<br>control to<br>(Mix Mode).  |

# **INTERIOR STORAGE AND EQUIPMENT**

# STORAGE

## **Glove Compartment**

The glove compartment is located on the passenger side of the instrument panel.

To open the glove compartment, pull the release handle.



#### **Glove Compartment**

#### WARNING!

Do not operate this vehicle with a glove compartment in the open position. Driving with the glove compartment open may result in injury in a collision.

## **Console Storage Compartment**

The center console has both an upper and lower storage compartment.

To open the upper storage compartment, lift the top latch. To access the lower storage compartment, lift the bottom latch.



#### **Console Storage Latches**

1 -Upper Compartment Latch 2 -Lower Compartment Latch



Console Storage Lock If equipped, the center console storage may have a locking mechanism.

# Rear Storage Compartment — If Equipped

The rear cargo area storage compartment is located underneath the load floor.

To access the storage compartment, lift up on the cargo strap/handle at the rear of the cargo area.



#### **Rear Storage Cover (Four Door Models)**



**Rear Storage Cover (Two Door Models)** 

# LIGHTED CUPHOLDERS – IF EQUIPPED

On some vehicles, the front cupholders are equipped with a light ring that illuminates the cupholders for the front passengers. The light ring is controlled by the dimmer control  $\Box$  page 72.

# USB/AUX CONTROL

The Media Hub is located on the instrument panel, below the climate controls. Behind the media hub access door, the Media Hub contains one AUX port, a Type C USB port and one standard USB port. Both USB ports allow you to play music from MP3 players, smartphones or USB devices through the vehicle's sound system.

Plugging in a smartphone device to a USB port may activate Android Auto<sup>TM</sup> or Apple CarPlay® features, if equipped. For further information, refer to Android Auto<sup>TM</sup> or Apple Carplay® in the Uconnect Radio Instruction Manual.

The Smart Charging USB ports provide power to your device up to an hour after the vehicle is turned off.

#### NOTE:

- Once a device is connected to the USB port, it will begin charging and is ready for use with the system.
   Type C and Type A charge-only USB ports can be used at the same time but cannot be used simultaneously while playing media. When both Type C and Type A charge-only USB ports are in use they will be charged at a reduced rate.
- Both ports share a single data connection. The user cannot switch between Type A or Type C.

For example, if a device is plugged into the Type A USB port and another device is plugged into the Type C USB port, a message will appear and allow you to select which device to use.



#### Media Hub

1 – AUX Port 2 – Type C USB Port 3 – Type A USB Port

Located inside the center console, a second USB port allows you to play music from USB devices through your vehicle's sound system.

Third and fourth USB ports (if equipped) are located behind the center console, above the power inverter. Both ports are charge only.



#### USB On The Back Of The Center Console

When a new device or smartphone is plugged into the USB ports, the following message may display depending on the device being utilized:

- "A new device is now connected. Previous connection was lost."
- "(Phone Name) now connected. Previous connection was lost."
- "Another device is in use through the same USB port. Please disconnect the first device to use the second device."

#### NOTE:

Charge unsupported devices with the Charge Only USB ports. If an unsupported device is plugged into a Media USB port, a message will display on the touchscreen that the device is not supported by the system.

#### WARNING!

Do not plug in or remove the external device while driving. Failure to follow this warning could result in a collision.

# POWER OUTLETS

There are two 12 Volt (13 Amp) auxiliary power outlets that can provide power for accessories designed for use with the standard power outlet adapters.

The front power outlet is located in the center of the instrument panel below the climate controls, and is powered from the ignition switch. Power is available when the ignition switch is in the ON/RUN or ACC position.

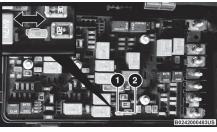


**Front Power Outlet** 

On vehicles equipped with a rear subwoofer, there is a second power outlet located in the rear cargo area and is powered directly from the vehicle's battery.



**Rear Cargo Power Outlet** 



#### **Power Outlets Fuse Locations**

1-F43 Fuse 20A Yellow Rear Power Outlet (battery powered at all times) 2-F45 Fuse 20A Yellow Rear Power Outlet (powered when the ignition switch is in the ON/RUN or ACC position)

#### CAUTION!

- Do not exceed the maximum power of 160 W (13 Amp) at 12 Volt. If the 160 W (13 Amp) power rating is exceeded, the fuse protecting the system will need to be replaced.
- Power outlets are designed for accessory plugs only. Do not insert any other object in the power outlets as this will damage the outlet and blow the fuse. Improper use of the power outlet can cause damage not covered by your New Vehicle Limited Warranty.

#### WARNING!

- To avoid serious injury or death:
- Do not insert any objects into the receptacles.
- Do not touch with wet hands.
- · Close the lid when not in use.
- If this outlet is mishandled, it may cause an electric shock and failure.

#### CAUTION!

- Many accessories that can be plugged in draw power from the vehicle's battery, even when not in use (i.e., cellular phones, etc.). Eventually, if plugged in long enough, the vehicle's battery will discharge sufficiently to degrade battery life and/or prevent the engine from starting.
- Accessories that draw higher power (i.e., coolers, vacuum cleaners, lights, etc.), will degrade the battery even more quickly. Only use these intermittently and with greater caution.

#### CAUTION!

- After the use of high power draw accessories, or long periods of the vehicle not being started (with accessories still plugged in), the vehicle must be driven a sufficient length of time to allow the alternator to recharge the vehicle's battery.
- Power outlets are designed for accessory plugs only. Do not hang any type of accessory or accessory bracket from the plug. Improper use of the power outlet can cause damage.

# POWER INVERTER -- IF EQUIPPED

There is a 115 Volt, 150 W inverter outlet located on the back of the center console to convert DC current to AC current.

This outlet can power cellular phones, electronics and other low power devices requiring power up to 150 W. Certain video game consoles exceed this power limit, as will most power tools.



The power inverter is designed with built-in overload protection. If the power rating of 150 W is exceeded, the power inverter automatically shuts down. Once the electrical device has been removed from the outlet, the inverter should automatically reset. If the power rating exceeds approximately 170 W, the power inverter may have to be reset manually.

#### WARNING!

To avoid serious injury or death:

- Do not insert any objects into the receptacles.
- Do not touch with wet hands.
- · Close the lid when not in use.
- If this outlet is mishandled, it may cause an electric shock and failure.

# AUXILIARY SWITCHES – IF EQUIPPED

Four auxiliary switches located in the lower switch bank of the instrument panel can be used to power various electrical devices. You have the ability to configure the functionality of the auxiliary switches via the Uconnect Settings  $\Box$  page 201.

All switches can be configured as follows:

- Switch type operation: Latching or Momentary
- Power source: Battery or Ignition
- · Ability to hold last state across key cycles: On or Off

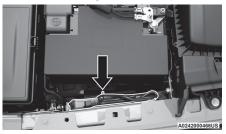


Auxiliary Switches

#### NOTE:

Holding last state conditions are met when switch type is set to latching and power source is set to ignition.

The auxiliary switches manage the relays that power four blunt cut wires. These wires are located under the instrument panel in the passenger compartment and under the hood to the right, near the battery.

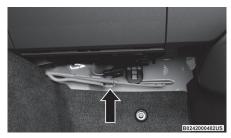


Auxiliary Switch Connections - Under Hood

**Power Inverter** 

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#### **Auxiliary Switch Connections - Under Instrument Panel**

In addition to the four auxiliary switch wires, a fused battery wire and ignition wire are also located in the interior, in the passenger side under the instrument panel.

A kit of splices and heat shrink tubing are provided with the auxiliary switches to aid in the connection/ installation of your electrical devices.

#### Wire Color Chart

| Circuit<br>Function | Fuse            | Wire<br>Color  | Locations   |
|---------------------|-----------------|----------------|---|
| Aux Switch 1        | F93 -<br>40 Amp | Beige/<br>Pink | Interior (passen-<br>ger side under<br>instrument<br>panel) & Under-<br>hood (right side<br>near battery) |

| Circuit<br>Function | Fuse             | Wire<br>Color         | Locations   |
|---------------------|------------------|-----------------------|---|
| Aux Switch 2        | F92 -<br>40 Amp  | Green/<br>Pink        | Interior (passen-<br>ger side under<br>instrument<br>panel) & Under-<br>hood (right side<br>near battery) |
| Aux Switch 3        | F103 -<br>15 Amp | Orange/<br>Pink       | Interior (passen-<br>ger side under<br>instrument<br>panel) & Under-<br>hood (right side<br>near battery) |
| Aux Switch 4        | F108 -<br>15 Amp | Dark<br>Blue/<br>Pink | Interior (passen-<br>ger side under<br>instrument<br>panel) & Under-<br>hood (right side<br>near battery) |
| Battery             | F72 -<br>10 Amp  | Red/<br>White         | Interior (passen-<br>ger side under<br>instrument<br>panel)   |
| Ignition            | F50 -<br>10 Amp  | Pink/<br>Orange       | Interior (passen-<br>ger side under<br>instrument<br>panel)   |

# POWER WINDOWS — IF EQUIPPED

The power window switches are located on the instrument panel below the climate controls. Push the switch downward to open the window and upward to close the window.

The top left switch controls the left front window and the top right switch controls the right front window.

#### WARNING!

Never leave children unattended in a vehicle, and do not let children play with power windows. Do not leave the key fob in or near the vehicle, or in a location accessible to children. Occupants, particularly unattended children, can become entrapped by the windows while operating the power window switches. Such entrapment may result in serious injury or death.



**Power Window Switches** 

To open the window part way (manually), push the window switch down briefly and release.

#### NOTE:

The power window switches will remain active for up to 10 minutes after ignition is placed in the OFF position. Opening either front door will cancel this feature.

#### Four-Door Models

The lower left switch controls the left rear passenger window, and the lower right switch controls the right rear passenger window.

#### NOTE:

There are window switches located on the rear of the center console for the rear passenger windows in the four-door model.

# AUTO-DOWN FEATURE

The driver door power and the passenger door power window switches have an Auto-Down feature. Push the window switch down to the second detent and release, and the window will go down automatically.

To stop the window from going all the way down during the Auto-Down operation, pull up on the switch briefly.

#### WARNING!

There is no anti-pinch protection when the window is almost closed. Be sure to clear all objects from the window before closing.

# WINDOW LOCKOUT SWITCH



#### Window Lockout Switch

The window lockout switch allows you to disable the window controls on the rear passenger doors. To disable the window controls, rotate the switch downward. To enable the window controls, rotate the switch upward.

## WIND BUFFETING

Wind buffeting can be described as the perception of pressure on the ears or a helicopter-type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the Power Sliding Top (if equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof open any window.

# WRANGLER TOPS

# **PROVIDED TOOLS**

For your convenience, a tool kit is provided with your vehicle located in the center console. This kit includes the necessary tools required for the operations described in the following sections. All pieces fit into the ratchet for easy use.

#### NOTE:

The soft top and the hard top are to be used independently. Your vehicle warranty will not cover damage resulting from both tops being installed at the same time.



1 – Ratchet 2 – #T50 Torx Head Driver 3 – #T40 Torx Head Driver 4 – 15 mm Socket

If your vehicle is equipped with a Dual Top (four door models only), the soft top system will be provided in a separate box located in the rear of the vehicle for shipping purposes only.

# LOWERING THE SOFT TOP INTO SUNRIDER® POSITION

Use this QR code to access your digital experience.



#### WARNING!

- The fabric quarter windows and fabric top are designed only for protection against the elements.
   Do not rely on them to contain occupants within the vehicle or to protect against injury during an accident. Remember, always wear seat belts.
- Make sure hands and fingers are clear of all pinch points when installing and removing the soft tops. The lift assist mechanism and side bows may cause serious injury if fingers or hands get caught in between.



The soft top is not designed to carry any additional loads such as roof racks, spare tires, building, hunting, or camping supplies, and/or luggage, etc. Also, it was not designed as a structural member of the vehicle and, thus, cannot properly carry any additional loads other than environmental (rain, snow, etc.).

If the temperature is below  $72^{\circ}F(24^{\circ}C)$  and/or the top has been folded down for a period of time, the top will appear to have shrunk when you raise it, making it difficult to put up. This is caused by a natural contraction of the vinyl or acrylic materials of the fabric top.

Place the vehicle in a warm area. Pull steadily on the top fabric. The vinyl will stretch back to its original size and the top can then be installed. If the temperature is 41°F (5°C) or below, do not attempt to put the top down or roll the rear or side curtains.

### CAUTION!

- Do not run a fabric top through an automatic car wash. Window scratches and wax buildup may result.
- Do not lower the top when the temperature is below 41°F (5°C). Damage to the top may result.

#### CAUTION!

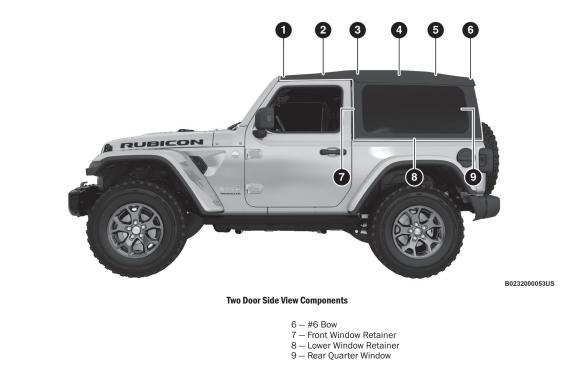
- Do not move your vehicle until the top has been either fully attached to the windshield frame, or fully lowered.
- Do not fully lower the top with the windows installed. Window and top damage may occur.
- Do not use any tools (screwdrivers, etc.) to pry or force any of the clamps, clips, or retainers securing the soft top. Do not force or pry the soft top framework when opening or closing. Damage to the top may result.

Failure to follow these cautions may cause interior water damage, stains or mildew on the top material:

- It is recommended that the top be free of water prior to opening it. Operating the top, opening a door or lowering a window while the top is wet may allow water to drip into the vehicle's interior.
- Careless handling and storage of the soft top may damage the seals, causing water to leak into the vehicle's interior.
- The soft top must be positioned properly to ensure sealing. Improper installation can cause water to leak into the vehicle's interior.

(Continued)





- 1 #1 Bow 2 – #2 Bow 3 – #3 Bow 4 – #4 Bow
- 5-#5 Bow



**Two And Four Door Rear Components** 

- 1 Rear Window Retainer Attachment Points
- 2 Quarter Window Pillars
- 3 Swing Gate Bar Retainers

#### 88 GETTING TO KNOW YOUR VEHICLE

#### NOTE:

- All lowering and raising the soft top instructions are applicable to both two and four door model vehicles.
- Images shown are of four door models, and appearance of two door model components may differ.

The following options are available to you when lowering your vehicle's soft top:

- Sunrider® position with rear and quarter windows installed
- Sunrider® position with rear and quarter panels removed
- Sunrider® position with rear window installed and quarter panels removed
- Fully lowered position with rear and quarter windows removed

Both quarter windows should be removed and installed together.

#### Lowering The Soft Top Into Sunrider® Position

- 1. Fold both sun visors forward against the windshield.
- Release the header latches from the crossbar by pulling the handle downward. Make sure the hook is disengaged from its receiver.



Step Two

3. From both the left and right sides, lift up on the #1 Bow of the soft top to start the operation.



#### **Step Three**

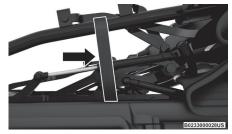
 Move to the side of the vehicle and use the side link to fold the soft top rearward into the Sunrider® position.



Step Four

#### NOTE:

If leaving the soft top in the Sunrider® position, secure the top by using the two hook-and-loop fasteners provided in the center console.



#### Step Four

#### NOTE:

- The vehicle can be driven in the Sunrider® position with the rear window and quarter panel assemblies fully installed or completely removed.
- The rear window and rear quarter windows must be removed before fully lowering the soft top to prevent damage to the top. Clean the side and rear windows before removal to assist in preventing scratching during removal of the soft top. If the plastic retainers are difficult to operate due to road dust, etc., clean them with a mild soap solution and a small brush. Cleaning products are available through an authorized dealer.

## **Removing The Soft Top Windows**

#### NOTE:

Before fully lowering the soft top, the rear window and rear quarter windows **must** be removed.

#### Remove The Rear Window:

 With the swing gate open, remove the rear window's plastic retainers from the lower right and left corners.



Step One

2. Grab the swing gate bar, rotate it outward and upward releasing it from both the right and left retainers.



#### Step Two (Left Side Shown)

 While holding the window in place, slide the swing gate bar to the left separating it from the rear window. Store in soft window bag (if equipped), or a safe location.



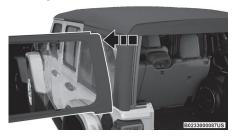
Step Three

4. Remove the plastic retainers from both quarter window pillars.



Step Four

 While keeping the rear window level, slide to the left until it is completely separate from its retainer. Do not pull downward while removing the rear window. Damage to the retainer could result.



Step Five

#### Remove The Right And Left Quarter Windows:

1. Through the rear opening, push the bottom corner outward and release tab from the bottom of the window pillar.



#### Step One

2. Undo the hook-and-loop fastener located at the upper front corner of each quarter window.



3. Starting at the rear of the vehicle, remove plastic retainer from along the bottom of the window moving toward the front of the vehicle.



Step Three

4. Remove plastic retainer from the bottom to the top of the front window.



**Step Four** 

 While keeping the window level, slide rearward until it is completely separate from its retainer. Do not pull downward while removing the window. Damage to the retainer could result.



#### Step Five

6. Store in soft window bag (if equipped) or a safe location.

#### NOTE:

For information on the use of the storage bag, refer to the next section.

Step Two

# Soft Top Window Storage Bag — If Equipped

To safely store the soft top rear window, and rear quarter windows, proceed as follows:

## NOTE:

The swing gate bar, once removed from the rear window, **does not** store in the soft window storage bag (if equipped).

 With the bag opened completely, fold both fabric dividers downward and lay the first quarter window all the way to the right side with the inside of the window facing downward and the window pillar to the outside.

#### NOTE:

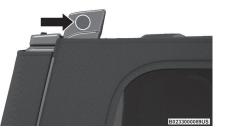
The quarter windows are marked "1" and "2" on the inside of the window pillar.



1 - Quarter Window Facing Downward

2 – Both Dividers Folded Down

2. Fold the first divider upward, covering the first quarter window.







Step Two

 Lay the second quarter window on top of the first divider all the way to the left side with the inside of the window facing downward and the window pillar to the outside.



Step Three

- 1 Quarter Window Facing Downward
- 2 Second Divider Folded Down
- 4. Fold the second divider upward, covering the second quarter window.



Step Four

5. Lay the rear window on top of the second divider.



- Step Five
- 6. Close the storage bag and store in a safe location.



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Step Six

# Lowering The Soft Top All The Way

- Remove the rear window and quarter panel windows > page 89.
- From the Sunrider® position straps if previously secured and move to the rear of the vehicle.
- 3. Locate the Sunrider® latch beneath the #6 Bow of the soft top on the left side.



#### Step Three

 Pull the latch to release the top, and allow the soft top to slide rearward freely in the guide tracks to the stowed position.



**Step Four** 

### CAUTION!

Failure to follow the next steps could result in damage to the Soft Top or vehicle.

While pushing downward slightly on the folded soft top, slide the lock lever on the left and right side lift assist mechanisms to the "lock" position.



#### Step Five (Locked Position)

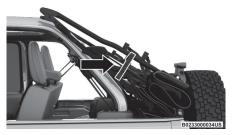
 Once the lock lever is in the "lock" position, push downward on each side of the folded soft top to ensure it is secure. An audible "click" may be heard.



Step Six

#### NOTE:

Secure the top by using the two hook-and-loop fasteners provided in the center console.



Step Six

# RAISING THE SOFT TOP

Use this QR code to access your digital experience.

Raising The Soft Top From The Fully Lowered Position

1. From the fully lowered position, remove straps if previously secured.

#### CAUTION!

Scan me

Failure to follow the next steps could result in damage to the Soft Top or vehicle.

 While pushing down on the rear of the top, slide the lock lever on the left and right side lift assist mechanisms to the "unlock" position.



Step Two

3. Push up and forward from the #5 Bow along the guide track until it locks into the Sunrider® position with an audible "click".



Step Three

1 - Unlocked Position

2 – #5 Bow Location

- 4. Gently pull rearward on the #6 Bow to ensure the top is locked in the Sunrider® position.
- Using the side link, lift and push the soft top toward the front of the vehicle manually guiding the top into the closed position.



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Step Five

2





 From inside the vehicle, pull the handle on the header latch downward to engage the hook into its receiver. Repeat on the other side.





7. Pull the handle back upward while squeezing the hook, locking the latch into place.



Step Seven

### Installing The Soft Top Windows Install The Right And Left Quarter Windows

 From the rear of the vehicle, guide the top of the window into the retainer and slide forward while keeping the window level. Repeat on the other side.



2. Place the top of the quarter window pillar into the top cover, and insert the bottom tab into the clip.



Step Two



Step Two

#### CAUTION!

Failure to follow all Quarter Window Install steps could result in damage to the Soft Top or vehicle.

Step One

3. Engage the retainers on the front of the windows, ensuring they are fully engaged, followed by the retainers along the bottom of the windows.



**Step Three** 

- 1 Retainer At Front Of Quarter Window
- 2 Retainer At Bottom Of Quarter Window

#### NOTE:

It is **critical** that the retainers are fully engaged before the vehicle resumes motion.

4. Secure the hook-and-loop fastener at the upper front corner of each quarter window by pressing firmly.



Step Four

#### Install The Rear Window

1. Guide the rear window into the retainer from left to right while keeping the window level.



Step One

2. Insert the swing gate bar into the retainers at the bottom of the window from left to the right.



Step Two

3. Rotate the swing gate bar into the left and right side retainers.



Step Three

4. Line up the rear window to the **right side** quarter window first, and engage the plastic retainers.

5. Repeat with the left side quarter window.



Step Five

6. Engage the rear window retainers in the lower right and left corners.



Step Six

### NOTE:

For information on removing your soft top, refer to the next section.

# REMOVING THE SOFT TOP

Use this QR code to access your digital experience.

1. Fully lower the soft top  $\Box$  page 92



### CAUTION!

Failure to follow the next steps could result in damage to the Soft Top or vehicle.

 Make sure the lift assist mechanism on both the left and right sides are in the "lock" position, and an audible "click" is heard when pushing down on the #1 bow from each of the lift assist mechanisms before removing.



Step Two

 Using the provided #40 Torx head driver and ratchet, unscrew the two Torx head screws on each lift assist mechanism, then lift the mechanism up and away from the vehicle.



**Step Three** 

- 1 Lock Position
- $\rm 2-Torx\; Head\; Screw$
- 3 Torx Head Screw
- 4. Pull the release lever on top of the rail rearward to release the side link from the track.



Step Four



**Step Four** 

- 5. Repeat on the opposite side.
- Utilizing two people, lift the soft top up and away from the vehicle, careful to avoid the vehicle's sport bar, trim, and tire carrier. Store the soft top in a safe, clean, and dry location.





7. Using the provided #50 Torx head driver and ratchet, unscrew the Torx screw on both rear corners of the vehicle, removing the retainers.



Step Seven

# INSTALLING THE SOFT TOP

- 1. If currently installed, remove the hard top  $\Box$  page 103.
- Install the rear retainers on each side of the rear of the vehicle using the provided #50 Torx head driver and ratchet. Refer to the following table for recommended torque specifications.



Step Three

# CAUTION! Do not overtighten Torx screws. Damage to the retainers will occur.

| Torque<br>Specification<br>For Torx Screw | Maximum     | Minimum     |
|---|-------------|-------------|
| 119.5 in-lb                               | 150.5 in-lb | 106.2 in-lb |
| 13.5 N·m                                  | 17.0 N·m    | 12.0 N·m    |

Failure to follow the next steps could result in damage to the Soft Top or vehicle.

#### 98 GETTING TO KNOW YOUR VEHICLE

4. Making sure the lift assist mechanism is in the "lock" position, lift the soft top into the rear of the vehicle with the side links pointing toward the front. Lower the lift assist mechanisms onto its retainers on both sides (on the inside of the sport bar).

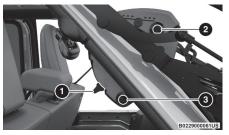


Step Four



Step Four

5. Using the provided #40 Torx head driver and ratchet, tighten the Torx screws by turning them clockwise. Secure them until they are snug (refer to the following table for recommended torque specifications), being careful not to cross-thread the screws or overtighten. Repeat on the opposite side.



Step Five

- 1 Lock Position
- 2 Torx Head Screw
- 3 Torx Head Screw

| Torque<br>Specification<br>For Torx Screws | Maximum     | Minimum     |
|--|-------------|-------------|
| 119.5 in-lb                                | 150.5 in-lb | 106.2 in-lb |
| 13.5 N·m                                   | 17.0 N·m    | 12.0 N·m    |

#### CAUTION!

Do not overtighten the screws. You can strip the screws if they are overtightened.

6. While pulling the release lever on the top of the rail rearward, place the side link into the guide track on the top of the rail then release the lever.



Step Six

- 7. Unsnap and remove the black boot cover. This cover should be discarded. It was intended as a protective cover for shipping only.
- 8. Raise the soft top  $\Rightarrow$  page 93.

#### NOTE:

Be sure the wire harness in the left rear corner is not tangled in the soft top bows before you lift the top.

# HARD TOP FRONT PANEL(S) REMOVAL

#### CAUTION!

- Do not move your vehicle until the top has been either fully attached to the front header, sport bar, and body side or fully removed.

Failure to follow these cautions may cause interior water damage, stains or mildew:

- It is recommended that the top be free of water prior to panel removal. Removing the top, opening a door or lowering a window while the top is wet may allow water to drip into the vehicle's interior.
- The hard top assembly must be positioned properly to ensure sealing. Improper installation can cause water to leak into the vehicle's interior.
- Careless handling and storage of the removable roof panels may damage the seals, causing water to leak into the vehicle's interior.
- The front panel(s) must be positioned properly to ensure sealing. Improper installation can cause water to leak into the vehicle's interior.



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Four Door Hard Top Components

1 – Right Side Panel 2 – Left Side Panel 3 – Hard Top



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1 — Right Side Panel 2 — Left Side Panel 3 — Hard Top

#### NOTE:

- All hard top removal and installation instructions are applicable to both two and four door model vehicles.
- Images shown are of four door models, and appearance of two door model components may differ.
- The left side panel must be removed before removing the right side panel.

To remove the hard top front panel(s), proceed as follows:

- 1. Fold down the sun visor against the windshield.
- 2. Turn the three L-shaped locks on the left side panel (one at the front, the rear, and outside), unlocking them from the roof.



Step Two

3. Unlatch the left side header panel latch located at the top of the windshield.



**Step Three** 

- 1 Header Panel Latched
- 2 Unlatched Position
- 4. Remove the left side panel.
- 5. Repeat the previous steps to remove the right side panel.

# Hard Top Panel(s) Storage Bag — If Equipped

The Freedom Top panels storage bag allows you to store your hard top panels. The storage bag contains two compartments.

Lay the bag for the Freedom Top panels down so the loops and hooks are facing upward. Unzip the bag and fold back the outer flap.

### NOTE:

Ensure the front panel latch is closed prior to inserting the panel into the panels bag.

- 1. Insert the left side hard top panel into the bag with the latches facing upward.
- 2. Unfold the black panel divider (ensure the divider is lying flat).

3. Insert the right side Freedom Top panel into the bag with the latches facing downward.

#### NOTE:

Ensure the front panel latch is closed prior to inserting the panel into the bag.

4. Unfold the outer flap and zip the hard top bag closed.



**Step Four** 

- Lift the Freedom Top bag into the vehicle with the hooks and straps facing the back of the rear seat. Attach the clip at the bottom of the bag to the child restraint anchorage, located at the base of the rear seat.
- Wrap the upper strap around the rear head restraints and loop the strap through the buckle. Pull on the strap to tighten the Freedom Top bag securely against the rear seat.

# HARD TOP FRONT PANEL(S) INSTALLATION

- 1. Open the header latch inside the vehicle, and the three L-shaped locks on each panel.
- Set the right side panel on the windshield frame with the locating pin in the front receiver mounting hole followed by the left side panel, making sure there is no overhang. Also, make sure that the panels are sitting flush with the body.
- 3. Reinstall the panel(s) using the same steps for removal in reverse order.

#### NOTE:

To prevent water leaks, the seals and hard top panels should be clear of any dust and debris prior to reinstallation.

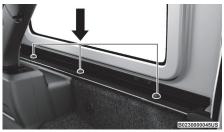
# REMOVING THE HARD TOP

- 1. Remove both front panels  $\Box$  page 99.
- 2. Open both front doors.
- Using the provided #50 Torx head driver and ratchet, remove the two Torx head screws that secure the hard top at the B-pillar (near the top of the front doors).



Step Three

 Remove the six Torx head screws that secure the hard top to the vehicle (along the interior bodyside – three screws on each side) using the #50 Torx head driver.



Step Four

5. Open the swing gate all the way to ensure clearance of the rear window glass. Lift the rear window glass.



Step Five

6. Locate the wire harness and washer hose on the left rear inside corner of the vehicle.





Step Six

7. Release the locking tab by pushing it downward.



Step Seven

8. To remove the wiring harness, push the tab inward while pulling downward to disconnect.



Step Eight



Step Eight

9. To remove the washer hose, push the release button on hose connector, and pull downward.



Step Nine

10. Store the wire harness and washer hose in the compartment below the trim. To access the storage compartment, lift the trim cover as shown.



Step Ten

11. Secure the wire harness within the compartment by plugging it into the receptacle and reengaging the locking tab.



Step Eleven

12. Secure the washer hose by snapping it in next to the receptacle, then replace the compartment cover.



Step Twelve

- 13. Lower the rear window, and close the swing gate.
- 14. Remove the hard top from the vehicle. Place the hard top on a soft surface to prevent damage.

#### CAUTION!

The removal of the rear Hard Top requires four adults, one located on each corner. Failure to follow this caution could damage the Hard Top.

# INSTALLING THE HARD TOP

If the door frames are installed from soft top usage, they must be removed prior to installation of the hard top. For removal procedures, see  $rac{}{}$  page 110.

To install the hard top, place the hard top on the vehicle while making sure that the top is sitting flush with the body at the sides and check to ensure that there is a uniform gap between the lift glass and hard top. Then follow the removal steps in reverse order.

#### NOTE:

- Inspect the hard top seals for damage and replace if necessary.
- The Torx fasteners that attach the hard top to the body should be torqued as follows using the provided #50 Torx head driver and ratchet:
  - Hard top to B-pillar: 119 in-lb +/- 23 in-lb (13.5 N·m +/- 2.7 N·m)
  - $\odot\,$  Hard top to J-rail: 154 in-lb +/- 30 in-lb (17.5 N-m +/- 3.5 N-m)

# SUNRIDER® FOR HARD TOP

#### WARNING!

Do not open or close the Sunrider® top while driving. Operating the top while driving could cause the driver to lose control of the vehicle. Failure to follow this warning may result in serious injury or death.

The Sunrider® soft top can be used in place of the Hard Top Freedom Panels for quick and easy opening of the area above the driver and front passenger seats.



Sunrider® For Hard Top

To install the Sunrider® soft top, proceed as follows:

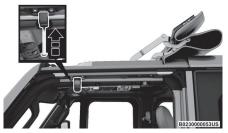
- 1. Remove both front Hard Top Freedom panels  $\Box$  page 99.
- With the help of a second person, set the Sunrider® top onto the top of the vehicle making sure to align the holes at the front and rear of the side rails.



Lower Sunrider® Onto The Vehicle

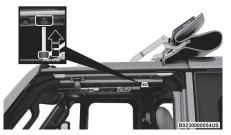
#### 106 GETTING TO KNOW YOUR VEHICLE

 Swing the front frame bracket around the side of the rail, and insert the door rail attachment bolt (provided bolt without spacer) from underneath. Tighten with a #40 Torx head driver until snug.



**Attach Front Door Rail Bolt** 

 Insert the rear door rail attachment bolt (provided bolt with spacer) from underneath. Tighten with #40 Torx head driver until snug.



Attach Rear Door Rail Bolt

5. Repeat steps 3 and 4 on the other side of the vehicle.

#### NOTE:

The recommended torque specification for the front and rear door rail attachment bolts is 8.8 ft-lb (12  $\mbox{N-m}).$ 

 Attach the rear clamp at the rear center of the Sunrider® top using the two provided rear clamp attachment bolts. Tighten with #40 Torx head driver until snug.



#### **Rear Clamp Location**

#### NOTE:

The recommended torque specification for the rear clamp attachment bolts is 3.7 ft-lb (5 N·m).

 From inside the vehicle, lift and pull the Sunrider® top forward using the integrated handle on the front header of the top. Manually guide the top into the closed position.



Push Sunrider® Top Forward

 From inside the vehicle, pull the handle on the header latch downward to engage the hook into its receiver. Pull the handle back upward while squeezing the hook, locking the latch into place. Repeat on the other side.



**Engage Both Header Latches** 

#### To Open The Sunrider® Top

To open the Sunrider® top, proceed as follows:

- 1. Fold both sun visors forward against the windshield.
- Release the header latches from the crossbar by pulling the handle downward. Make sure the hook is disengaged from its receiver.



**Release Both Header Latches** 

3. From the front of the Sunrider® top, lift and push the top rearward to the Sunrider® position.



Sunrider® Position

 Secure the top by using the two hook-and-loop fasteners provided with the Sunrider® kit, and wrap one around the side rails on each side of the Sunrider® top to hold it in place.



**Hook-And-Loop Fastener Placement** 

# POWER SLIDING TOP – IF EQUIPPED

#### CAUTION!

Lowering of the windshield is NOT recommended in vehicles equipped with a Power Sliding Top. Damage will occur to the top as well as the header seal.

If your vehicle is equipped with a Power Sliding Top, the control switch can be found on the front trim panel, to the right of the driver's side sun visor.



#### **Power Sliding Top Control Switch**

1 – Open Switch 2 – Close Switch

#### NOTE:

- The power top will not open in temperatures below -4°F (-20°C). However, if it is opened at a higher temperature, it can be closed at temperatures above -40°F (-40°C).
- The power top will not operate at vehicle speeds above 60 mph (96 km/h).

#### NOTE:

A slight pause in audio may be heard when opening and closing the Power Sliding Top as a result of the Uconnect system switching between power top Closed and power top Open audio modes. 2

#### WARNING!

- Never leave children unattended in a vehicle, or with access to an unlocked vehicle. Never leave the key fob in or near the vehicle, or in a location accessible to children. Do not leave the Keyless Enter 'n Go<sup>™</sup> Ignition in the ACC or ON/RUN position. Occupants, particularly unattended children, can become entrapped by the power top while operating the power top switch. Such entrapment may result in serious injury or death.
- In a collision, there is a greater risk of being thrown from a vehicle with an open power top. You could also be seriously injured or killed. Always fasten your seat belt properly and make sure all passengers are also properly secured.
- Do not allow small children to operate the power top. Never allow your fingers, other body parts, or any object, to project through the power top opening. Injury may result.

## **Opening And Closing The Power Top**

#### Express Open/Close

Push the open switch and release it within one-half second and the power top will open automatically from any position. The power top will open fully and stop automatically.

Push the close switch and release it within one-half second and the power top will close automatically from any position. The power top will close fully and stop automatically.

During Express Open or Express Close operation, any other movement of the power top switch will stop the power top.

#### Manual Open/Close

To open the power top manually, push and hold the open switch to the full open position, then release.

To close the power top manually, push and hold the close switch to the fully closed position, then release. Any release of the switch during open or close operation will stop the power top movement. The top will remain in a partially opened position until the switch is operated and held again.

## **Pinch Protect Feature**

This feature will detect an obstruction in the opening of the power top during Express Close operation. If an obstruction in the path of the power top is detected, the power top will automatically retract. Remove the obstruction if this occurs. Next, push the close switch and release to Express Close.

#### WARNING!

There is no anti-pinch protection when the power top is almost closed. To avoid personal injury be sure to clear your arms, hands, fingers and all objects from the top's path before closing.

#### NOTE:

- The Power Sliding Top may reverse motion if closing during a severe headwind. If this occurs, push and hold the Power Sliding Top switch again to close the top completely.
- If three consecutive power top close attempts result in Pinch Protect reversals, Pinch Protect will disable and the power top must be closed in Manual Mode.

## **Power Top Maintenance**

Use only a non-abrasive cleaner and a soft cloth to clean the quarter window glass panel. For important information on cleaning and caring for your vehicle  $\Box$  page 335.

## Ignition Off Operation

The power top switch can remain active in Accessory Delay for up to approximately 10 minutes after the vehicle's ignition is placed to the OFF position. Opening either front door will cancel this feature.

#### NOTE:

Ignition Off time is programmable through the Uconnect system  $\Rightarrow$  page 201.

#### **Relearn Procedure**

For vehicles equipped with a power top, there is a relearn procedure that allows you to calibrate the power top when the "Express Mode" stops working. To reset the power top, follow these steps:

1. Place the ignition in the RUN position, and start the vehicle.

#### NOTE:

The engine must be running to perform the relearn procedure.

- 2. Ensure the power top is in the fully closed position.
- 3. Push and hold the Close switch for 10 seconds. This will put the power top into calibration mode.
- 4. Continue holding down the close button while the top goes fully open and then back to fully close.

5. Once the power top has stopped in the fully closed position, release the close button. The power top is now reset and ready to use.

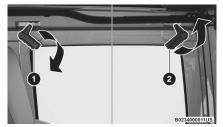
#### NOTE:

If the close button is released anytime during the relearning process, the relearn may not be complete, and the procedure must be repeated.

## **Rear Quarter Window Removal**

On vehicles equipped with a Power Sliding Top, the rear quarter windows can be removed. To remove these windows, follow this procedure:

- 1. Open the swing gate, and lift the rear window.
- 2. Open both side doors nearest the quarter windows.
- 3. Locate the rear quarter window latches (two on each window) on the interior of the windows.
- 4. Rotate the left hand side latch clockwise to release.
- 5. Rotate the right hand side latch **counterclockwise** to release.



Step Five

- 1 Rotate Left Handle Clockwise
- 2 Rotate Right Handle Counterclockwise

6. From the outside of the vehicle, lift each window upward and away from the vehicle.

#### NOTE:

Do not pull down or apply any weight to the windows after the latches are released. Damage could result to the pins holding the windows in place.



Step Six



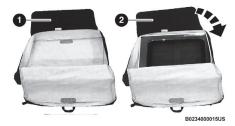
Step Six

Store the rear quarter windows in the provided storage bag and keep in a safe location, or securely fasten the bag to the rear seat.

#### Quarter Window Storage Bag

To use the storage bags for the rear quarter windows, proceed as follows:

 With the bag completely open and the fabric divider raised, place the first quarter window with the latches facing outward into the foam insert. Fold divider over the window once placed inside.



Step One

 $\begin{array}{l} 1-\text{Bag Open With Divider Raised} \\ 2-\text{Lower Divider Over Window} \\ \text{(Latches Facing Outward)} \end{array}$ 

Place the second window into the foam insert with the latches facing outward. Fully close the bag.

#### NOTE:

Once both windows are placed inside the bag, the outside of the windows will be facing each other with all latches facing the outside of the bag.

#### 110 GETTING TO KNOW YOUR VEHICLE

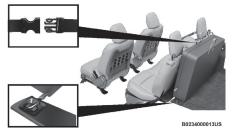


Step Two

 $1-{\rm Second}\;{\rm Window}\;{\rm Placed}\;{\rm Over}\;{\rm Divider}$ 

2 - Fully Closed Bag

3. Store the bag in a safe location, or in the cargo area of the vehicle by securing the bag in the vehicle's cargo area. This is done by attaching the straps at the top of the bag to the rear head restraints, as well as attaching the clip at the bottom of the bag to the forward most cargo hook on the load floor.



WARNING!

In a collision, unsecured rear quarter windows in the vehicle could cause injury. They could fly around in a sudden stop or rough terrain and strike someone in the vehicle. Do not store the rear quarter windows in the vehicle without securing them as instructed here.

## **DOOR FRAME**

#### WARNING!

Do not drive your vehicle on public roads with the door frame(s) removed as you will lose the protection that they can provide. This procedure is furnished for use during off-road operation only.

#### CAUTION!

Failure to follow these cautions may cause interior water damage, stains or mildew:

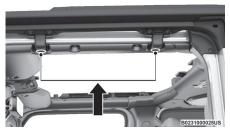
- Opening a door or lowering a window while the top is wet may allow water to drip into the vehicle's interior.
- Careless handling and storage of the removable door frame(s) may damage the seals, causing water to leak into the vehicle's interior.
- The door frame(s) must be positioned properly to ensure sealing. Improper installation can cause water to leak into the vehicle's interior.

## DOOR FRAME REMOVAL

#### NOTE:

In four door models, the rear door frames must be removed first, followed by the front door frames.

 Using the provided #40 Torx head driver and ratchet, loosen the Torx screws located on the underside of each door frame (two per door).



#### **Door Frame Screw Locations**

2. Once all the way loosened, remove the screws by pulling downward.

#### NOTE:

Screws will not fall out once completely loose, as they are held in place by an internal mechanism.



2



**Remove Screws From Below Frame** 

3. Lift the frame upward, removing it from the vehicle.



**Step Three** 

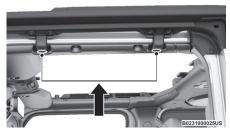
- 4. Store screws in a secure location.
- 5. Repeat procedure on the front door frame (four door models).

#### WARNING!

- Do not drive your vehicle on public roads with the door frame(s) removed as you will lose the protection that they can provide. This procedure is furnished for use during off-road operation only.
- Do not drive your vehicle on public roads with the doors removed as you will lose the protection that they can provide. This procedure is furnished for use during off-road operation only.

# DOOR FRAME INSTALLATION FOUR DOOR MODELS — IF EQUIPPED

- 1. Install the front door rail first.
- Carefully place the front door rail in the rubber seal at the top of the windshield, and line up the holes for the Torx head screws (two for each door).
- 3. Swing the frame bracket around the side of the rail, and insert the screws from underneath. Tighten with #40 Torx head driver until they are snug, being careful not to cross-thread the screws or overtighten. Refer to the following table for the appropriate torque specifications for the door rail screws.



Step Three

| Target Torque<br>Specification<br>For Torx<br>Fasteners | Maximum    | Minimum    |
|---|------------|------------|
| 79.6 in-lb  | 87.6 in-lb | 71.7 in-lb |
| (9 N⋅m)   | (9.9 N⋅m)  | (8.1 N⋅m)  |

#### CAUTION!

Do not overtighten the screws. You can strip the screws if they are overtightened.

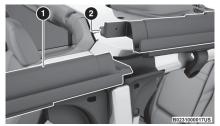
#### 112 GETTING TO KNOW YOUR VEHICLE

4. Set the rear door frame pin into the hole on top of the body side, just behind the rear door opening.



#### **Step Four**

 Carefully position the top of the door frame onto the rear of the front door rail, making sure rubber seals lie flat. Ensure the seals are installed correctly to avoid water leaks.



**Position Of Frame Above Door** 

1 – Front Door Rail

#### 2 - Rear Door Frame

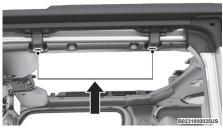
6. Swing the frame bracket around the side of the rail, and insert the screws from underneath. Tighten with #40 Torx head driver until they are snug, being careful not to cross-thread the screws or overtighten. Refer to the previous table for the appropriate torque specifications for the door rail screws.



**Insert Screws From Below Frame** 

## DOOR FRAME INSTALLATION TWO DOOR MODELS – IF EQUIPPED

- 1. Carefully place the front door rail in the rubber seal at the top of the windshield, and line up the holes for the Torx head screws (two for each door).
- Swing the frame bracket around the side of the rail, and insert the screws from underneath. Tighten with #40 Torx head driver until they are snug, being careful not to cross-thread the screws or overtighten. Refer to the following table for the appropriate torque specifications for the door rail screws.



Step Two

| Target Torque<br>Specification<br>For Torx<br>Fasteners | Maximum    | Minimum    |
|---|------------|------------|
| 79.6 in-lb  | 87.6 in-lb | 71.7 in-lb |
| (9 N⋅m)   | (9.9 N⋅m)  | (8.1 N⋅m)  |

#### CAUTION!

Do not overtighten the screws. You can strip the screws if they are overtightened.

## FOLDING WINDSHIELD

#### CAUTION!

Lowering of the windshield is NOT recommended in vehicles equipped with a Power Sliding Top. Damage will occur to the top as well as the header seal.

The fold-down windshield on your vehicle is a structural element that can provide some protection in some accidents. The windshield also provides some protection against weather, road debris and intrusion of small branches and other objects.

Do not drive your vehicle on-road with the windshield down, as you lose the protection this structural element can provide.

If required for certain off-road uses, the windshield can be folded down. However, the protection afforded by the windshield is then lost. If you fold down the windshield, drive slowly and cautiously. It is recommended that the speed of the vehicle be limited to 10 mph (16 km/h), with low range operation preferred if you are driving off-road with the windshield folded down.

Raise the windshield as soon as the task that required its removal is completed and before you return to on-road driving. Both you and your passengers should wear seat belts at all times, on-road and off-road, regardless of whether the windshield is raised or folded down.

#### WARNING!

Carefully follow these warnings to help protect against personal injury:

- Do not drive your vehicle on-road with the windshield down.
- Do not drive your vehicle unless the windshield is securely fastened, either up or down.
- Eye protection, such as goggles, should be worn at all times when the windshield is down.
- Be sure that you carefully follow the instructions for raising the windshield. Make sure that the folding windshield, windshield wipers, side bars, and all associated hardware and fasteners are correctly and tightly assembled before driving your vehicle. Failure to follow these instructions may prevent your vehicle from providing you and your passengers' protection in some accidents.
- If you remove the doors, store them outside the vehicle. In the event of an accident, a loose door may cause personal injury.

## LOWERING THE WINDSHIELD

- 1. Before completing the following steps:
  - If your vehicle is equipped with a Soft Top, the top MUST be lowered, and the door rails must be removed prior to lowering the windshield.
  - If your vehicle is equipped with a Hard Top, the Freedom Panels MUST be removed prior to lowering the windshield.

- Refer to the following instructions for more information:
  - Soft Top Lowering 与 page 92
  - Door Frame  $\Box$  page 110
  - Freedom Top Panels  $\Box$  page 102

#### CAUTION!

Failure to follow this step will cause damage to the vehicle's header seal.

2. Manually remove the protective caps over the windshield wiper hex bolts.



Step Two

1 – Hex Bolt Cover Installed 2 – Hex Bolt Cover Removed

3. Using the provided 15 mm socket, remove the two hex bolts and remove the wiper arms.

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- 4. Move to the inside of the vehicle and lower both sun visors.
- Using the provided #40 Torx head driver, remove the four Torx screws located along the interior of the windshield.



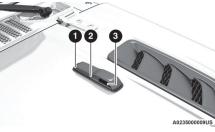
Step Five

- 1 Outside Torx Screws
- 2 Inside Torx Screws

#### NOTE:

Store all of the mounting bolts in their original threaded holes and tighten for safekeeping.

6. Lower the windshield gently until it contacts the tiedown bumpers (if equipped).



Step Six

- 1 Washer Nozzle
- 2 Bumper
- 3 Tie-Down
- Secure the windshield by passing a cinch strap through the tie-down on either side of the hood and on the windshield frame. Tighten the strap to secure the windshield in place.

#### CAUTION!

Do Not Overtighten! Damage to the windshield could result.

## Adaptive Cruise Control (ACC)/Forward Collision Warning (FCW) Sensor Protective Cover — If Equipped

Your vehicle may be equipped with a protective cover that is to be used whenever the windshield is folded down in order to protect the Adaptive Cruise Control (ACC)/Forward Collision Warning (FCW) sensor. To install the cover, follow these instructions:

- 1. Secure the top part of the cover so that it hinges to the header.
- 2. Swing the cover down and push on it so that it covers the opening.
- 3. Check to make sure the cover is secured properly.

#### NOTE:

Be sure to remove the cover before returning the windshield to the normal position. Store the cover in the cargo area.

#### **Cleaning Instructions**

During windshield down applications, dust/dirt can accumulate in the cover and block the camera lens. Use a microfiber cloth to clean the camera lens, module, and inside cover, being careful not to damage or scratch the module.

## RAISING THE WINDSHIELD

- 1. Release the strap that secured the windshield in the lowered position.
- 2. Raise the windshield.
- Using the provided #40 Torx head driver, reinstall the four Torx screws located along the interior of the windshield. Secure them until they are snug, being careful not to cross-thread the screws or overtighten.



Interior Torx Screw Locations

- 1 Outside Torx Screws
- 2 Inside Torx Screws
- 4. Reinstall the windshield wiper arms using the provided 15 mm socket. First, align the tips of the blade to the "T" mark in the glass. Then, while holding the arm in that position, reinstall the hex nut and tighten until snug. Be careful not to overtighten. Repeat for the other arm.
- 5. Reinstall the protective caps over the wiper arm hex bolts and push gently until they snap into place.



Step Five

1 - Hex Bolt Cover Installed

2 - Hex Bolt Cover Removed

- 6. After completing the previous steps:
  - If your vehicle is equipped with a Soft Top, reinstall the Door Rails and raise the top.
  - O If your vehicle is equipped with a Hard Top, reinstall the Freedom Panels.

## HOOD

## **OPENING THE HOOD**

#### WARNING!

For PHEV models: Always place the ignition in the OFF position before opening the hood. If the ignition is in the RUN position and the Propulsion System is active when the hood is opened, the engine could automatically start, and persons not clear of the vehicle could be injured by the engine's moving parts.

Release both of the outside hood latches.



Hood Latch Locations

Raise the hood slightly, and place a hand palm-side down in the center of the hood opening. Locate the safety latch in the middle, and push the latch to the right to open.



**Place Hand In Hood Opening** 

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Remove the support rod from the hood, and insert it into the radiator crossmember.



**Hood Prop Rod Slot** 

#### NOTE:

- Vehicle must be at a stop and the gear selector must be in PARK.
- You may have to push down slightly on the hood before pushing the safety latch.
- While lifting the hood, use both hands.
- Before lifting the hood, check that the wiper arms are not in motion and not in the lifted position.
- For PHEV models: If the vehicle was actively charging the high voltage battery when the hood was opened, the vehicle will stop charging until the hood is closed.
- For PHEV models:Electric drive mode will not be available while the hood is open. A message will show in the instrument cluster display to alert the driver.

## CLOSING THE HOOD

To close the hood, remove the support rod from the slot and replace it on the hood panel retaining clip. Lower the hood slowly. Secure both of the hood latches.

#### NOTE:

For PHEV models: If the vehicle stopped charging the high voltage battery when the hood was opened, the vehicle will resume charging when the hood closes.

#### WARNING!

Be sure the hood is fully latched before driving your vehicle. If the hood is not fully latched, it could open when the vehicle is in motion and block your vision. Failure to follow this warning could result in serious injury or death.

#### CAUTION!

To prevent possible damage, do not slam the hood to close it.

## **REAR SWING GATE**

The rear swing gate can be unlocked by using one of the following methods:

- Mechanical key (with mechanical lock if equipped)
- Remote Keyless Entry key fob (if equipped)
- Power door unlock switch on the front doors (if equipped)
- Passive Entry swing gate handle (if equipped)

#### To open the swing gate, pull on the handle.



#### **Swing Gate Handle**

#### NOTE:

Close the rear flip-up window before attempting to close the swing gate (hard top models only).

#### WARNING!

Driving with the flip-up window open can allow poisonous exhaust gases into your vehicle. You and your passengers could be injured by these fumes. Keep the flip-up window closed when you are operating the vehicle.

#### CAUTION!

Do not push on rear wiper blade when closing the rear flip-up window, as damage to the blade will result.

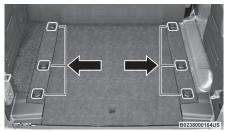
#### NOTE:

The swing gate hinges and check strap may require cleaning if a squeak can be heard when opening the swing gate. Progressive accumulation of dirt or debris on the check strap arm may cause failure of the check strap, requiring replacement. For further information on vehicle cleaning procedures, see ⇒ page 337.

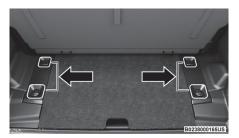
## CARGO AREA FEATURES

## **Cargo Tie-Down Hooks And Loops**

The cargo tie-downs, located on the cargo area floor, should be used to safely secure loads when the vehicle is moving.



Cargo Tie-Down Loops (Four Door Models)



WARNING!

- Cargo tie-downs are not safe anchors for a child seat tether strap. In a sudden stop or accident, a tie-down could pull loose and allow the child seat to come loose. A child could be badly injured. Use only the anchors provided for child seat tethers.
- To help protect against personal injury, passengers should not be seated in the rear cargo area. The rear cargo space is intended for load carrying purposes only, not for passengers, who should sit in seats and use seat belts.

The weight and position of cargo and passengers can change the vehicle center of gravity and vehicle handling. To avoid loss of control resulting in personal injury, follow these guidelines for loading your vehicle:

- Do not carry loads that exceed the load limits described on the label attached to the left door or left door center pillar.
- Always place cargo evenly on the cargo floor. Put heavier objects as low and as far forward as possible.
- Place as much cargo as possible in front of the rear axle. Too much weight or improperly placed weight over or behind the rear axle can cause the vehicle to sway.
- Do not pile luggage or cargo higher than the top of the seatback. This could impair visibility or become a dangerous projectile in a sudden stop or accident.

## **ROOF LUGGAGE RACK — IF EQUIPPED**

#### NOTE:

Roof rack applications are for Hard Top models ONLY.

The load carried on the roof, when equipped with a luggage rack, must not exceed 100 lb (45 kg), this includes the weight of the crossbars, and it should be uniformly distributed over the cargo area.

Crossbars should always be used whenever cargo is placed on the roof rack. Check the straps frequently to be sure that the load remains securely attached.

#### NOTE:

Crossbars can be purchased at an authorized dealer through Mopar $(\ensuremath{\mathbb{R}})$  parts.

External racks do not increase the total load carrying capacity of the vehicle. Be sure that the total occupant and luggage load inside the vehicle, plus the load on the luggage rack, does not exceed the maximum vehicle load capacity.

#### WARNING!

Cargo must be securely tied down before driving your vehicle. Anything improperly secured to the roof rack, crossbars, or the roof itself can fly off the vehicle, particularly at high speeds, resulting in collisions, personal injury or property damage. Follow the roof rack cautions when carrying anything on your roof or roof rack.

Cargo Tie-Down Loops (Two Door Models)

#### CAUTION!

- To avoid damage to the roof rack and vehicle, do not exceed the maximum roof rack load capacity.
   Always distribute heavy loads as evenly as possible and appropriately secure the load and any protective layer placed between the load and the roof surface.
- Long loads, which extend over the windshield, should be secured to both the front and rear of the vehicle.
- Place a blanket or other protection between the surface of the roof and the load.
- Travel at reduced speeds and turn corners carefully when carrying large or heavy loads on the roof rack. Wind forces, due to natural causes or nearby truck traffic, can add sudden upward lift. It is recommended to not carry large flat loads, such as wood panels or surfboards, which may result in damage to the cargo or your vehicle.
- Load should always be secured to crossbars first, with tie down loops used as additional securing points if needed. Tie loops are intended as supplementary tie down points only. Do not use ratcheting mechanisms with the tie loops. Check the straps frequently to be sure that the load remains securely attached.

## GETTING TO KNOW YOUR INSTRUMENT PANEL

## **INSTRUMENT CLUSTER**



119



Use this QR code to access your digital experience.



# INSTRUMENT CLUSTER DESCRIPTIONS

#### 1. Tachometer

 Indicates the engine speed in revolutions per minute (RPM x 1000).

#### CAUTION!

Do not operate the engine with the tachometer pointer in the red area. Engine damage will occur.

#### 2. Temperature Gauge

- The temperature gauge shows engine coolant temperature. Any reading within the normal range indicates that the engine cooling system is operating satisfactorily.
- The pointer will likely indicate a higher temperature when driving in hot weather, up mountain grades, or when towing a trailer. It should not be allowed to exceed the upper limits of the normal operating range.

#### WARNING!

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. It is recommended to call an authorized dealer for service if your vehicle overheats.

#### CAUTION!

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads "H" pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the "H", turn the engine off immediately and call an authorized dealer for service.

#### 3. Instrument Cluster Display

#### 4. Fuel Gauge

- The pointer shows the level of fuel in the fuel tank when the ignition switch is in the ON/RUN position.
- The fuel pump symbol points to the side of the vehicle where the fuel filler door is located.

#### 5. Speedometer

Indicates vehicle speed.



## **INSTRUMENT CLUSTER — PHEV Only**



## INSTRUMENT CLUSTER DESCRIPTIONS - PHEV ONLY

#### 1. Tachometer

 Indicates the engine speed in revolutions per minute (RPM x 1000).

#### CAUTION!

Do not operate the engine with the tachometer pointer in the red area. Engine damage will occur.

#### 2. Engine Coolant Temperature

O This gauge shows the engine coolant temperature. The gauge pointer will likely show higher temperatures when driving in hot weather, up mountain grades, or in heavy stop and go traffic. If the red Warning Light turns on while driving, safely bring the vehicle to a stop, and turn off the engine. DO NOT operate the vehicle until the cause is corrected.

#### WARNING!

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. It is recommended to call an authorized dealer for service if your vehicle overheats.

#### CAUTION!

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads "H" pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the "H", turn the engine off immediately and call an authorized dealer for service.

#### 3. Instrument Cluster Display

○ The instrument cluster display features a driver interactive display. When the appropriate conditions exist, this display shows messages □> page 124.

#### 4. Fuel Gauge

- $\ensuremath{\mathbb{O}}$  The pointer shows the level of fuel in the fuel tank when the ignition is in the ON/RUN position.
- The fuel pump symbol points to the side of the vehicle where the fuel door is located.

#### 5. Power/Charge Gauge

O This gauge represents the source of the power utilized to accelerate the vehicle. The green outer ring represents the High Voltage (HV) battery output during acceleration, and input power during regeneration. The yellow inner ring represents the engine output power.



## 3

## **INSTRUMENT CLUSTER DISPLAY**

Your vehicle will be equipped with an instrument cluster display, which offers useful information to the driver. With the ignition in the OFF mode, opening/closing of a door will activate the display for viewing, and display the total miles, or kilometers, in the odometer. Your instrument cluster display is designed to display important information about your vehicle's systems and features. Using a driver interactive display located on the instrument panel, your instrument cluster display can show you how systems are working and give you warnings when they aren't. The steering wheel mounted controls allow you to scroll through and enter the main menus and submenus. You can access the specific information you want and make selections and adjustments.

# INSTRUMENT CLUSTER DISPLAY LOCATION AND CONTROLS

The instrument cluster display is located in the center of the instrument cluster.



#### **Instrument Cluster Display Location**

1 -- Instrument Cluster Display Screen

2 - Instrument Cluster Display Controls

The system allows the driver to select information by pushing the following buttons mounted on the steering wheel:



#### Instrument Cluster Display Control Buttons

- 1 Left Arrow Button
- 2 Up Arrow Button
- 3 Right Arrow Button
- 4 Down Arrow Button
- 5 OK Button

#### Left Arrow Button

Push and release the left  $\triangleleft$  arrow button to access the information screens or submenu screens of a main menu item.

Up Arrow Button

Push and release the  $up \ \cap{\Delta}$  arrow button to scroll upward through the Main Menu items.

Right Arrow Button

Push and release the **right**  $\triangleright$  arrow button to access the information screens or submenu screens of a main menu item.

#### Down Arrow Button

Push and release the **down**  $\bigtriangledown$  arrow button to scroll downward through the Main Menu items.

OK Button

Push the **OK** button to access/select the information screens or submenu screens of a Main Menu item. Push and hold the **OK** arrow button for two seconds to reset displayed/selected features that can be reset.

## Stop Safely Vehicle Will Shut Off Soon — PHEV Only



#### Stop Safely Vehicle Will Shut Off Soon Warning Message

This warning will be displayed on the instrument panel display when the vehicle has determined an operational issue will occur shortly, which will cause the vehicle's propulsion system to turn off. If the light turns on while driving, stop the vehicle in a safe location as soon as possible. Have the vehicle transported to an authorized dealer.

- This message will be displayed continuously
- Cannot be cleared with button press
- A single chime will sound

## Stop Safely And Leave The Vehicle As Soon As Possible — PHEV Only



#### Stop Safely And Leave The Vehicle As Soon As Possible Warning Message

A warning will appear on the instrument panel display if the system detects the high voltage battery has overheated. This can result in a vehicle fire, and the release of toxic and/or flammable gases. To reduce the risk of a larger fire, the vehicle's high voltage propulsion system will turn off within thirty seconds of displaying this warning. At that time, the vehicle may not accelerate. You can still steer and brake the vehicle.

Stop and park the vehicle in an open area. Have all passengers exit the vehicle as soon as possible and move to a safe distance away from the vehicle. After all passengers safely exit the vehicle, call emergency responders immediately.

Even if you do not see flames, a fire may start at any moment, so do not attempt to re-enter or start the vehicle.

- This message will be displayed continuously.
- Cannot be cleared with a button press.
- A continuous and rapid chime will sound.

## CAUTION!

If the instrument cluster instructs you to change the engine oil, do not reset the service indicator without changing the oil. Engine damage may result.

### CAUTION!

 An overheated High Voltage Battery may result in electrical systems damage. Do not attempt to restart the vehicle. The vehicle must be towed to an authorized dealer.

## OIL CHANGE RESET - IF EQUIPPED

Use this QR code to access your digital experience.

Your vehicle may be equipped with an engine oil change indicator system. The "Oil Change Required" message will display in the instrument cluster display for five seconds after a single chime has sounded to indicate the next scheduled oil change interval.



The engine oil change indicator system is duty cycle based, which means the engine oil change interval may fluctuate, dependent upon your personal driving style. Unless reset, this message will continue to display each time you place the ignition in the ON/RUN position. To turn off the message temporarily, push and release the **OK** button. To reset the oil change indicator system (after performing the scheduled maintenance), refer to the following procedure.

#### Oil Life Reset

- 1. Without pushing the brake pedal, place the ignition in the ON/RUN mode (do not start the engine).
- 2. Navigate to "Oil Life" submenu in "Vehicle Info" in the instrument cluster display.
- Push and hold the OK button until the gauge resets to 100%.

#### Secondary Method For Oil Change Reset Procedure

- 1. Without pushing the brake pedal, place the ignition in the ON/RUN position (do not start the engine).
- 2. Fully press the accelerator pedal, slowly, three times within ten seconds.
- 3. Without pushing the brake pedal, place the ignition in the OFF position.

#### NOTE:

If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

# ELECTRIC MODE TEMPORARILY UNAVAILABLE

If Electric Drive mode is unavailable, the reason will display for five seconds at start up. If your check engine light comes on, see an authorized dealer immediately.



#### Electric Mode Temporarily Unavailable Message

See the following information for the most common reasons that the Electric mode would be unavailable:

#### Operator Choices that can inhibit Electric mode

- Transmission in Manual Shift mode Shift to Drive to use Electric mode.
- Heavily depressed accelerator pedal position, requesting high power demand - Beyond the limits of the electric drivetrain, will cause engine to run, enabling the powertrain to produce its full combined power available in Hybrid mode.
- Sustained high speed operation in Electric mode -Using the engine is more efficient for high speeds than Electric drive.
- Transfer case and drive mode selection eSave mode almost always runs the engine. Hybrid mode, in 4WD Low, will also run the engine.

- Electric range is depleted You need to recharge to enjoy Electric mode, or you can continue normally in Hybrid.
- Hood open (or a hood switch fault) This is to prevent unexpected engine starts with the hood open.

#### Thermal Protection that can inhibit Electric mode

- Engine, transmission or engine starting belt too cold - Some systems require warm up to function properly if the outside temperature is below 32°F (15°F in Electric Drive mode).
- Electric cabin heating capacity limits (or electric cabin heater fault) - Unlike Battery Electric Vehicles (BEV's), the PHEV Wrangler can warm the cabin more efficiently with engine heat when operating below 15°F outside temperature.
- HV battery, motors or contactors over temperature -This is a temporary hardware protection feature. Vehicle performance will resume once protection is no longer required. If the vehicle performance is accompanied with a Malfunction Indicator Lamp (MIL) , have the vehicle serviced at an autho-

(MIL) a , have the vehicle serviced at an authorized dealership.

#### Component Protection that can inhibit Electric mode

- HV battery undervoltage Sustained EV operation at high speed, especially with aftermarket wheels and tires, can induce this.
- Other electric propulsion system faults indicated by a MIL - Please bring the vehicle to your dealership for service.
- Fuel And Oil Refresh mode See the following section.

### Fuel And Oil Refresh Mode

Since it is possible to operate this vehicle for extended periods of time without running the gas engine, the fuel within the vehicle's fuel tank can become stale or the engine oil's lubricating properties can be reduced. To prevent engine and/or fuel system damage due to stale fuel, as well as maintaining internal engine lubrication, this vehicle is equipped with a Fuel and Oil Refresh mode.



Fuel And Oil Refresh Mode Message

The vehicle will automatically enter into the Fuel and Oil Refresh mode to minimize potential for stale fuel, and to ensure lubrication of internal engine components. When operating in this mode, the gas engine will run to provide vehicle propulsion (electric only operation is inhibited). A message will be displayed in the instrument cluster whenever Fuel and Oil Refresh mode is active.

The vehicle will automatically exit the Fuel and Oil Refresh mode when fuel and lubrication conditions have been satisfied. If the vehicle enters Fuel and Oil Refresh mode, due to fuel which has been in the fuel tank for a long period of time (becoming stale fuel), the engine will run whenever the vehicle is operational (no electric only operation) until the low fuel level warning is activated. It is also possible to exit the Fuel and Oil Refresh mode sooner by adding a minimum of four gallons (15 Liters) of new fuel to the vehicle's fuel tank.

#### NOTE:

If the vehicle enters Fuel and Oil Refresh mode to maintain engine lubrication, adding fuel will not exit the mode sooner.

If the vehicle enters Fuel and Oil Refresh mode to maintain engine lubrication properties, the engine may run for a period of up to 2.5 hours when fully warm whenever the vehicle is operational (no electric only operation). If the vehicle is shut down before conditions to exit the refresh mode have been satisfied, the engine may run for additional time on subsequent trips. Oil refresh may take significantly longer in freezing temperatures.

#### NOTE:

- Frequent short trips at low ambient temperature conditions where the engine does not reach normal operating temperatures are more likely to trigger the lubrication based mode.
- Electric drive mode will be temporarily unavailable while the Fuel And Oil Refresh Mode (FORM) is active. Do not attempt to return to Electric Mode until the FORM cycle is complete.

#### CAUTION!

If the instrument cluster instructs you to change the engine oil, do not reset the service indicator without changing the oil. Engine damage may result.

## DISPLAY AND MESSAGES

The instrument cluster display is located in the center portion of the cluster and consist of multiple sections:

- Main Screen The inner ring of the display will illuminate in black under normal conditions, yellow for noncritical warnings and red for critical warnings
- Submenu Dots Whenever there are submenus available, the position within the submenus is shown here
- Reconfigurable Telltales/Information
- Gear Selector Status (PRND)
- Driver Interactive Display (Compass, Temp, Range to Empty, Trip A, Trip B, Average Fuel Economy, Current Fuel Economy and Time)
- Four-Wheel Drive (4WD) Status If Equipped

The instrument cluster display will normally display the main menu or the screens of a selected feature of the main menu. The main display area also displays pop-up messages and warning or information messages. These pop-up messages fall into several categories:

#### • Five Second Stored Messages

When the appropriate conditions occur, this type of message takes control of the main display area for five seconds and then returns to the previous screen. Most of the messages of this type are then stored (as long as the condition that activated it remains active) and can be reviewed from the "Messages" main menu item. Examples of this message type are "Right Front Turn Signal Lamp Out" and "Low Tire Pressure".

#### Unstored Messages

This message type is displayed indefinitely or until the condition that activated the message is cleared. Examples of this message type are "Turn Signal On" (if a turn signal is left on) and "Lights On" (if driver leaves the vehicle with the lights on).

Unstored Messages Until RUN

These messages deal primarily with the Remote Start feature. This message type is displayed until the ignition is in the RUN state. Examples of this message type are "Remote Start Canceled - Door Ajar" and "Press Brake Pedal and Push Button to Start".

• Five Second Unstored Messages

When the appropriate conditions occur, this type of message takes control of the main display area for five seconds and then returns to the previous screen. An example of this message type is "Automatic High Beams On". Messages include the following, but not limited to:

#### NOTE:

Certain messages may require dealer service.

| Front Seat Belts Unbuckled              | Oil Change Due                      | ACC Override                            |
|---|-------------------------------------|---|
| Driver Seat Belt Unbuckled              | Fuel Low                            | Cruise Set To XXX mph or km/h           |
| Passenger Seat Belt Unbuckled           | Service Anti-lock Brake System      | Service Shifter                         |
| Traction Control Off                    | Service Electronic Throttle Control | Tire Pressure Screen With Low Tire(s)   |
| Washer Fluid Low                        | Service Power Steering              | Service Tire Pressure System            |
| Oil Pressure Low                        | Cruise Off                          | Park Brake Engaged                      |
| Oil Level Low – If Equipped             | Cruise Ready                        | Brake Fluid Low                         |
| Engine Temperature Hot                  | Lights On                           | Right Front Turn Signal Light Out       |
| Right Rear Turn Signal Light Out        | Left Front Turn Signal Light Out    | Left Rear Turn Signal Light Out         |
| Ignition or Accessory On                | Vehicle Not In Park                 | Remote Start Active Push Start Button   |
| Remote Start Canceled Fuel Low          | Remote Start Canceled Hood Open     | Remote Start Canceled Liftgate Open     |
| Remote Start Canceled Door Open         | Remote Start Canceled Time Expired  | Remote Start Disabled Start To Reset    |
| Service Air Bag System                  | Service Air Bag Warning Light       | Door Open                               |
| Doors Open                              | Hood Open                           | Vehicle Speed Too High To Shift to D    |
| Liftgate Open                           | Shift Not Allowed                   | Vehicle Speed is Too High to Shift to R |
| Vehicle Speed is Too High to Shift to P | Service Transmission                |   |

# INSTRUMENT CLUSTER DISPLAY SELECTABLE ITEMS

The instrument cluster display can be used to view the following main menu items:

#### NOTE:

Depending on the vehicles options, feature settings may vary.

| Speedometer  | Driver Assist —<br>If Equipped        | Stop/Start |
|--------------|---------------------------------------|------------|
| Vehicle Info | Fuel Economy                          | Audio      |
| Off Road     | Trip Info                             | Messages   |
| Screen Setup | Phone Call<br>Status —<br>If Equipped |            |

#### NOTE:

The instrument cluster menu items display in the center of the instrument cluster. Menu items may vary depending on your vehicle features.

## Speedometer

Push and release the **up**  $\triangle$  or **down**  $\triangledown$  arrow button until the speedometer menu icon is displayed in the instrument cluster display. Push and release the **OK** button to toggle between MPH and km/h.

## Vehicle Info

Push and release the **up**  $\triangle$  or **down**  $\triangledown$  arrow button until the Vehicle Info menu icon is displayed in the instrument cluster display. Push and release the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to scroll through the information submenus and push and release the **OK** button to select or reset the resettable submenus.

| Tire Pressure   | Coolant<br>Temperature                   | Transmission<br>Temperature –<br>Automatic<br>Transmission<br>Only |
|-----------------|--|--|
| Oil Temperature | Oil Pressure                             | Oil Life   |
| Battery Voltage | Single Gauge<br>Submenu —<br>If Equipped | Critical Level<br>Logic —<br>If Equipped                           |

## Off Road

Push and release the **up**  $\triangle$  or **down**  $\triangledown$  arrow button until the Off Road menu icon is displayed in the instrument cluster display. Push and release the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to scroll through the information submenus.

- Drivetrain
  - Front Wheel Angle: displays the graphical and numerical value of calculated average front wheel angle from the steering wheel orientation.
  - Transfer Case Lock Status: displays "Lock" graphic only during 4WD High, 4WD High Part Time, 4WD Low status.

- O Axle Lock And Sway Bar Status (If Equipped): displays front and rear or rear only axle locker graphic, and sway bar connection graphic with text message (connected or disconnected).
- Pitch And Roll
  - Displays the pitch and roll of the vehicle in the graphic with the angle number on the screen.

#### NOTE:

When vehicle speed becomes too high to display the pitch and roll, "--" will display in place of the numbers, and the graphic will be greyed out. A message indicating the necessary speed for the feature to become available will also display.

## Driver Assist — If Equipped

The Driver Assist menu displays the status of the ACC systems.

Push and release the up  $\triangle$  or down  $\bigtriangledown$  arrow button until the Driver Assist menu is displayed in the instrument cluster display.

#### Adaptive Cruise Control (ACC) Feature — If Equipped

The instrument cluster display displays the current ACC system settings. The information displayed depends on ACC system status.

Push the ACC ON/OFF button (located on the steering wheel) until one of the following displays in the instrument cluster display:

#### Adaptive Cruise Control Off

When ACC is deactivated, the display will read "Adaptive Cruise Control Off."

#### Adaptive Cruise Control Ready

When ACC is activated but the vehicle speed setting has not been selected, the display will read "Adaptive Cruise Control Ready."

Push the SET + or the SET - button (located on the steering wheel), and the following will display in the instrument cluster display.

#### ACC SET

When ACC is set, the set speed will display in the instrument cluster.

The ACC screen may display once again if any of the following ACC activity occurs:

- System Cancel
- Driver Override
- System Off
- ACC Proximity Warning
- ACC Unavailable Warning

#### NOTE:

The instrument cluster display will return to the last display selected after five seconds of no ACC display activity  $\Box$  page 173.

## **Fuel Economy**

Push and release the **up**  $\triangle$  or **down**  $\triangledown$  arrow button until the Fuel Economy icon is highlighted in the instrument cluster display. Push and hold the **OK** button to reset average fuel economy feature.

Toggle left  $\,\triangleleft\,$  or right  $\,\vartriangleright\,$  to select a display with or without Current Fuel Economy Information.

 Range – The display shows the estimated distance (mi or km) that can be traveled with the fuel remaining in the tank. When the Range value is less than 10 miles (16 kilometers), the Range display will change to a "LOW" message. Adding a significant amount of fuel to the vehicle will turn off the "LOW" message and a new Range value will display. Range cannot be reset through the **OK** button.

#### NOTE:

Significant changes in driving style or vehicle loading will greatly affect the actual drivable distance of the vehicle, regardless of the Range displayed value.

- Average The display shows the average fuel economy (MPG, L/100 km, or km/L) since the last reset.
- Current This display shows the current fuel economy (MPG, L/100 km, km/L) while driving.

## Energy Economy — If Equipped

Push and release the up  $\triangle$  or down  $\forall$  arrow button until Energy Economy is highlighted in the instrument cluster display. Push the left  $\triangleleft$  or right  $\triangleright$  arrow button to scroll through the following information submenus:

- Average Energy Economy gauge + value (hold **OK** to reset)
- Current Energy Economy gauge + value
- Total Range

## Hybrid Info

Push and release the **up**  $\triangle$  or **down**  $\forall$  arrow button until Hybrid Info is highlighted in the instrument cluster display. Push the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to scroll through the following information submenus:

#### Range to Empty

- Electric Range
- Hybrid Range
- Total Range

#### Efficiency Coach

Efficiency Coach will monitor your current driving to help you drive as efficient as possible.

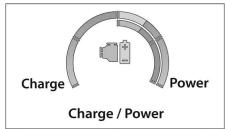
- "Accel" is based on amount of acceleration (Different from MPG).
  - The gauge will only move up when accelerator pedal is pushed (or accelerating with Cruise Control or ACC).
  - $\ensuremath{\bigcirc}$  Above a certain rate of change will be considered inefficient.
  - $\ensuremath{\bigcirc}$  The color of the gauge bar will change from green to yellow to orange.
- "Brake" is based on amount of deceleration (slowing down).
  - The gauge will only move down when brake pedal is pushed (or decelerating with Cruise Control or ACC).
  - $\ensuremath{\bigcirc}$  The color of the gauge bar will change from green to yellow to orange.
- The gauge bar color will transition smoothly up and down, and have a gradual change based on efficiency.
   Center of gauge is 0% Accel and 0% Brake.
  - +/-0-35% of gauge fills green, +/-36-80% yellow, and +/-81-100% orange (with a blend between each color).



**Efficiency Coach Gauge** 

#### Charge/Power

- Charging is represented by the gauge filling on the left hand side.
- Power is represented by the gauge filling on the right hand side.



Charge/Power Gauge

#### E-Drive Mode

- Hybrid automatically adapts for most efficient driving.
- · Electric mode saves fuel for later use.
- e-Save mode saves battery for later use.

## Trip Info

#### GASOLINE

Push and release the **up**  $\triangle$  or **down**  $\triangledown$  arrow button until the Trip icon/title is highlighted in the instrument cluster display, then push and release the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to select Trip A or Trip B.

The Trip A and Trip B information will display the following:

- Distance
- Average Fuel Economy
- Elapsed Time

#### Hold the OK button to reset all the information.

#### PHEV ONLY

Push and release the **up**  $\triangle$  or **down**  $\bigtriangledown$  arrow button until Trip Info is highlighted in the instrument cluster display. Push the **left**  $\triangleleft$  or **right**  $\triangleright$  arrow button to scroll through the Trip A and Trip B submenus. The Trip information will display the following:

Trip A

- Distance Electric
- Distance Hybrid
- Distance Total
- Average Energy Economy
- Elapsed Time

Hold the OK button to reset feature information.

#### Trip B

- Distance Electric
- Distance Hybrid
- Distance Total
- Average Energy Economy
- Elapsed Time

Hold the **OK** button to reset feature information.

#### Stop/Start — If Equipped

Push and release the **up**  $\triangle$  or **down**  $\triangledown$  arrow button until the Stop/Start icon/title is highlighted in the instrument cluster display. The screen will display the Stop/Start status.

#### Audio

Push and release the **up**  $\triangle$  or **down**  $\bigtriangledown$  arrow button until the Audio Menu icon/title is highlighted in the instrument cluster display. This menu will display the audio source information, including the Song name, Artist name, and audio source with an accompanying graphic.

#### Messages

Push and release the **up**  $\triangle$  or **down**  $\bigtriangledown$  arrow button until the Messages Menu item is highlighted. This feature shows the number of stored warning messages. Pushing the **right**  $\triangleright$  arrow button will allow you to see what the stored messages are.

When no messages are present, a "No Stored Messages" will display.

#### Screen Setup

Push and release the **up**  $\triangle$  or **down**  $\bigtriangledown$  arrow button until the Screen Setup Menu Icon/Title is highlighted in the instrument cluster display. Push and release the **OK** button to enter the submenus and follow the prompts on the screen as needed. The Screen Setup feature allows you to change what information is displayed in the instrument cluster as well as the location that information is displayed.

#### NOTE:

Based upon equipment options and current vehicle status, some of the features may not be available.

#### Screen Setup Driver Selectable Items

| Upper Left and Right |                                      |                                      |
|----------------------|--------------------------------------|--------------------------------------|
| None                 | Current MPG<br>(or L/100km,<br>km/L) | Average MPG<br>(or L/100km,<br>km/L) |
| Outside Temp         | Compass                              | Trip A Distance                      |
| Range To Empty       | Time                                 | Trip B Distance                      |

| Center                               |                                      |                 |
|--------------------------------------|--------------------------------------|-----------------|
| None                                 | Compass                              | Time            |
| Outside Temp                         | Average MPG<br>(or L/100km,<br>km/L) | Trip A Distance |
| Range to Empty                       | Audio                                | Speedometer     |
| Current MPG<br>(or L/100km,<br>km/L) | Trip B Distance                      | Menu Title      |

| Favorite Menus                           |              |   |
|--|--------------|---|
| Speedometer                              | Stop/Start   | Vehicle Info                                  |
| Off Road –<br>If Equipped<br>(show/hide) | Messages     | Driver Assist –<br>If Equipped<br>(show/hide) |
| Fuel Economy<br>(show/hide)              | Screen Setup | Trip Info<br>(Show/Hide)                      |
| Audio<br>(show/hide)                     |              |   |

#### Gear Display — If Equipped

• Full

Single

Current Gear — If Equipped

• On

• Off

Odometer — If Equipped

Show

• Hide

Defaults (Restores All Settings To Default Settings)

- Cancel
- Restore

The menu with (show/hide) means user can press **OK** button to choose show or hide this menu on the instrument cluster display.

## Phone Call Status - If Equipped

A pop-up message for an incoming call will appear on any screen within your instrument cluster. The pop-up message will appear on your screen until it is cleared out of the call is ignored, answered, or the calling ends.

#### NOTE:

The Uconnect Settings can be programmed to turn the pop-up off. This will not affect the audio menu or any phone status information  $\Box$  page 201.

Any incoming calls, active calls, and outgoing calls will take the place of your audio information.

A caller's name will only be displayed if:

- A number is associated with the call. The phone number will be displayed in place of the caller's name.
- The test/font of the name is not supported by the instrument cluster. The instrument cluster will not display anything in place of the name.

 The caller's name exceeds the maximum number of characters. The last two to three digits that will fit will be replaced with "...".

#### NOTE:

Any audio information will return to the instrument cluster once the call has ended.

## BATTERY SAVER ON/BATTERY SAVER MODE MESSAGE — ELECTRICAL LOAD REDUCTION ACTIONS — IF EQUIPPED

This vehicle is equipped with an Intelligent Battery Sensor (IBS) to perform additional monitoring of the electrical system and status of the vehicle battery.

In cases when the IBS detects charging system failure, or the vehicle battery conditions are deteriorating, electrical load reduction actions will take place to extend the driving time and distance of the vehicle. This is done by reducing power to or turning off non-essential electrical loads.

Load reduction is only active when the engine is running. It will display a message if there is a risk of battery depletion to the point where the vehicle may stall due to lack of electrical supply, or will not restart after the current drive cycle.

When load reduction is activated, the message "Battery Saver On" or "Battery Saver Mode" will appear in the instrument cluster display.

These messages indicate the vehicle battery has a low state of charge and continues to lose electrical charge at a rate that the charging system cannot sustain.

#### NOTE:

- The charging system is independent from load reduction. The charging system performs a diagnostic on the charging system continuously.

The following are electrical loads that may be switched off (if equipped), and vehicle functions which can be affected by load reduction:

- Heated Seat/Vented Seats/Heated Wheel
- Rear Defroster And Heated Mirrors
- HVAC System
- 150W Power Inverter System
- Audio and Telematics System

Loss of the battery charge may indicate one or more of the following conditions:

- The charging system cannot deliver enough electrical power to the vehicle system because the electrical loads are larger than the capability of the charging system. The charging system is still functioning properly.
- Turning on all possible vehicle electrical loads (e.g. HVAC to max settings, exterior and interior lights, overloaded power outlets +12 Volt, 150W, USB ports) during certain driving conditions (city driving, towing, frequent stopping).
- Installing options like additional lights, upfitter electrical accessories, audio systems, alarms and similar devices.
- Unusual driving cycles (short trips separated by long parking periods).

- The vehicle was parked for an extended period of time (weeks, months).
- The battery was recently replaced and was not charged completely.
- The battery was discharged by an electrical load left on when the vehicle was parked.
- The battery was used for an extended period with the engine not running to supply radio, lights, chargers, +12 Volt portable appliances like vacuum cleaners, game consoles and similar devices.

# What to do when an electrical load reduction action message is present ("Battery Saver On" or "Battery Saver Mode")

During a trip:

- Reduce power to unnecessary loads if possible:
  - O Turn off redundant lights (interior or exterior)
  - Check what may be plugged in to power outlets +12 Volt, 150W, USB ports
  - Check HVAC settings (blower, temperature)
  - Check the audio settings (volume)

After a trip:

- Check if any aftermarket equipment was installed (additional lights, upfitter electrical accessories, audio systems, alarms) and review specifications if any (load and Ignition Off Draw currents).
- Evaluate the latest driving cycles (distance, driving time and parking time).
- The vehicle should have service performed if the message is still present during consecutive trips and the evaluation of the vehicle and driving pattern did not help to identify the cause.

## WARNING LIGHTS AND MESSAGES

The warning/indicator lights will illuminate in the instrument panel together with a dedicated message and/or acoustic signal when applicable. These indications are indicative and precautionary and as such must not be considered as exhaustive and/or alternative to the information contained in the Owner's Manual, which you are advised to read carefully in all cases. Always refer to the information in this chapter in the event of a failure indication. All active telltales will display first if applicable. The system check menu may appear different based upon equipment options and current vehicle status. Some telltales are optional and may not appear.

## **RED WARNING LIGHTS**

## Air Bag Warning Light



This warning light will illuminate to indicate a fault with the air bag, and will turn on for four to eight seconds as a bulb check when the ignition is placed in the ON/RUN or ACC/

ON/RUN position. This light will illuminate with a single chime when a fault with the air bag has been detected, it will stay on until the fault is cleared. If the light is not on during startup, stays on, or turns on while driving, have the system inspected at an authorized dealer as soon as possible.

## **Brake Warning Light**

## BRAKE

This warning light monitors various brake functions, including brake fluid level and parking brake application. If the brake light turns on it may indicate that the parking

brake is applied, that the brake fluid level is low, or that there is a problem with the Anti-Lock Brake System reservoir.

If the light remains on when the parking brake has been disengaged, and the fluid level is at the full mark on the master cylinder reservoir, it indicates a possible brake hydraulic system malfunction or that a problem with the Brake Booster has been detected by the Anti-Lock Brake System (ABS) / Electronic Stability Control (ESC) system. In this case, the light will remain on until the condition has been corrected. If the problem is related to the brake booster, the ABS pump will run when applying the brake, and a brake pedal pulsation may be felt during each stop.

The dual brake system provides a reserve braking capacity in the event of a failure to a portion of the hydraulic system. A leak in either half of the dual brake system is indicated by the Brake Warning Light, which will turn on when the brake fluid level in the master cylinder has dropped below a specified level.

The light will remain on until the cause is corrected.

#### NOTE:

The light may flash momentarily during sharp cornering maneuvers, which change fluid level conditions. The vehicle should have service performed, and the brake fluid level checked.

If brake failure is indicated, immediate repair is necessary.

#### WARNING!

Driving a vehicle with the red brake light on is dangerous. Part of the brake system may have failed. It will take longer to stop the vehicle. You could have a collision. Have the vehicle checked immediately.

Vehicles equipped with the Anti-Lock Brake System (ABS) are also equipped with Electronic Brake Force Distribution (EBD). In the event of an EBD failure, the Brake Warning Light will turn on along with the ABS Light. Immediate repair to the ABS system is required.

Operation of the Brake Warning Light can be checked by turning the ignition switch from the OFF position to the ON/RUN position. The light should illuminate for approximately two seconds. The light should then turn off unless the parking brake is applied or a brake fault is detected. If the light does not illuminate, have the light inspected by an authorized dealer.

The light also will turn on when the parking brake is applied with the ignition switch in the ON/RUN position.

#### NOTE:

This light shows only that the parking brake is applied. It does not show the degree of brake application.

## Battery Charge Warning Light



This warning light will illuminate when the battery is not charging properly. If it stays on while the engine is running, there may be a malfunction with the charging system. Contact an authorized dealer as soon as possible.

This indicates a possible problem with the electrical system or a related component.

## Door Open Warning Light



This indicator will illuminate when a door is ajar/open and not fully closed.

NOTE:

If the vehicle is moving, there will also be a single chime.

## Electric Power Steering (EPS) Fault Warning Light



This warning light will turn on when there's a fault with the EPS system  $\Box$  page 167.

#### WARNING!

Continued operation with reduced assist could pose a safety risk to yourself and others. Service should be obtained as soon as possible.

## Electronic Throttle Control (ETC) Warning Light



This warning light will illuminate to indicate a problem with the ETC system. If a problem is detected while the vehicle is running, the light will either stay on or flash depending on the

nature of the problem. Cycle the ignition when the vehicle is safely and completely stopped and the transmission is placed in the PARK (P) position. The light should turn off. If the light remains on with the vehicle running, your vehicle will usually be drivable; however, see an authorized dealer for service as soon as possible.

#### NOTE:

This light may turn on if the accelerator and brake pedals are pressed at the same time.

If the light continues to flash when the vehicle is running, immediate service is required and you may experience reduced performance, an elevated/rough idle, or engine stall and your vehicle may require towing. The light will come on when the ignition is placed in the ON/RUN or ACC/ON/RUN position and remain on briefly as a bulb check. If the light does not come on during starting, have the system checked by an authorized dealer.

## **Engine Coolant Temperature Warning** Light



This warning light warns of an overheated engine condition. If the engine coolant temperature is too high, this indicator will illuminate and a single chime will sound. If the

temperature reaches the upper limit, a continuous chime will sound for four minutes or until the engine is able to cool, whichever comes first,

If the light turns on while driving, safely pull over and stop the vehicle. If the Air Conditioning (A/C) system is on, turn it off. Also, shift the transmission into NEUTRAL (N) and idle the vehicle. If the temperature reading does not return to normal, turn the engine off immediately and call for service  $\Box$  page 277.

## Hood Open Warning Light



This indicator will illuminate when the hood is ajar/open and not fully closed.

## Hybrid Electric Vehicle System Service Warning Light – PHEV Only

This warning light will illuminate when service to the hybrid electric system is needed. It will be accompanied by a "Service Hybrid Electric Vehicle System" message in the cluster. If the telltale stays on or continues to come on, contact an authorized dealer as soon as possible.

## **Oil Pressure Warning Light**



This warning light will illuminate, and a chime will sound, to indicate low engine oil pressure. If the light and chime turn on while driving, safely stop the vehicle and turn off the engine as soon as possible. After the vehicle is safely stopped, restart the engine and monitor the Oil Pressure Warning Light. If the Oil Pressure Warning Light is still illuminated, turn the engine OFF and contact an authorized dealer for further assistance. Do not operate the vehicle until the cause is corrected. If the light is no longer illuminated, the engine can be operated but it is recommended to take the vehicle to an authorized dealer as soon as possible.

Do not operate the vehicle until the cause is corrected. This light does not indicate how much oil is in the engine. The engine oil level must be checked under the hood.

## **Oil Temperature Warning Light**



This warning light will illuminate to indicate the engine oil temperature is high. If the light turns on while driving, stop the vehicle and shut off the engine as soon as possible. Wait for oil temperature to return to normal levels.

## Plug Status Fault Warning Light – PHEV Only



This warning light will illuminate when a plug status fault is detected (when vehicle not in motion). It will be accompanied by a cluster message indicating the type of fault. You may receive one of the following messages if a fault is detected:

- "Service Charging System" If you see this message, it is recommended to unplug and plug in again, or try a different charging station. If an issue continues, contact an authorized dealer to service your high voltage charging system.
- "Issue Detected Check External Charging Station" If you see this message, the charging station might be powered off, have an internal fault or be scheduled to charge later. It is recommended to try a different charging station. If an issue continues, then contact an authorized dealer.

#### NOTE:

- Older or non-compliant J1772 EVSE models may not support charging of this vehicle. If this vehicle does not charge, it may be connected to a non-compliant Level 2 EVSE, and will flash indicators. Please identify this failure to the site operator and/or EVSE provider.
- Before this vehicle can be driven, the EVSE Charging Cord must be disconnected from the vehicle.

#### NOTE:

If the vehicle is moving, there will also be a single chime.

## Seat Belt Reminder Warning Light

This warning light indicates when the driver or passenger seat belt is unbuckled. When the ignition is first placed in the ON/RUN or ACC/ON/RUN position and if the driver's seat belt is unbuckled, a chime will sound and the light will turn on. When driving, if the driver or front passenger seat belt remains unbuckled, the Seat Belt Reminder Light will flash or remain on continuously and a chime will sound  $\leftrightarrows$  page 239.

## Swing Gate Open Warning Light



This warning light will illuminate when the swing gate is open.

#### NOTE:

If the vehicle is moving, there will also be a single chime.

## Torque Limited Warning Light – PHEV Only



This warning light illuminates when vehicle acceleration is limited due to a reduction in engine or electric motor performance. Contact an authorized dealer for service if illumi-

nation persists.

## **Transmission Temperature Warning Light**



This warning light will illuminate to warn of a high transmission fluid temperature. This may occur with strenuous usage such as trailer towing. If this light turns on, stop the vehicle and run the engine at idle or slightly faster, with the transmission in PARK (P) or NEUTRAL (N), until the light turns off. Once the light turns off, you may continue to drive normally.

#### WARNING!

If you continue operating the vehicle when the Transmission Temperature Warning Light is illuminated you could cause the fluid to boil over, come in contact with hot engine or exhaust components and cause a fire. If you continue to operate the vehicle when the "CLUTCH HOT" message is displayed, or the Transmission Temperature Warning Light is illuminated, you could cause the clutch to overheat and cause a fire.

#### CAUTION!

Continuous driving with the Transmission Temperature Warning Light illuminated will eventually cause severe transmission damage or transmission failure. If you continue to operate the vehicle when the "CLUTCH HOT" message is displayed, or the Transmission Temperate Warning Light is illuminated, you could cause the clutch to overheat and cause severe clutch damage, transmission damage, or failure.

## Vehicle Security Warning Light — If Equipped



This light will flash at a fast rate for approximately 15 seconds when the Vehicle Security system is arming, and then will flash slowly until the vehicle is disarmed.

## YELLOW WARNING LIGHTS

## Anti-Lock Brake System (ABS) Warning Light



This warning light monitors the ABS. The light will turn on when the ignition is placed in the ON/RUN or ACC/ON/RUN position and may stay on for as long as four seconds.

If the ABS light remains on or turns on while driving, then the Anti-Lock portion of the brake system is not functioning and service is required as soon as possible. However, the conventional brake system will continue to operate normally, assuming the Brake Warning Light is not also on.

If the ABS light does not turn on when the ignition is placed in the ON/RUN or ACC/ON/RUN position, have the brake system inspected by an authorized dealer.

## Electronic Stability Control (ESC) Active Warning Light — If Equipped

This warning light will indicate when the Electronic Stability Control system is Active. The ESC Indicator Light in the instrument cluster will come on when the ignition is

placed in the ON/RUN or ACC/ON/RUN position, and when ESC is activated. It should go out with the engine running. If the ESC Indicator Light comes on continuously with the engine running, a malfunction has been detected in the ESC system. If this warning light remains on after several ignition cycles, and the vehicle has been driven several miles (kilometers) at speeds greater than 30 mph (48 km/h), see an authorized dealer as soon as possible to have the problem diagnosed and corrected.

- The ESC OFF Indicator Light and the ESC Indicator Light come on momentarily each time the ignition is placed in the ON/RUN or ACC/ON/RUN position.
- The ESC system will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESC becomes inactive.
- This light will come on when the vehicle is in an ESC event.

## Electronic Stability Control (ESC) OFF Warning Light — If Equipped



This warning light indicates the ESC is off. Each time the ignition is turned to ON/RUN or ACC/ON/RUN, the ESC system will be on, even if it was turned off previously.

## Fuel Level Sensor Failure Warning Light



This light illuminates when there is a fuel level sensor failure. If this light illuminates, take it to an authorized dealer and have them inspect it.

## Loose Fuel Filler Cap Warning Light — If Equipped



This warning light will illuminate when the fuel filler cap is loose. Properly close the filler cap to disengage the light. If the light does not turn off, please see an authorized

dealer.

## Low Fuel Warning Light



When the fuel level reaches approximately 2.0 gal (7.5 L), this light will turn on and a chime will sound. The light will remain on until fuel is added.

## Low Washer Fluid Warning Light — If Equipped

This warning light will illuminate when the windshield washer fluid is low  $\Rightarrow$  page 288.

## Engine Check/Malfunction Indicator Warning Light (MIL)

The MIL is a part of an Onboard Diagnostic System called OBD II that monitors engine and automatic transmission control systems. This warning light will illuminate when the ignition is in the ON/RUN position before engine start. If the bulb does not come on when turning the ignition switch from OFF to ON/RUN, have the condition checked promptly.

Certain conditions, such as a loose or missing gas cap, poor quality fuel, etc., may illuminate the light after engine start. The vehicle should be serviced if the light stays on through several typical driving styles. In most situations, the vehicle will drive normally and will not require towing.

When the engine is running, the MIL may flash to alert serious conditions that could lead to immediate loss of power or severe catalytic converter damage. The vehicle should be serviced by an authorized dealer as soon as possible if this occurs.

#### WARNING!

A malfunctioning catalytic converter, as previously referenced, can reach higher temperatures than in normal operating conditions. This can cause a fire if

(Continued)

#### WARNING!

you drive slowly or park over flammable substances such as dry plants, wood, cardboard, etc. This could result in death or serious injury to the driver, occupants or others.

#### CAUTION!

3

Prolonged driving with the Malfunction Indicator Light (MIL) on could cause damage to the vehicle control system. It also could affect fuel economy and driveability. If the MIL is flashing, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

## Service 4WD Warning Light — If Equipped

 SERV
 This warning light will illuminate to signal a fault with the 4WD system. If the light stays on or comes on during driving, it means that the 4WD system is not functioning properly

and that service is required. We recommend you drive to the nearest service center and have the vehicle serviced immediately.

## Service Adaptive Cruise Control Warning Light — If Equipped



This light will turn on when a ACC is not operating and needs service  $\Box$  page 173.

## Service Forward Collision Warning (FCW) Light — If Equipped



This warning light will illuminate to indicate a fault in the Forward Collision Warning System. Contact an authorized dealer for service  $\Box$  page 234.

## Service Stop/Start System Warning Light — If Equipped



This warning light will illuminate when the Stop/Start system is not functioning properly and service is required. Contact an authorized dealer for service.

## **Cruise Control Fault Warning Light**



This warning light will illuminate to indicate the Cruise Control system is not functioning properly and service is required. Contact an authorized dealer

## Sway Bar Fault Warning Light



This light will illuminate when there is a fault in the sway bar disconnect system BAR 🖌 🖒 page 159.

## Tire Pressure Monitoring System (TPMS) Warning Light



The warning light switches on and a message is displayed to indicate that the tire pressure is lower than the recommended value and/or that slow pressure loss is

occurring. In these cases, optimal tire duration and fuel consumption may not be guaranteed.

Should one or more tires be in the condition previously mentioned, the display will show the indications corresponding to each tire.

#### CAUTION!

Do not continue driving with one or more flat tires as handling may be compromised. Stop the vehicle, avoiding sharp braking and steering. If a tire puncture occurs, repair immediately using the dedicated tire repair kit and contact an authorized dealer as soon as possible.

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.

As an added safety feature, your vehicle has been equipped with a TPMS that illuminates a low tire pressure telltale when one or more of your tires is significantly underinflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under inflated tire causes the tire to overheat and can lead to tire failure. Underinflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if underinflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

#### CAUTION!

The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warning have been established for the tire size equipped on vour vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage. Using aftermarket tire sealants may cause the Tire Pressure Monitoring System (TPMS) sensor to become inoperable. After using an aftermarket tire sealant it is recommended that you take your vehicle to an authorized dealer to have your sensor function checked.

## Traffic Sign Recognition (TSR) Fault Warning Light — If Equipped



This light will illuminate to indicate a TSR fault. Contact an authorized dealer if the light remains on after restarting the engine.

## YELLOW INDICATOR LIGHTS

## 4WD Indicator Light – If Equipped



This light alerts the driver that the vehicle is 4H /4WD in the Four-Wheel Drive (4WD) mode, and the front and rear driveshafts are mechani-

cally locked together forcing the front and rear wheels to rotate at the same speed.

## 4WD Low Indicator Light — If Equipped



This light alerts the driver that the vehicle is 4L / two in the 4WD Low mode. The front and rear driveshafts are mechanically locked together forcing the front and rear wheels to rotate at

the same speed. Low range provides a greater gear reduction ratio to provide increased torque at the wheels  $\Box$  page 154.

## 4WD Part Time Indicator Light -If Equipped



This light alerts the driver that the vehicle is HWD in the Four-Wheel Drive part time mode, and the front and rear driveshafts are mechanically locked together forcing the front and

rear wheels to rotate at the same speed.

## Axle Locker Fault Indicator Light



This light indicates when the front and/or rear axle locker fault has been detected.

## Forward Collision Warning (FCW) OFF Indicator Light — If Equipped



This indicator light illuminates to indicate that Forward Collision Warning is off  $\Rightarrow$  page 234.

## Front And Rear Axle Lock Indicator Light



This light indicates when the front, rear, or both axles have been locked. The telltale will display the lock icon on the front and rear axles to indicate the current lock status.

## Neutral Indicator Light – If Equipped

This light alerts the driver that the vehicle is in the Neutral mode.

## Off Road+ Indicator Light - If Equipped

This indicator light will illuminate when Off OFF Road+ has been activated ROAD+

## Rear Axle Lock Indicator Light



This light indicates when the rear axle lock has been activated  $\Box$  page 154.

## Sway Bar Indicator Light — If Equipped



This indicator light will illuminate when the front sway bar is disconnected  $\Rightarrow$  page 159.

## GREEN INDICATOR LIGHTS

## Adaptive Cruise Control (ACC) Set With No Target Detected Indicator Light — If Equipped

This light will turn on when the Adaptive Cruise Control is set and there is no vehicle in front detected  $\Box$  page 173.

## Adaptive Cruise Control (ACC) Set With Target Indicator Light — If Equipped



This will display when the ACC is set and a vehicle in front is detected  $\Box$  page 173.

## 4WD Auto Indicator Light — If Equipped



This light alerts the driver that the vehicle is 4WD /4H in the Four-Wheel Drive auto mode. The system will provide power to all four wheels and shift the power between the front and rear

axles as needed. This will provide maximum traction in dry and slippery conditions.

## Cruise Control SET Indicator Light -If Equipped With A Premium Instrument Cluster



This indicator light will illuminate when the Cruise Control is set to the desired speed 

## Front Fog Indicator Light — If Equipped



This indicator light will illuminate when the front fog lights are on  $\Box$  page 70.

## Max Regeneration Indicator Light -**PHEV Only**



This indicator light will illuminate to indicate that Max Regeneration is on and capable. When the switch is pressed, the following

- instrument cluster messages will be seen: • "Max Regeneration On" - appears when the feature is turned on.
- "Max Regeneration Off" appears when the feature is turned off

 "Max Regeneration Unavailable" – appears when the feature is requested, but the vehicle is unable to comply. LED will flash for five seconds to indicate unavailability  $\Box$  page 19.

## Parking/Headlights On Indicator Light

This indicator light will illuminate when the parking lights or headlights are turned on. :DQ:

## Plug Status Indicator Light – PHEV Only

When plugged in, the green plug indicator light will illuminate if the Electric Vehicle Supply Equipment (EVSE) charging plug is securely attached to the charging port. This indicates that the plug is detected, but doesn't mean it is charging. It will be accompanied with a cluster message indicating the charge status:

- "Plugged In And Charging"
- "Plugged In And Waiting to Charge On A Set Schedule"
- "Plugged in and Charging Complete"

#### NOTE:

The vehicle cannot be driven until it is unplugged.

## Ready To Drive Indicator Light - PHEV Only



This indicator light will illuminate to indicate that the vehicle has enough power to be driven, regardless of the speed of the vehicle

## Stop/Start Active Indicator Light -If Equipped



This indicator light will illuminate when the Stop/Start function is in "Autostop" mode.

## Turn Signal Indicator Lights



When the left or right turn signal is activated, the turn signal indicator will flash independently and the corresponding exterior turn signal lamps will flash. Turn signals can be

activated when the multifunction lever is moved down (left) or up (right).

#### NOTE:

- A continuous chime will sound if the vehicle is driven more than 1 mile (1.6 km) with either turn signal on.
- Check for an inoperative outside light bulb if either indicator flashes at a rapid rate.

## WHITE INDICATOR LIGHTS

## Adaptive Cruise Control (ACC) Ready Indicator Light — If Equipped



This light will turn on when the vehicle equipped with ACC has been turned on, but not set.

## 2WD High Indicator Light – If Equipped With a Premium Instrument Cluster



This light alerts the driver that the vehicle is in the Two-Wheel Drive High mode.

## Hill Descent Control (HDC) Indicator Light — If Equipped



This indicator shows when the HDC feature is turned on. The light will be on solid when HDC is armed. HDC can only be armed when the transfer case is in the 4WD Low position

and the vehicle speed is less than 30 mph (48 km/h). If these conditions are not met while attempting to use the HDC feature, the HDC indicator light will flash on/off.

#### Max Regeneration Indicator Light -PHEV Only



This indicator light will illuminate to indicate that Max Regeneration is on and not ready. When the switch is pressed, the following instrument cluster messages will be seen:

- "Max Regeneration On" appears when the feature is turned on
- "Max Regeneration Off" appears when the feature is turned off.
- "Max Regeneration Unavailable" appears when the feature is requested, but the vehicle is unable to comply. LED will flash for five seconds to indicate unavailability  $\Box$  page 19.

## Selec-Speed Control Indicator Light -If Equipped



This light will turn on when "Selec-Speed Control" is activated.

To activate "Selec-Speed Control", ensure the vehicle is in 4WD Low and push the but-

ton on the Instrument Panel.

## NOTE:

If the vehicle is not in 4WD Low. "To Enter Selec-Speed Shift to 4WD Low" will appear in the instrument cluster display.

### Cruise Control Ready Indicator Light -If Equipped With A Premium Instrument Cluster



This light will turn on when the Cruise Control has been turned on, but not set.

## Cruise Control SET Indicator Light -If Equipped With Base Instrument Cluster



This indicator light will illuminate when the Cruise Control is set.

## BLUE INDICATOR LIGHTS

## **High Beam Indicator Light**



This indicator light will illuminate to indicate that the high beam headlights are on. With the low beams activated, push the multifunction lever forward (toward the front of the vehicle) to turn on the high beams. Pull the multifunc-

tion lever rearward (toward the rear of the vehicle) to turn off the high beams. If the high beams are off, pull the lever toward you for a temporary high beam on, "flash to pass" scenario.

## GRAY INDICATOR LIGHTS

## Cruise Control Ready Indicator Light -If Equipped With Base Instrument Cluster



This light will turn on when the Cruise Control has been turned on, but not set.

## ONBOARD DIAGNOSTIC SYSTEM — OBD II

Your vehicle is equipped with a sophisticated Onboard Diagnostic system called OBD II. This system monitors the performance of the emissions, engine, and transmission control systems. When these systems are operating properly, your vehicle will provide excellent performance and fuel economy, as well as engine emissions well within current government regulations.

If any of these systems require service, the OBD II system will turn on the Malfunction Indicator Light (MIL). It will also store diagnostic codes and other information to assist your service technician in making repairs.

Although your vehicle will usually be drivable and not need towing, see an authorized dealer for service as soon as possible.

#### CAUTION!

- Prolonged driving with the MIL on could cause further damage to the emission control system. It could also affect fuel economy and driveability. The vehicle must be serviced before any emissions tests can be performed.
- If the MIL is flashing while the vehicle is running, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

# ONBOARD DIAGNOSTIC SYSTEM (OBD II) CYBERSECURITY

Your vehicle is required to have OBD II and a connection port to allow access to information related to the performance of your emissions controls. Authorized service technicians may need to access this information to assist with the diagnosis and service of your vehicle and emissions system  $\Box$  page 201.

#### WARNING!

- ONLY an authorized service technician should connect equipment to the OBD II connection port in order to read the VIN, diagnose, or service your vehicle.
- If unauthorized equipment is connected to the OBD II connection port, such as a driver-behavior tracking device, it may:
  - O Be possible that vehicle systems, including safety related systems, could be impaired or a loss of vehicle control could occur that may result in an accident involving serious injury or death.

#### WARNING!

 Access, or allow others to access, information stored in your vehicle systems, including personal information.

## EMISSIONS INSPECTION AND MAINTENANCE PROGRAMS

In some localities, it may be a legal requirement to pass an inspection of your vehicle's emissions control system. Failure to pass could prevent vehicle registration.



For states that require an Inspection and Maintenance (I/M), this check verifies the Malfunction Indicator Light (MIL) is functioning and is not on when the engine is running,

and that the OBD II system is ready for testing.

The OBD II system may **not** be ready if your vehicle was recently serviced, recently had a depleted battery or a battery replacement. If the OBD II system should be determined not ready for the I/M test, your vehicle may fail the test.

Your vehicle has a simple ignition actuated test, which you can use prior to going to the test station. To check if your vehicle's OBD II system is ready, you must do the following:

1. Cycle the ignition switch to the ON position, but do not crank or start the engine.

#### NOTE:

If you crank or start the engine, you will have to start this test over.

- As soon as you cycle the ignition switch to the ON position, you will see the Malfunction Indicator Light (MIL) symbol come on as part of a normal bulb check.
- 3. Approximately 15 seconds later, one of two things will happen:
  - O The MIL will flash for about 10 seconds and then return to being fully illuminated until you turn OFF the ignition or start the engine. This means that your vehicle's OBD II system is not ready and you should not proceed to the I/M station.
  - O The MIL will not flash at all and will remain fully illuminated until you place the ignition in the off position or start the engine. This means that your vehicle's OBD II system is ready and you can proceed to the I/M station.

If your OBD II system is **not ready**, you should see an authorized dealer or repair facility. If your vehicle was recently serviced or had a battery failure or replacement, you may need to do nothing more than drive your vehicle as you normally would in order for your OBD II system to update. A recheck with the previously mentioned test routine may then indicate that the system is **now ready**.

Regardless of whether your vehicle's OBD II system is ready or not, if the MIL is illuminated during normal vehicle operation you should have your vehicle serviced before going to the I/M station. The I/M station can fail your vehicle because the MIL is on with the engine running.

## **STARTING THE ENGINE**

Before starting your vehicle, adjust your seat, adjust both inside and outside mirrors, and fasten your seat belts.

#### WARNING!

- When exiting the vehicle, always remove the key fob from the ignition and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

# MANUAL TRANSMISSION – IF EQUIPPED

Apply the parking brake, place the gear selector in NEU-TRAL, and press the clutch pedal before starting the vehicle. This vehicle is equipped with a clutch interlocking ignition system. It will not start unless the clutch pedal is pressed to the floor.

#### Four-Wheel Drive Models Only

In 4L mode, if the vehicle is stalled, the engine will start regardless of whether or not the clutch pedal is pressed to the floor. This feature enhances off-road performance by allowing the vehicle to start when in 4L without having to press the clutch pedal. The 4L Indicator Light will illuminate when the transfer case has been shifted into this mode.

# AUTOMATIC TRANSMISSION – IF EQUIPPED

Start the vehicle with the gear selector in the PARK position (vehicle can also be started in NEUTRAL). Apply the brake before shifting to any driving range.

# NORMAL STARTING – GASOLINE ENGINE

# To Turn On The Engine Using The ENGINE START/STOP Button

- 1. The transmission must be in PARK or NEUTRAL.
- 2. Press and hold the brake pedal while pushing the ENGINE START/STOP button once.

- The system takes over and attempts to start the vehicle. If the vehicle fails to start, the starter will disengage automatically after 10 seconds.
- 4. If you wish to stop the cranking of the engine prior to the engine starting, push the button again.

#### NOTE:

Normal starting of either a cold or a warm engine is obtained without pumping or pressing the accelerator pedal.

## To Turn Off The Engine Using The ENGINE START/STOP Button

- 1. Place the gear selector in PARK, then push and release the ENGINE START/STOP button.
- 2. The ignition will return to the OFF position.
- 3. If the gear selector is not in PARK (with vehicle stopped) and the ENGINE START/STOP button is pushed once, the transmission will automatically select PARK and the engine will turn off while the ignition will remain in the ACC position (NOT the OFF position). Never leave a vehicle out of the PARK position, or it could roll.
- If the gear selector is in NEUTRAL, and the vehicle speed is below 5 mph (8 km/h), pushing the START/ STOP button once will turn the engine off. The ignition will remain in the ACC position.
- 5. If the vehicle speed is above 5 mph (8 km/h), the ENGINE START/STOP button must be held for two seconds (or three short pushes in a row) to turn the engine off. The ignition will remain in the ACC position (NOT the OFF position) if the engine is turned off when the transmission is not in PARK.

#### NOTE:

The system will automatically time out and the ignition will cycle to the OFF position after 30 minutes of inactivity if the ignition is left in the ACC or RUN (engine not running) position and the transmission is in PARK.

#### ENGINE START/STOP Button Functions — With Driver's Foot OFF The Brake Pedal (In PARK Or NEUTRAL Position)

The ENGINE START/STOP button operates similar to an ignition switch. It has three positions: OFF, ACC, and RUN. To change the ignition positions without starting the vehicle and use the accessories, follow these steps:

- 1. Start with the ignition in the OFF position.
- Push the ENGINE START/STOP button once to place the ignition to the ACC position (instrument cluster will display "ACC").
- Push the ENGINE START/STOP button a second time to place the ignition to the RUN position (instrument cluster will display "ON/RUN").
- Push the ENGINE START/STOP button a third time to return the ignition to the OFF position (instrument cluster will display "OFF").

## AUTOPARK

AutoPark is a supplemental feature to assist with placing the vehicle in PARK should the situations on the following pages occur. It is a back-up system and should not be relied upon as the primary method by which the driver shifts the vehicle into PARK.

The conditions under which AutoPark will engage are outlined on the following pages.

#### WARNING!

- Driver inattention could lead to failure to place the vehicle in PARK. ALWAYS DO A VISUAL CHECK that your vehicle is in PARK by verifying that a solid (not blinking) "P" is indicated in the instrument cluster display and on the gear selector. If the "P" indicator is blinking, your vehicle is not in PARK. As an added precaution, always apply the parking brake when exiting the vehicle.
- AutoPark is a supplemental feature. It is not designed to replace the need to shift your vehicle into PARK. It is a back-up system and should not be relied upon as the primary method by which the driver shifts the vehicle into PARK.

## If the vehicle is not in PARK and the driver turns off the engine, the vehicle may AutoPark.

AutoPark will engage when all of these conditions are met:

- Vehicle is equipped with an 8-speed transmission
- Driver's door is ajar or if the driver's door is removed and the driver is not on the seat (seat pad sensor detects driver missing)
- Vehicle is not in PARK
- Vehicle speed is 1.2 mph (1.9 km/h) or less
- Ignition is switched from RUN to OFF

#### NOTE:

For Keyless Enter 'n GoTM equipped vehicles, the engine will turn off and the ignition switch will change to ACC position.

If the vehicle is not in PARK and the driver exits the vehicle with the engine running, the vehicle may AutoPark.

AutoPark will engage when all of these conditions are met:

- Vehicle is equipped with an 8-speed transmission
- Driver's door is ajar or if the driver's door is removed and the driver is not on the seat (seat pad sensor detects driver missing)
- Vehicle is not in PARK
- Vehicle speed is 1.2 mph (1.9 km/h) or less
- Driver's seat belt is unbuckled
- Brake pedal is not pressed

The message " AutoPark Engaged Shift To P Then Shift To Gear" will display in the instrument cluster.

#### NOTE:

In some cases the ParkSense graphic will be displayed in the instrument cluster. In these cases, the gear selector must be returned to "P" to select desired gear.

If the driver shifts into PARK while moving, the vehicle may AutoPark.

AutoPark will engage ONLY when vehicle speed is 1.2 mph (1.9 km/h) or less.

The message " Vehicle Speed Is Too High To Shift To P" will be displayed in the instrument cluster if vehicle speed is above 1.2 mph (1.9 km/h).

#### WARNING!

If vehicle speed is above 1.2 mph (1.9 km/h), the transmission will default to NEUTRAL until the vehicle speed drops below 1.2 mph (1.9 km/h). A vehicle left in the NEUTRAL position can roll. As an added precaution, always apply the parking brake when exiting the vehicle.

#### 4L

AutoPark will be disabled when operating the vehicle in 4L.

The message "  ${\mbox{AutoPark Disabled}"}$  will be displayed in the instrument cluster.

Additional customer warnings will be given when both of these conditions are met:

- Vehicle is not in PARK
- Driver's door is ajar

The message " AutoPark Not Engaged" will be displayed in the instrument cluster. A warning chime will continue until you shift the vehicle into PARK or the driver's door is closed.

ALWAYS DO A VISUAL CHECK that your vehicle is in PARK by looking for the "P" in the instrument cluster display and on the gear selector. As an added precaution, always apply the parking brake when exiting the vehicle.

## EXTENDED PARK STARTING

#### NOTE:

Extended Park condition occurs when the vehicle has not been started or driven for at least 30 days.

- Install a battery charger or jumper cables to the battery to ensure a full battery charge during the crank cycle.
- Place the ignition in the START position and release it when the engine starts. For vehicles equipped with the ENGINE START/STOP button, press and hold the brake pedal while pushing the ENGINE START/STOP button once.

- 3. If the engine fails to start within 10 seconds, place the ignition in the OFF position, wait 10 to 15 seconds to allow the starter to cool, then repeat the "Extended Park Starting" procedure.
- 4. If the engine fails to start after eight attempts, allow the starter to cool for at least 10 minutes, then repeat the procedure.

#### CAUTION!

To prevent damage to the starter, do not crank continuously for more than 10 seconds at a time. Wait 10 to 15 seconds before trying again.

## IF ENGINE FAILS TO START

If the engine fails to start after following the "Normal Starting" procedure and the vehicle has not experienced an extended park condition, as previously defined, it may be flooded. Push the accelerator pedal all the way to the floor and hold it there. Crank the engine for no more than 10 to 15 seconds. This should clear any excess fuel in case the engine is flooded. Leave the ignition in the RUN position, release the accelerator pedal and repeat the "Normal Starting" procedure.

#### WARNING!

 Never pour fuel or other flammable liquid into the throttle body air inlet opening in an attempt to start the vehicle. This could result in flash fire causing serious personal injury.

#### (Continued)

#### WARNING!

- Do not attempt to push or tow your vehicle to get it started. Vehicles equipped with an automatic transmission cannot be started this way. Unburned fuel could enter the catalytic converter and once the engine has started, ignite and damage the converter and vehicle.
- If the vehicle has a discharged battery, booster cables may be used to obtain a start from a booster battery or the battery in another vehicle. This type of start can be dangerous if done improperly ⇔ page 274.

#### CAUTION!

To prevent damage to the starter, do not continuously crank the engine for more than 10 to 15 seconds at a time. Wait 10 to 15 seconds before trying again.

## EXTREME COLD WEATHER (BELOW -22°F OR -30°C)

To ensure reliable starting at these temperatures, use of an externally powered electric engine block heater (available from an authorized dealer) is recommended.

## AFTER STARTING

The idle speed is controlled automatically and will decrease as the engine warms up.

4

## STARTING THE VEHICLE — PHEV (IF EQUIPPED)

Before starting your vehicle, adjust your seat, adjust both inside and outside mirrors, and fasten your seat belts.

#### WARNING!

- Before exiting a vehicle, always come to a complete stop, then shift the automatic transmission into PARK and apply the parking brake.
- Always make sure the ignition is in the OFF position, key fob is removed from the vehicle and vehicle is locked.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave the ignition of a vehicle equipped with Keyless Enter 'n Go™ in the ACC or ON/RUN position. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

Activate the Propulsion System Active (PSA) or Ready to Drive mode with the gear selector in the PARK (P) position. Apply the brake before shifting to any driving range.

In extreme temperatures, high or low, the high voltage battery may need to be conditioned, and therefore may require the vehicle to be plugged in  $\Box$  page 16.

#### NOTE:

If the ignition switch does not change with the push of a button, the key fob may have a low or depleted battery. In this situation, a back-up method can be used to operate the ignition switch. Put the key fob against the ENGINE START/STOP button and push to operate the ignition switch.

## NORMAL STARTING

## Achieving vehicle READY using the ENGINE START/ STOP button.

- 1. The transmission must be in PARK or NEUTRAL.
- 2. Press and hold the brake pedal while pushing the ENGINE START/STOP button once.
- The READY indicator will appear in the instrument cluster display when the vehicle is in Ready to Drive mode, which may include the start of the engine depending on conditions such as battery state of charge and engine temperature.
- 4. If you wish to terminate Ready to Drive mode, push the button again.

#### ENGINE START/STOP Button Functions — With Driver's Foot Off The Brake Pedal (In PARK Or NEUTRAL Position)

The ENGINE START/STOP button operates similar to an ignition switch by providing three positions: OFF, ACC and ON/RUN. To change the ignition position without starting the vehicle (to power certain accessories), follow these steps:

- 1. Start with the ignition in the OFF position.
- Push the ENGINE START/STOP button once, without the brake pedal being pressed, to place the ignition in the ACC position (instrument cluster will display "ACC").
- Push the ENGINE START/STOP button a second time, without the brake pedal being pressed, to place the ignition in the ON/RUN position (instrument cluster will display "Ignition or Accessory On").

#### NOTE:

The vehicle is not able to be driven in the Ignition or Accessory On position, see "Achieving vehicle READY using the ENGINE START/STOP button" previously defined in this section for further information.

 Push the ENGINE START/STOP button a third time, without the brake pedal being pressed, to return the ignition to the OFF position (instrument cluster will display "OFF").

#### NOTE:

Only press one pedal at a time while driving the vehicle. Torque performance of the vehicle could be reduced if both pedals are pressed at the same time. If pressure is detected on both pedals simultaneously, a warning message will display in the instrument cluster  $\Box$  page 124.

## AFTER STARTING

To optimize energy efficiency, the vehicle will automatically control engine operation.

# TO TURN OFF THE VEHICLE USING ENGINE START/STOP BUTTON

- 1. Place the gear selector in PARK, then push and release the ENGINE START/STOP button.
- 2. The ignition button indicator will return to the OFF position.
- If the gear selector is not in PARK, with vehicle speed less than 5 mph (8 km/h), when the ENGINE START/STOP button is pushed, the instrument cluster display will display a "Vehicle Not In Park" message, and the vehicle will remain running.
- 4. If the gear selector is not in PARK, with vehicle speed greater than 5 mph (8 km/h), when the ENGINE START/STOP button is pushed continuously for at least two seconds (or three short pushes in a row), the vehicle ignition will exit the Ready mode and enter Accessory mode. Never leave a vehicle out of the PARK position, or it could roll.

#### NOTE:

 This vehicle is equipped with an automatic shutdown feature. If the vehicle is left in a READY state (vehicle running) with the gear selector in PARK for 30 minutes, the vehicle will automatically turn itself off.  The vehicle provides automatic notification using a three horn chirp alert, cluster chiming, and a cluster message ("Key Fob Has Left The Vehicle") if the vehicle was not turned off (still "Ready to Drive") and a valid key fob for the vehicle is not detected within the passenger cabin, following the opening and closing of any passenger compartment door (requires all doors to be closed before the key fob check will occur). These automatic alerts are to remind the driver to turn off the vehicle before leaving it, as well as, to let the driver know that the vehicle's key fob may have been unintentionally removed from the vehicle by an exiting passenger. After providing the horn chirp alert, additional auto chirps will be inhibited until the gear selector has been moved out of PARK or ignition cycled.

## **ENGINE BREAK-IN RECOMMENDATIONS**

A long break-in period is not required for the engine and drivetrain (transmission and axle) in your vehicle.

Drive moderately during the first 300 miles (500 km). After the initial 60 miles (100 km), speeds up to 50 or 55 mph (80 or 90 km/h) are desirable.

While cruising, brief full-throttle acceleration within the limits of local traffic laws contributes to a good break-in. Wide-open throttle acceleration in low gear can be detrimental and should be avoided.

The engine oil installed in the engine at the factory is a high-quality energy conserving type lubricant. Oil changes should be consistent with anticipated climate conditions under which vehicle operations will occur.

#### CAUTION!

Never use Non-Detergent Oil or Straight Mineral Oil in the engine or damage may result.

#### NOTE:

A new engine may consume some oil during its first few thousand miles (kilometers) of operation. This should be considered a normal part of the break-in and not interpreted as a problem.

# ENGINE BREAK-IN RECOMMENDATIONS - 6.4L ENGINE (IF EQUIPPED)

This breaking in occurs mainly during the first 500 miles (805 km) and continues through the first oil change interval.

It is recommended for the operator to observe the following driving behaviors during the new vehicle break-in period:

0 to 100 miles (0 to 161 km):

- Do not allow the engine to operate at idle for an extended period of time.
- Press the accelerator pedal slowly and not more than halfway to avoid rapid acceleration.
- Avoid aggressive braking.
- Drive with the engine speed below 3,500 RPM.
- Maintain vehicle speed below 55 mph (88 km/h) and observe local speed limits.

100 to 300 miles (161 to 483 km):

- Press the accelerator pedal slowly and not more than halfway to avoid rapid acceleration in lower gears (FIRST to THIRD gears).
- Avoid aggressive braking.
- Drive with the engine speed below 5,000 RPM.
- Maintain vehicle speed below 70 mph (112 km/h) and observe local speed limits.

300 to 500 miles (483 to 805 km):

- Exercise the full engine RPM range, shifting manually (paddles or gear shift) at higher RPMs when possible.
- Do not perform sustained operation with the accelerator pedal at wide open throttle.
- Maintain vehicle speed below 85 mph (136 km/h) and observe local speed limits.

For the first 1,500 miles (2,414 km):

 Do not participate in track events, sport driving schools, or similar activities.

#### NOTE:

Check engine oil with every refueling and add if necessary. Oil and fuel consumption may be higher through the first oil change interval. Running the engine with an oil level below the add mark can cause severe engine damage.

## **PARKING BRAKE**

Before exiting the vehicle, make sure that the parking brake is fully applied. Also, be certain to leave an automatic transmission in PARK, or manual transmission in REVERSE or FIRST gear.

The parking brake lever is located in the center console. To apply the parking brake, pull the lever up as firmly as possible. To release the parking brake, pull the lever up slightly, push the center button, then lower the lever completely.



#### Parking Brake Lever

When the parking brake is applied with the ignition switch ON, the Brake Warning Light in the instrument cluster will illuminate.

#### NOTE:

When the parking brake is applied and the transmission is placed in gear, the Brake Warning Light will flash if vehicle speed is detected. A chime will sound if the vehicle speed is over 5 mph (8 km/h) to alert the driver. Fully release the parking brake before attempting to move the vehicle.

• This light only shows that the parking brake is applied. It does not show the degree of brake application.

When parking on a hill, it is important to turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade. For vehicles equipped with an automatic transmission, apply the parking brake before placing the gear selector in PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the gear selector out of PARK.

#### WARNING!

- Never use the PARK position on an automatic transmission as a substitute for the parking brake. Always apply the parking brake fully when parked to guard against vehicle movement and possible injury or damage.
- When exiting the vehicle, always remove the key fob from the ignition and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.
- Be sure the parking brake is fully disengaged before driving; failure to do so can lead to brake failure and a collision.

#### WARNING!

 Always fully apply the parking brake when leaving your vehicle or it may roll and cause damage or injury. Also, be certain to leave an automatic transmission in PARK, a manual transmission in REVERSE or FIRST gear. Failure to do so may cause the vehicle to roll and cause damage or injury.

#### CAUTION!

If the Brake Warning Light remains on with the parking brake released, a brake system malfunction is indicated. Have the brake system serviced by an authorized dealer immediately.

## MANUAL TRANSMISSION — IF EQUIPPED

#### WARNING!

You or others could be injured if you leave the vehicle unattended without having the parking brake fully applied. The parking brake should always be applied when the driver is not in the vehicle, especially on an incline.

#### CAUTION!

 Never drive with your foot resting on or partially depressing the clutch pedal. Never attempt to hold the vehicle on a hill with the clutch pedal partially engaged. Operating vehicle in this manner may

(Continued)

CAUTION!

cause the clutch to overheat and cause permanent damage to the clutch. If you continue to operate the vehicle in this manner, the "CLUTCH HOT" message or Transmission Temperature Warning Light will be displayed in the instrument cluster. For more information  $\Box$  page 133.

 Do not drive with your hand resting on the gear selector as the force exerted, even if slight, over time could lead to premature wear of the gearbox internal components.

#### NOTE:

During cold weather, you may experience increased effort in shifting until the transmission fluid warms up. This is normal.



**Transmission Gear Selector** 

To shift the gears, fully press the clutch pedal and place the gear selector into the desired gear position (the diagram for the engagement of the gears is displayed on the handle of the selector). The engaged gear will be displayed in the instrument cluster. To engage REVERSE gear from the NEUTRAL position, lift the REVERSE ring, located below the knob and move the gear selector all the way left and then forward.

## SHIFTING

Fully press the clutch pedal before shifting gears. As you release the clutch pedal, lightly press the accelerator pedal.

You should always use FIRST gear when starting from a standing position.

#### NOTE:

A certain amount of noise from the transmission is normal. This noise can be most noticeable when the vehicle is idling in NEUTRAL with the clutch engaged (clutch pedal released), but it may also be heard when driving. The noise may also be more noticeable when the transmission is warm. This noise is normal and is not an indication of a problem with your clutch or transmission.

#### **Recommended Vehicle Shift Speeds**

To utilize your manual transmission efficiently for both fuel economy and performance, it should be upshifted as listed in recommended shift speed chart. Shift at the vehicle speeds listed for acceleration. When heavily loaded or pulling a trailer, these recommended up-shift speeds may not apply.

| Manual Transmission Shift Speeds in MPH (KM/H) |        |         |         |         |          |          |  |  |  |
|--|--------|---------|---------|---------|----------|----------|--|--|--|
| Engine   | Speeds | 1 to 2  | 2 to 3  | 3 to 4  | 4 to 5   | 5 to 6   |  |  |  |
| 2.01   | Accel. | 15 (24) | 24 (39) | 50 (80) | 65 (104) | 70 (112) |  |  |  |
| 3.6L   | Cruise | 10 (16) | 19 (31) | 40 (64) | 55 (88)  | 65 (105) |  |  |  |

#### NOTE:

Vehicle speeds shown in the chart above are for 2H and 4H only. Vehicle speeds in 4L would be significantly less.

## DOWNSHIFTING

Moving from a high gear down to a lower gear is recommended to preserve brakes when driving down steep hills. In addition, downshifting at the right time provides better acceleration when you desire to resume speed. Downshift progressively. Do not skip gears to avoid overspeeding the engine and clutch.

#### NOTE:

The manual transmission shift system is equipped with gear blockers, which will prevent downshifts into FIRST or SECOND gear above certain vehicle speeds.

#### WARNING!

Do not downshift for additional engine braking on a slippery surface. The drive wheels could lose their grip, and the vehicle could skid.

#### CAUTION!

- Skipping gears and downshifting into lower gears at higher vehicle speeds can damage the engine and clutch systems. Any attempt to shift into lower gear with the clutch pedal pressed may result in damage to the clutch system. Shifting into lower gear and releasing the clutch may result in engine damage.
- When descending a hill, be very careful to downshift one gear at a time to prevent overspeeding the engine which can cause engine damage, and/or clutch damage, even if the clutch pedal is pressed. If transfer case is in low range the vehicle speeds to cause engine and clutch damage are significantly lower.

(Continued)

|   | CAUTION!   |
|---|--|
| • | Failure to follow the maximum recommended downshifting speeds may cause the engine damage and/or damage the clutch, even if the clutch pedal is pressed. |
| • | Descending a hill in low range with the clutch pedal pressed could result in clutch damage.  |

# Maximum Recommended Downshift Speeds

CAUTION!

Failure to follow the maximum recommended downshifting speeds may cause the engine to overspeed and/or damage the clutch disc, even if the clutch pedal is pressed.

| Manual Transmission Downshift Speeds in MPH (KM/H) |          |          |         |         |         |  |  |  |
|--|----------|----------|---------|---------|---------|--|--|--|
| Gear Selection                                     | 6 to 5   | 5 to 4   | 4 to 3  | 3 to 2  | 2 to 1  |  |  |  |
| Maximum Speed                                      | 80 (129) | 70 (113) | 50 (81) | 30 (48) | 15 (24) |  |  |  |

#### NOTE:

Vehicle speeds shown in the preceding chart are for 2H and 4H only, vehicle speeds in 4L would be significantly less.

## AUTOMATIC TRANSMISSION — IF EQUIPPED

You must press and hold the brake pedal while shifting out of PARK.

#### WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.
- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.
- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.

#### WARNING!

- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always come to a complete stop, then apply the parking brake, shift the transmission into PARK, and turn the ignition OFF. When the ignition is in the OFF position, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- When exiting the vehicle, always make sure the ignition is in the OFF position, remove the key fob from the vehicle, and lock the vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.
- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN position. A child could operate power windows, other controls, or move the vehicle.

#### CAUTION!

Damage to the transmission may occur if the following precautions are not observed:

• Shift into or out of PARK or REVERSE only after the vehicle has come to a complete stop.

CAUTION!

- Do not shift between PARK, REVERSE, NEUTRAL, or DRIVE when the engine is above idle speed.
- Before shifting into any gear, make sure your foot is firmly pressing the brake pedal.

## **IGNITION PARK INTERLOCK**

This vehicle is equipped with an Ignition Park Interlock which requires the transmission to be in PARK before the ignition can be turned to the OFF position. This helps the driver avoid inadvertently leaving the vehicle without placing the transmission in PARK. This system also locks the transmission in PARK whenever the ignition is in the OFF position.

#### NOTE:

The transmission is NOT locked in PARK when the ignition is in the ACC position (even though the engine will be off). Ensure that the transmission is in PARK, and the ignition is OFF (not in ACC position) before exiting the vehicle.

## BRAKE/TRANSMISSION SHIFT INTERLOCK (BTSI) SYSTEM

This vehicle is equipped with a BTSI system that holds the transmission gear selector in PARK unless the brakes are applied. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed. The brake pedal must also be pressed to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds.

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## 8-SPEED AUTOMATIC TRANSMISSION

The transmission gear range (PRNDM) is displayed both beside the gear selector and in the instrument cluster. To select a gear range, push the lock button on the gear selector and move the selector rearward or forward. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed. You must also press the brake pedal to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds. Select the DRIVE range for normal driving.

#### NOTE:

In the event of a mismatch between the gear selector position and the actual transmission gear (for example, driver selects PARK while driving), the position indicator will blink continuously until the selector is returned to the proper position, or the requested shift can be completed.

The electronically controlled transmission adapts its shift schedule based on driver inputs, along with environmental and road conditions. The transmission electronics are self-calibrating; therefore, the first few shifts on a new vehicle may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles (kilometers).

Only shift from DRIVE to PARK or REVERSE when the accelerator pedal is released and the vehicle is stopped. Be sure to keep your foot on the brake pedal when shifting between these gears.

The transmission gear selector provides PARK, REVERSE, NEUTRAL, DRIVE and MANUAL (AutoStick) shift positions. Manual shifts can be made using the AutoStick shift control. Toggling the gear selector forward (-) or rearward (+) while in the MANUAL (AutoStick) position (beside the DRIVE position) will manually select the transmission gear, and will display the current gear in the instrument cluster  $\Box$  page 154.



#### **Transmission Gear Selector**

#### NOTE:

If the gear selector cannot be moved to the PARK, REVERSE, or NEUTRAL position (when pushed forward), it is probably in the AutoStick (+/-) position (beside the DRIVE position). In AutoStick mode, the transmission gear (1, 2, 3, etc.) is displayed in the instrument cluster. Move the gear selector to the right (into the DRIVE [D] position) for access to PARK, REVERSE, and NEUTRAL.

### **Gear Ranges**

Do not press the accelerator pedal when shifting out of  $\ensuremath{\mathsf{PARK}}$  or <code>NEUTRAL</code>.

#### NOTE:

After selecting any gear range, wait a moment to allow the selected gear to engage before accelerating. This is especially important when the engine is cold.

#### PARK (P)

This range supplements the parking brake by locking the transmission. The engine can be started in this range. Never attempt to use PARK while the vehicle is in motion. Apply the parking brake when exiting the vehicle in this range.

When parking on a hill, apply the parking brake before shifting the transmission to PARK. As an added precaution, turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade.

When exiting the vehicle, always:

- Apply the parking brake.
- Shift the transmission into PARK.
- Turn the ignition OFF.
- Remove the key fob from the vehicle.

#### NOTE:

On four-wheel drive vehicles, be sure that the transfer case is in a drive position.

#### CAUTION!

- Before moving the transmission gear selector out of PARK, you must start the engine, and also press the brake pedal. Otherwise, damage to the gear selector could result.
- DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range, as this can damage the drivetrain.

The following indicators should be used to ensure that you have properly engaged the transmission into the PARK position:

- When shifting into PARK, push the lock button on the gear selector and firmly move the gear selector all the way forward until it stops and is fully seated.
- Look at the transmission gear position display and verify that it indicates the PARK position (P), and is not blinking.
- With the brake pedal released, verify that the gear selector will not move out of PARK.

#### REVERSE (R)

This range is for moving the vehicle backward. Shift into REVERSE only after the vehicle has come to a complete stop.

#### NEUTRAL (N)

Use this range when the vehicle is standing for prolonged periods with the engine running. Apply the parking brake and shift the transmission into PARK if you must exit the vehicle.

#### WARNING!

Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

#### CAUTION!

 Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage.

#### CAUTION!

#### DRIVE (D)

This range should be used for most city and highway driving. It provides the smoothest upshifts and down-shifts, and the best fuel economy. The transmission automatically upshifts through all forward gears. The DRIVE position should be used for all normal operating conditions.

When frequent transmission shifting occurs (such as when operating the vehicle under heavy loading conditions, in hilly terrain, traveling into strong head winds, or while towing a heavy trailer), use the AutoStick shift control to select a lower gear \$\sigma\$ page 154. Under these conditions, using a lower gear will improve performance and extend transmission life by reducing excessive shifting and heat buildup.

During extremely cold temperatures (-22 °F [-30 °C] or below), transmission operation may be modified depending on engine and transmission temperature as well as vehicle speed. Normal operation will resume once the transmission temperature has risen to a suitable level.

#### MANUAL (M)

The MANUAL (M, +/-) position (beside the DRIVE position) enables full manual control of transmission shifting also known as AutoStick mode. Toggling the gear selector forward (-) or rearward (+) while in the MANUAL (AutoStick) position will manually select the transmission gear, and will display the current gear in the instrument cluster rich page 154.

#### Transmission Limp Home Mode

Transmission function is monitored electronically for abnormal conditions. If a condition is detected that could result in transmission damage, Transmission Limp Home mode is activated. In this mode, the transmission may operate only in certain gears, or may not shift at all. Vehicle performance may be severely degraded and the engine may stall. In some situations, the transmission may not re-engage if the engine is turned off and restarted. The Malfunction Indicator Light (MIL) may be illuminated. A message in the instrument cluster will inform the driver of the more serious conditions, and indicate what actions may be necessary.

In the event of a momentary problem, the transmission can be reset to regain all forward gears by performing the following steps:

#### NOTE:

- In cases where the instrument cluster message indicates the transmission may not re-engage after engine shutdown, perform this procedure only in a desired location (preferably, at an authorized dealer).
- Even if the transmission can be reset, we recommend that you visit an authorized dealer at your earliest possible convenience. An authorized dealer has diagnostic equipment to assess the condition of your transmission.
- If the transmission cannot be reset, authorized dealer service is required.
- 1. Stop the vehicle.
- 2. Shift the transmission into PARK, if possible. If not, shift the transmission to NEUTRAL.

- 3. Push and hold the ignition switch until the engine turns off.
- 4. Wait approximately 30 seconds.
- 5. Restart the engine.
- Shift into the desired gear range. If the problem is no longer detected, the transmission will return to normal operation.

### AutoStick

AutoStick is a driver-interactive transmission feature providing manual shift control, giving you more control of the vehicle. AutoStick allows you to maximize engine braking, eliminate undesirable upshifts and downshifts, and improve overall vehicle performance. This feature can also provide you with more control during passing, city driving, cold slippery conditions, mountain driving, trailer towing, and many other situations.



Steering Wheel Mounted Paddle Shifters (If Equipped)

1-(-) Paddle Shifter

2-(+) Paddle Shifter

#### Operation

To activate AutoStick mode, move the gear selector into the MANUAL (M) position (beside the DRIVE position) or tap one of the paddle shifters (if equipped) on the steering wheel. The current transmission gear will be displayed in the instrument cluster. In AutoStick mode, you can use the gear selector (in the MANUAL position) or the paddle shifters (if equipped) to manually shift the transmission.

AutoStick mode has the following operational benefits:

- The transmission will automatically downshift as the vehicle slows (to prevent engine lugging) and will display the current gear.
- The transmission will automatically downshift to FIRST gear when coming to a stop. After a stop, the driver should manually upshift (+) the transmission as the vehicle is accelerated.
- You can start out, from a stop, in FIRST or SECOND gear (or THIRD gear, in 4L range). Tapping (+) (at a stop) will allow starting in SECOND gear. Starting out in SECOND or THIRD gear can be helpful in snowy or icy conditions.
- If a requested downshift would cause the engine to overspeed, that shift will not occur.
- The system will ignore attempts to upshift at too low of a vehicle speed.
- Holding the gear selector or paddle shifter (if equipped) in the (-) position will downshift the transmission to the lowest gear possible at the current speed.
- Transmission shifting will be more noticeable when AutoStick is enabled.
- The system may revert to automatic shift mode if a fault or overheat condition is detected.

#### NOTE:

When Hill Descent Control or Selec-Speed Control (if equipped) is enabled AutoStick is not active.

To disengage AutoStick mode, return the gear selector to the DRIVE position, or press and hold the (+) shift paddle (if equipped) (and the gear selector is already in DRIVE) until "D" is once again indicated in the instrument cluster. You can shift in or out of the AutoStick position at any time without taking your foot off the accelerator pedal.

#### WARNING!

Do not downshift for additional engine braking on a slippery surface. The drive wheels could lose their grip and the vehicle could skid, causing a collision or personal injury.

## FOUR-WHEEL DRIVE OPERATION

#### WARNING!

Failure to engage a transfer case position completely can cause transfer case damage or loss of power and vehicle control. You could have a collision. Do not drive the vehicle unless the transfer case is fully engaged.

# FOUR-POSITION TRANSFER CASE – IF EQUIPPED



#### Four-Wheel Drive Gear Selector

The transfer case provides four positions:

- 2H Two-Wheel Drive High Range
- 4H Four-Wheel Drive High Range
- N (Neutral)
- 4L Four-Wheel Drive Low Range

For additional information on the appropriate use of each transfer case position, see the following:

#### 2H

Two-Wheel Drive High Range — This range is for normal street and highway driving on dry, hard surfaced roads.

#### 4H

Four-Wheel Drive High Range — This range maximizes torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This range provides additional traction for loose, slippery road surfaces only. N (Neutral)

#### WARNING!

You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the (N) Neutral position without first fully engaging the parking brake. The transfer case (N) Neutral position disengages both the front and rear driveshafts from the powertrain, and will allow the vehicle to roll, even if the automatic transmission is in PARK (or manual transmission is in gear). The parking brake should always be applied when the driver is not in the vehicle.

N (Neutral) – This range disengages both the front and rear driveshafts from the powertrain. To be used for flat towing behind another vehicle  $\Box$  page 193.

#### 4L

Four-Wheel Drive Low Range — This range provides low speed four-wheel drive. It maximizes torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This range provides additional traction and maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h).

The transfer case is intended to be driven in the 2H position for normal street and highway conditions, such as hard-surfaced roads.

In the event that additional traction is required, the transfer case 4H and 4L positions can be used to lock the front and rear driveshafts together, forcing the front and rear wheels to rotate at the same speed. The 4H and 4L positions are intended for loose, slippery road surfaces only and not intended for normal driving. Driving in the 4H and 4L positions on hard-surfaced roads

will cause increased tire wear and damage to the drive-line components. For further information on shifting into 4H or 4L  $\, \backsim$  page 155.

The instrument cluster alerts the driver that the vehicle is in four-wheel drive, and the front and rear driveshafts are locked together. The light will illuminate when the transfer case is shifted into the 4H position.

When operating your vehicle in 4L, the engine speed will be approximately three times (four times for Rubicon models) that of the 2H or 4H positions at a given road speed. Take care not to overspeed the engine.

Proper operation of four-wheel drive vehicles depends on tires of equal size, type, and circumference on each wheel. Any difference will adversely affect shifting and cause damage to the transfer case.

Because four-wheel drive provides improved traction, there is a tendency to exceed safe turning and stopping speeds. Do not go faster than road conditions permit.

### **Shifting Procedures**

#### 2H TO 4H OR 4H TO 2H

Shifting between 2H and 4H can be made with the vehicle stopped or in motion. The preferred shifting speed would be 0 to 45 mph (72 km/h). With the vehicle in motion, the transfer case will engage/ disengage faster if you momentarily release the accelerator pedal after completing the shift. Do not accelerate while shifting the transfer case. Apply a constant force when shifting the transfer case lever.

#### NOTE:

- Do not attempt to make a shift while only the front or rear wheels are spinning. The front and rear driveshaft speeds must be equal for the shift to take place. Shifting while only the front or rear wheels are spinning can cause damage to the transfer case.
- Delayed shifts out of four-wheel drive may be experienced due to uneven tire wear, low or uneven tire pressures, excessive vehicle loading, or cold temperatures.
- Shifting effort will increase with speed, this is normal.

During cold weather, you may experience increased effort in shifting until the transfer case fluid warms up. This is normal.

#### 4H TO 4L OR 4L TO 4H

With the vehicle rolling at 1 to 3 mph (2 to 5 km/h), shift an automatic transmission into NEUTRAL (N), or press the clutch pedal on a manual transmission. While the vehicle is coasting at 1 to 3 mph (2 to 5 km/h), shift the transfer case lever firmly to the desired position. Do not pause with the transfer case in N (Neutral). Once the shift is completed, place the automatic transmission into DRIVE or release the clutch pedal on a manual transmission.

#### NOTE:

Shifting into or out of 4L is possible with the vehicle completely stopped; however, difficulty may occur due to the mating teeth not being properly aligned. Several attempts may be required for clutch teeth alignment and shift completion to occur. The preferred method is with the vehicle rolling at 1 to 3 mph (2 to 5 km/h). Avoid attempting to engage or disengage 4L with the vehicle moving faster than 1 to 3 mph (2 to 5 km/h).

During cold weather, you may experience increased effort in shifting until the transfer case fluid warms up. This is normal.

#### WARNING!

Failure to engage a transfer case position completely can cause transfer case damage or loss of power and vehicle control. You could have a collision. Do not drive the vehicle unless the transfer case is fully engaged.

# FIVE-POSITION TRANSFER CASE — IF EQUIPPED



**Four-Wheel Drive Gear Selector** 

The transfer case provides five mode positions:

- 2H Two-Wheel Drive High Range
- 4H AUTO Four-Wheel Drive Auto High Range
- 4H PART TIME Four-Wheel Drive Part Time High Range
- N (Neutral)

• 4L - Four-Wheel Drive Low Range

For additional information on the appropriate use of each transfer case mode position, see the following:

#### 2H

Two-Wheel Drive High Range – This range is for normal street and highway driving on dry, hard surfaced roads.

#### 4H AUTO

Four-Wheel Drive Auto High Range — This range sends power to the front wheels. The four-wheel drive system will be automatically engaged when the vehicle senses a loss of traction. Additional traction for varying road conditions.

#### 4H PART TIME

Four-Wheel Drive Part Time High Range — This range maximizes torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This range provides additional traction for loose, slippery road surfaces only.

#### N (Neutral)

#### WARNING!

You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the (N) Neutral position without first fully engaging the parking brake. The transfer case (N) Neutral position disengages both the front and rear driveshafts from the powertrain, and will allow the vehicle to roll, even if the automatic transmission is in PARK (or manual transmission is in gear). The parking brake should always be applied when the driver is not in the vehicle.

Neutral – This range disengages both the front and rear driveshafts from the powertrain. To be used for flat towing behind another vehicle  $rac{1}{2}$  page 193.

#### 4L

Four-Wheel Drive Low Range — This range provides low speed four-wheel drive. It maximizes torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This range provides additional traction and maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h).

This transfer case is designed to be driven in the twowheel drive position (2H) or four-wheel drive position (4H AUTO) for normal street and highway conditions on dry hard surfaced roads.

For variable driving conditions, the 4H AUTO mode can be used. In this mode, the front axle is engaged, but the vehicle's power is sent to the rear wheels. Four-wheel drive will be automatically engaged when the vehicle senses a loss of traction. Because the front axle is engaged, this mode will result in lower fuel economy than the 2H mode.

In the event that additional traction is required, the transfer case 4H and 4L positions can be used to lock the front and rear driveshafts together, forcing the front and rear wheels to rotate at the same speed. The 4H and 4L positions are intended for loose, slippery road surfaces only and not intended for normal driving. Driving in the 4H and 4L positions on hard-surfaced roads will cause increased tire wear and damage to the driveline components. For further information on shifting into 4H or 4L  $\Box$  page 157.

The instrument cluster alerts the driver that the vehicle is in four-wheel drive, and the front and rear driveshafts are locked together. The light will illuminate when the transfer case is shifted into the 4H position.

When operating your vehicle in 4L, the engine speed will be approximately three times (four times for Rubicon models) that of the 2H or 4H positions at a given road speed. Take care not to overspeed the engine.

Proper operation of four-wheel drive vehicles depends on tires of equal size, type, and circumference on each wheel. Any difference will adversely affect shifting and cause damage to the transfer case.

Because four-wheel drive provides improved traction, there is a tendency to exceed safe turning and stopping speeds. Do not go faster than road conditions permit.

### **Shifting Procedures**

#### 2H TO 4H AUTO OR 4H AUTO TO 2H

Shifting between 2H and 4H AUTO can be made with the vehicle stopped or in motion. The preferred shifting speed would be 0 to 45 mph (72 km/h). With the vehicle in motion, the transfer case will engage/ disengage faster if you momentarily release the accelerator pedal after completing the shift. Do not accelerate while shifting the transfer case. Apply a constant force when shifting the transfer case lever.

#### 2H/4H AUTO TO 4H PART TIME OR 4H PART TIME TO 2H/4H AUTO

Shifting between 2H/4H AUTO to 4H PART TIME can be made with the vehicle stopped or in motion. The preferred shifting speed would be 0 to 45 mph (72 km/h). With the vehicle in motion, the transfer case will engage/disengage faster if you momentarily release the accelerator pedal after completing the shift. Do not accelerate while shifting the transfer case. Apply a constant force when shifting the transfer case lever.

#### NOTE:

 Do not attempt to make a shift while only the front or rear wheels are spinning. The front and rear driveshaft speeds must be equal for the shift to take place. Shifting while only the front or rear wheels are spinning can cause damage to the transfer case.

- Delayed shifts out of four-wheel drive may be experienced due to uneven tire wear, low or uneven tire pressures, excessive vehicle loading, or cold temperatures.
- Shifting effort will increase with speed, this is normal.

During cold weather, you may experience increased effort in shifting until the transfer case fluid warms up. This is normal.

# 4H PART TIME/4H AUTO TO 4L OR 4L TO 4H PART TIME/4H AUTO

With the vehicle rolling at 1 to 3 mph (2 to 5 km/h), shift an automatic transmission into NEUTRAL (N), or press the clutch pedal on a manual transmission. While the vehicle is coasting at 1 to 3 mph (2 to 5 km/h), shift the transfer case lever firmly to the desired position. Do not pause with the transfer case in N (Neutral). Once the shift is completed, place the automatic transmission into DRIVE or release the clutch pedal on a manual transmission.

#### NOTE:

Shifting into or out of 4L is possible with the vehicle completely stopped; however, difficulty may occur due to the mating teeth not being properly aligned. Several attempts may be required for clutch teeth alignment and shift completion to occur. The preferred method is with the vehicle rolling at 1 to 3 mph (2 to 5 km/h). Avoid attempting to engage or disengage 4L with the vehicle moving faster than 1 to 3 mph (2 to 5 km/h).

#### WARNING!

Failure to engage a transfer case position completely can cause transfer case damage or loss of power and vehicle control. You could have a collision. Do not drive the vehicle unless the transfer case is fully engaged.

# TRAC-LOK REAR AXLE — IF EQUIPPED

The Trac-Lok rear axle provides a constant driving force to both rear wheels and reduces wheel spin caused by the loss of traction at one driving wheel. If traction differs between the two rear wheels, the differential automatically proportions the usable torque by providing more torque to the wheel that has traction.

Trac-Lok is especially helpful during slippery driving conditions. With both rear wheels on a slippery surface, a slight application of the accelerator will supply maximum traction.

#### WARNING!

On vehicles equipped with a limited-slip differential, never run the engine with one rear wheel off the ground. The vehicle may drive through the rear wheel remaining on the ground and cause you to lose control of your vehicle.

# AXLE LOCK (TRU-LOK) FRONT AND REAR — IF EQUIPPED

The AXLE LOCK switch is located on the instrument panel (to the right of the steering column).



#### **Axle Lock Switch Panel**

This feature will only activate when the following conditions are met:

- Ignition in RUN position, vehicle in 4L.
- Vehicle speed should be 10 mph (16 km/h) or less.
   Vehicle speed should be 16 km/h (10 mph) or less.
   Vehicle speed should be 16 km/h or less.
- Both right and left wheels on axle are at the same speed.

To activate the system, push the AXLE LOCK switch down to lock the rear axle only (the "REAR ONLY" will illuminate), push the switch up to lock the front axle and rear axle (the "FRONT + REAR" will illuminate). When the rear axle is locked, pushing the bottom of switch again will lock or unlock the front axle.

#### NOTE:

The indicator lights will flash until the axles are fully locked or unlocked.

To unlock the axles, push the AXLE LOCK OFF button.

Axle Lock will disengage if the vehicle is taken out of 4L, or the ignition switch is turned to the OFF position.

The Axle Lock disengages at speeds above 30 mph (48 km/h), and will automatically re-lock once vehicle speed is less than 10 mph (16 km/h).

The axle lock disengages at speeds above 48 km/h (30 mph), and will automatically re-lock once vehicle speed is less than 16 km/h (10 mph).

The axle lock disengages at speeds above 48 km/h, and will automatically re-lock once vehicle speed is less than 16 km/h.

# AXLE LOCK (TRU-LOK) REAR ONLY — IF EQUIPPED

The rear axle may be locked in 4H if the proper conditions are met.

#### WARNING!

This mode is intended for off-highway or off-road use only and should not be used on any public roadways.

The AXLE LOCK switch is located on the instrument panel (to the right of the steering column).



**Axle Lock Switch Panel** 

This feature will only activate when the following conditions are met:

- Ignition in RUN position, vehicle in 4H.
- The vehicle must be in Off Road+ active ⇒ page 160.
- Vehicle must not be actively in a high wheel slip or tight cornering condition.

To activate the system, push the AXLE LOCK switch down to lock the rear axle only ("REAR ONLY" will illuminate).

To unlock the rear axle, push the AXLE LOCK OFF button.

Axle Lock will disengage if the vehicle is taken out of 4H, Off Road+ is turned off by the driver, ESC "Full Off" is exited, or the ignition switch is turned to the OFF position.

#### NOTE:

The indicator lights will flash until the rear axle is fully locked or unlocked.

The rear Axle Lock system may temporarily disengage the rear locker under some conditions.

If this occurs, the rear axle will automatically re-lock as soon as the system allows.

## ELECTRONIC SWAY BAR DISCONNECT — IF EQUIPPED

Your vehicle may be equipped with an electronic disconnecting stabilizer/sway bar. This system allows greater front suspension travel in off-road situations.

This system is controlled by the SWAY BAR switch located on the instrument panel (to the right of the steering column).



**SWAY BAR Switch** 

Push the SWAY BAR switch to activate the system. Push the switch again to deactivate the system. The Sway Bar Indicator Light (located in the instrument cluster) will illuminate when the bar is disconnected. The Sway Bar Indicator Light will flash during activation transition, or when activation conditions are not met. The stabilizer/sway bar should remain in on-road mode during normal driving conditions.

#### WARNING!

Ensure the stabilizer/sway bar is reconnected before driving on hard surfaced roads or at speeds above 18 mph (29 km/h); a disconnected stabilizer/sway bar may contribute to the loss of vehicle control, which could result in serious injury. Under certain circumstances, the front stabilizer/sway bar enhances vehicle stability and assists with vehicle control. The system monitors vehicle speed and will attempt to reconnect the stabilizer/sway bar at speeds over 18 mph (29 km/h). This is indicated by a flashing or solid Sway Bar Indicator Light. Once vehicle speed is reduced below 14 mph (22 km/h), the system will once again attempt to return to off-road mode.

To disconnect the stabilizer/sway bar, shift to either 4H or 4L and push the SWAY BAR switch to obtain the off-road position rightarrow page 154. The Sway Bar Indicator Light will flash until the stabilizer/sway bar has been fully disconnected.

#### NOTE:

The stabilizer/sway bar may be torque locked due to left and right suspension height differences. This condition is due to driving surface differences or vehicle loading. In order for the stabilizer/sway bar to disconnect/reconnect, the right and left halves of the bar must be aligned. This alignment may require that the vehicle be driven onto level ground or rocked from side to side.

To return to on-road mode, push the SWAY BAR switch again.

#### WARNING!

If the stabilizer/sway bar will not return to on-road mode, the Sway Bar Indicator Light will flash in the instrument cluster and vehicle stability may be reduced. Do not attempt to drive the vehicle over 18 mph (29 km/h). Driving faster than 18 mph (29 km/h) with a disconnected stabilizer/sway bar may contribute to the loss of vehicle control, which could result in serious injury.

## $\mathsf{OFF}\;\mathsf{ROAD}\text{+-}\mathsf{IF}\;\mathsf{EQUIPPED}$



#### **OFF ROAD+ Switch**

When activated, Off Road+ is designed to improve the user experience when using specific Off Road driving modes. To activate Off Road+, push the OFF ROAD+ switch in the switch bank. The vehicle's performance will improve depending on which Four-Wheel Drive (4WD) mode is activated.

#### NOTE:

Off Road+ will not function in 2H mode. If the button is pushed while in 2H mode, the cluster display will show the message "Off Road+ Unavailable Shift to 4WD".

When Off Road+ is active, the following features will activate:

- The Off Road+ telltale will illuminate in the instrument cluster display
- A mode-specific message will display the instrument cluster display
- Off-Road Pages will launch on the radio head-unit if selected in radio settings
- The TrailCam System (forward facing camera) will launch if selected in radio settings

Once in Off Road+, the vehicle will begin to behave in different ways depending on the 4WD mode in use. The following enhancements will occur when using Off Road+.

#### 4L

- Engine/Transmission Calibration: Rock Crawl and controllability focus, change in shifting schedule when rock crawling, pedal calibration shifted to de-gain and low range, operates at lower vehicle speeds
- Traction Control: Aggressive brake lock differential tuning at slower speed or FIRST gear
- Off Road+: Recall the last status between ignition cycles

#### 4H

 Engine/Transmission Calibration: Improved sand performance/wheel slip focus, change in shift schedule for sport mode, pedal calibration set to aggressive, operates at elevated vehicle speeds

- Traction Control: High wheel speed, slip tuning brake lock differential with no engine management
- Electronic Stability Control: ESC Off with unlimited speed
- Off Road+: Will default to OFF between ignition cycles

Cruise Control and Adaptive Cruise Control (ACC) will not function while using Off Road+. A dedicated cluster message will display indicating this if either feature is activated while in Off Road+.

If the ESC OFF button is pushed while in Off Road+, the following will occur on the vehicle:

- Push of the ESC OFF Button: Traction Control will turn off, but Stability Control will remain active.
- Hold the ESC OFF Button for five seconds: Traction Control and Stability Control will turn off.

## TORQUE RESERVE — 6.4L (IF EQUIPPED)

Torque Reserve is automatically enabled while staging a brake-torque launch, to reduce the time required for the intake system to fill with air. Torque Reserve provides greater engine airflow than is otherwise required, stops fuel flow to multiple cylinders and retards spark as necessary to hold the torque from the extra airflow "in reserve". As soon as the driver launches the vehicle, fuel flow is restored and spark is advanced to instantaneously deliver the reserve torque. For a given launch engine speed, additional torque is delivered more quickly than is possible without Torque Reserve.

#### NOTE:

Due to the way the engine is controlled during Torque Reserve, a distinct exhaust note is produced and engine vibration increases.

## DUAL MODE EXHAUST — 6.4L (IF EQUIPPED)

This vehicle is equipped with a dual-mode exhaust, designed to provide both quiet cruising and sporty sound. The system has two modes, Performance Exhaust ON and Performance Exhaust OFF. A button on the dashboard can be used to toggle between settings, and the light illuminates when "Performance Exhaust ON" mode is active. In this mode, the exhaust valves are commanded to deliver a deep, sporty sound. A message appears momentarily in the instrument cluster whenever the exhaust mode changes. When the "Performance Exhaust OFF" setting is active, the exhaust valves are closed except at high engine speeds and loads, when they are commanded open without notification.



#### **Dual Mode Exhaust Button**

The Performance Exhaust is OFF by default; however, if Performance Exhaust ON is activated by pressing the exhaust button, this setting will be saved after changing drive modes and after restarting the engine.

## WINCH USAGE — RUBICON (IF EQUIPPED)

# THINGS TO KNOW BEFORE USING YOUR WINCH

### **General Winch Information**

Your vehicle is equipped with an electric vehicle recovery winch. This winch uses the electrical power from the vehicle charging system to power a motor that winds the winch rope onto the winch drum via planetary gear reduction. By nature, a winch is capable of generating very high forces and should be used with care. Do not operate the winch without reading and understanding the complete winch owner's manual.

## **Tensioning The Winch Rope**

The winch rope must be properly tensioned before use. Follow the instructions listed to tension the rope:

- 1. Un-spool the rope leaving five wraps of rope on the winch drum.
- 2. Attach the hook to a suitable anchor point.

#### CAUTION!

Be certain the anchor will withstand the load required to tension the winch rope.

 Apply at least 1,000 lb (454 kg) of tension to the rope while winding the rope. Always use care to ensure the rope does not pile up on one side of the drum and is neatly wound onto the drum. CAUTION!

The winch rope must spool on the winch drum in the direction indicated on the drum rotation decal on the winch.

# UNDERSTANDING THE FEATURES OF YOUR WINCH



#### Winch Components

- Remote Control: The remote control provides the interface between the winch operator and the winch. The remote control provides the ability to power the winch in, out, and stop the winch. To operate the winch, the toggle switch is pushed down to power the winch in and up to power the winch out. The winch will stop if the switch is left in the neutral (center) position.
- 2. Motor: The winch motor is powered by the vehicle charging system.

- 3. **Remote Socket:** The remote socket (underneath this cap) allows the remote control to be attached to the control pack to allow the winch to function.
- Clutch Lever: The clutch lever allows the winch drum to be disconnected from the winch motor to allow the rope to be pulled from the winch by hand.
- Synthetic Rope/Hook: The synthetic rope with hook allows the winch to be connected to an anchor to provide a pulling force. This synthetic rope is highly flexible, lightweight, and it floats.
- 6. Winch Drum With Integral Brake: The winch drum allows the rope to be stored on the winch and transmits force to the rope. The winch is equipped with an integral brake that will stop rotation of the winch drum if the winch motor is stopped.

#### CAUTION!

If not installed, the hook strap must be placed on the hook.

Fairlead: The hawse fairlead acts as a guide for the synthetic rope and minimizes damage to the rope.

## WINCH ACCESSORIES

The following accessories are necessary to attach the winch to anchors, change direction of pull, and for safe winching.



**Gloves:** It is extremely important to wear protective gloves while operating the winch or handling the winch rope. Avoid loose fitting clothes or anything that could become

entangled in the rope and other moving parts.



Snatch/Block Pulley: Used properly, the multi-purpose snatch block allows you to (1) increase the winch's pulling power; and (2) change your pulling direction without damag-

ing the winch rope. Proper use of the snatch block is covered in "Before You Pull."

Clevis/D-Shackles: The D-Shackle is a safe means of connecting the looped ends of cables, straps and snatch blocks. The shackle's pin is threaded to allow easy removal.

Tree Trunk Protector: Typically made of tough, high-quality nylon, it provides the operator an attachment point for the winch rope to a wide variety of anchor points and

objects, as well as protects living trees.

Abrasion Sleeve: The abrasion sleeve is provided with the synthetic rope and must be used with the synthetic rope at all times to protect the rope from potential abrasion wear. The sleeve has a loose fit so it can easily be positioned along the synthetic rope to protect from rough surfaces and sharp corners.

## OPERATING YOUR WINCH

#### WARNING!

Failure to observe any of these warnings regarding proper winch usage may result in severe injury.

- Always use supplied hook strap to hold the hook when spooling wire rope in or out.
- Never use as a hoist.
- Never use to move persons.
- Never exceed winch or synthetic rope rated capacity.

#### WARNING!

- Always wear heavy leather gloves when handling the synthetic rope.
- Never touch synthetic rope or hook while in tension or under load.
- Never engage or disengage clutch if winch is under load, synthetic rope is in tension, or rope drum is moving.
- Always stand clear of synthetic rope and load and keep others away during winching.
- Always keep hands and clothing clear of the synthetic rope, hook and fairlead opening during operation and when spooling.
- Never wrap synthetic rope back onto itself. Always use a choker chain, wire choker rope or tree trunk protector on the anchor.
- Never attach a recovery strap to the winch hook to increase the length of a pull.
- Never attempt to tow a vehicle with the recovery strap attached directly to the winch hook.
- Never use bungee or kinetic straps that develop tremendous and potentially dangerous amounts of force when stretched.
- Always disconnect the remote control when not in use.
- Never winch when there are less than 10 wraps of synthetic rope around the winch drum.
- Always pass remote control through a window to avoid pinching lead in door, when using remote inside a vehicle.
- Never leave the remote control plugged into the winch while free spooling, rigging or sitting idle.

(Continued)

## **General Information**

Practice using your winch before you get stuck. Some key points to remember when using your winch are:

- Always take your time to assess the situation and plan your pull carefully.
- Always take your time when using a winch.
- Use the right equipment for the situation.
- Always wear leather gloves and do not allow the synthetic rope to slip through your hands when handling the rope.
- Only the operator should handle the synthetic rope and remote control.
- Think safety at all times.

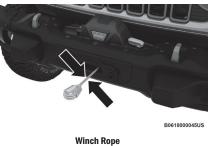
### Vehicle Recovery Using The Winch

#### CAUTION!

- Always know your winch: Take the time to fully read and understand the included Installation and Operations Guide and Basic Guide to Winching Techniques, in order to understand your winch and the winching operation.
- Always inspect winch installation and synthetic rope condition before operating the winch. Frayed, kinked or damaged rope must be replaced immediately. Loose or damaged winch installation must be corrected immediately.
- Always be sure any element which can interfere with safe winching operations is removed prior to initiating winching.
- Always keep remote control lead clear of the drum, synthetic rope and rigging.

#### CAUTION!

- Inspect for cracks, pinches, frayed rope, or loose connections. Replace if damaged.
- Be careful not to pull the winch rope collar through the rollers. Watch and listen to winch for proper snugness.
- Never power hook through fairlead. Could cause damage.
- Inspect the winch, winch mount, and synthetic rope for damage. Do not use the winch if the mount is loose or rope shows excessive wear, frays, or damage.



- 2. Put on gloves.
- Disengage the clutch to allow free spooling of the winch drum, rotate the clutch lever on the winch to disengage. Freespooling conserves battery power.



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#### Free Spool Lever

4. Free the winch hook from its anchor point. Attach the hook strap to the hook (if not attached).



Hook Strap

#### WARNING!

- Never touch winch rope or hook while someone else is at the control switch or during winching operation.
- Never touch winch rope or hook while under tension or under load.
- Pull the synthetic rope to the anchor point. Pull out enough synthetic rope to reach your anchor point. To prevent losing the end, hold the hook strap while you work.



#### **Pulling Synthetic Rope**

 Secure to the anchor point. Once you have established your anchor point, secure the tree-trunk protector or choker-chain around the object.

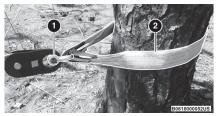
#### CAUTION!

Always be certain the anchor you select will withstand the load.

#### NOTE:

How to choose an anchor point: A secure anchor is critical to winching operations. An anchor must be strong enough to hold while winching. Natural anchors include trees, stumps and rocks. Hook the cable as low as possible. If no natural anchors are available when recovering another vehicle, your vehicle becomes the anchor point. In this case, be sure to put the transmission in NEUTRAL, apply the hand brake and block its wheels to prevent your vehicle from moving. Ideally, you'll want an anchor point that will enable you to pull straight in the direction the vehicle will move. This allows the synthetic rope to wind tightly and evenly onto the spooling drum. An anchor point as far away as possible will provide the winch with its greatest pulling power.

 Attach the Clevis/D-Shackle and Tree Trunk Protector. Attach the shackle to the two ends of the strap or chain and through the hook, being careful not to over tighten (tighten and back-off 1/2 turn).



#### **Tree Trunk Protector**

- $1-{\rm Clevis}/{\rm D}{\rm -Shackles}$
- 2 Tree Trunk Protector

8. Lock the clutch. Lock the winch drum by rotating the clutch lever on the winch to engage.

#### NOTE:

Always ensure the clutch is fully engaged or disengaged.

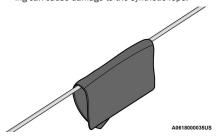
9. Connect the remote control to the winch control box, located on the front of the winch. Be careful not to let the remote control cord dangle in front of the winch. If you choose to control the winch from inside your vehicle, always pass the remote through a window to avoid pinching the cord in the door. Always disconnect the remote control when not in use.



#### Winch Box Remote Control Connector

- Put synthetic rope under tension. Using the remote control switch, slowly wind the rope until no slack remains. Once the rope is under tension, stand well clear of it and never step over it.
- 11. Check your anchor. Make sure all connections are secured and free of debris before continuing with the winching procedure.

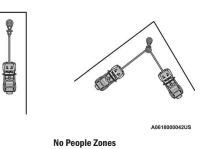
12. Check synthetic rope. The rope should be neatly wound around the spooling drum. Improper winding can cause damage to the synthetic rope.



#### Heavy Blanket Over Rope

In certain situations you may decide to throw a heavy blanket or similar object over the rope. A heavy blanket can absorb energy should the synthetic rope break. Place it on the rope midway between the winch and the anchor point. Do this before the rope is put under tension. Do not approach or move the blanket once tension is applied. Do not allow it to get pulled into the fairlead. If it is necessary to move or remove the blanket, slack the tension on the rope first.

13. Establish "no people" zones: Make your intentions clear. Be sure that everyone in the immediate vicinity surrounding the winching operation is completely aware of your intentions before you pull. Declare where the spectators should not stand — never behind or in front of the vehicle and never near the synthetic rope or snatch block. Your situation may have other "no people" zones.



14. Begin winching. With the winching vehicles engine on and light tension already on the synthetic rope, begin winching slowly and steadily. Be sure that the rope is winding evenly and tightly around the spooling drum. For additional assistance, the winched vehicle can be slowly driven while being pulled by the winch. Continue pulling until the vehicle is on stable ground. If you are able to drive the vehicle, the winching operation is complete.



**Using The Remote Control** 

#### NOTE:

- Avoid overheating the winch motor. For extended winching, stop at reasonable intervals to allow the winch motor to cool down.
- O What to look for under load: The synthetic rope must always spool onto the drum as indicated by the drum rotation decal on the winch. As you power-in, make sure the synthetic rope winds evenly and tightly on the drum. This prevents the outer rope wraps from drawing into the inner wraps, binding and damaging the synthetic rope. Avoid shock loads by using the control switch intermittently to take up rope slack. Shock loads can momentarily far exceed the winch and synthetic rope ratings. During side pulls the synthetic rope tends to stack up at one end of the drum. This stack can become large enough to cause serious damage to the winch. So, line up pulls as straight ahead as possible and stop winching if the synthetic rope comes close to the tie rods or mounting plate. To fix an uneven stack, spool out that section of the rope and reposition it to the opposite end of the drum, which will free up space for continued winching.
- Secure the vehicle. Once recovery of the vehicle is complete, be sure to secure the vehicle's brakes and shift the transmission to PARK. Release tension in the synthetic rope.
- 16. Disconnect the synthetic rope, and disconnect from the anchor.

### 4

 Rewind the synthetic rope. The person handling the synthetic rope should walk the rope in and not let it slide through the hand, control the winch at all times.



S P06190000

#### **Rewinding The Synthetic Rope**

#### WARNING!

To prevent serious injury, NEVER put your fingers inside the hook area as you are powering-in.

#### NOTE:

How to spool under no load: Arrange the remote control lead so it cannot be caught in the winch. Arrange the synthetic rope so it will not kink or tangle when spooled. Be sure any synthetic rope already on the spooling drum is wound tightly and evenly layered. Tighten and straighten the layer if necessary. Keep the synthetic rope under light tension and spool the rope back and onto the winch drum in even layers. Stop frequently to tighten and straighten the layers as necessary. Repeat this process until the winch hook is the same distance as the full length of the remote control from the winch. Pinch the hook between your thumb and forefinger and attach the hook strap. Hold the hook strap between the thumb and forefinger to keep tension on the synthetic rope. Walk the synthetic rope towards the fairlead, carefully spooling in the remaining rope by pulsing the remote control switch.

18. Store the hook on the most outboard loop of the hawse fairlead.



#### Hook In Stored Position

19. Disconnect the remote control. Disconnect the remote control cord from the control box and store in a clean and dry place. Winching operations are now complete. Put the cap on the solenoid plug-in.

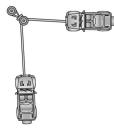
#### NOTE:

Always store the remote control in a protected, clean, dry area.

## **RIGGING TECHNIQUES**

Various winching situations will require application of other winching techniques. These could range from too little distance to achieve maximum pull using straight line rigging, simply increasing pulling power, or maintaining a straight-line pulling situation. You will have to assess what technique is correct for your situation. Think "safety" at all times.

#### How To Change The Pulling Direction



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#### **Change Pulling Directions**

All winching operations should have a straight line from the winch to the object being pulled. This minimizes the synthetic rope collecting on one side of the drum affecting pulling efficiency and damaging synthetic rope. A snatch block, secured to a point directly in front of the vehicle will enable you to change your pulling direction while still allowing the synthetic rope to be at 90° to wind properly onto the spooling drum.

### Increasing Pulling Power

In some cases, you may find yourself needing more pulling power. The use of snatch blocks increases mechanical advantage and that increases your pulling power.

### **Double Line**

Because pulling power decreases with the number of layers of synthetic rope on the winch drum, you can use a snatch block to double line out more rope. This decreases the number of layers of synthetic rope on the drum, and increases pulling power. Start by feeding out enough synthetic rope to free the winch hook. Attach the hook to your vehicle's frame/tow hook and run the rope through a snatch block. Disengage the clutch and, using the snatch block, pull out enough synthetic rope to reach your anchor point. Do not attach the hook to the mounting kit. Secure to the anchor point with a tree trunk protector or choker chain. Attach the clevis/ shackle. Attach the shackle to the two ends of the strap/chain, being careful not to over tighten (tighten and back-off 1/2 turn).

## **ELECTRO-HYDRAULIC POWER STEERING**

Your vehicle is equipped with an Electro-Hydraulic Power Steering system that provides increased vehicle response and ease of maneuverability. The system adapts to different driving conditions. If the Electro-Hydraulic Power Steering system experiences a fault that prevents it from providing power steering assist, then the system will provide mechanical steering capability.

#### CAUTION!

Extreme steering maneuvers may cause the electrically driven pump to reduce or stop power steering assistance in order to prevent damage to the system. Normal operation will resume once the system is allowed to cool.

If the "SERVICE POWER STEERING" message and a flashing icon are displayed on the instrument cluster screen, it indicates that the vehicle needs to be taken to an authorized dealer for service. It is likely the vehicle has lost power steering assistance  $\Box >$  page 124.

#### NOTE:

- Even if power steering assistance is no longer operational, it is still possible to steer the vehicle. Under these conditions there will be a substantial increase in steering effort, especially at very low vehicle speeds and during parking maneuvers.
- If the condition persists, see an authorized dealer for service.

## FUEL SAVER TECHNOLOGY — 6.4L (IF EQUIPPED)

This feature offers improved fuel economy by shutting off four of the engine's eight cylinders during light load operation. The system is automatic with no driver inputs. It is not available in 4L. There is also a four cylinder indicator in the instrument cluster to indicate when this feature is active.

#### NOTE:

This system may take some time to return to full functionality after a battery disconnect.

## STOP/START SYSTEM — AUTOMATIC TRANSMISSION (IF EQUIPPED)

The Engine Stop/Start (ESS) function is designed to reduce fuel consumption. The system will stop the engine automatically during a vehicle stop if the required conditions are met. Releasing the brake pedal or pressing the accelerator pedal will automatically restart the engine.

ESS vehicles have been upgraded with a heavy-duty starter, enhanced battery, and other upgraded engine parts, to handle the additional engine starts. Vehicles equipped with eTorque contain a heavy-duty motor generator and an additional hybrid electric battery to store energy from vehicle deceleration for use on engine startup after a stop as well as providing launch torque assist.

#### NOTE:

It is recommended that Stop/Start system be disabled during off-road use.

#### Secondary Battery

Your vehicle may be equipped with a secondary battery used to power the Stop/Start system and the 12 Volt vehicle electrical system. The secondary battery is located behind the wheel well for the front passenger wheel.



**Battery Locations** 

1 – Primary Battery

2 - Secondary Battery

## AUTOSTOP MODE

#### WARNING!

 Vehicles with the Stop/Start system will be equipped with two batteries. Both the main and the supplemental batteries must be disconnected to completely de-energize the 12 Volt electrical system. WARNING!

 Serious injury or death could result if you do not disconnect both batteries. To learn how to properly disconnect, see an authorized dealer.

The Stop/Start feature is enabled after every driver ignition start. At that time, the system will go into STOP/ START READY and if all other conditions are met, can go into a STOP/START AUTOSTOP ACTIVE Autostop mode.

## To Activate The Autostop Mode, The Following Must Occur:

- The system must be in STOP/START READY state. A STOP/START READY message will be displayed in the instrument cluster display within the Stop/Start section 
  □> page 124.
- The vehicle must be completely stopped.
- The shifter must be in a forward gear and the brake pedal pressed.

# POSSIBLE REASONS THE ENGINE DOES NOT AUTOSTOP

Prior to engine shut down, the system will check many safety and comfort conditions to see if they are fulfilled. Detailed information about the operation of the Stop/ Start system may be viewed in the instrument cluster display Stop/Start screen. Situations when the engine will not stop include (but not limited to):

- · Driver's seat belt is not buckled.
- Driver's door is not closed.
- Battery temperature is too warm or cold.
- Battery charge is low.
- The vehicle is on a steep grade.

- Cabin heating or cooling is in process and an acceptable cabin temperature has not been achieved.
- Gear selector is in MANUAL (M) mode.
- HVAC is set to full defrost mode at a high blower speed.
- HVAC is set to MAX A/C.
- Engine has not reached normal operating temperature.
- Engine or exhaust temperature is too high.
- The transmission is not in a forward gear.
- Hood is open.
- Transfer case is in 4L or N (Neutral).
- Brake pedal is not pressed with sufficient pressure.
- Accelerator pedal input.
- Vehicle speed threshold has not been achieved from previous Autostop.
- Steering angle is beyond threshold (ESS Models Only).
- ACC is on and speed is set.
- Vehicle is at high altitude.
- System fault is present.

It may be possible for the vehicle to be driven several times without the Stop/Start system going into a STOP/ START READY state under more extreme conditions of the previously listed items.

# TO START THE ENGINE WHILE IN AUTOSTOP MODE

While in a forward gear, the engine will start when the brake pedal is released or the throttle pedal is pressed. The transmission will automatically re-engage upon engine restart.

(Continued)

#### Conditions That Will Cause The Engine To Start Automatically While In Autostop Mode:

- The transmission selector is moved out of DRIVE.
- To maintain cabin temperature comfort.
- Actual cabin temperature is significantly different than temperature set on Auto HVAC.
- HVAC is set to full defrost mode.
- HVAC system temperature or fan speed is manually adjusted higher.
- Battery voltage drops too low.
- Stop/Start OFF switch is pushed.
- A Stop/Start system error occurs.
- Stop/Start Autostop Active time exceeds five minutes.
- Transfer case is in 4L or N (Neutral).
- Steering wheel is turned beyond threshold (ESS Models Only).

# TO MANUALLY TURN OFF THE STOP/START SYSTEM



#### Stop/Start OFF Switch

Push the Stop/Start OFF switch (located on the switch bank). The light on the switch will illuminate.

The "Stop/Start OFF" message will appear in instrument cluster display within the Stop/Start section, and the autostop function will be disabled  $\stackrel{}{\sqsubseteq}$  page 124.

#### NOTE:

The Stop/Start system will reset itself back to an ON condition every time the ignition is turned off and back on.

# TO MANUALLY TURN ON THE STOP/START SYSTEM

Push the Stop/Start OFF switch (located on the switch bank). The light on the switch will turn off.

## SYSTEM MALFUNCTION

If there is a malfunction in the Stop/Start system, the system will not shut down the engine. A "SERVICE STOP/START SYSTEM" message and a yellow Stop/Start telltale will appear in the Instrument Cluster Display  $r_{2}$  page 124.

If the "SERVICE STOP/START SYSTEM" message appears in the instrument cluster display, have the system checked by an authorized dealer.

If a malfunction occurs during an autostop, the vehicle may not auto start and will need a key start.

## STOP/START SYSTEM — MANUAL TRANSMISSION (IF EQUIPPED)

The Engine Stop/Start (ESS) function is designed to reduce fuel consumption. The system will stop the engine automatically during a vehicle stop if the required conditions are met. Pressing the clutch pedal will automatically restart the vehicle.

ESS vehicles have been upgraded with a heavy-duty starter, enhanced battery, and other upgraded engine parts, to handle the additional engine starts.

Vehicles equipped with eTorque contain a heavy duty motor generator and an additional hybrid electric battery to store energy from vehicle deceleration for use on engine startup after a stop as well as providing launch torque assist.

#### NOTE:

It is recommended that Stop/Start be disabled during off-road use.

#### Secondary Battery

Your vehicle may be equipped with a secondary battery used to power the Stop/Start system and the 12 Volt vehicle electrical system. The secondary battery is located behind the wheel well for the front passenger wheel.



**Battery Locations** 

1 – Primary Battery

2 – Secondary Battery

## AUTOSTOP MODE

#### WARNING!

- Vehicles with the Stop/Start system will be equipped with two batteries. Both the main and the supplemental batteries must be disconnected to completely de-energize the 12 Volt electrical system.
- Serious injury or death could result if you do not disconnect both batteries. To learn how to properly disconnect, see an authorized dealer.

The Stop/Start feature is enabled after every driver ignition start. It will remain in STOP/START NOT READY until you drive forward with a vehicle speed greater than 5 mph (8 km/h). At that time, the system will go into STOP/START READY and if all other conditions are met, can go into an STOP/START AUTO STOP ACTIVE mode.

# To Activate The STOP/START AUTOSTOP ACTIVE Mode, The Following Must Occur:

- Vehicle speed must be less than 2 mph (3 km/h).
- The gear selector must be in the NEUTRAL position and the clutch pedal must be fully released.

# POSSIBLE REASONS THE ENGINE DOES NOT AUTOSTOP

Prior to engine shut down, the system will check many safety and comfort conditions to see if they are fulfilled. Situations when the engine will not stop include (but not limited to):

- Driver's seat belt is not buckled.
- Outside temperature is less than 10°F (-12°C) or greater than 109°F (43°C).

- Actual cabin temperature is significantly different than temperature set on Auto HVAC.
- HVAC is set to full defrost mode.
- Engine has not reached normal operating temperature.
- Battery is discharged.
- When driving in REVERSE.
- Hood is open.
- Transfer case is in 4L or N (Neutral).
- Driver's seat is not occupied or driver's door is open.
- Vehicle is at high altitude.
- The vehicle is on a steep grade.
- Forward Gear is engaged.
- Steering angle is beyond threshold (ESS Models Only).
- System fault is present.
- HVAC is set to MAX A/C.

It may be possible for the vehicle to be driven several times without the Stop/Start system going into a STOP/ START READY state under more extreme conditions of the previously listed items.

# TO START THE ENGINE WHILE IN AUTOSTOP MODE

When the gear selector is in NEUTRAL, the engine will start when the clutch pedal is pressed (does not require complete/full pedal press). The vehicle will go into STOP/START SYSTEM NOT READY mode until the vehicle speed is greater than 5 mph (8 km/h).

Conditions that will cause the engine to start automatically while in STOP/START AUTOSTOP ACTIVE mode

#### The Engine Will Start Automatically When:

- Actual cabin temperature is significantly different than temperature set on Auto HVAC.
- HVAC is set to full defrost mode.
- HVAC system temperature or fan speed is manually adjusted higher.
- Stop/Start Autostop Active time exceeds five minutes.
- Battery voltage drops too low.
- Vehicle is moving faster than 5 mph (8 km/h).
- STOP/START OFF switch is pressed.
- Transfer case is in 4L or N (Neutral).
- Steering wheel is turned beyond threshold (ESS Models Only).

# TO MANUALLY TURN OFF THE STOP/START SYSTEM

1. Push the Stop/Start OFF switch (located on the switch bank). The light on the switch will illuminate.



Stop/Start OFF Switch

- 2. The STOP/START OFF message will appear in the instrument cluster  $\dashv >$  page 124.
- 3. At the next vehicle stop (after turning off the Stop/ Start system), the engine will not be stopped.
- If the Stop/Start system is manually turned off, the engine can only be started and stopped by cycling the ignition switch.
- The Stop/Start system will reset itself back to an ON condition every time the ignition is turned off and back on.

# TO MANUALLY TURN ON THE STOP/START SYSTEM

Push the Stop/Start OFF switch (located on the switch bank). The light on the switch will turn off.

## SYSTEM MALFUNCTION

If there is a malfunction in the Stop/Start system, the system will not shut down the engine. A "SERVICE STOP/START SYSTEM" message and a yellow Stop/ Start telltale will appear in the Instrument Cluster Display  $\Rightarrow$  page 124.

If the "SERVICE STOP/START SYSTEM" message appears in the instrument cluster display, have the system checked by an authorized dealer.

If a malfunction occurs during an autostop, the vehicle may not auto start and will need a key start.

## CRUISE CONTROL SYSTEMS — IF EQUIPPED

Your vehicle may be equipped with the Cruise Control system, or the Adaptive Cruise Control (ACC) system:

- Cruise Control will keep your vehicle at a constant preset speed.
- Adaptive Cruise Control (ACC) will adjust the vehicle speed up to the preset speed to maintain a distance with the vehicle ahead.

#### NOTE:

- In vehicles equipped with ACC, if ACC is not enabled, Fixed Speed Cruise Control will not detect vehicles directly ahead of you. Always be aware of the feature selected.
- Only one Cruise Control feature can operate at a time. For example, if Fixed Speed Cruise Control is enabled, Adaptive Cruise Control will be unavailable, and vice versa.

## CRUISE CONTROL

When engaged, the Cruise Control takes over accelerator operations at speeds greater than 20 mph (32 km/h).

The Cruise Control buttons are located on the right side of the steering wheel.



**Cruise Control Buttons** 

1 – SET (+)/Accel 2 – CANC/Cancel 3 – SET (-)/Decel 4 – On/Off 5 – RES/Resume

#### WARNING!

Cruise Control can be dangerous where the system cannot maintain a constant speed. Your vehicle could go too fast for the conditions, and you could lose control and have an accident. Do not use Cruise Control in heavy traffic or on roads that are winding, icy, snow-covered or slippery.

### To Activate

Push the on/off button to activate the Cruise Control. The Cruise Control Set Indicator Light in the instrument cluster display will illuminate. To turn the system off, push the on/off button a second time. The Cruise Control Set Indicator Light will turn off. The system should be turned off when not in use.

#### WARNING!

Leaving the Cruise Control system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have an accident. Always leave the system off when you are not using it.

## To Set A Desired Speed

Turn the Cruise Control on.

#### NOTE:

The vehicle should be traveling at a steady speed and on level ground before pushing the SET (+) or SET (-) button.

When the vehicle has reached the desired speed, push the SET (+) or SET (-) button and release. Release the accelerator and the vehicle will operate at the selected speed.

## To Vary The Speed Setting

#### To Increase Or Decrease The Set Speed

When the Cruise Control is set, you can increase speed by pushing the SET (+) button, or decrease speed by pushing the SET (-) button.

#### U.S. Speed (mph)

- Pushing the SET (+), or SET (-) button once will result in a 1 mph speed adjustment. Each subsequent tap of the button results in an adjustment of 1 mph.
- If the button is continually pushed, the set speed will continue to adjust in 5 mph increments until the button is released, then the new set speed will be established.

#### Metric Speed (km/h)

- Pushing the SET (+), or SET (-) button once will result in a 1 km/h speed adjustment. Each subsequent tap of the button results in an adjustment of 1 km/h.
- If the button is continually pushed, the set speed will continue to adjust in 10 km/h increments until the button is released, then the new set speed will be established.

## To Accelerate For Passing

While the Cruise Control is set, press the accelerator to pass as you would normally. When the pedal is released, the vehicle will return to the set speed.

#### USING CRUISE CONTROL ON HILLS

The transmission may downshift on hills to maintain the vehicle set speed.

The Cruise Control system maintains speed up and down hills. A slight speed change on moderate hills is normal. On steep hills, a greater speed loss or gain may occur so it may be preferable to drive without Cruise Control.

#### WARNING!

Cruise Control can be dangerous where the system cannot maintain a constant speed. Your vehicle could go too fast for the conditions, and you could lose control and have an accident. Do not use Cruise Control in heavy traffic or on roads that are winding, icy, snow-covered or slippery.

## To Resume Speed

To resume a previously set speed, push the RES button and release. Resume can be used at any speed above 20 mph (32 km/h).

### To Deactivate

A tap on the brake pedal, pushing the CANC (cancel) button, or normal brake pressure while slowing the vehicle will deactivate the Cruise Control without erasing the set speed from memory.

The following conditions will also deactivate the Cruise Control without erasing the set speed from memory:

- · Vehicle parking brake is applied
- Stability event occurs
- Gear selector is moved out of DRIVE
- Engine overspeed occurs
- Clutch pedal is pressed (manual transmission only)
- Vehicle is operating at a low RPM (manual transmission only)

Pushing the on/off button or placing the ignition in the OFF position erases the set speed from memory.

## ADAPTIVE CRUISE CONTROL (ACC)

Adaptive Cruise Control (ACC) increases the driving convenience provided by Cruise Control while traveling on highways and major roadways. However, it is not a safety system and not designed to prevent collisions. The Cruise Control function performs differently if your vehicle is not equipped with ACC  $\Box$  page 171.

#### NOTE:

- If the ACC sensor detects a vehicle ahead, ACC will apply limited braking or accelerate (not to exceed the original set speed) automatically to maintain a preset following distance, while matching the speed of the vehicle ahead
- Any chassis/suspension or tire size modifications to the vehicle will affect the performance of the Adaptive Cruise Control and Forward Collision Warning system.
- Fixed Speed Cruise Control (ACC not enabled) will not detect vehicles directly ahead of you. Always be aware of the feature selected  $\Box$  page 352.

#### WARNING!

 Adaptive Cruise Control (ACC) is a convenience system. It is not a substitute for active driver involvement. It is always the driver's responsibility to be attentive of road, traffic, and weather conditions, vehicle speed, distance to the vehicle ahead and, most importantly, brake operation to ensure safe operation of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow these warnings can result in a collision and death or serious personal injury.

#### WARNING!

- The ACC system:
  - Does not react to pedestrians, oncoming vehicles, and stationary objects (e.g., a stopped vehicle in a traffic iam or a disabled vehicle).
  - O Cannot take street, traffic, and weather conditions into account, and may be limited upon adverse sight distance conditions.
  - O Does not always fully recognize complex driving conditions, which can result in wrong or missing distance warnings.
  - On vehicles with an automatic transmission, will bring the vehicle to a complete stop while following a vehicle ahead and hold the vehicle for two seconds in the stop position. If the vehicle ahead does not start moving within two seconds, the ACC system will display a message that the system will release the brakes and that the brakes must be applied manually. An audible chime will sound when the brakes are released.
- · You should not utilize the ACC system:
  - O When driving in fog, heavy rain, heavy snow, sleet, heavy traffic, and complex driving situations (i.e., in highway construction zones).
  - O When entering a turn lane or highway off-ramp; when driving on roads that are winding, icv. snow-covered, slippery, or have steep uphill or downhill slopes.
  - When towing a trailer up or down steep slopes.
- O When circumstances do not allow safe driving at a constant speed.

### Adaptive Cruise Control (ACC) Operation

The buttons on the right side of the steering wheel operate the ACC system.



#### Adaptive Cruise Control Buttons

- 1 Distance Setting Increase
- 2 Adaptive Cruise Control (ACC) On/Off
- 3 Distance Setting Decrease

#### Adaptive Cruise Control (ACC) Menu

The instrument cluster display will show the current ACC system settings. The information it displays depends on ACC system status.

Push the Adaptive Cruise Control (ACC) on/off button until one of the following appears in the instrument cluster display:

#### Adaptive Cruise Control Off

When ACC is deactivated, the display will read "Adaptive Cruise Control Off."

#### Adaptive Cruise Control Ready

When ACC is activated, but the vehicle speed setting has not been selected, the display will read "Adaptive Cruise Control Ready."

#### Adaptive Cruise Control Set

When the SET (+) or the SET (-) button is pushed, the display will read "ACC SET."

When ACC is set, the set speed will show in the instrument cluster display.

The ACC screen may display once again if any of the following ACC activity occurs:

- System Cancel
- Driver Override
- System Off
- ACC Proximity Warning
- ACC Unavailable Warning

The instrument cluster display will return to the last display selected after five seconds of no ACC display activity.

## Activating Adaptive Cruise Control (ACC)

The minimum set speed for the ACC system is 20 mph (32 km/h).

When the system is turned on and in the ready state, the instrument cluster displays "ACC Ready."

When the system is off, the instrument cluster displays "Adaptive Cruise Control (ACC) Off."

#### NOTE:

You cannot engage ACC under the following conditions:

- When in 4WD Low
- When the brakes are applied
- When the parking brake is applied

- When the automatic transmission is in PARK, REVERSE or NEUTRAL
- When the manual transmission is in FIRST gear
- When the vehicle speed is below 20 mph (32 km/h) (manual transmission)
- When the vehicle speed is below the minimum speed range
- When the brakes are overheated
- When the driver's door is open at low speeds
- When the driver's seat belt is unbuckled at low speeds
- When ESC Full Off mode is active
- When Off Road+ (if equipped) is active

### To Activate/Deactivate

Push and release the Adaptive Cruise Control (ACC) on/off button. The ACC menu in the instrument cluster display will read "ACC Ready."

To turn the system off, push and release the Adaptive Cruise Control (ACC) on/off button again. At this time, the system will turn off and the instrument cluster display will read "Adaptive Cruise Control (ACC) Off."

#### WARNING!

Leaving the Adaptive Cruise Control (ACC) system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have a collision. Always leave the system off when you are not using it.

### To Set A Desired Speed

When the vehicle reaches the speed desired, push the SET (+) button or the SET (-) button and release. The instrument cluster display will show the set speed.

#### NOTE:

Fixed Speed Cruise Control can be used without ACC enabled. To change between the different modes, push the ACC on/off button which turns the ACC and the Fixed Speed Cruise Control off. Pushing the Fixed Speed Cruise Control on/off button will result in turning on (changing to) Fixed Speed Cruise Control mode.

#### WARNING!

In Fixed Speed Cruise Control mode, the system will not react to vehicles ahead. In addition, the proximity warning does not activate and no alarm will sound even if you are too close to the vehicle ahead since neither the presence of the vehicle ahead nor the vehicle-to-vehicle distance is detected. Be sure to maintain a safe distance between your vehicle and the vehicle ahead. Always be aware which mode is selected.

If ACC is set when the vehicle speed is below 20 mph (32 km/h), the set speed will default to 20 mph (32 km/h).

#### NOTE:

Fixed Speed Cruise Control cannot be set below 20 mph (32 km/h).

If either system is set when the vehicle speed is above 20 mph (32 km/h), the set speed shall be the current speed of the vehicle.

On vehicles equipped with a manual transmission, the ACC system cannot be set when the vehicle speed is below 20 mph (32 km/h) or when the vehicle is in FIRST gear.

#### NOTE:

- Keeping your foot on the accelerator pedal can cause the vehicle to continue to accelerate beyond the set speed. If this occurs, the message "DRIVER OVERRIDE" will display in the instrument cluster display.
- If you continue to accelerate beyond the set speed while ACC is enabled, the system will not be controlling the distance between your vehicle and the vehicle ahead. The vehicle speed will only be determined by the position of the accelerator pedal.

### To Cancel

The following conditions cancel the ACC or Fixed Speed Cruise Control systems:

- The brake pedal is applied
- The CANC button is pushed
- The Anti-Lock Brake System (ABS) activates
- The gear selector is removed from the DRIVE position
- The Electronic Stability Control/Traction Control System (ESC/TCS) activates
- The vehicle parking brake is applied
- The braking temperature exceeds normal range (overheated)
- The Trailer Sway Control (TSC) activates
- The vehicle speed is less than 15 mph (24 km/h) (manual transmission only)

- The clutch is pressed for more than 10 seconds (manual transmission only)
- The vehicle is placed in NEUTRAL for more than 10 seconds (manual transmission only)
- The driver shifts to FIRST gear (manual transmission only)

The following conditions will only cancel the ACC system:

- Driver seat belt is unbuckled at low speeds
- Driver door is opened at low speeds

## To Turn Off

The system will turn off and erase the set speed in memory if:

- The Adaptive Cruise Control (ACC) on/off button is pushed
- The Fixed Speed Cruise Control on/off button is pushed
- The ignition is placed in the OFF position
- 4WD Low is engaged

### To Resume

If there is a set speed in the memory, push the RES button and then remove your foot from the accelerator pedal. The instrument cluster display will show the last set speed.

Resume can be used at any speed above 20 mph (32 km/h) when only Fixed Speed Cruise Control is being used.

Resume can be used at any speed above 0 mph (0 km/h) when ACC is active.

#### NOTE:

- While in ACC mode, when the vehicle comes to a complete stop longer than two seconds, the system will cancel. The driver will have to apply the brakes to keep the vehicle at a standstill.
- ACC cannot be resumed if there is a stationary vehicle in front of your vehicle in close proximity.

#### WARNING!

The Resume function should only be used if traffic and road conditions permit. Resuming a set speed that is too high or too low for prevailing traffic and road conditions could cause the vehicle to accelerate or decelerate too sharply for safe operation. Failure to follow these warnings can result in a collision and death or serious personal injury.

### To Vary The Speed Setting

#### To Increase Or Decrease The Set Speed

After setting a speed, you can increase the set speed by pushing the SET (+) button, or decrease speed by pushing the SET (-) button.

#### U.S. Speed (mph)

- Pushing the SET (+), or SET (-) button once will result in a 1 mph speed adjustment. Each subsequent tap of the button results in an adjustment of 1 mph.
- If the button is continually pushed, the set speed will continue to adjust in 5 mph increments until the button is released. The new set speed is reflected in the instrument cluster display.

#### Metric Speed (km/h)

- Pushing the SET (+), or SET (-) button once will result in a 1 km/h speed adjustment. Each subsequent tap of the button results in an adjustment of 1 km/h.
- If the button is continually pushed, the set speed will continue to adjust in 10 km/h increments until the button is released. The new set speed is reflected in the instrument cluster display.

#### NOTE:

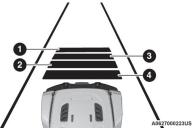
When you override and push the SET (+) button or SET (-) buttons, the new set speed will be the current speed of the vehicle.

#### When ACC Is Active

- When you use the SET (-) button to decelerate, if the engine's braking power does not slow the vehicle sufficiently to reach the set speed, the brake system will automatically slow the vehicle.
- The ACC system applies the brake down to a full stop when following the vehicle in front. If your vehicle follows the vehicle in front to a standstill, your vehicle will release the brakes two seconds after coming to a full stop.
- The ACC system maintains set speed when driving uphill and downhill. However, a slight speed change on moderate hills is normal. In addition, downshifting may occur while climbing uphill or descending downhill. This is normal operation and necessary to maintain set speed. When driving uphill and downhill, the ACC system will cancel if the braking temperature exceeds normal range (overheated).

## Setting The Following Distance In ACC

The specified following distance for ACC can be set by varying the distance setting between four bars (longest), three bars (long), two bars (medium) and one bar (short). Using this distance setting and the vehicle speed, ACC calculates and sets the distance to the vehicle ahead. This distance setting displays in the instrument cluster display.



**Distance Settings** 

- 1 Longest Distance Setting (Four Bars)
- 2 Medium Distance Setting (Two Bars)
- 3 Long Distance Setting (Three Bars)
- 4 Short Distance Setting (One Bar)

To increase the distance setting, push the Distance Setting Increase button and release. Each time the button is pushed, the distance setting increases by one bar (longer).

To decrease the distance setting, push the Distance Setting Decrease button and release. Each time the button is pushed, the distance setting decreases by one bar (shorter). If there is no vehicle ahead, the vehicle will maintain the set speed. If a slower moving vehicle is detected in the same lane, the instrument cluster displays the ACC Set With Target Light. The system will then adjust vehicle speed automatically to maintain the distance setting, regardless of the set speed.

The vehicle will then maintain the set distance until:

- The vehicle ahead accelerates to a speed above the set speed
- The vehicle ahead moves out of your lane or view of the sensor
- The distance setting is changed

The maximum braking applied by ACC is limited; however, the driver can always apply the brakes manually, if necessary.

#### NOTE:

The brake lights will illuminate whenever the ACC system applies the brakes.

A Proximity Warning will alert the driver if ACC predicts that its maximum braking level is not sufficient to maintain the set distance. If this occurs, a visual alert "BRAKE!" will flash in the instrument cluster display and a chime will sound while ACC continues to apply its maximum braking capacity.

#### NOTE:

The "BRAKE!" screen in the instrument cluster display is a warning for the driver to take action and does not necessarily mean that the Forward Collision Warning system is applying the brakes autonomously.

### **Overtake Aid**

When driving with ACC engaged and following a vehicle, the system will provide an additional acceleration up to the ACC set speed to assist in passing the vehicle. This additional acceleration is triggered when the driver utilizes the left turn signal and will only be active when passing on the left hand side.

# ACC Operation At A Stop (Automatic Transmission Only)

In the event that the ACC system brings your vehicle to a standstill while following a target vehicle, your vehicle will resume motion without the need for any driver action if the target vehicle starts moving within two seconds of your vehicle coming to a standstill.

If the target vehicle does not start moving within two seconds of your vehicle coming to a standstill, the ACC with Stop system will cancel and the brakes will release. A cancel message will display on the instrument cluster display and produce a warning chime. Driver intervention will be required at this moment.

While ACC with Stop is holding your vehicle at a standstill, if the driver seatbelt is unbuckled or the driver door is opened, the ACC with Stop system will cancel and the brakes will release. A cancel message will display on the instrument cluster display and produce a warning chime. Driver intervention will be required at this moment.

#### WARNING!

When the ACC system is resumed, the driver must ensure that there are no pedestrians, vehicles or objects in the path of the vehicle. Failure to follow

#### WARNING!

these warnings can result in a collision and death or serious personal injury.

### **Display Warnings And Maintenance**

# "WIPE FRONT RADAR SENSOR IN FRONT OF VEHICLE" WARNING

The "ACC/FCW Unavailable Wipe Front Radar Sensor" warning will display and a chime will sound when conditions temporarily limit system performance.

This most often occurs at times of poor visibility, such as in snow or heavy rain. The ACC system may also become temporarily blinded due to obstructions, such as mud, dirt or ice. In these cases, the instrument cluster display will display "ACC/FCW Unavailable Wipe Front Radar Sensor" and the system will deactivate.

The "ACC/FCW Unavailable Wipe Front Radar Sensor" message can sometimes be displayed while driving in highly reflective areas (i.e. tunnels with reflective tiles, or ice and snow). The ACC system will recover after the vehicle has left these areas. Under rare conditions, when the radar is not tracking any vehicles or objects in its path this warning may temporarily occur.

#### NOTE:

If the "ACC/FCW Unavailable Wipe Front Radar Sensor" warning is active, Fixed Speed Cruise Control is still available.

If weather conditions are not a factor, the driver should examine the sensor. It may require cleaning or removal of an obstruction. The sensor is located in the center of the vehicle behind the lower grille. To keep the ACC system operating properly, it is important to note the following maintenance items:

- Always keep the sensor clean. Carefully wipe the sensor lens with a soft cloth. Be cautious not to damage the sensor lens.
- Do not remove any screws from the sensor. Doing so could cause an ACC system malfunction or failure and require a sensor realignment.
- If the sensor or front end of the vehicle is damaged due to a collision, see an authorized dealer for service.
- Do not attach or install any accessories near the sensor, including transparent material or aftermarket grilles. Doing so could cause an ACC system failure or malfunction.

When the condition that deactivated the system is no longer present, the system will return to the "Adaptive Cruise Control Off" state and will resume function by simply reactivating it.

#### NOTE:

If the "ACC/FCW Unavailable Wipe Front Radar Sensor" message occurs frequently (e.g. more than once on every trip) without any snow, rain, mud, or other obstructions, have the radar sensor realigned at an authorized dealer.

#### "CLEAN FRONT WINDSHIELD" WARNING

The "ACC/FCW Limited Functionality Clean Front Windshield" warning will display and a chime will sound when conditions temporarily limit system performance. This most often occurs at times of poor visibility, such as in snow or heavy rain and fog. The ACC system may also become temporarily blinded due to obstructions, such as mud, dirt, or ice on windshield and fog on the

inside of glass. In these cases, the instrument cluster display will display "ACC/FCW Limited Functionality Clean Front Windshield" and the system will have degraded performance.

The "ACC/FCW Limited Functionality Clean Front Windshield" message can sometimes be displayed while driving in adverse weather conditions. The ACC/FCW system will recover after the vehicle has left these areas. Under rare conditions, when the camera is not tracking any vehicles or objects in its path this warning may temporarily occur.

If weather conditions are not a factor, the driver should examine the windshield and the camera located on the back side of the inside rearview mirror. They may require cleaning or removal of an obstruction.

When the condition that created limited functionality is no longer present, the system will return to full functionality.

#### NOTE:

If the "ACC/FCW Limited Functionality Clean Front Windshield" message occurs frequently (e.g. more than once on every trip) without any snow, rain, mud, or other obstructions, have the windshield and forward facing camera inspected at an authorized dealer.

#### "SERVICE ACC/FCW" WARNING

If the system turns off, and the instrument cluster displays "ACC/FCW Unavailable Service Required" or "Cruise/FCW Unavailable Service Required", there may be an internal system fault or a temporary malfunction that limits ACC functionality. Although the vehicle is still drivable under normal conditions, ACC will be temporarily unavailable. If this occurs, try activating ACC again later, following an ignition cycle. If the problem persists, see an authorized dealer.

### **Precautions While Driving With ACC**

In certain driving situations, ACC may have detection issues. In these cases, ACC may brake late or unexpectedly. The driver needs to stay alert and may need to intervene. The following are examples of these types of situations:

#### **TOWING A TRAILER**

Towing a trailer is not recommended when using ACC.

#### **OFFSET DRIVING**

ACC may not detect a vehicle in the same lane that is offset from your direct line of travel, or a vehicle merging in from a side lane. There may not be sufficient distance to the vehicle ahead. The offset vehicle may move in and out of the line of travel, which can cause your vehicle to brake or accelerate unexpectedly.

#### TURNS AND BENDS

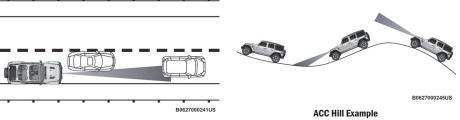
When driving on a curve with ACC engaged, the system may increase or decrease the vehicle speed for stability, with no vehicle ahead detected. Once the vehicle is out of the curve, the system will resume your original set speed. This is a part of normal ACC system functionality.

#### NOTE:

On tight turns ACC performance may be limited.

#### USING ACC ON HILLS

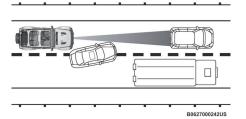
ACC performance may be limited when driving on hills. ACC may not detect a vehicle in your lane depending on the speed, vehicle load, traffic conditions, and the steepness of the hill.



#### Offset Driving Condition Example

### LANE CHANGING

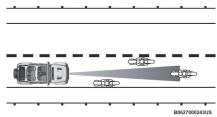
ACC may not detect a vehicle until it is completely in the lane in which you are traveling. In the following lane changing example, ACC has not yet detected the vehicle changing lanes and it may not detect the vehicle until it's too late for the ACC system to take action. ACC may not detect a vehicle until it is completely in the lane. There may not be sufficient distance to the lane-changing which. Always be attentive and ready to apply the brakes if necessary.



### Lane Changing Example

### NARROW VEHICLES

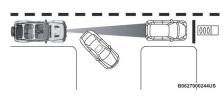
Some narrow vehicles traveling near the outer edges of the lane or edging into the lane are not detected until they have moved fully into the lane. There may not be sufficient distance to the vehicle ahead.



#### Narrow Vehicle Example

### STATIONARY OBJECTS AND VEHICLES

ACC does not react to stationary objects or vehicles. For example, ACC will not react in situations where the vehicle you are following exits your lane and the vehicle ahead is stopped in your lane. It will consider this stopped vehicle a stationary object as it did not previously detect movement from it. Always be attentive and ready to apply the brakes if necessary.



**Stationary Object And Stationary Vehicle Example** 

# PARKSENSE REAR PARK ASSIST — IF EQUIPPED

ParkSense will retain the last system state (enabled or disabled) from the last ignition cycle when the ignition is placed in the ON/RUN position.

ParkSense can be active only when the gear selector is in REVERSE. If ParkSense is enabled at this gear selector position, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. When in REVERSE and above the system's operating speed, a warning will appear within the instrument cluster display indicating the vehicle speed is too fast. The system will become active again if the vehicle speed is decreased to less than approximately 6 mph (9 km/h).

# PARKSENSE SENSORS

The four ParkSense sensors, located in the rear fascia/ bumper, monitor the area behind the vehicle that is within the sensors' field of view. The sensors can detect obstacles from approximately 12 inches (30 cm) up to 79 inches (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

# PARKSENSE WARNING DISPLAY

The ParkSense Warning screen is located within the instrument cluster display  $\Rightarrow$  page 124. It provides visual warnings to indicate the distance between the rear fascia/bumper and the detected obstacle.

# PARKSENSE DISPLAY

When the vehicle is in REVERSE, the instrument cluster display will show the Park Assist ready system status.

The system will indicate a detected obstacle by showing a single arc in one or more regions based on the obstacle's distance and location relative to the vehicle. If an obstacle is detected in the center rear region, the display will show a single solid arc in the center rear region and will produce a one-half second tone. As the vehicle moves closer to the obstacle, the display will show a single arc moving closer to the vehicle and emit a fast tone that will change from fast to continuous.

If an obstacle is detected in the left and/or right rear region, the display will show a single flashing arc in the left and/or right rear region and will produce a fast tone. As the vehicle moves closer to the obstacle, the display will show the single arc moving closer to the vehicle and the tone will change from fast to continuous.



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**Rear ParkSense Arcs** 

- 4 Slow Tone/Solid Arc
  - 5 Slow Tone/Solid Arc
  - 6 Single 1/2 Second Tone/Solid Arc

- 1 Continuous Tone/Flashing Arc
- $2-{\sf Fast}~{\sf Tone}/{\sf Flashing}~{\sf Arc}$

 $\rm 3-Fast\ Tone/Flashing\ Arc$ 

The vehicle is close to the obstacle when the warning display shows one flashing arc and sounds a continuous tone. The following chart shows the warning alert operation when the system is detecting an obstacle:

|                              | WARNING ALERTS                        |   |                                |                                   |                                   |                            |                                   |
|------------------------------|---------------------------------------|---|--------------------------------|-----------------------------------|-----------------------------------|----------------------------|-----------------------------------|
| Rear Distance<br>(inches/cm) | Greater than<br>79 inches<br>(200 cm) | 79-59 inches<br>(200-150 cm)                        | 59-47 inches<br>(150-120 cm)   | 47-39 inches<br>(120-100 cm)      | 39-25 inches<br>(100-65 cm)       | 25-12 inches<br>(65-30 cm) | Less than<br>12 inches<br>(30 cm) |
| Arcs – Left                  | None                                  | None  | None                           | None                              | None                              | 2nd Flashing               | 1st Flashing                      |
| Arcs – Center                | None                                  | 6th Solid   | 5th Solid                      | 4th Solid                         | 3rd Flashing                      | 2nd Flashing               | 1st Flashing                      |
| Arcs — Right                 | None                                  | None  | None                           | None                              | None                              | 2nd Flashing               | 1st Flashing                      |
| Audible Alert<br>Chime       | None                                  | Single 1/2<br>Second Tone<br>(for rear center only) | Slow<br>(for rear center only) | Slow<br>(for rear center<br>only) | Fast<br>(for rear center<br>only) | Fast                       | Continuous                        |
| Radio Volume<br>Reduced      | No                                    | Yes   | Yes                            | Yes                               | Yes                               | Yes                        | Yes                               |

### NOTE:

ParkSense will reduce the volume of the radio, if on, when the system is sounding an audio tone.

# ENABLING AND DISABLING PARKSENSE



ParkSense can be enabled and disabled with the ParkSense switch located below the Uconnect display.

When the ParkSense switch is pushed to disable the system, the instrument cluster display  $\Box$  page 124 will show the "ParkSense Off" message for approximately five seconds. When the gear selector is moved to REVERSE and the system is disabled, the instrument cluster display will show the "ParkSense Off" message for as long as the vehicle is in REVERSE (Not in 4WD Low). The ParkSense switch LED will be on when ParkSense is disabled or requires service. The ParkSense switch LED will be off when the system is enabled. If the ParkSense switch is pushed, and requires service, the ParkSense switch LED will blink momentarily, and then the LED will remain on.

# SERVICE THE PARKSENSE REAR PARK ASSIST SYSTEM

During vehicle start up, when the ParkSense Rear Park Assist System has detected a faulted condition, the instrument cluster display will actuate a single chime, once per ignition cycle, and it will display the "ParkSense Unavailable Wiper Rear Sensors" or the "ParkSense Unavailable Service Required" message. When the gear selector is moved to REVERSE and the system has detected a faulted condition, the instrument cluster display will show the "ParkSense Unavailable Wiper Rear Sensors" or "ParkSense Unavailable Service Required" message for as long as the vehicle is in REVERSE. Under this condition, ParkSense will not operate.

If "ParkSense Unavailable Wiper Rear Sensors" appears in the instrument cluster display, make sure the outer surface and the underside of the rear fascia/ bumper is clean and clear of snow, ice, mud, dirt or other obstructions and then cycle the ignition. If the message continues to appear, see an authorized dealer.

If "ParkSense Unavailable Service Required" appears in the instrument cluster display, see an authorized dealer.

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# CLEANING THE PARKSENSE SYSTEM

Clean the Rear Park Assist sensors with water, car wash soap and a soft cloth. Do not use rough or hard cloths. In washing stations, clean sensors quickly keeping the vapor jet/high pressure washing nozzles at least 4 inches (10 cm) from the sensors. Do not scratch or poke the sensors.

# PARKSENSE SYSTEM USAGE PRECAUTIONS

### NOTE:

- Ensure that the rear fascia/bumper is free of snow, ice, mud, dirt and debris to keep the ParkSense system operating properly.
- Jackhammers, large trucks, and other vibrations could affect the performance of ParkSense.
- When you turn ParkSense off, the instrument cluster display will read "ParkSense Off." Furthermore, once you turn ParkSense off, it remains off until you turn it on again, even if you cycle the ignition.
- ParkSense, when on, will reduce the volume of the radio when it is sounding a tone.
- Clean the ParkSense sensors regularly, taking care not to scratch or damage them. The sensors must not be covered with ice, snow, slush, mud, dirt or debris. Failure to do so can result in the system not working properly. The ParkSense system might not detect an obstacle behind the fascia/bumper, or it could provide a false indication that an obstacle is behind the fascia/bumper.

 Use the ParkSense switch to turn the ParkSense system off if objects such as bicycle carriers, trailer hitches, etc. are placed within 12 inches (30 cm) of the rear fascia/bumper. Failure to do so can result in the system misinterpreting a close object as a sensor problem, causing the "ParkSense Unavailable Service Required" message to be displayed in the instrument cluster display.

### WARNING!

- Drivers must be careful when backing up even when using ParkSense. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. You are responsible for safety and must continue to pay attention to your surroundings. Failure to do so can result in serious injury or death.
- Before using ParkSense, it is strongly recommended that the ball mount and hitch ball assembly be disconnected from the vehicle when the vehicle is not used for towing. Failure to do so can result in injury or damage to vehicles or obstacles because the hitch ball will be much closer to the obstacle than the rear fascia when the vehicle sounds the continuous tone. Also, the sensors could detect the ball mount and hitch ball assembly, depending on its size and shape, giving a false indication that an obstacle is behind the vehicle.

### CAUTION!

- ParkSense is only a parking aid and it is unable to recognize every obstacle, including small obstacles. Parking curbs might be temporarily detected or not detected at all. Obstacles located above or below the sensors will not be detected when they are in close proximity.
- The vehicle must be driven slowly when using ParkSense in order to be able to stop in time when an obstacle is detected. It is recommended that the driver looks over his/her shoulder when using ParkSense.

# PARKVIEW REAR BACK UP CAMERA

The ParkView Rear Back Up Camera allows you to see an on-screen image of the rear surroundings of your vehicle whenever the gear selector is put into REVERSE. The image will be displayed in the touchscreen display along with a caution note to "Check Entire Surroundings" across the top of the screen. After five seconds this note will disappear. The ParkView camera is located on the rear of the vehicle in the center of the spare tire.

#### Manual Activation Of The Rear View Camera

- 1. Press the Controls button located on the bottom of the Uconnect display.
- 2. Press the Back Up Camera button to turn the Rear View Camera system on.

When the vehicle is shifted out of REVERSE with Camera delay turned off, the rear Camera mode is exited and the previous screen appears again. When the vehicle is shifted out of REVERSE with Camera delay turned on, the rear Camera image will be displayed for up to 10 seconds unless the vehicle speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, the ignition is placed in the OFF position, or the touchscreen X button to disable display of the Rear View Camera image is pressed.

Whenever the Rear View Camera image is activated through the Back Up Camera button in the Controls menu, and the vehicle speed is greater than, or equal to, 8 mph (13 km/h), a display timer for the image is initiated. The image will continue to be displayed until the display timer exceeds 10 seconds.

### NOTE:

- If the vehicle speed remains below 8 mph (13 km/h), the Rear View Camera image will be displayed continuously until deactivated via the touchscreen X button, the transmission is shifted into PARK, or the ignition is placed in the OFF position.
- The touchscreen X button to disable display of the camera image is made available ONLY when the vehicle is not in REVERSE.

When enabled, active guidelines are overlaid on the image to illustrate the width of the vehicle and its projected back up path based on the steering wheel position. A dashed center line overlay indicates the center of the vehicle to assist with parking or aligning to a hitch/receiver.

When enabled, fixed guidelines are overlaid on the image to illustrate the width of the vehicle.

Different colored zones indicate the distance to the rear of the vehicle.

The following table shows the approximate distances for each zone:

| Zone   | Distance To The Rear Of<br>The Vehicle |  |  |
|--------|--|--|--|
| Red    | 0 - 1 ft (0 - 30 cm)                   |  |  |
| Yellow | 1 ft - 6.5 ft (30 cm - 2 m)            |  |  |
| Green  | 6.5 ft or greater<br>(2 m or greater)  |  |  |

### WARNING!

Drivers must be careful when backing up even when using the ParkView Rear Back Up Camera. Always check carefully behind your vehicle, and be sure to check for pedestrians, animals, other vehicles, obstructions, or blind spots before backing up. You are responsible for the safety of your surroundings and must continue to pay attention while backing up. Failure to do so can result in serious injury or death.

### CAUTION!

- To avoid vehicle damage, ParkView should only be used as a parking aid. The ParkView camera is unable to view every obstacle or object in your drive path. You remain responsible at all times for parking safely while using the ParkView camera.
- To avoid vehicle damage, the vehicle must be driven slowly when using ParkView to be able to stop in time when an obstacle is seen. It is recommended that the driver look frequently over his/ her shoulder when using ParkView.

### NOTE:

If snow, ice, mud, or any foreign substance builds up on the camera lens, clean the lens, rinse with water, and dry with a soft cloth. Do not cover the lens.

# TRAILCAM SYSTEM — IF EQUIPPED

Your vehicle may be equipped with a TrailCam that allows you to see an on-screen image of the front view of your vehicle. The image will be displayed on the touchscreen display along with a caution note "Check Entire Surroundings" across the top of the screen.

When enabled, active dynamic tire lines are projected on the ground plane of the TrailCam view based on the steering wheel position.



**Front View Camera** 

### NOTE:

The system will stay active while in 4WD Low. The TrailCam system has programmable settings that may be selected through the Uconnect system  $\Rightarrow$  page 201.

#### Manual Activation Of The TrailCam

TrailCam view can be activated via these methods:

- Press the FWD Camera button on the controls screen.
- Press the Forward Facing Camera button on the apps menu.
- Press the TrailCam button on the Off Road Pages.
- Press the Off Road+ button when "Auto Launch Off Road+" (if equipped) has been selected under camera settings.

The TrailCam view can also be activated by pressing the icon on the Back Up Camera view. The Back Up Camera view can also be activated by pressing the ison on the TrailCam view.

When the vehicle is shifted out of REVERSE with Camera Delay turned off and TrailCam view is active, the TrailCam mode is exited and the previous screen appears again.

When the vehicle is shifted out of REVERSE with Camera Delay turned on and the TrailCam view is active, the TrailCam image will be displayed for up to 10 seconds unless the vehicle speed exceeds 8 mph (13 km/h), the transmission is shifted into PARK, the ignition is placed in the OFF position, or the touchscreen X button to disable display of the TrailCam view is pressed.

Whenever the TrailCam image is activated through the Manual Activation Methods, and the vehicle speed is greater than or equal to 8 mph (13 km/h), a display timer for the image is initiated. The image will continue to be displayed until the display timer exceeds 10 seconds.

### NOTE:

- If the vehicle speed remains below 8 mph (13 km/h) while in 2WD or 4WD High, the TrailCam image will be displayed continuously until deactivated via the touchscreen X button, the transmission is shifted into PARK, or the ignition is placed in the OFF position.
- The touchscreen X button to disable the display of the camera image is made available ONLY when the vehicle is not in REVERSE.
- The TrailCam view will stay active regardless of the vehicle speed and time while in 4WD Low.

### **Cleaning The TrailCam**

Press and hold the Clean Camera button located on the TrailCam view to wash the TrailCam. Washer fluid will stop when the button is released. In addition, if your vehicle is equipped with a rear washer system, when activated, washer fluid will also dispense to wash the TrailCam.

- The camera can be washed up to 20 seconds at a time while holding the button.
- The Clean Camera system is not available when windshield washing is in process.

# **REFUELING THE VEHICLE**

# FUEL FILLER CAP

The fuel filler cap is located on the driver's side of the vehicle. If the fuel filler cap is lost or damaged, be sure the replacement cap is the correct one for this vehicle.

1. Open the fuel filler door.



**Fuel Filler Door** 

2. Remove the fuel cap by rotating it counterclockwise.



**Fuel Filler Cap** 

- 3. Fully insert the fuel nozzle into the filler pipe.
- 4. Fill the vehicle with fuel.

### NOTE:

- When the fuel nozzle "clicks" or shuts off, the fuel tank is full.
- Wait five seconds before removing the fuel nozzle to allow excess fuel to drain from the nozzle.
- 5. Remove the fuel nozzle, reinstall fuel cap and close fuel filler door.

#### WARNING!

- Never have any smoking materials lit in or near the vehicle when the fuel door is open or the tank is being filled.
- Never add fuel when the engine is running. This is in violation of most state and federal fire regulations and may cause the Malfunction Indicator Light to turn on.
- A fire may result if fuel is pumped into a portable container that is inside of a vehicle. You could be burned. Always place fuel containers on the ground while filling.

### CAUTION!

 Damage to the fuel system or emission control system could result from using an improper fuel filler cap. A poorly fitting cap could let impurities into the fuel system. Also, a poorly fitting aftermarket cap can cause the Malfunction Indicator Light (MIL) to illuminate, due to fuel vapors escaping from the system.

### CAUTION!

• To avoid fuel spillage and overfilling, do not "top off" the fuel tank after filling.

### NOTE:

- When the fuel nozzle "clicks" or shuts off, the fuel tank is full.
- Tighten the fuel filler cap about a quarter turn until you hear one click. This is an indication that the cap is properly tightened.
- If the fuel filler cap is not tightened properly, the MIL will come on. Be sure the cap is tightened every time the vehicle is refueled.

# LOOSE FUEL FILLER CAP MESSAGE

After fuel has been added, the vehicle diagnostic system can determine if the fuel filler cap is possibly loose, improperly installed, or damaged. If the system detects a malfunction, the "gASCAP" message will display in the odometer display. Tighten the gas cap until a "clicking" sound is heard. This is an indication that the gas cap is properly tightened. Push the odometer reset button to turn the message off. If the problem persists, the message will appear the next time the vehicle is started. This might indicate a damaged cap. If the problem is detected twice in a row, the system will turn on the MIL. Resolving the problem will turn the MIL off.

# REFUELING THE VEHICLE — PHEV (IF EQUIPPED)

### CAUTION!

To avoid fuel spillage and overfilling, do not "top off" the fuel tank after filling.

- 1. Put the vehicle in the PARK position.
- 2. Push the fuel filler door release button (located below the headlight switch).



**Fuel Filler Door Release Switch** 

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 Pushing the button will initiate a sequence of events to depressurize the fuel system. A message will display in the cluster when the vehicle is ready to be fueled.



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### **Instrument Cluster Message**

### NOTE:

- After pushing the release button you will have 20 minutes to fuel the vehicle; beyond 20 minutes you will need to push the release button again.
- The fuel door should take 15 seconds to open under normal conditions. It may take longer to open in some situations, such as high ambient temperatures.
- If you hear a hissing sound when the fuel cap is removed, wait to begin fueling the vehicle until after the hissing sound stops.
- The fuel door pops away from the vehicle when it has been released. To finish opening the fuel door, manually rotate it away from the vehicle.

### NOTE:

- If the service station fuel pump repeatedly clicks off (stops delivering fuel) before the fuel tank has been filled, push the fuel door release button again.
- O If pushing the fuel door release button a second time does not correct the problem, try using a different fuel pump. If premature fuel pump shutoff continues to be a problem, take the vehicle to an authorized dealer for service.
- O If the fuel door does not re-latch upon closure, push the fuel door release button again to reset the latch. If pushing the fuel door release button a second time does not correct the problem, take the vehicle to an authorized dealer for service.



### Fuel Filler Door

### NOTE:

In certain cold conditions, ice may prevent the fuel door from opening. If this occurs, lightly push on the fuel door to break the ice buildup and re-release the fuel door using the inside release button. Do not pry on the door.

- 5. Remove the fuel filler cap.
- Insert the nozzle and fill the vehicle with fuel; when the fuel nozzle "clicks" or shuts off the fuel tank is full.
- 7. Wait five seconds before removing the fuel nozzle to allow excess fuel to drain from nozzle.
- 8. Remove the fuel nozzle, replace the fuel filler cap by turning until you hear one click, and then close the fuel door.

### NOTE:

- Tighten the fuel filler cap about a quarter turn until you hear one click. This is an indication that the cap is properly tightened.
- After the click, pull on the cap at the handle to verify it is secure and fastened.
- If it is loose, and not secured to the filler tube, reinstall and tighten again about a quarter turn until you hear the click.
- Verify the cap tether is not pinched between the cap and filler tube.
- If the fuel filler cap is not tightened properly, the yellow Loose Fuel Filler Cap Warning Light and the "Check Fuel Cap" message will appear in the instrument cluster.
- Be sure the cap is tightened every time the vehicle is refueled.

### WARNING!

 Never have any smoking materials lit in or near the vehicle when the fuel door is open or the tank is being filled.

(Continued)

### WARNING!

- Never add fuel when the engine is running. This is in violation of most state and federal fire regulations and may cause the "Malfunction Indicator Light" to turn on.
- A fire may result if fuel is pumped into a portable container that is inside of a vehicle. You could be burned. Always place fuel containers on the ground while filling.

### CAUTION!

To avoid fuel spillage and overfilling, do not "top off" the fuel tank after filling.

### **Emergency Fuel Door Release**

1. Place the vehicle's ignition in the RUN position (Propulsion System Active (PSA) not active).

### NOTE:

If this is not performed, then the tank vent valve will not open. This will result in premature fuel pump shutoffs.

2. Access the rear quarter trim panel in the cargo area on the left side of the vehicle.



### **Release Cap Location**

- 3. Remove the release cap from the quarter trim panel.
- 4. After removing the release cap, pull it directly away from the quarter trim panel to release the fuel door.



#### **Fuel Door Emergency Release**

- 5. Reinstall the release cap into the quarter trim when completed.
- 6. Wait 15 seconds and then begin fueling your vehicle.

# LOOSE FUEL FILLER CAP MESSAGE

After fuel has been added, the vehicle diagnostic system can determine if the fuel filler cap is possibly loose, improperly installed, or damaged. If the system detects a malfunction, the "gASCAP" message will display in the odometer display. Tighten the gas cap until a "clicking" sound is heard. This is an indication that the gas cap is properly tightened. Push the odometer reset button to turn the message off. If the problem persists, the message will appear the next time the vehicle is started. This might indicate a damaged cap. If the problem is detected twice in a row, the system will turn on the MIL. Resolving the problem will turn the MIL off.

# **VEHICLE LOADING**

# CERTIFICATION LABEL

As required by National Highway Traffic Safety Administration regulations, your vehicle has a certification label affixed to the driver's side door or pillar.

This label contains the month and year of manufacture, Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Rating (GAWR) front and rear, and Vehicle Identification Number (VIN). A Month-Day-Hour (MDH) number is included on this label and indicates the Month, Day and Hour of manufacture. The bar code that appears on the bottom of the label is your VIN.

### Gross Vehicle Weight Rating (GVWR)

The GVWR is the total permissible weight of your vehicle including driver, passengers, vehicle, options and cargo. The label also specifies maximum capacities of front and rear axle systems (GAWR). Total load must be limited so GVWR and front and rear GAWR are not exceeded.

# Payload

The payload of a vehicle is defined as the allowable load weight a truck can carry, including the weight of the driver, all passengers, options and cargo.

# Gross Axle Weight Rating (GAWR)

The GAWR is the maximum permissible load on the front and rear axles. The load must be distributed in the cargo area so that the GAWR of each axle is not exceeded.

Each axle GAWR is determined by the components in the system with the lowest load carrying capacity (axle, springs, tires or wheels). Heavier axles or suspension components sometimes specified by purchasers for increased durability do not necessarily increase the vehicle's GVWR.

# Tire Size

The tire size on the Vehicle Certification Label represents the actual tire size on your vehicle. Replacement tires must be equal to the load capacity of this tire size.

# **Rim Size**

This is the rim size that is appropriate for the tire size listed.

### Inflation Pressure

This is the cold tire inflation pressure for your vehicle for all loading conditions up to full GAWR.

# **Curb Weight**

The curb weight of a vehicle is defined as the total weight of the vehicle with all fluids, including vehicle fuel, at full capacity conditions, and with no occupants or cargo loaded into the vehicle. The front and rear curb weight values are determined by weighing your vehicle on a commercial scale before any occupants or cargo are added.

# Loading

The actual total weight and the weight of the front and rear of your vehicle at the ground can best be determined by weighing it when it is loaded and ready for operation.

The entire vehicle should first be weighed on a commercial scale to ensure that the GVWR has not been exceeded. The weight on the front and rear of the vehicle should then be determined separately to be sure that the load is properly distributed over the front and rear axle. Weighing the vehicle may show that the GAWR of either the front or rear axles has been exceeded but the total load is within the specified GVWR. If so, weight must be shifted from front to rear or rear to front as appropriate until the specified weight limitations are met. Store the heavier items down low and be sure that the weight is distributed equally. Stow all loose items securely before driving.

Improper weight distributions can have an adverse affect on the way your vehicle steers and handles and the way the brakes operate.

### WARNING!

Do not load your vehicle any heavier than the GVWR or the maximum front and rear GAWR. If you do, parts on your vehicle can break, or it can change the way your vehicle handles. This could cause you to lose control. Overloading can shorten the life of your vehicle.

# **TRAILER TOWING**

In this section you will find safety tips and information on limits to the type of towing you can reasonably do with your vehicle. Before towing a trailer, carefully review this information to tow your load as efficiently and safely as possible.

To maintain the New Vehicle Limited Warranty coverage, follow the requirements and recommendations in this manual concerning vehicles used for trailer towing.

# COMMON TOWING DEFINITIONS

The following trailer towing related definitions will assist you in understanding the following information:

## Gross Vehicle Weight Rating (GVWR)

The GVWR is the total allowable weight of your vehicle. This includes driver, passengers, cargo and tongue weight. The total load must be limited so that you do not exceed the GVWR  $\Box$  page 187.

# Gross Trailer Weight (GTW)

The GTW is the weight of the trailer plus the weight of all cargo, consumables and equipment (permanent or temporary) loaded in or on the trailer in its "loaded and ready for operation" condition.

The recommended way to measure GTW is to put your fully loaded trailer on a vehicle scale. The entire weight of the trailer must be supported by the scale.

## Gross Combination Weight Rating (GCWR)

The GCWR is the total permissible weight of your vehicle and trailer when weighed in combination.

# Gross Axle Weight Rating (GAWR)

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or rear GAWR rscience 5 page 187.

### WARNING!

It is important that you do not exceed the maximum front or rear GAWR. A dangerous driving condition can result if either rating is exceeded.

## Tongue Weight (TW)

The TW is the downward force exerted on the hitch ball by the trailer. You must consider this as part of the load on your vehicle.

## **Frontal Area**

The frontal area is the maximum height multiplied by the maximum width of the front of a trailer.

# Trailer Sway Control (TSC) – If Equipped

The TSC is a telescoping link that can be installed between the hitch receiver and the trailer tongue. It typically provides adjustable friction associated with the telescoping motion to dampen any unwanted trailer swaying motions while traveling.

## Weight-Carrying Hitch

A weight-carrying hitch supports the trailer tongue weight, just as if it were luggage located at a hitch ball or some other connecting point of the vehicle. These kinds of hitches are commonly used to tow small and medium sized trailers.

### Weight-Distributing Hitch

A Weight-Distributing Hitch works by applying leverage through spring (load) bars. They are typically used for heavier loads to distribute trailer tongue weight to the tow vehicle's front axle and the trailer axle(s). When used in accordance with the manufacturer's directions, it provides for a more level ride, offering more consistent steering and brake control thereby enhancing towing safety. The addition of a friction/hydraulic sway control also dampens sway caused by traffic and crosswinds and contributes positively to tow vehicle and trailer stability. Trailer sway control and a Weight-Distributing (load equalizing) Hitch are recommended for heavier Tongue Weights (TW) and may be required depending on vehicle and trailer configuration/loading to comply with Gross Axle Weight Rating (GAWR) requirements.

### WARNING!

- An improperly adjusted Weight Distributing Hitch system may reduce handling, stability, braking performance, and could result in a collision.
- Weight-Distributing Hitch Systems may not be compatible with surge brake couplers. Consult with your hitch and trailer manufacturer or a reputable Recreational Vehicle dealer for additional information.

# TRAILER HITCH CLASSIFICATION

The following chart provides the industry standard for the maximum trailer weight a given trailer hitch class can tow and should be used to assist you in selecting the correct trailer hitch for your intended towing condition.

| Trailer Hitch Classification Definitions   |                                       |  |  |
|--|---------------------------------------|--|--|
| Class  | Max. Trailer Hitch Industry Standards |  |  |
| Class I - Light Duty   | 2,000 lb (907 kg)                     |  |  |
| Class II - Medium Duty   | 3,500 lb (1,587 kg)                   |  |  |
| Class III - Heavy Duty   | 6,000 lb (2,721 kg)                   |  |  |
| Class IV - Extra Heavy Duty  | 10,000 lb (4,535 kg)                  |  |  |
| Refer to the "Trailer Towing Weights (Maximum Trailer Weight Ratings)" chart for the Maximum Gross Trailer Weight (GTW) towable for your given drivetrain. |                                       |  |  |
| All trailer hitches should be professionally installed on your vehicle.  |                                       |  |  |

# TRAILER TOWING WEIGHTS (MAXIMUM TRAILER WEIGHT RATINGS)

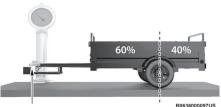
| Engine   | Model        | GCWR                | Frontal Area     | Maximum GTW         | Maximum Trailer TW (See Note) |
|--|--------------|---------------------|------------------|---------------------|-------------------------------|
| 2.0L   | Two-Door     | 8,016 lb (3,636 kg) | 20 ft2 (1.86 m2) | 2,000 lb (907 kg)   | 200 lb (91 kg)                |
| 2.0L   | Four-Door    | 8,117 lb (3,682 kg) | 30 ft2 (2.79 m2) | 3,500 lb (1,587 kg) | 350 lb (158 kg)               |
| 2.0L PHEV  | Sport/Sahara | 9,000 lb (4,082 kg) | 30 ft2 (2.79 m2) | 3,500 lb (1,587 kg) | 350 lb (158 kg)               |
| 2.0L PHEV  | Rubicon      | 9,200 lb (4,173 kg) | 30 ft2 (2.79 m2) | 3,500 lb (1,587 kg) | 350 lb (158 kg)               |
| 3.6L   | Two-Door     | 8,016 lb (3,636 kg) | 20 ft2 (1.86 m2) | 2,000 lb (907 kg)   | 200 lb (91 kg)                |
| 3.6L   | Four-Door    | 8,117 lb (3,682 kg) | 30 ft2 (2.79 m2) | 3,500 lb (1,587 kg) | 350 lb (158 kg)               |
| 6.4L   | Four-Door    | 9,000 lb (4,082 kg) | 30 ft2 (2.79 m2) | 3,500 lb (1,587 kg) | 350 lb (158 kg)               |
| Refer to local laws for maximum trailer towing speeds. |              |                     |                  |                     |                               |

### NOTE:

The trailer tongue weight must be considered as part of the combined weight of occupants and cargo (i.e., the GVWR), and the GVWR should never exceed the weight referenced on the Tire And Loading Information Placard rightarrow page 320.

# TRAILER AND TONGUE WEIGHT

Never exceed the maximum tongue weight stamped on your bumper or trailer hitch.



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#### **Weight Distribution**

Consider the following items when computing the weight on the rear axle of the vehicle:

- The tongue weight of the trailer.
- The weight of any other type of cargo or equipment put in or on your vehicle.
- The weight of the driver and all passengers.

### NOTE:

Remember that everything put into or on the trailer adds to the load on your vehicle. Also, additional factory-installed options or dealer-installed options must be considered as part of the total load on your vehicle. Refer to the Tire And Loading Information Placard for the maximum combined weight of occupants and cargo for your vehicle.

# TOWING REQUIREMENTS

To promote proper break-in of your new vehicle drivetrain components, the following guidelines are recommended:

### WARNING!

Improper towing can lead to a collision. Follow these guidelines to make your trailer towing as safe as possible:

- Make certain that the load is secured in the trailer and that it will not shift during travel. When trailering cargo that is not fully secured, dynamic load shifts can occur that may be difficult for the driver to control. You could lose control of your vehicle and have a collision.
- When hauling cargo, or towing a trailer, do not overload your vehicle or trailer. Overloading can cause a loss of control, poor performance, or damage to brakes, axle, engine, transmission, steering, suspension, chassis structure, or tires.
- Safety chains must always be used between your vehicle and trailer. Always connect the chains to the frame or hook retainers of the vehicle hitch. Cross the chains under the trailer tongue and allow enough slack for turning corners.
- Vehicles with trailers should not be parked on a grade. When parking, apply the parking brake on the tow vehicle. Put the tow vehicle transmission in PARK. Always block or "chock" the trailer wheels.
- GCWR must not be exceeded.

(Continued)

#### WARNING!

• Total weight must be distributed between the tow vehicle and the trailer such that the following four ratings are not exceeded:

O GVWR O GTW

O GAWR

O Tongue weight rating for the trailer hitch utilized

### CAUTION!

- Do not tow a trailer at all during the first 500 miles (805 km) the new vehicle is driven. The engine, axle or other parts could be damaged.
- Then, during the first 500 miles (805 km) that a trailer is towed, do not drive over 50 mph (80 km/h) and do not make starts at full throttle. This helps the engine and other parts of the vehicle wear in at the heavier loads.

## Towing Requirements - Tires

- Proper tire inflation pressures are essential to the safe and satisfactory operation of your vehicle.
- Check the trailer tires for proper tire inflation pressures before trailer usage.
- Check for signs of tire wear or visible tire damage before towing a trailer.
- Replacing tires with a higher load carrying capacity will not increase the vehicle's GVWR and GAWR limits.
- For further information  $\Box$  page 320.

## **Towing Requirements – Trailer Brakes**

- Do not interconnect the hydraulic brake system or vacuum system of your vehicle with that of the trailer. This could cause inadequate braking and possible personal injury.
- An electronically actuated trailer brake controller is required when towing a trailer with electronically actuated brakes. When towing a trailer equipped with a hydraulic surge actuated brake system, an electronic brake controller is not required.
- Trailer brakes are recommended for trailers over 1,000 lb (453 kg) and required for trailers in excess of 2,000 lb (907 kg).

### WARNING!

- Do not connect trailer brakes to your vehicle's hydraulic brake lines. It can overload your brake system and cause it to fail. You might not have brakes when you need them and could have an accident.
- Towing any trailer will increase your stopping distance. When towing, you should allow for additional space between your vehicle and the vehicle in front of you. Failure to do so could result in an accident.

### CAUTION!

If the trailer weighs more than 1,000 lb (453 kg) loaded, it should have its own brakes and they should be of adequate capacity. Failure to do this could lead to accelerated brake lining wear, higher brake pedal effort, and longer stopping distances.

# Towing Requirements – Trailer Lights And Wiring

Whenever you pull a trailer, regardless of the trailer size, stop lights and turn signals on the trailer are required for motoring safety.

The Trailer Tow Package may include a four- and sevenpin wiring harness. Use a factory approved trailer harness and connector.

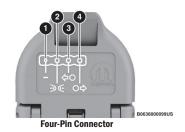
### NOTE:

Do not cut or splice wiring into the vehicle's wiring harness.

The electrical connections are all complete to the vehicle but you must mate the harness to a trailer connector. Refer to the following illustrations.

### NOTE:

- Disconnect the trailer wiring connector from the vehicle (or any other device plugged into the vehicle's electrical connectors) before launching a boat into water.
- Be sure to reconnect once clear from water area.



1 – Ground 2 – Park

3 – Left Stop/Turn

4 – Right Stop/Turn



Seven-Pin Connector

- 1 Backup Lamps
- 2 Running Lamps
- 3 Left Stop/Turn
- 4 Ground
- 5 Battery
- 6 Right Stop/Turn
- 7 Electric Brakes

# TOWING TIPS

Before setting out on a trip, practice turning, stopping and backing the trailer in an area away from heavy traffic.

If using a manual transmission vehicle for trailer towing, all starts must be in FIRST gear to avoid excessive clutch slippage.

## Automatic Transmission — If Equipped

Select the DRIVE range when towing. The transmission controls include a drive strategy to avoid frequent shifting when towing. However, if frequent shifting does occur while in DRIVE, you can use the AutoStick shift control to manually select a lower gear.

# **RECREATIONAL TOWING (BEHIND MOTORHOME)**

# TOWING THIS VEHICLE BEHIND ANOTHER VEHICLE

### NOTE:

Using a lower gear while operating the vehicle under heavy loading conditions, will improve performance and extend transmission life by reducing excessive shifting and heat buildup. This action will also provide better engine braking.

### AutoStick

 When using the AutoStick shift control, select the highest gear that allows for adequate performance and avoids frequent downshifts. For example, choose "5" if the desired speed can be maintained. Choose "4" or "3" if needed to maintain the desired speed.  To prevent excess heat generation, avoid continuous driving at high RPM. Return to a higher gear or vehicle speed when grade and road conditions allow.

### Cruise Control — If Equipped

- Do not use in hilly terrain or with heavy loads.
- When using the Cruise Control, if you experience speed drops greater than 10 mph (16 km/h), disengage until you can get back to cruising speed.
- Use Cruise Control in flat terrain and with light loads to maximize fuel efficiency.

| Towing Condition   | Wheels OFF the Ground | Four-Wheel Drive Models  |  |
|--|-----------------------|--|--|
| Flat Tow   | NONE                  | See Instructions           Automatic transmission in PARK.           Manual transmission in gear (NOT in NEUTRAL [N]).           Transfer case in (N) Neutral.           Tow in forward direction. |  |
| Dally Tau  | Front                 | NOT ALLOWED  |  |
| Dolly Tow  | Rear                  | NOT ALLOWED  |  |
| On Trailer   | ALL                   | ОК   |  |
| IOTE:<br>Vhen towing your vehicle, always follow applicable state and provincial laws. Contact state and provincial Highway Safety offices for additional details. |                       |  |  |

# RECREATIONAL TOWING — FOUR-WHEEL DRIVE MODELS

### NOTE:

The transfer case must be shifted into (N) Neutral, automatic transmission must be in PARK, and manual transmission must be in gear (NOT in NEUTRAL) for recreational towing.

### CAUTION!

- DO NOT dolly tow any 4WD vehicle. Towing with only one set of wheels on the ground (front or rear) will cause severe transmission and/or transfer case damage. Tow with all four wheels either ON the ground, or OFF the ground (using a vehicle trailer).
- Tow only in the forward direction. Towing this vehicle backwards can cause severe damage to the transfer case.
- Automatic transmissions must be placed in PARK for recreational towing.
- Manual transmissions must be placed in gear (not in NEUTRAL) for recreational towing.
- Before recreational towing, perform the procedure outlined under "Shifting Into (N) Neutral" to be certain that the transfer case is fully in (N) Neutral. Otherwise, internal damage will result.
- Towing this vehicle in violation of the previously listed requirements can cause severe transmission and/or transfer case damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

(Continued)

### CAUTION!

 Do not use a fascia/bumper-mounted clamp-on tow bar on your vehicle. The bumper face bar will be damaged.

# Shifting Into (N) Neutral

Use the following procedure to prepare your vehicle for recreational towing:

### WARNING!

You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the (N) Neutral position without first fully engaging the parking brake. The transfer case (N) Neutral position disengages both the front and rear driveshafts from the powertrain, and will allow the vehicle to roll, even if the automatic transmission is in PARK (or manual transmission is in gear). The parking brake should always be applied when the driver is not in the vehicle.

### CAUTION!

It is necessary to follow these steps to be certain that the transfer case is fully in (N) Neutral before recreational towing to prevent damage to internal parts.

- 1. Bring the vehicle to a complete stop on level ground.
- 2. Press and hold the brake pedal.
- Shift the automatic transmission into NEUTRAL or press the clutch pedal on a manual transmission.
- 4. Turn the engine off.

- 5. Shift the transfer case lever into (N) Neutral.
- 6. Start the engine.
- 7. Shift the transmission into REVERSE.
- Release the brake pedal (and clutch pedal on manual transmissions) for five seconds and ensure that there is no vehicle movement.
- Repeat steps seven and eight with automatic transmission in DRIVE or manual transmission in FIRST gear.
- 10. Turn the engine off.
- 11. Firmly apply the parking brake.
- 12. Shift the transmission into PARK or place manual transmission in gear (NOT in NEUTRAL).

### CAUTION!

Damage to the transmission may occur if the transmission is shifted into PARK with the transfer case in (N) Neutral and the engine running. With the transfer case in (N) Neutral ensure that the engine is OFF before shifting the transmission into PARK.

- 13. Attach the vehicle to the tow vehicle using a suitable tow bar.
- 14. Release the parking brake.

# Shifting Out of (N) Neutral

Use the following procedure to prepare your vehicle for normal usage.

- 1. Bring the vehicle to a complete stop, leaving it connected to the tow vehicle.
- 2. Firmly apply the parking brake.

- 3. Start the engine.
- 4. Press and hold the brake pedal.
- 5. Shift the transmission into NEUTRAL.
- 6. Turn the engine off.
- 7. Shift the transfer case lever to the desired position.

### NOTE:

When shifting the transfer case out of (N) Neutral, the engine should remain off to avoid gear clash.

- 8. Shift the automatic transmission into PARK, or place manual transmission in NEUTRAL.
- 9. Release the brake pedal.
- 10. Disconnect vehicle from the tow vehicle.
- 11. Start the engine.
- 12. Press and hold the brake pedal.
- 13. Release the parking brake.
- 14. Shift the transmission into gear, release the brake pedal (and clutch pedal on manual transmissions), and check that the vehicle operates normally.

# **DRIVING TIPS**

# ON-ROAD DRIVING TIPS

Utility vehicles have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher center of gravity than conventional passenger cars. An advantage of the higher ground clearance is a better view of the road, allowing you to anticipate problems. They are not designed for cornering at the same speeds as conventional passenger cars any more than lowslung sports cars are designed to perform satisfactorily in off-road conditions. Avoid sharp turns or abrupt maneuvers. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle rollover.

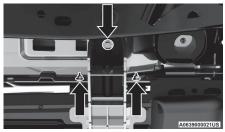
# OFF-ROAD DRIVING TIPS

# Side Step Removal — If Equipped

### NOTE:

Prior to off-road usage, the side steps should be removed to prevent damage if so equipped.

1. Remove both nuts and bolt from the underside of the vehicle for each bracket.



**Underside Nuts** 

2. Remove the side step assembly.

### **Bumper End Cap Removal**

The end caps on your vehicle's front fascia/bumper can be removed by following the steps listed:

### NOTE:

Bumper end caps are removable on steel fascia/ bumpers only.

 Loosen the two bolts that retain the GAWR bracket (Bolts #1 and #2) to the end cap using a T45 Torx bit screwdriver. Do not remove the bolts.







Bolt #2

- 2. Remove the remaining eight bolts.
- 3. Gently remove the end cap from the vehicle and store it where it will not get damaged.
- 4. Repeat this procedure on the other side.

## The Basics Of Off-Road Driving

You will encounter many types of terrain driving offroad. You should be familiar with the terrain and area before proceeding. There are many types of surface conditions: hard-packed dirt, gravel, rocks, grass, sand, mud, snow and ice. Every surface has a different effect on your vehicle's steering, handling and traction. Controlling your vehicle is one of the keys to successful offroad driving, so always keep a firm grip on the steering wheel and maintain a good driving posture. Avoid sudden accelerations, turns or braking. In most cases, there are no road signs, posted speed limits or signal lights. Therefore, you will need to use your own good judgment on what is safe and what is not. When on a trail, you should always be looking ahead for surface obstacles and changes in terrain. The key is to plan your future driving route while remembering what you are currently driving over.

### NOTE:

It is recommended that the Stop/Start system and the Forward Collision Warning (FCW) system (if equipped) be disabled during off-road use.

### WARNING!

 Always wear your seat belt and firmly tie down cargo. Unsecured cargo can become projectiles in an off-road situation.

(Continued)

### WARNING!

 A malfunctioning catalytic converter can reach higher temperatures than in normal operating conditions. This can cause a fire if you drive slowly or park over flammable substances such as dry plants, wood, cardboard, etc. This could result in death or serious injury to the driver, occupants or others.

## When To Use 4L Range

When off-road driving, shift into 4L for additional traction and control on slippery or difficult terrain, ascending or descending steep hills, and to increase low speed pulling power. This range should be limited to extreme situations such as deep snow, mud, steep inclines, or sand where additional low speed pulling power is needed. Vehicle speeds in excess of 25 mph (40 km/h) should be avoided when in 4L.

### CAUTION!

Do not use 4L when operating the vehicle on dry pavement. Driveline hardware damage can result.

# Simultaneous Brake And Throttle Operation

Many off-road driving conditions require the simultaneous use of the brake and throttle (two-footed driving). When climbing rocks, logs, or other stepped objects, using light brake pressure with light throttle will keep the vehicle from jerking or lurching. This technique is also used when you need to stop and restart a vehicle on a steep incline.

# Driving In Snow, Mud And Sand

### SNOW

In heavy snow or for additional control and traction at slower speeds, shift the transmission into a low gear and the transfer case into 4L if necessary. Do not shift to a lower gear than necessary to maintain headway. Over-revving the engine can spin the wheels and traction will be lost. If you start to slow to a stop, try turning your steering wheel no more than a 1/4 turn quickly back and forth, while still applying throttle. This will allow the tires to get fresh traction and help maintain your momentum.

### CAUTION!

On icy or slippery roads, do not downshift at high engine RPM or vehicle speeds, because engine braking may cause skidding and loss of control.

### MUD

Deep mud creates a great deal of suction around the tires and is very difficult to get through. You should use DRIVE, with the transfer case in the 4L position to maintain your momentum. If you start to slow to a stop, try turning your steering wheel no more than a 1/4 turn quickly back and forth for additional traction. Mud holes pose an increased threat of vehicle damage and getting stuck. They are normally full of debris from previous vehicles getting stuck. As a good practice before entering any mud hole, get out and determine how deep it is, if there are any hidden obstacles and if the vehicle can be safely recovered if stuck.

### SAND

Soft sand is very difficult to travel through with full tire pressure. When crossing soft, sandy spots in a trail, maintain your vehicle's momentum and do not stop. The key to driving in soft sand is using the appropriate tire pressure, accelerating slowly, avoiding abrupt maneuvers and maintaining the vehicle's momentum. If you are going to be driving on large soft sandy areas or dunes, reduce your tire pressure to a minimum of 15 psi (103 kPa) to allow for a greater tire surface area. Reduced tire pressure will drastically improve your traction and handling while driving on the soft sand, but you must return the tires to normal air pressure before driving on pavement or other hard surfaces. Be sure you have a way to reinflate the tires prior to reducing the pressure.

### CAUTION!

Reduced tire pressures may cause tire unseating and total loss of air pressure. To reduce the risk of tire unseating, while at a reduced tire pressure, reduce your speed and avoid sharp turns or abrupt maneuvers.

# Crossing Obstacles (Rocks And Other High Points)

While driving off-road, you will encounter many types of terrain. These varying types of terrain bring different types of obstacles. Before proceeding, review the path ahead to determine the correct approach and your ability to safely recover the vehicle if something goes wrong. Keeping a firm grip on the steering wheel, bring the vehicle to a complete stop and then inch the vehicle

forward until it makes contact with the object. Apply the throttle lightly while holding a light brake pressure and ease the vehicle up and over the object.

### WARNING!

Crossing obstacles can cause abrupt steering system loading which could cause you to lose control of your vehicle.

### **USING A SPOTTER**

There are many times where it is hard to see the obstacle or determine the correct path. Determining the correct path can be extremely difficult when you are confronting many obstacles. In these cases have someone guide you over, through, or around the obstacle. Have the person stand a safe distance in front of you where they can see the obstacle, watch your tires and undercarriage, and guide you through.

### **CROSSING LARGE ROCKS**

When approaching large rocks, choose a path which ensures you drive over the largest of them with your tires. This will lift your undercarriage over the obstacle. The tread of the tire is tougher and thicker than the side wall and is designed to take the abuse. Always look ahead and make every effort to cross the large rocks with your tires.

### CAUTION!

- Never attempt to straddle a rock that is large enough to strike your axles or undercarriage.
- Never attempt to drive over a rock which is large enough to contact the door sills.

### CROSSING A RAVINE, GULLY, DITCH, WASH-OUT OR RUT

When crossing a ravine, gully, ditch, washout or a large rut, the angled approach is the key to maintaining your vehicle's mobility. Approach these obstacles at a 45-degree angle and let each tire go through the obstacle independently. You need to use caution when crossing large obstacles with steep sides. Do not attempt to cross any large obstacle with steep sides at an angle great enough to put the vehicle at risk of a rollover. If you get caught in a rut, dig a small trench to the right or left at a 45-degree angle ahead of the front tires. Use the removed dirt to fill the rut ahead of the turnout you just created. You should now be able to drive out following the trench you just created at a 45-degree angle.

#### WARNING!

There is an increased risk of rollover when crossing an obstacle, at any angle, with steep sides.

### **CROSSING LOGS**

To cross a log, approach it at a slight angle (approximately 10 to 15 degrees). This allows one front tire to be on top of the log while the other just starts to climb the log. While climbing the log, modulate your brake and accelerator to avoid spinning the log out from under your tires. Then ease the vehicle off the log using your brakes.

### CAUTION!

Do not attempt to cross a log with a greater diameter than the running ground clearance or the vehicle will become high-centered.

### **GETTING HIGH-CENTERED**

If you get hung up or high-centered on an object, get out of the vehicle and try to determine what the vehicle is hung up on, where it is contacting the underbody and what is the best direction to recover the vehicle. Depending on what you are in contact with, jack the vehicle up and place a few rocks under the tires so the weight is off of the high point when you let the vehicle down. You can also try rocking the vehicle or winching the vehicle off the object.

### CAUTION!

Winching or rocking the vehicle off hard objects increases the risk of underbody damage.

# **Hill Climbing**

Hill climbing requires good judgment and a good understanding of your abilities and your vehicle's limitations. Hills can cause serious problems. Some are just too steep to climb and should not be attempted. You should always feel confident with the vehicle and your abilities. You should always climb hills straight up and down. Never attempt to climb a hill on an angle.

### **BEFORE CLIMBING A STEEP HILL**

As you approach a hill, consider its grade or steepness. Determine if it is too steep. Look to see what the traction is on the hill side trail. Is the trail straight up and down? What is on top and the other side? Are there ruts, rocks, branches or other obstacles on the path? Can you safely recover the vehicle if something goes wrong? If everything looks good and you feel confident, shift the transmission into a lower gear with 4L engaged, and proceed with caution, maintaining your momentum as you climb the hill.

### DRIVING UP HILL

Once you have determined your ability to proceed and have shifted into the appropriate gear, line your vehicle up for the straightest possible run. Accelerate with an easy constant throttle and apply more power as you start up the hill. Do not race forward into a steep grade; the abrupt change of grade could cause you to lose control. If the front end begins to bounce, ease off the throttle slightly to bring all four tires back on the ground. As you approach the crest of the hill, ease off the throttle and slowly proceed over the top. If the wheels start to slip as you approach the crest of a hill, ease off the accelerator and maintain headway by turning the steering wheel no more than a 1/4 turn guickly back and forth. This will provide fresh traction into the surface and will usually provide enough traction to complete the climb. If you do not make it to the top, place the vehicle in REVERSE and back straight down the grade using engine resistance along with the vehicle brakes.

### WARNING!

Never attempt to climb a hill at an angle or turn around on a steep grade. Driving across an incline increases the risk of a rollover, which may result in severe injury.

### **DRIVING DOWNHILL**

Before driving down a steep hill, you need to determine if it is too steep for a safe descent. What is the surface traction? Is the grade too steep to maintain a slow, controlled descent? Are there obstacles? Is it a straight descent? Is there plenty of distance at the base of the hill to regain control if the vehicle descends to fast? If you feel confident in your ability to proceed, then make sure you are in 4L and proceed with caution. Allow engine braking to control the descent and apply your brakes, if necessary, but do not allow the tires to lock.

### WARNING!

Do not descend a steep grade in NEUTRAL. Use vehicle brakes in conjunction with engine braking. Descending a grade too fast could cause you to lose control and be seriously injured or killed.

### DRIVING ACROSS AN INCLINE

If at all possible, avoid driving across an incline. If it is necessary, know your vehicle's abilities. Driving across an incline places more weight on the downhill wheels, which increases the possibilities of a downhill slide or rollover. Make sure the surface has good traction with firm and stable soils. If possible, transverse the incline at an angle heading slightly up or down.

#### WARNING!

Driving across an incline increases the risk of a rollover, which may result in severe injury.

### IF YOU STALL OR BEGIN TO LOSE HEADWAY

If you stall or begin to lose headway while climbing a steep hill, allow your vehicle to come to a stop and immediately apply the brake. Restart the engine and shift into REVERSE. Back slowly down the hill allowing engine braking to control the descent and apply your brakes, if necessary, but do not allow the tires to lock.

### WARNING!

If the engine stalls or you lose headway or cannot make it to the top of a steep hill or grade, never attempt to turn around. To do so may result in tipping

### WARNING!

and rolling the vehicle, which may result in severe injury. Always back carefully straight down a hill in REVERSE. Never back down a hill in NEUTRAL using only the vehicle brakes. Never drive diagonally across a hill, always drive straight up or down.

# **Driving Through Water**

Extreme care should be taken crossing any type of water. Water crossings should be avoided, if possible, and only be attempted when necessary in a safe, responsible manner. Only drive through areas which are designated and approved. Tread lightly and avoid damage to the environment. Know your vehicle's abilities and be able to recover it if something goes wrong. Never stop or shut a vehicle off when crossing deep water unless you ingested water into the engine air intake. If the engine stalls, do not attempt to restart it. Determine if it has ingested water first. The key to any crossing is low and slow. Shift into FIRST gear (manual transmission), or DRIVE (automatic transmission), with the transfer case in the 4L position and proceed very slowly with a constant slow speed of {3 to 5 mph (5 to 8 km/h) maximum} and light throttle. Keep the vehicle moving; do not try to accelerate through the crossing. After crossing any water higher than the bottom of the axle differentials, inspect all of the vehicle fluids for signs of water ingestion.

### CAUTION!

 Water ingestion into the axles, transmission, transfer case, engine or vehicle interior can occur if you drive too fast or through too deep of water.

(Continued)

### CAUTION!

Water can cause permanent damage to engine, driveline or other vehicle components, and your brakes will be less effective once wet and/or muddy.

 When driving through water, do not exceed 5 mph (8 km/h). Always check water depth before entering as a precaution, and check all fluids afterward. Driving through water may cause damage that may not be covered by the New Vehicle Limited Warranty.

### BEFORE YOU CROSS ANY TYPE OF WATER

As you approach any type of water, you need to determine if you can cross it safely and responsibly. If necessary, get out and walk through the water or probe it with a stick. You need to be sure of its depth, approach angle, current and bottom condition. Be careful of murky or muddy waters; check for hidden obstacles. Make sure you will not be intruding on any wildlife, and you can recover the vehicle if necessary. The key to a safe crossing is the water depth, current and bottom conditions. On soft bottoms, the vehicle will sink in, effectively increasing the water level on the vehicle. Be sure to consider this when determining the depth and the ability to safely cross.

### CROSSING PUDDLES, POOLS, FLOODED AREAS OR OTHER STANDING WATER

Puddles, pools, flooded or other standing water areas normally contain murky or muddy waters. These water types normally contain hidden obstacles and make it difficult to determine an accurate water depth, approach angle, and bottom condition. Murky or muddy water holes are where you want to hook up tow straps prior to entering. This makes for a faster, cleaner and easier vehicle recovery. If you are able to determine you can safely cross, than proceed using the low and slow method.

### CAUTION!

Muddy waters can reduce the cooling system effectiveness by depositing debris onto the radiator.

# CROSSING DITCHES, STREAMS, SHALLOW RIVERS OR OTHER FLOWING WATER

Flowing water can be extremely dangerous. Never attempt to cross a fast running stream or river even in shallow water. Fast moving water can easily push your vehicle downstream, sweeping it out of control. Even in very shallow water, a high current can still wash the dirt out from around your tires putting you and your vehicle in jeopardy. There is still a high risk of personal injury and vehicle damage with slower water currents in depths greater than the vehicle's running ground clearance. You should never attempt to cross flowing water which is deeper than the vehicle's running ground clearance. Even the slowest current can push the heaviest vehicle downstream and out of control if the water is deep enough to push on the large surface area of the vehicle's body. Before you proceed, determine the speed of the current, the water's depth. approach angle, bottom condition and if there are any obstacles. Then cross at an angle heading slightly upstream using the low and slow technique.

### WARNING!

Never drive through fast moving deep water. It can push your vehicle downstream, sweeping it out of control. This could put you and your passengers at risk of injury or drowning.

## After Driving Off-Road

Off-road operation puts more stress on your vehicle than does most on-road driving. After going off-road, it is always a good idea to check for damage. That way you can get any problems taken care of right away and have your vehicle ready when you need it.

- Completely inspect the underbody of your vehicle. Check tires, body structure, steering, suspension, and exhaust system for damage.
- Inspect the radiator for mud and debris and clean as required.
- Check threaded fasteners for looseness, particularly on the chassis, drivetrain components, steering, and suspension. Retighten them, if required, and torque to the values specified in the Service Manual.
- Check for accumulations of plants or brush. These things could be a fire hazard. They might hide damage to fuel lines, brake hoses, axle pinion seals, and propeller shafts.
- After extended operation in mud, sand, water, or similar dirty conditions, have the radiator, fan, brake rotors, wheels, brake linings, and axle yokes inspected and cleaned as soon as possible.

#### NOTE:

Inspect the clutch vent holes in the manual transmission bell housing for mud and debris and clean as required.

### WARNING!

Abrasive material in any part of the brakes may cause excessive wear or unpredictable braking. You might not have full braking power when you need it to prevent a collision. If you have been operating your vehicle in dirty conditions, get your brakes checked and cleaned as necessary.

 If you experience unusual vibration after driving in mud, slush or similar conditions, check the wheels for impacted material. Impacted material can cause a wheel imbalance and freeing the wheels of it will correct the situation.

# MULTIMEDIA

# **UCONNECT SYSTEMS**

For detailed information about your Uconnect 5 NAV With 12.3-inch Display, refer to your Uconnect Radio Instruction Manual.

### NOTE:

Uconnect screen images are for illustration purposes only and may not reflect exact software for your vehicle.

# **CYBERSECURITY**

Depending on applicability, your vehicle may be able to send or receive information from a wired or wireless network. This information allows systems and features in your vehicle to function properly.

The risk of unauthorized and unlawful access to your vehicle systems may still exist, even if the most recent version of vehicle software (such as Uconnect software) is installed.

### WARNING!

- ONLY insert trusted devices/components into your vehicle. Media of unknown origin could possibly contain malicious software, and if installed in your vehicle, it may increase the possibility for vehicle systems to be breached.
- As always, if you experience unusual vehicle behavior, take your vehicle to an authorized dealer immediately.

### NOTE:

To help further improve user experience, features, stability, etc., and minimize the potential risk of a security breach, vehicle owners should routinely check www.driveuconnect.com (US Residents) or www.driveuconnect.ca (Canadian Residents) to learn about available Uconnect software updates.

# **UCONNECT SETTINGS**

The Uconnect system uses a combination of buttons on the touchscreen and buttons on the faceplate located on the center of the instrument panel. These buttons allow you to access and change the Customer Programmable Features. Many features can vary by vehicle.

Buttons on the faceplate are located below and/or beside the Uconnect system in the center of the instrument panel. In addition, there is a SCROLL/ENTER control knob located on the right side. Turn the control knob to scroll through menus and change settings. Push the center of the control knob one or more times to select or change a setting.

Your Uconnect system may also have SCREEN OFF and MUTE buttons on the faceplate.

Push the SCREEN OFF button on the faceplate to turn off the Uconnect screen. Push the button again or tap the screen to turn the screen on.

Press the Back Arrow button to exit out of a Menu or certain option on the Uconnect system.

# CUSTOMER PROGRAMMABLE FEATURES



Uconnect 5 NAV With 12.3-inch Display Touchscreen And Faceplate Buttons

- 1 Uconnect Buttons On The Touchscreen
- 2 Uconnect Buttons On The Faceplate

### For The Uconnect 5 NAV With 12.3-inch Display

Press the Vehicle button, then press the Settings tab at the top of the touchscreen. In this menu, the Uconnect system allows you to access all of the available programmable features.

### NOTE:

- Depending on the vehicle's options, feature settings may vary.
- All settings should be changed with the ignition in the ON/RUN position.

When making a selection, press the button on the touchscreen to enter the desired menu. Once in the desired menu, press and release the preferred setting option until a check mark appears next to the setting, showing that setting has been selected. Once the setting is complete, press the Vehicle button to exit to the screen. Pressing the Up or Down Arrow button on the right side of the screen will allow you to toggle up or down through the available settings.

### Display

When the Display button is pressed on the touchscreen, the system will display the options related to the theme (if equipped), brightness, and color of the touchscreen. The available settings are:

### NOTE:

| Setting Name                  | Description   |
|-------------------------------|---|
| Language                      | This setting will change the language of the Uconnect system and Instrument Cluster<br>Display. The available languages are Español (Mexico), English (United States), Ital-<br>iano, and Français (Canada).  |
| Display Mode                  | This setting will allow you to set the brightness manually or have the system set it auto-<br>matically. The "Auto" setting has the system automatically adjust the display bright-<br>ness. The "Manual" setting will allow the user to adjust the brightness of the display.                      |
| Theme Mode                    | This setting will allow you to adjust the brightness of your theme. Setting options are "Light", "Dark" and "Auto". Select to show Themes in Light or Dark mode. "Auto" changes the theme with the headlights.  |
| Set Theme                     | This setting will allow you to change the display theme.  |
| Units                         | This setting will allow you to customize the units for "Speed" (mph or km/h), "Dis-<br>tance" (mi or km), "Fuel Consumption" (MPG [US], MPG [UK], L/100 km, or km/L),<br>"Pressure" (psi, kPa, or bar), "Temperature" (°C or °F), and "Torque" (Nm or Ib-ft) units<br>of measurement independently. |
| Touchscreen Beep              | This setting will allow you to turn the touchscreen beep on or off.   |
| Show Main Category Bar Labels | This setting will allow the main category bar labels to be shown on or off.   |

| Setting Name                                 | Description  |
|--|--|
| Display Brightness Nighttime                 | Only available if Display Mode is set to "Manual". This setting will allow you to adjust the "Brightness Nighttime" setting. Selectable options are 1 through 10.                            |
| Display Brightness Daytime                   | Only available if Display Mode is set to "Manual". This setting will allow you to adjust the "Brightness Daytime" setting. Selectable options are 1 through 10.                              |
| Cluster Options                              | This settings allows users to select which content to display in each customizable area on the Instrument Cluster Display.   |
| Warning Cluster Buzzer Volume                | This setting will let you adjust the Warning Cluster Buzzer Volume. Selectable options are "Low", "Mid", and "High".   |
| Navigation Turn-by-Turn Displayed in Cluster | This setting will display Navigation prompts in the Instrument Cluster Display.  |
| Phone Pop-ups Displayed In Cluster           | This setting will display smartphone notifications and messages in the Instrument Cluster Display.   |
| Auto Launch with Off-Road+                   | This setting will determine how the Off-Road feature is launched through the radio when turning the vehicle on. The options are "Off", "Forward Camera" (if equipped), and "Off Road Pages". |

## My Profile

When the My Profile button is pressed on the touchscreen, the system displays options related to the vehicle's profiles.

### NOTE:

| Setting Name                 | Description  |  |
|------------------------------|--|--|
| Language                     | This setting will change the language of the Uconnect system and Instrument Cluster<br>Display. The available languages are Español (Mexico), English (United States), Ital-<br>iano, and Français (Canada). |  |
| Display Mode                 | This setting will adjust the display for the radio to "Auto" or "Manual". "Manual" allows for more customization with the radio display.   |  |
| Display Brightness Nighttime | This setting will allow you to adjust the "Brightness Nighttime" setting. Selectable options are 1 through 10.   |  |

| Setting Name  | Description   |
|---|---|
| Display Brightness Daytime                                    | This setting will allow you to adjust the "Brightness Daytime" setting. Selectable options are 1 through 10.  |
| Theme Mode  | This setting will allow you to adjust the brightness of your theme. Setting options are<br>"Light", "Dark" and "Auto". Select to show Themes in Light or Dark mode. "Auto"<br>changes the theme with the headlights.  |
| Set Theme   | This setting will allow you to change the display theme.  |
| Units   | This setting will allow you to customize the units for "Speed" (mph or km/h), "Dis-<br>tance" (mi or km), "Fuel Consumption" (MPG [US], MPG [UK], L/100 km, or km/L),<br>"Pressure" (psi, kPa, or bar), "Temperature" (°C or °F), and "Torque" (Nm or Ib-ft) units<br>of measurement independently.   |
| Touchscreen Beep  | This setting will allow you to turn the touchscreen beep on or off.   |
| Show Main Category Bar Labels                                 | This setting will allow the main category bar labels to be shown on or off.   |
| Time Format   | This setting will allow you to set the time format (AM/PM). Sync Time With GPS must be "Off" for this setting to be available. The "12 hrs" setting will set the time to a 12-hour format. The "24 hrs" setting will set the time to a 24-hour format.  |
| Voice Options   | This setting will allow you to change the voice options for the radio to "Male" or<br>"Female".   |
| Wake Up Word  | This setting will allow you to set the system "Wake Up" word. The available options are "Off", "Hey, Uconnect", and "Hey, Jeep".  |
| Voice Barge-in  | This setting will allow Voice Barge-in to be turned on or off.  |
| Show Command List   | This setting will allow the Command List to be shown on or off.   |
| Navigation Settings   | This setting will redirect to the list of Navigation settings. Refer to your Uconnect Radio<br>Instruction Manual for further information.  |
| Auto-On Driver Heated/Ventilated Seat & Heated Steering Wheel | This setting will activate the vehicle's comfort system and heated seats or heated steering wheel when the vehicle is remote started or ignition is started. The "Off" setting will not activate the comfort systems. The "Remote Start" setting will only activate the comfort systems when using Remote Start. The "All Start" setting will activate the comfort systems whenever the vehicle is started. |
| Radio Off Delay   | This setting will keep certain electrical features running after the engine is turned off.<br>When any door is opened, the electronics will deactivate. The available settings are<br>"0 min" and "20 min".   |

| Setting Name                                 | Description  |
|--|--|
| Radio Off With Door                          | This setting will allow you to determine if the radio shuts off when any of the doors are opened.  |
| Audio Settings                               | This setting will open the submenu, containing the audio settings. For more informa-<br>tion about audio settings, please refer to the Uconnect Radio Instruction Manual.  |
| App Drawer Favoriting Pop-ups                | This setting will allow you to favorite app drawer pop-ups with "On" and "Off" options.  |
| App Drawer Unfavoritings Pop-ups             | This setting will allow you to unfavorite app drawer pop-ups with "On" and "Off" options.  |
| New Text Message Pop-ups                     | This setting will allow you to have pop-up notifications for new text messages. Setting options are "On" and "Off".  |
| Missed Calls Message                         | This setting will allow you to have pop-up notifications for missed calls. Setting options are "On" and "Off".   |
| Navigation Pop-ups                           | This setting will allow you to have pop-up notifications for Navigation. Setting options are "On" and "Off".   |
| Reset App Drawer to Default Order            | This setting will reset the app drawer to its factory default layout.  |
| Restore Settings to Default                  | This setting will return all the previously changed settings to their factory defaults.  |
| More Profile Options                         | This setting will give access to more profile options.   |
| Warning Cluster Buzzer Volume                | This setting will let you adjust the Warning Cluster Buzzer Volume. Selectable options are "Low", "Mid", and "High".   |
| Cluster Options                              | This setting will display options for the cluster using the Uconnect touchscreen.<br>Options include "Trip B On Cluster", "Custom Areas on Cluster", and "Widget List".  |
| Auto-On Comfort                              | This setting will activate the vehicle's comfort systems and heated seats or heated steering wheel when the vehicle is remote started or ignition is started. The "Off" setting will not activate the comfort systems. The "Remote Start" setting will only activate the comfort systems when using Remote Start. The "All Start" setting will activate the comfort systems whenever the vehicle is started. |
| Navigation Turn-by-Turn Displayed in Cluster | This setting will display Navigation prompts in the Instrument Cluster Display.  |
| Phone Pop-ups Displayed In Cluster           | This setting will display smartphone notifications and messages in the Instrument Cluster Display.   |

# Safety/Driving Assistance

When the Safety/Driving Assistance button is pressed on the touchscreen, the system displays the options related to the vehicle's safety settings. These options will differ depending on the features equipped on the vehicle. The settings may display in list form or within subfolders on the screen. To access a subfolder, select the desired folder; the available options related to that feature will then display on the screen.

### NOTE:

| Setting Name  | Description   |
|---|---|
| Forward Collision Warning – Located In Automatic Emergency Braking Submenu                | This setting will turn the Forward Collision Warning (FCW) system on or off. The "Off" setting will deactivate the FCW system. The "Warning Only" setting will provide only an audible chime when a collision is detected. The "Warning + Active Braking" setting will provide an audible chime and apply some brake pressure when a collision is detected.   |
| Forward Collision Warning Sensitivity – Located In Automatic Emergency Braking<br>Submenu | This setting will change the distance at which the Forward Collision Warning alert sounds. The "Medium" setting will have the FCW system signal when an object is in view, and the possibility of a collision is detected. The "Near" setting will have the FCW system signal when the object is closer to the vehicle. The "Far" setting will have the FCW system signal when an object is at a far distance from the vehicle. |
| Active Driving Assist Steering Wheel Vibration  | This setting will turn the Active Driving Assist Steering Wheel Vibration on or off.  |
| ParkSense   | This setting will change the type of ParkSense alert when a close object is detected<br>and can provide both an audible chime and a visual display.   |
| Front ParkSense Volume  | This setting adjusts the volume of the Front ParkSense system. The available settings are "Low", "Medium", and "High".  |
| Rear ParkSense Volume   | This setting adjusts the volume of the Rear ParkSense system. The available settings are "Low", "Medium", and "High".   |
| Rear ParkSense Braking Assist   | This setting will provide braking assistance if the Rear ParkSense system senses a collision with an object.  |
| Blind Spot Alert  | This setting will change the type of alert provided when an object is detected in the vehicle's blind spot. The "Off" setting will turn off Blind Spot Alert. The "Lights" setting will activate the Blind Spot Alert lights on the outside mirrors. The "Lights & Chime" setting will activate both the lights on the outside mirrors and an audible chime.  |
| Traffic Sign Recognition  | This setting will turn Traffic Sign Recognition on or off.  |
| Traffic Sign Assist   | This setting will turn Traffic Sign Assist on or off.   |

| Setting Name                            | Description  |
|---|--|
| Traffic Sign Assist Warning             | This setting will allow you to set the warning type related to the traffic sign. The available options are "Off", "Visual", and "Visual + Chime".  |
| New Speed Zone Indication               | This setting will allow you to set if the system will warn you that the speed limit has<br>changed in an area. The available options are "Off", "Visual", and "Visual + Chime".  |
| Drowsy Driver Alert                     | This setting will monitor the driver's driving habits and warn you of any changes, indi-<br>cating that the driver may be drowsy. The available options are "On" and "Off".  |
| Highway Assist Steering Wheel Vibration | This setting will customize the Highway Assist Steering Wheel Vibration. The available options are "On" and "Off".   |
| Tire Fill Assist                        | This setting will turn Tire Fill Assist on or off.   |
| Hill Start Assist                       | This setting will turn the Hill Start Assist system on or off.   |
| Intelligent Speed Options               | This setting will let you customize your Intelligent Speed Options. Selectable options are "Manual Confirm" and "Auto Confirm".  |
| New Speed Zone Indication               | This setting will allow you to set if the system will warn you that the speed limit has<br>changed in an area. The available options are "Off", "Visual", and "Visual + Chime".  |
| Rear Seat Alert                         | When this setting is turned on and the rear doors are opened while the engine is run-<br>ning, or if the engine is turned on within 10 minutes of the door opening, a message<br>will appear to check the rear seat when the vehicle is powered OFF. |
| Front Passenger Airbag                  | This setting will let you enable or disable the Front Passenger Airbag.  |
| Power Side Step                         | This setting will activate the Power Side Step. The "Auto" setting will lower the step when the door is opened and retract it once the door is closed. The "Off" setting will deactivate the feature.  |

# Clock & Date

When the Clock & Date button is pressed on the touchscreen, the system displays the different options related to the vehicle's internal clock.

### NOTE:

| Setting Name                         | Description   |
|--------------------------------------|---|
| Sync Time With GPS                   | This setting will sync the time to the GPS receiver in the system. The system will con-<br>trol the time via the GPS location.  |
| Set Time                             | This setting will allow you to set the hours and minutes. Sync Time With GPS must be off for this setting to be available. The "+" setting will increase the hours or minutes. The "-" setting will decrease the hours or minutes.  |
| Time Format                          | This setting will allow you to set the time format (AM/PM). Sync Time With GPS must be off for this setting to be available. The "12 hrs" setting will set the time to a 12-hour format. The "24 hrs" setting will set the time to a 24-hour format. You will also be able to adjust the clock. |
| Set Date                             | This setting will allow you to set the date.  |
| Show Time in Status Bar              | This setting will place the time in the radio's status bar.   |
| Show Time and Date During Screen Off | This setting will allow you to show the time and date while the screen is off. Available options are "On" and "Off".  |

### Phone/Bluetooth®

When the Phone/Bluetooth® button is pressed on the touchscreen, the system displays the options related to Bluetooth® connectivity from an external audio device or smartphone. The list of paired audio devices or smartphones can be accessed from this menu.

### NOTE:

Depending on the vehicle's options, feature settings may vary.

| Setting Name                       | Description   |
|------------------------------------|---|
| Device Manager                     | This setting will open the Device Manager main screen.  |
| Do Not Disturb All                 | This setting will open the Do Not Disturb All Settings menu. The available options are "On" and "Off".            |
| Enable Two Active Phones           | This setting will enable or disable two active phones within the vehicle. The setting options are "On" and "Off". |
| Phone Pop-Ups Displayed In Cluster | This setting will activate phone message pop-ups in the Instrument Cluster Display.                               |

### Voice

When the Voice button is pressed on the touchscreen, the system displays the options related to the vehicle's Voice Recognition feature.

### NOTE:

| Setting Name      | Description   |
|-------------------|---|
| Voice Options     | This setting will allow you to change the system's voice to either "Male" or "Female".  |
| Wake Up Word      | This setting will allow you to set the system's "Wake Up" word. The available options are "Off", "Hey, Uconnect", and "Hey, Jeep".  |
| Voice Barge-In    | This setting allows you to respond to a Voice Response before the statement is com-<br>pleted by the system. The available options are "On" and "Off".  |
| Show Command List | This setting will allow you to turn the Command List on or off. The "Always" setting will<br>always show the Command List. The "With Help" setting will show the Command List<br>and provide a brief description of what the command does. The "Never" setting will<br>turn the Command List off. |

## Navigation

When the Navigation button is pressed on the touchscreen, the system displays options related to the vehicle's built-in Navigation system. These settings can change which icons display on the map, how "time to arrival is calculated", and route types.

For more information on Navigation and settings, refer to your Uconnect Radio Instruction Manual.

### Camera

When the Camera button is pressed on the touchscreen, the system displays the options related to the vehicle's camera features.

### NOTE:

Depending on the vehicle's options, feature settings may vary.

| Setting Name                             | Description   |
|--|---|
| ParkView Backup Camera Delay             | This setting will add a timed delay to the ParkView Backup Camera when shifting out of REVERSE. |
| ParkView Backup Camera Active Guidelines | This setting will turn the ParkView Backup Camera Active Guidelines on or off.                  |
| ParkView Backup Camera Fixed Guidelines  | This setting will turn the ParkView Backup Camera Fixed Guidelines on or off.                   |
| Forward Facing Camera Guidelines         | This setting will turn the Forward Facing Camera Guidelines on or off.                          |

### **Mirrors & Wipers**

When the Mirrors & Wipers button is pressed on the touchscreen, the system displays the option related to the vehicle's mirrors and wipers.

### NOTE:

| Setting Name           | Description   |
|------------------------|---|
| Headlights With Wipers | This setting will turn the headlights on when the wipers are activated. |

# Lights

When the Lights button is pressed on the touchscreen, the system displays the options related to the vehicle's exterior and interior lights.

### NOTE:

- When the "Daytime Running Lights" feature is selected, the daytime running lights can be turned on or off. This feature is only allowed by law in the country of the vehicle purchase.
- Depending on the vehicle's options, feature settings may vary.

| Setting Name            | Description  |
|-------------------------|--|
| Headlight Off Delay     | This setting will allow you to set the amount of time it takes for the headlights to shut off after the vehicle is turned off. The available settings are "0 sec", "30 sec", "60 sec", and "90 sec". |
| Illuminated Approach    | This setting will allow you to set the amount of time it takes for the headlights to shut off after the vehicle is unlocked. The available settings are "0 sec", "30 sec", "60 sec", and "90 sec".   |
| Headlights With Wipers  | This setting will turn the headlights on when the wipers are activated.  |
| Auto Dim High Beams     | This setting will allow you to turn the Auto Dim High Beams on or off.   |
| Daytime Running Lights  | This setting will allow you to turn the Daytime Running Lights on or off.  |
| Flash Lights With Lock  | This setting will allow you to turn the flashing of the lights when the Lock button is pushed on the key fob on or off.  |
| Interior Ambient Lights | This setting will allow you to turn the Interior Ambient Lights on or off.   |

# Doors & Locks

When the Doors & Locks button is pressed on the touchscreen, the system displays the options related to locking and unlocking the vehicle's doors.

### NOTE:

| Setting Name                 | Description  |
|------------------------------|--|
| Auto Door Locks              | This setting will allow you to change if the doors lock automatically when the vehicle reaches 15 mph (24 km/h).   |
| Auto Unlock On Exit          | This setting will unlock the doors when any of the doors are opened from the inside.   |
| Flash Lights With Lock       | This setting will allow you to turn the flashing of the lights when the Lock button is pushed on the key fob on or off.  |
| Sound Horn With Lock         | This setting will sound the horn when the Lock button is pushed on the key fob. The "Off" setting will not sound the horn when the Lock button is pushed. The "1st Press" setting will sound the horn when the Lock button is pushed once. The "2nd Press" setting will sound the horn when the Lock button is pushed twice. |
| Sound Horn With Remote Start | This setting will sound the horn when the remote start is activated from the key fob.  |
| 1st Press Of Key Fob Unlocks | This setting will change how many pushes of the Unlock button on the key fob are needed to unlock all the doors. The "Driver Door" setting will only unlock the driver door on the first push on the Unlock button. The "All Doors" setting will unlock all doors with only one push of the Unlock button.                   |
| Passive Entry                | This setting will allow you to turn the Passive Entry feature (Keyless Enter 'n ${\rm Go}^{\rm TM}$ ) on or off.   |

# Seats & Comfort

When Seats & Comfort button is pressed on the touchscreen, the system displays the option related to the vehicle's comfort systems when remote start has been activated or the vehicle has been started.

### NOTE:

Depending on the vehicle's options, feature settings may vary.

| Setting Name | Description   |
|--------------|---|
|              | This setting will activate the vehicle's comfort system and heated seats or heated steering wheel when the vehicle is remote started or ignition is started. The "Off" setting will not activate the comfort systems. The "Remote Start" setting will only activate the comfort systems when using Remote Start. The "All Start" setting will activate the comfort systems whenever the vehicle is started. |

### **AUX Switches**

When the AUX Switches button is pressed on the touchscreen, the system displays the option related to the four vehicle AUX switches.

### NOTE:

| Setting Name | Description   |
|--------------|---|
|              | This setting will adjust the type and power source for the four vehicle AUX switches.<br>There are two types: "Latching" and "Momentary". The power source for the AUX<br>switches can either be set to run off the "Battery" or from the "Ignition". In addition to<br>setting the type and power source, you can set if the vehicle will recall the previous<br>state at which the AUX switches were set. The Recalled Last State setting can be set to<br>"On" or "Off". Last state conditions are met only if the type is set to Latching and the<br>power source is set to Ignition. |

# **Key Off Options**

After pressing the Key Off Options button on the touchscreen, the following settings will be available:

### NOTE:

Depending on the vehicle's options, feature settings may vary.

| Setting Name                  | Description   |
|-------------------------------|---|
| Doors On Key Off Power Delay  | This setting will keep certain electrical features running after the engine is turned on.<br>When any door is opened, the electronics will deactivate. The available settings are<br>"0 sec", "45 sec", "5 min", and "10 min".  |
| Doors Off Key Off Power Delay | This setting will keep certain electrical features running after the engine is turned off.<br>When any door is opened, the electronics will deactivate. The available settings are<br>"0 sec", "45 sec", "5 min", and "10 min". |
| Headlight Off Delay           | This setting will allow you to set the amount of time it takes for the headlights to shut off after the vehicle is turned off. The available settings are "0 sec", "30 sec", "60 sec", and "90 sec".                            |

### Audio

When the Audio button is pressed on the touchscreen, the system displays options related to the vehicle's sound system. These settings can change the audio location within the vehicle, adjust the bass or treble levels, and auto-play settings from an audio device or smartphone.

### NOTE:

| Setting Name          | Description   |
|-----------------------|---|
| Balance/Fade          | This setting will adjust audio levels from specific speakers in the front/back and left/<br>right of the vehicle. The Speaker icon can be moved to set audio location.                      |
| Equalizer             | This setting will adjust the "Bass", "Mid", and "Treble" ranges of the audio.   |
| Speed Adjusted Volume | This setting will adjust audio volume as speeds increase. At a higher setting, the volume will increase more as the vehicle speeds up. The available settings are "Off", "1", "2", and "3". |

| Setting Name      | Description  |  |
|-------------------|--|--|
| AUX Volume Offset | This setting will tune the audio levels from a device connected through the AUX port. The available settings are "+" and "". |  |
| Auto Play         | This setting will automatically begin playing audio from a connected device.   |  |
| Surround Sound    | This setting will turn the Surround Sound system on or off.  |  |
| Loudness          | This setting will improve sound quality at lower volumes when enabled.   |  |

## SiriusXM® Setup

When the SiriusXM® Setup button is pressed on the touchscreen, the system displays the options related to SiriusXM® satellite radio. These settings can be used to skip specific radio channels and restart favorite songs from the beginning.

#### NOTE:

- A subscription to SiriusXM® satellite radio is required for these settings to be functional.
- Depending on the vehicle's options, feature settings may vary.

| Setting Name                             | Description  |  |
|--|--|--|
| SiriusXM® Account, Profile, And Settings | This setting will redirect you to the SiriusXM $\ensuremath{\mathbb{R}}$ Settings menu within the SiriusXM $\ensuremath{\mathbb{R}}$ menu. |  |
| Block Explicit                           | This setting will skip over content labeled as explicit. The available settings are "On" and "Off".  |  |

#### 216 MULTIMEDIA

### Reset

When the Reset button is pressed on the touchscreen, the system displays the options related to resetting the Uconnect system back to its default settings. These settings can clear personal data and reset selected settings from other menus.

#### NOTE:

Depending on the vehicle's options, feature settings may vary.

| Setting Name                      | Description  |  |
|-----------------------------------|--|--|
| Reset App Drawer To Default Order | This setting will reset the app drawer to its factory default layout.  |  |
| Restore Apps                      | This setting will restore all installed apps. This feature is used if there is an issue using<br>or installing apps.                               |  |
| Restore Settings to Default       | This setting will return all the previously changed settings to their factory defaults.  |  |
| Clear Personal Data               | This setting will display a pop-up that gives you the option to clear all personal data from the system, including Bluetooth® devices and presets. |  |

### System Information

When the System Information button is pressed on the touchscreen, the system displays the radio system information.

#### NOTE:

Depending on the vehicle's options, feature settings may vary.

| Setting Name        | Description  |  |
|---------------------|--|--|
| Software Licenses   | This will display the software licensing information screen.   |  |
| Version Information | When this feature is selected, a Version Information screen will appear, displaying information about the version of your radio. |  |
| License Information | When this feature is selected, a License Information screen will appear, displaying the licensing information of your radio.     |  |

## STEERING WHEEL AUDIO CONTROLS — **IF EQUIPPED**

The remote sound system controls are located on the rear surface of the steering wheel at the three and nine o'clock positions.



#### **Remote Sound System Controls**

The right-hand control is a rocker-type switch with a push button in the center and controls the volume and mode of the sound system. Pushing the top of the rocker switch will increase the volume, and pushing the bottom of the rocker switch will decrease the volume.

Pushing the right-hand control's center button will make the radio switch between the various modes available (AM/FM/SXM or Media, etc.).

The left-hand control is a rocker-type switch with a push button in the center. The function of the left-hand control is different depending on which mode you are in. The following describes the left-hand control operation in each mode:

## RADIO OPERATION

Pushing the top of the switch will seek up for the next available station and pushing the bottom of the switch will seek down for the next available station

The button located in the center of the left-hand control will tune to the next preset station that you have programmed in the radio preset button.

## MEDIA MODE

Pushing the top of the switch once goes to the next track on the selected media (AUX/USB/Bluetooth®). Pushing the bottom of the switch once goes to the beginning of the current track, or to the beginning of the previous track if it is within eight seconds after the current track begins to play.

## **RADIO OPERATION AND MOBILE PHONES**

Under certain conditions, the mobile phone being on in your vehicle can cause erratic or noisy performance from your radio. This condition may be lessened or eliminated by repositioning the mobile phone within the vehicle. This condition is not harmful to the radio. If your radio performance does not satisfactorily improve from repositioning the mobile phone, it is recommended that the volume be turned down or off during mobile phone operation when not using the Uconnect system.

## REGULATORY AND SAFETY INFORMATION

#### US/CANADA

Exposure to Radio Frequency Radiation

The radiated output power of the internal wireless radio is far below the FCC and IC radio frequency exposure limits. Nevertheless, the wireless radio will be used in such a manner that the radio is 8 inches (20 cm) or further from the human body.

The internal wireless radio operates within guidelines found in radio frequency safety standards and recommendations, which reflect the consensus of the scientific community.

The radio manufacturer believes the internal wireless radio is safe for use by consumers. The level of energy emitted is far less than the electromagnetic energy emitted by wireless devices such as mobile phones. However, the use of wireless radios may be restricted in some situations or environments, such as aboard airplanes. If you are unsure of restrictions, you are encouraged to ask for authorization before turning on the wireless radio  $\Box$  page 352.

## **OFF-ROAD PAGES** — IF EQUIPPED

If your vehicle is equipped with Off-Road Pages, it will provide you vehicle status information while operating on off-road conditions. It supplies information relating to the status of the drivetrain, transfer case, coolant/oil gauges, pitch and roll of the vehicle, and access to the trailcam system.

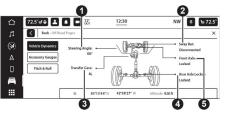
To access Off-Road Pages, press the Off Road button on the touchscreen, and then press "Launch Off-Road".

## VEHICLE DYNAMICS

The Vehicle Dynamics page displays information concerning the dynamics of the vehicle.

The following information is displayed:

- Steering angle in degrees
- Status of Transfer Case
- Status of the Rear Axle
- Status of the Front Axle
- Status of the Sway Bar



#### Vehicle Dynamics Menu 2WD/4WD

- 1 Steering Angle
- 2 Sway Bar
- 3 Transfer Case Status
- $4 \operatorname{Rear} \operatorname{Axle} \operatorname{Locker} \operatorname{Status}$
- 5 Front Axle Locker Status

## ACCESSORY GAUGE

The Accessory Gauge page displays the current status of the vehicle's Coolant Temperature, Oil Temperature, Oil Pressure (Gas Vehicles Only), Transmission Temperature (Automatic Transmissions Only), and Battery Voltage.

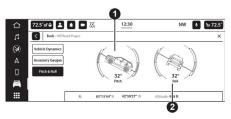


#### Accessory Gauges Menu 2WD/4WD

- 1 Oil Temperature
- 2 Coolant Temperature
- 3 Oil Pressure (Gas Vehicles Only)
- 4 Transmission Temperature (Automatic Transmissions Only)
- 5 Battery Voltage

## PITCH & ROLL

The Pitch & Roll page displays the vehicle's current pitch (angle up and down) and roll (angle side to side) in degrees. The Pitch & Roll gauges provide a visualization of the current vehicle angle.



#### Pitch & Roll Menu 2WD/4WD

1 – Current Pitch 2 – Current Roll

## TRAILCAM — IF EQUIPPED

Your vehicle may be equipped with a TrailCam that allows you to see an on-screen image of the front view of your vehicle. The image will be displayed on the touchscreen along with a caution note "Check Entire Surroundings" across the top of the screen.

To activate, press the TrailCam button on the touchscreen.



**TrailCam Activation** 

## TRAIL RECORDING — IF EQUIPPED

#### Overview

The Trail Recording feature can be accessed from a variety of different ways: Within the Vehicle Dashboard screen, from the App Drawer menu, within the Off-Road Pages Vehicle Dynamics tab, or from the Start Recording feature within the Adventure Guides app. There will be options within "Trail Recording" where you can start recording your trail or view saved recordings where you can see previous trails recorded.

## **Recording A Trail And Stop Recording**

To start recording a trail, select "Start Recording" towards the bottom of the touchscreen. Once selected, your trail will start recording for as long as desired. When the trail is over, press "Stop Recording". Select whether to save the trail in which the trail will be saved

## and will appear in "Saved Recordings". Selecting "Cancel" will not save the trail, and the trail will be deleted.

#### NOTE:

After 30 miles (48 km) a notification will appear on the touchscreen asking if you want to keep recording.

#### Adding a Waypoint

On the bottom left-hand side of the touchscreen select "Add Waypoint" from the trail recording screen. This will allow the user to pin a location along the trail, both during and after the recording. There are three selectable options to mark a Waypoint: A Waypoint can be placed whether the vehicle is in or out of motion, but can only be edited when the vehicle is not moving. As a default, Waypoints are named chronologically in the order in which the Waypoints are marked or added. They can be renamed later by pressing the edit icon located to the right of the defaulted Waypoint name. Places

Obstacle

Guidance

#### NOTE:

A Waypoint can be placed whether or not the vehicle is in motion, but can only be edited when the vehicle is not moving.

#### Expand/Collapse View

While in the Trail Recording screen, press the Expand button located to the right of the Map View to enlarge the Trail Map screen during recordings. Once in expanded view, press the collapse icon which will shrink the trail map during screen recordings.

## **Editing A Trail**

After finishing recording a trail, there will be a scale to rate the difficulty of the trail for future reference. The scale is from 1-10 with one being the easiest and 10 being the most difficult.

#### NOTE:

Setting the difficulty is not required to save the trail and can be edited afterwards.

#### Editing/Deleting a Waypoint

To edit a Waypoint, select the desired Waypoint on the map. Once selected, choose the type of Waypoint. Once selected, choose a sub-type that describes the Waypoint. Waypoint sub-types are listed in the following table:

| Places       | Obstacles | Guidance   |
|--------------|-----------|------------|
| Camping      | Mud       | Bare Left  |
| Scenic View  | Rock      | Bare Right |
| Staging Area | Sand      | Dead End   |

| Places    | Obstacles     | Guidance      |
|-----------|---------------|---------------|
| Trailhead | Steep Ascent  | Hard Left     |
| Water     | Steep Descent | Hard Right    |
|           | Water         | Slow          |
|           |               | Route Closure |

Waypoints can be renamed later by pressing the pencil icon located to the right of the defaulted Waypoint name. Selecting the pencil icon will bring up a keyboard which will allow you to customize the Waypoint name.

#### NOTE:

Editing Waypoints is not available while the vehicle is in motion. To edit and customize Waypoints the vehicle must not be in motion.

If you want to Delete a Waypoint, select the Waypoint that you created and press the delete Waypoint button located towards the bottom of your touchscreen. The pop-up, "Your waypoint was deleted successfully" will appear on your touchscreen once the Waypoint was successfully deleted.

## Saving And Canceling A Trail

When finished editing a trail select "Save". The trail will be stored in the Saved Recordings tab.

Selecting "Cancel" will delete the trail, and a pop-up screen will appear asking if you are sure that you want to cancel your current trail recording. Selecting "No, Don't Cancel", or the X button, will take you back to the Waypoint editing screen. Selecting "Yes, Cancel" will discard the selected trail recording.

#### Saved Trails

To view previously saved trails, click the Saved Recordings button on the Trail Recording home page. Once entering Saved Recordings, a list of previously saved trails will be listed. The Remove Icon button to the far right of each trail will delete the trail. To delete all trails select "Delete All" towards the bottom of the touchscreen.

#### NOTE:

Saved recordings can be accessed even once the Brand connected services subscription has expired.

After selecting a saved recording, options will be available to view, edit, delete, or export the recording onto a USB device. Pressing "View Performance Data" will showcase the vehicle's pitch, roll, altitude, and location for each selected Waypoint. A Snapshot feature is available, where a photo of the performance data can be exported to a connected USB device.

#### Export a Recording onto a USB

After selecting a saved recording, press the Export button towards the bottom of the touchscreen and select the USB icon option. There will be a pop-up message afterwards stating whether or not the export was successful.

## ADVENTURE GUIDES — IF EQUIPPED

To access the Adventure Guides feature, press the Vehicle icon on the lower menu bar of your touchscreen. From the Vehicle Dashboard, press "Adventure Guides".

To search for an off-road trail:

1. Press the search box and enter an address or keyword.

| Ż    | 20.5 🖉 🛱 😤 📩 🗼 🛛 🖄 🖉 🙆 12:30                   | 9 🖕 24       |
|------|--|--------------|
| 1    | < search                                       |              |
| 9    | Search Results                                 | and Map View |
|      | 1234567 Whatever Street, Auburn Hills, MI      |              |
| ]    | 8 mi Cedar River North Equestrian State Forest |              |
| icle | 8 mi Cedar River North Equestrian State Forest |              |
|      | 8 mi Cedar River North Equestrian State Forest |              |

#### Search For An Off-Road Trail

#### NOTE:

- O An active subscription to Brand Connect connected services is required to access the Adventure Guides feature. If you do not have an active subscription, click the Register button on the touchscreen and follow the prompts.
- If there is no network connection, a message will display on your touchscreen, "Data connection temporarily not available. Please try again later." Press "OK", and ensure there is a stable network connection.

- If there are no search results within the area in which you added the address or keyword, the message "No Results Found" will display on your touchscreen.
- The distance to each search result will appear on the left of each destination. The difficulty level of each trail will show towards the right of each destination. Select the trail you wish to navigate to.

|              | 20.5 2 4 1 2 1 4 1 2 1 6 12:30                   | U 🕼 24.°        |
|--------------|--|-----------------|
|              | < Search   | 0               |
|              | Search Results                                   | And Map View    |
|              | 1234567 Whatever Street, Auburn Hills, MI        | ^ ^             |
| <b>"</b> D   | 8 mi Cedar River North Equestrian State Forest   |                 |
| )<br>Vehicle | 🏟 8 mi Cedar River North Equestrian State Forest | COCO Difficulty |
|              | 8 mi Cedar River North Equestrian State Forest   |                 |

#### Trail Difficulty

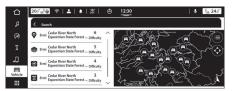
#### NOTE:

 Press the Map View button to view an expanded summary of each trail and its difficulty level.



**Map View Button** 

5



#### **Expanded Trail Difficulty View**

#### NOTE:

Each trail detail screen will provide you information such as an address, phone number, typical open/ close times, and vehicle requirements.

 Press the Preview Trail button to view the trail info. Press the Start Recording button which will bring you to the Trail Recording app landing page where you will be able to save the recording, view saved recordings, and see the distance to your destination.



#### **Preview Trail**

#### NOTE:

Pressing the Back arrow on the Trail Info page will bring you back to the trail detail screen.

4. Press the Navigate To Trail button which will send the directions to your TomTom Navigation system.



#### Navigate To Trail

 If the trail does not exist within your Uconnect system's local memory, press the Download button. If the trail already exists, meaning it has already been downloaded at some point, press the Check For Updates button.

#### NOTE:

- "Trail Updated Successfully" will display towards the top of your touchscreen if the trail update was completed properly. If "Trail could not update. Not enough space" appears, you will need to clear up space under your "Downloaded Trails" by removing trails that are no longer needed or desired. "No Updates available" means the trail you have selected is up-to-date.
- Pressing "X" on any of these screens will take you back to the trail details screen.

#### **Trails Near You**

The Trails Near You feature will show the first 20 trails based on 500 miles (805 km) within your current vehicle's location.

#### NOTE:

If there are no trails within a 500-mile (805-km) radius within your current vehicle's location, "No Results Found" will appear on your touchscreen.

#### **Preloaded Trails**

Press "Preloaded Trails" to see a list of trails that are preloaded onto your Uconnect system.

|              | 20.5 값을 후   💄   🎄   ﷺ   😁 <u>12:30</u>         | 🍦 📞 24°             |
|--------------|--|---------------------|
|              | K Vehicle Dashboard                            |                     |
|              | Preloaded Trails                               | ~                   |
|              | 8 mi Cedar River North Equestrian State Forest | 6-9<br>Difficulty   |
| <b>"</b> D   | 8 mi Cedar River North Equestrian State Forest | 6-9<br>Difficulty   |
| )<br>Vehicle | 8 mi Baraga State Park     3-4 Diffeo          |                     |
|              | 8 mi Bray Creek State Forest Campground        | 3-4 V<br>Difficulty |

#### **Preloaded Trails**

#### NOTE:

"Preloaded Trails" cannot be deleted from the list, as they are the default trails that remain on your system permanently.

#### **Downloaded Trails**

Any trail that you wish to download, press the Download button on the trail you have selected.

#### NOTE:

- "Trail Downloaded Successfully" will display towards the top of your touchscreen if the trail was downloaded properly. Once the download has been successful, "Check for updates" will be available if you wish to check the trail for updates.
- "Downloaded Trails Full. Free up some space" will display towards the top of your touchscreen if there is not enough space. Press the Downloaded Trails button to remove existing trails.

Press the Remove icon to remove a trail from the list. You will be presented with a confirmation, "Are you sure you want to delete this trail?". Press "Yes" to show the selected trail was deleted successfully, or press "No" or the X button which will bring you back to the Downloaded Trails list.



**Remove Downloaded Trails** 

# SAFETY

## **SAFETY FEATURES**

## ANTI-LOCK BRAKE SYSTEM (ABS)

The ABS provides increased vehicle stability and brake performance under most braking conditions. The system automatically prevents wheel lock and enhances vehicle control during braking.

The ABS performs a self-check cycle to ensure that the ABS is working properly each time the vehicle is started and driven. During this self-check, you may hear a slight clicking sound as well as some related motor noises.

The ABS is activated during braking when the system detects one or more wheels are beginning to lock. Road conditions such as ice, snow, gravel, bumps, railroad tracks, loose debris, or panic stops may increase the likelihood of ABS activation(s).

You also may experience the following normal characteristics when the ABS activates:

- ABS motor noise or clicking sounds (you may continue to hear for a short time after the stop)
- Brake pedal pulsations
- A slight drop of the brake pedal at the end of the stop

The ABS is designed to function with the Original Equipment Manufacturer (OEM) tires. Modification may result in degraded ABS performance.

#### WARNING!

- The ABS contains sophisticated electronic equipment that may be susceptible to interference caused by improperly installed or high output radio transmitting equipment. This interference can cause possible loss of anti-lock braking capability. Installation of such equipment should be performed by qualified professionals.
- Pumping of the Anti-Lock Brakes will diminish their effectiveness and may lead to a collision. Pumping makes the stopping distance longer. Just press firmly on your brake pedal when you need to slow down or stop.
- The ABS cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase braking or steering efficiency beyond that afforded by the condition of the vehicle brakes and tires or the traction afforded.
- The ABS cannot prevent collisions, including those resulting from excessive speed in turns, following another vehicle too closely, or hydroplaning.
- The capabilities of an ABS equipped vehicle must never be exploited in a reckless or dangerous manner that could jeopardize the user's safety or the safety of others.

# Anti-Lock Brake System (ABS) Warning Light

The yellow ABS Warning Light will turn on when the ignition is placed in the  $\rm ON/RUN$  mode and may stay on for as long as four seconds.

If the ABS Warning Light remains on or comes on while driving, it indicates that the anti-lock portion of the brake system is not functioning and that service is required. However, the conventional brake system will continue to operate normally if the ABS Warning Light is on.

If the ABS Warning Light is on, the brake system should be serviced as soon as possible to restore the benefits of Anti-Lock Brakes. If the ABS Warning Light does not come on when the ignition is placed in the ON/RUN mode, have the light repaired as soon as possible.

## AUDIBLE PEDESTRIAN WARNING SYSTEM - IF EQUIPPED

Your vehicle is equipped with an Audible Pedestrian Warning system. The Audible Pedestrian Warning system uses distinct sounds to alert pedestrians that your vehicle is approaching. In addition, the system will indicate changes in vehicle speed by varying the relative volume.

The system uses two external speakers. One is located in the under-hood compartment and the other is in the rear of the vehicle. The Audible Pedestrian Warning system is active when the vehicle is not in PARK and is traveling at lower speeds. Depending on the selected gear (REVERSE, DRIVE, or NEUTRAL), the system activates the corresponding speaker location based on the intended direction of travel.

#### NOTE:

The system is active when driving in Electric mode only.

#### WARNING!

The Audible Pedestrian Warning system is not intended to avoid a collision. It is always the driver's responsibility to be attentive to the vehicle's distance between other vehicles, people, and objects, and most importantly utilize brake operation to ensure safe driving of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow this warning could result in a collision or serious personal injury.

## REAR SEAT REMINDER ALERT (RSRA) – IF EQUIPPED

RSRA alerts you through visual and auditory notifications of the possible presence of an object, passenger, or pet in the rear seats if a rear door was opened up to 10 minutes before the ignition was placed in the ON/RUN position. RSRA does not directly detect objects, passengers, or pets in the rear seats. When the previous conditions are met, RSRA displays the message "Check Rear Seat" on the instrument cluster display and sounds an auditory alert upon the driver placing the ignition in the OFF.

To enable or disable RSRA, see  $\Box$  page 201.

#### WARNING!

- Before exiting a vehicle, always come to a complete stop, then shift the automatic transmission into PARK and apply the parking brake.
- Always make sure the keyless ignition node is in the OFF position, key fob is removed from the vehicle and vehicle is locked.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the gear selector.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.

# ELECTRONIC BRAKE CONTROL (EBC) SYSTEM

Your vehicle is equipped with an advanced Electronic Brake Control (EBC) system. This system includes Anti-Lock Brake System (ABS), Brake Assist System (BAS), Electronic Brake Force Distribution (EBD), Electronic Roll Mitigation (ERM), Electronic Stability Control (ESC), Hill Start Assist (HSA), and Traction Control System (TCS). These systems work together to enhance both vehicle stability and control in various driving conditions.

Your vehicle may also be equipped with Hill Descent Control (HDC), Rain Brake Support (RBS), Ready Alert Braking (RAB), and Trailer Sway Control (TSC).

## Brake System Warning Light

The red Brake System Warning Light will turn on when the ignition is placed in the ON/RUN mode and may stay on for as long as four seconds.

If the Brake System Warning Light remains on or comes on while driving, it indicates that the brake system is not functioning properly and that immediate service is required. If the Brake System Warning Light does not come on when the ignition is placed in the ON/RUN mode, have the light repaired as soon as possible.

## Brake Assist System (BAS)

The BAS is designed to optimize the vehicle's braking capability during emergency braking maneuvers. The system detects an emergency braking situation by sensing the rate and amount of brake application and then applies optimum pressure to the brakes. This can help reduce braking distances. The BAS complements the Anti-Lock Brake System (ABS). Applying the brakes very quickly results in the best BAS assistance. To receive the benefit of the system, you must apply continuous braking pressure during the stopping sequence (do not "pump" the brakes). Do not reduce brake pedal pressure unless braking is no longer desired. Once the brake pedal is released, the BAS is deactivated.

#### WARNING!

The Brake Assist System (BAS) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. BAS cannot prevent collisions, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. The capabilities of a BAS-equipped vehicle must

#### WARNING!

never be exploited in a reckless or dangerous manner, which could jeopardize the user's safety or the safety of others.

# Electronic Brake Force Distribution (EBD)

EBD manages the distribution of the braking torque between the front and rear axles by limiting braking pressure to the rear axle. This is done to prevent overslip of the rear wheels to avoid vehicle instability, and to prevent the rear axle from entering ABS before the front axle.

## **Electronic Roll Mitigation (ERM)**

ERM anticipates the potential for wheel lift by monitoring the driver's steering wheel input and the speed of the vehicle. When ERM determines that the rate of change of the steering wheel angle and vehicle's speed are sufficient to potentially cause wheel lift, it then applies the appropriate brake and may also reduce engine power to lessen the chance that wheel lift will occur. ERM can only reduce the chance of wheel lift occurring during severe or evasive driving maneuvers; it cannot prevent wheel lift due to other factors, such as road conditions, leaving the roadway, or striking objects or other vehicles.

#### NOTE:

ERM is disabled any time the ESC is in "Full Off" mode (if equipped)  $\Box$  page 225.

#### WARNING!

Many factors, such as vehicle loading, road conditions and driving conditions, influence the chance that wheel lift or rollover may occur. ERM cannot prevent all wheel lift or rollovers, especially those that involve leaving the roadway or striking objects or other vehicles. The capabilities of an ERM-equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.

## **Electronic Stability Control (ESC)**

ESC enhances directional control and stability of the vehicle under various driving conditions. ESC corrects for oversteering or understeering of the vehicle by applying the brake of the appropriate wheel(s) to counteract these conditions. Engine power may also be reduced to help the vehicle maintain the desired path.

- Oversteer when the vehicle is turning more than appropriate for the steering wheel position.
- Understeer when the vehicle is turning less than appropriate for the steering wheel position.

ESC uses sensors in the vehicle to determine the vehicle path intended by the driver and compares it to the actual path of the vehicle. When the actual path does not match the intended path, ESC applies the brake of the appropriate wheel to assist in counteracting the oversteer or understeer condition.

The ESC Activation/Malfunction Indicator Light located in the instrument cluster will start to flash as soon as the ESC system becomes active. The ESC Activation/ Malfunction Indicator Light also flashes when the TCS is active. If the ESC Activation/Malfunction Indicator Light begins to flash during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to adapt your speed and driving to the prevailing road conditions.

#### WARNING!

- Electronic Stability Control (ESC) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. ESC cannot prevent accidents, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. ESC also cannot prevent accidents resulting from loss of vehicle control due to inappropriate driver input for the conditions. Only a safe, attentive, and skillful driver can prevent accidents. The capabilities of an ESC equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.
- Vehicle modifications, or failure to properly maintain your vehicle, may change the handling characteristics of your vehicle, and may negatively affect the performance of the ESC system. Changes to the steering system, suspension, braking system, tire type and size or wheel size may adversely affect ESC performance. Improperly inflated and unevenly worn tires may also degrade ESC performance. Any vehicle modification or poor vehicle maintenance that reduces the effectiveness of the ESC system can increase the risk of loss of vehicle control, vehicle rollover, personal injury and death.

## **ESC Operating Modes**

Depending upon model and mode of operation, the ESC system may have multiple operating modes.

#### ESC On

"ESC On" is the normal operating mode for the ESC. Whenever the vehicle is started, the ESC system will be in this mode. This mode should be used for most driving conditions. Alternate ESC modes should only be used for specific reasons as noted in the following paragraphs.

#### Partial Off

This mode may be useful if the vehicle becomes stuck. This mode may modify TCS and ESC thresholds for activation, which allows for more wheel spin than normally allowed.

To enter the "Partial Off" mode, momentarily push the ESC OFF button and the ESC OFF Indicator Light will illuminate. To turn the ESC on again, momentarily push the ESC OFF button and the ESC OFF Indicator Light will turn off.

#### NOTE:

For vehicles with multiple partial ESC modes, the push and release of the button will toggle the ESC modes. Multiple attempts may be required to return to "ESC On".

#### WARNING!

 When in "Partial Off" mode, the TCS functionality of ESC, except for the limited slip feature described in the TCS section, has been disabled and the ESC OFF Indicator Light will be illuminated. When in "Partial Off" mode, the engine power reduction feature of TCS is disabled, and the enhanced vehicle stability offered by the ESC system is reduced.

#### WARNING!

• Trailer Sway Control (TSC) is disabled when the ESC system is in the "Partial Off" mode.

#### Full Off — If Equipped

The "Full Off" mode is intended for off-highway or off-road use only and should not be used on any public roadways. In this mode, TCS and ESC features are turned off. To enter the "Full Off" mode, push and hold the ESC OFF button for five seconds while the vehicle is stopped with the engine running. After five seconds, a chime will sound, the ESC OFF Indicator Light will illuminate, and the "ESC Off" message will display in the instrument cluster. To turn ESC on again, momentarily push the ESC OFF button.

#### NOTE:

System may switch from ESC "Full Off" to "Partial Off" mode when vehicle exceeds a predetermined speed. When the vehicle speed slows below the predetermined speed the system will return to ESC "Full Off".

If equipped with Off Road+ and if Off Road+ is active when "Full Off" mode is enabled by the driver, ESC will not switch to "Partial Off" mode at any speed and will remain in "Full Off" mode until Off Road+ is exited or ESC is re-enabled by the driver.

#### WARNING!

 In the ESC "Full Off" mode, the engine torque reduction and stability features are disabled. Therefore, enhanced vehicle stability offered by the ESC system is unavailable. In an emergency evasive maneuver, the ESC system will not engage to assist in maintaining stability. ESC "Full Off" mode is intended for off-highway or off-road use only.

#### WARNING!

The Electronic Stability Control (ESC) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. ESC cannot prevent all accidents, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. ESC also cannot prevent collisions.

## ESC Activation/Malfunction Indicator Light And ESC OFF Indicator Light



The ESC Activation/Malfunction Indicator Light in the instrument cluster will come on when the ignition is turned to the "ESC On" mode. It should go out with the engine run-

ning. If the ESC Activation/Malfunction Indicator Light comes on continuously with the engine running, a malfunction has been detected in the ESC system. If this light remains on after several ignition cycles, and the vehicle has been driven several miles (km) at speeds greater than 30 mph (48 km/h), see an authorized dealer as soon as possible to have the problem diagnosed and corrected.

The ESC Activation/Malfunction Indicator Light starts to flash as soon as the tires lose traction and the ESC system becomes active. The ESC Activation/Malfunction Indicator Light also flashes when TCS is active. If the ESC Activation/Malfunction Indicator Light begins to flash during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to adapt your speed and driving to the prevailing road conditions.

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The ESC OFF Indicator Light indicates the customer has elected to have the Electronic Stability Control (ESC) in a reduced mode.

#### NOTE:

- The ESC Activation/Malfunction Indicator Light and the ESC OFF Indicator Light come on momentarily each time the ignition is placed in the ON position.
- Each time the ignition is place in the ON position, the ESC system will be on even if it was turned off previously.
- The ESC system will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESC becomes inactive following the maneuver that caused the ESC activation.

## Hill Descent Control (HDC) - If Equipped

HDC is intended for low speed off-road driving while in 4WD Low. HDC maintains vehicle speed while descending hills during various driving situations. HDC controls vehicle speed by actively controlling the brakes.

#### HDC has three states:

- 1. Off (feature is not enabled and will not activate).
- Enabled (feature is enabled and ready but activation conditions are not met, or driver is actively overriding with brake or throttle application).
- Active (feature is enabled and actively controlling vehicle speed).

#### Enabling HDC

HDC is enabled by pushing the HDC switch, but the following conditions must also be met to enable HDC:

- The driveline is in 4WD Low.
- The vehicle speed is below 5 mph (8 km/h).
- The parking brake is released.
- The driver door is closed. (If doors are attached, then door must be closed. If doors are detached, then driver seat belt must be buckled.)

#### Activating HDC

Once HDC is enabled it will activate automatically if driven down a grade of sufficient magnitude. The set speed for HDC is selectable by the driver, and can be adjusted by using the gear shift +/-. The following summarizes the HDC set speeds:

#### **HDC Target Set Speeds**

- P = No set speed. HDC may be enabled but will not activate
- R = 0.6 mph (1 km/h)
- N = 1.2 mph (2 km/h)
- D = 0.6 mph (1 km/h)
- 1st = 0.6 mph (1 km/h)
- 2nd = 1.2 mph (2 km/h)
- 3rd = 1.8 mph (3 km/h)
- 4th = 2.5 mph (4 km/h)
- 5th = 3.1 mph (5 km/h)
- 6th = 3.7 mph (6 km/h)
- 7th = 4.3 mph (7 km/h)
- 8th = 5.0 mph (8 km/h)
- 9th = 5.6 mph (9 km/h) If Equipped

#### NOTE:

During HDC the +/- shifter input is used for HDC target speed selection, but will not affect the gear chosen by the transmission. When actively controlling HDC the transmission will shift appropriately for the driver-selected set speed and corresponding driving conditions.

#### Driver Override

The driver may override HDC activation with throttle or brake application at any time.

#### **Deactivating HDC**

HDC will be deactivated but remain available if any of the following conditions occur:

- Driver overrides HDC set speed with throttle or brake application.
- Vehicle speed exceeds 20 mph (32 km/h) but remains below 40 mph (64 km/h).
- Vehicle is on a downhill grade of insufficient magnitude, is on level ground, or is on an uphill grade.
- Vehicle is shifted to PARK.

#### Disabling HDC

HDC will be deactivated and disabled if any of the following conditions occur:

- The driver pushes the HDC switch.
- The driveline is shifted out of 4WD Low.
- The parking brake is applied.
- The driver door opens. (Driver door opens if doors are attached or driver seat belt is unbuckled if doors are detached.)
- The vehicle is driven greater than 20 mph (32 km/h) for greater than 70 seconds.
- The vehicle is driven greater than 40 mph (64 km/h) (HDC exits immediately).
- HDC detects excessive brake temperature.

#### Feedback To The Driver

The instrument cluster has an HDC icon and the HDC switch has an indicator light, which offers feedback to the driver about the state HDC is in.

- The cluster icon and switch indicator light will illuminate and remain on solid when HDC is enabled or activated. This is the normal operating condition for HDC.
- The cluster icon and switch indicator light will flash for several seconds then extinguish when the driver pushes the HDC switch but enable conditions are not met.
- The cluster icon and switch indicator light will flash for several seconds then extinguish when HDC disables due to excess speed.
- The cluster icon and switch indicator light will flash when HDC deactivates due to overheated brakes. The flashing will stop and HDC will activate again once the brakes have cooled sufficiently.

#### WARNING!

HDC is only intended to assist the driver in controlling vehicle speed when descending hills. The driver must remain attentive to the driving conditions and is responsible for maintaining a safe vehicle speed.

## Hill Start Assist (HSA)

The HSA system is designed to mitigate roll back from a complete stop while on an incline. If the driver releases the brake while stopped on an incline, HSA will continue to hold the brake pressure for a short period. If the driver does not apply the throttle before this time expires, the system will release brake pressure and the vehicle will roll down the hill as normal.

The following conditions must be met in order for HSA to activate:

- The feature must be enabled.
- The vehicle must be stopped.
- The parking brake must be off.
- The driver door must be closed. (If the doors are attached, then the door must be closed. If the doors are detached then the driver's seat belt must be buckled.)
- The vehicle must be on a sufficient grade.
- The gear selection must match vehicle uphill direction (i.e., vehicle facing uphill is in forward gear; vehicle backing uphill is in REVERSE gear).
- HSA will work in REVERSE gear and all forward gears. The system will not activate if the transmission is in PARK or NEUTRAL. For vehicles equipped with a manual transmission, if the clutch is pressed, HSA will remain active.

#### WARNING!

There may be situations where the Hill Start Assist (HSA) will not activate and slight rolling may occur, such as on minor hills or with a loaded vehicle, or while pulling a trailer. HSA is not a substitute for active driving involvement. It is always the driver's responsibility to be attentive to distance to other vehicles, people, and objects, and most importantly brake operation to ensure safe operation of the vehicle under all road conditions. Your complete attention is always required while driving to maintain safe control of your vehicle. Failure to follow these warnings can result in a collision or serious personal injury.

## **Disabling And Enabling HSA**

This feature can be turned on or turned off. To change the current setting, refer to  $\ \square>$  page 201 for further information.

## **Towing With HSA**

HSA will also provide assistance to mitigate roll back while towing a trailer.

#### WARNING!

- If you use a trailer brake controller with your trailer, the trailer brakes may be activated and deactivated with the brake switch. If so, there may not be enough brake pressure to hold both the vehicle and the trailer on a hill when the brake pedal is released. In order to avoid rolling down an incline while resuming acceleration, manually activate the trailer brake or apply more vehicle brake pressure prior to releasing the brake pedal.
- HSA is not a parking brake. Always apply the parking brake fully when exiting your vehicle. Also, be certain to place the transmission in PARK (P).
- Failure to follow these warnings can result in a collision or serious personal injury.

## Rain Brake Support (RBS)

RBS may improve braking performance in wet conditions. It will periodically apply a small amount of brake pressure to remove any water buildup on the front brake rotors. It functions when the windshield wipers are in LO or HI speed. When RBS is active, there is no notification to the driver and no driver interaction is required.

## Ready Alert Braking (RAB)

RAB may reduce the time required to reach full braking during emergency braking situations. It anticipates when an emergency braking situation may occur by monitoring how fast the throttle is released by the driver. The Electronic Brake Controller (EBC) will prepare the brake system for a panic stop.

## Selec-Speed Control (SSC) - If Equipped



SSC is intended for off-road driving in 4WD Low only. SSC maintains vehicle speed by actively controlling engine torque and brakes.

SSC has three states:

- 1. Off (feature is not enabled and will not activate)
- Enabled (feature is enabled and ready but activation conditions are not met, or driver is actively overriding with brake or throttle application)
- 3. Active (feature is enabled and actively controlling vehicle speed)

#### Enabling SSC

SSC is enabled by pushing the SSC switch, but the following conditions must also be met to enable SSC:

- The driveline is in 4WD Low.
- The vehicle speed is below 5 mph (8 km/h).
- The parking brake is released.
- The driver door is closed (If doors are attached, the door must be closed. If doors are detached, the driver seat belt must be buckled).
- The driver is not applying throttle.

#### Activating SSC

Once SSC is enabled it will activate automatically once the following conditions are met:

- The driver releases the throttle.
- The driver releases the brake.
- The driver seat belt is buckled.
- The transmission is in any selection other than PARK.
- Your vehicle speed is below 20 mph (32 km/h).
- The driver door is closed. (If doors are attached, the door must be closed. If doors are detached, the driver seat belt must be buckled).

The set speed for SSC is selectable by the driver, and can be adjusted by using the gear shift +/-. Additionally, the SSC set speed may be reduced when climbing a grade and the level of set speed reduction depends on the magnitude of grade. The following summarizes the SSC set speeds:

#### SSC Target Set Speeds

- 1st = 0.6 mph (1 km/h)
- 2nd = 1.2 mph (2 km/h)
- 3rd = 1.8 mph (3 km/h)
- 4th = 2.5 mph (4 km/h)
- 5th = 3.1 mph (5 km/h)
- 6th = 3.7 mph (6 km/h)
- 7th = 4.3 mph (7 km/h)
- 8th = 5 mph (8 km/h)
- 9th = 5.6 mph (9 km/h) if equipped
- REVERSE = 0.6 mph (1 km/h)
- NEUTRAL = 1.2 mph (2 km/h)
- PARK = SSC remains enabled but not active

#### SSC Target Set Speeds - If Equipped With Off Road+

- 1st = 0.6 mph (1 km/h)
- 2nd = 0.9 mph (1.5 km/h)
- 3rd = 1.2 mph (2 km/h)
- 4th = 1.5 mph (2.5 km/h)
- 5th = 1.8 mph (3 km/h)
- 6th = 2.5 mph (4 km/h)
- 7th = 3.7 mph (6 km/h)
- 8th = 5 mph (8 km/h)
- REVERSE = 0.6 mph (1 km/h)
- NEUTRAL = 1.2 mph (2 km/h)
- PARK = SSC remains enabled but not active

#### NOTE:

- During SSC, the +/- gear selector input is used for SSC target speed selection but will not affect the gear chosen by the transmission. While actively controlling SSC, the transmission will shift appropriately for the driver-selected set speed and corresponding driving conditions.
- SSC operation is influenced by Off Road+ drive mode if active. The differences may be notable to the driver as a varying level of aggressiveness.

#### Driver Override

The driver may override SSC activation with throttle or brake application at any time.

#### Deactivating SSC

SSC will be deactivated but remain available if any of the following conditions occur:

• The driver overrides SSC set speed with throttle or brake application.

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- The vehicle speed exceeds 20 mph (32 km/h) but remains below 40 mph (64 km/h).
- The vehicle is shifted into PARK.

#### Disabling SSC

SSC will deactivate and be disabled if any of the following conditions occur:

- The driver pushes the SSC switch.
- The driveline is shifted out of the 4WD Low.
- The parking brake is applied.
- The vehicle is driven greater than 20 mph (32 km/h) for greater than 70 seconds.
- The vehicle is driven greater than 40 mph (64 km/h). SSC will exist immediately.
- The driver door opens. (Driver door opens if doors are attached or driver seat belt is unbuckled if doors are detached).

#### Feedback To The Driver

The instrument cluster has an SSC icon and the SSC switch has a light that offers feedback to the driver about the state SSC is in.

- The cluster icon and switch light will illuminate and remain on solid when SSC is enabled or activated. These are the normal operating conditions for SSC.
- The cluster icon and switch light will flash for several seconds then extinguish when the driver pushes the SSC switch but enabled conditions are not met.
- The cluster icon and switch light will flash for several seconds then extinguish when SSC disables due to excess speed.
- The cluster icon and switch light will flash then extinguish when SSC deactivates due to overheated brakes.

#### WARNING!

SSC is only intended to assist the driver in controlling vehicle speed when driving in off-road conditions. The driver must remain attentive to the driving conditions and is responsible for maintaining a safe vehicle speed.

## Traction Control System (TCS)

TCS monitors the amount of wheel spin of each of the driven wheels. If wheel spin is detected, the TCS may apply brake pressure to the spinning wheel(s) and/or reduce engine power to provide enhanced acceleration and stability. A feature of the TCS, Brake Limited Differential (BLD) functions similarly to a limited slip differential and controls the wheel spin across a driven axle. If one wheel on a driven axle is spinning faster than the other, the system will apply the brake of the spinning wheel. This will allow more engine torque to be applied to the wheel that is not spinning. BLD may remain enabled even if TCS and Electronic Stability Control (ESC) are in reduced modes.

## Trailer Sway Control (TSC)

TSC uses sensors in the vehicle to recognize an excessively swaying trailer and will take the appropriate actions to attempt to stop the sway.

#### NOTE:

TSC cannot stop all trailers from swaying. Always use caution when towing a trailer and follow the trailer tongue weight recommendations  $\Rightarrow$  page 188.

When TSC is functioning, the ESC Activation/ Malfunction Indicator Light will flash, the engine power may be reduced and you may feel the brakes being applied to individual wheels to attempt to stop the trailer from swaying. TSC is disabled when the ESC system is in the "Partial Off" or "Full Off" modes.

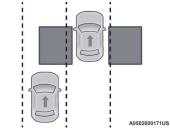
#### WARNING!

If TSC activates while driving, slow the vehicle down, stop at the nearest safe location, and adjust the trailer load to eliminate trailer sway.

## **AUXILIARY DRIVING SYSTEMS**

# BLIND SPOT MONITORING (BSM) — IF EQUIPPED

The BSM system uses two radar sensors, located inside the taillights, to detect highway licensable vehicles (automobiles, trucks, motorcycles, etc.) that enter the blind spot zones from the rear/front/side of the vehicle.



#### **Rear Detection Zones**

When the vehicle is started, the BSM Warning Light will momentarily illuminate in both outside rearview mirrors to let the driver know that the system is operational. The BSM system sensors operate when the vehicle is in any forward gear and enters standby mode when the vehicle is in PARK (P).

The BSM detection zone covers approximately one lane width on both sides of the vehicle 12 ft (3.8 m). The zone length starts at the outside rearview mirror and extends approximately 10 ft (3 m) beyond the rear fascia/bumper of the vehicle. The BSM system monitors the detection zones on both sides of the vehicle when the vehicle speed reaches approximately 6 mph (10 km/h) or higher and will alert the driver of vehicles in these areas.

#### NOTE:

- · The BSM system DOES NOT alert the driver about rapidly approaching vehicles that are outside the detection zones.
- The BSM system detection zone DOES NOT change if your vehicle is towing a trailer. Therefore, visually verify the adjacent lane is clear for both your vehicle and trailer before making a lane change. If the trailer or other object (i.e., bicycle, sports equipment) extends beyond the side of your vehicle, this may result in the BSM Warning Light remaining illuminated the entire time the vehicle is in a forward gear  $\Box$  page 201.
- · The Blind Spot Monitoring (BSM) system may experience dropouts (blinking on and off) of the side mirror warning indicator light when a motorcycle or any small object remains at the side of the vehicle for extended periods of time (more than a couple of seconds).

The BSM system can become blocked if snow, ice, mud, or other road contaminants accumulate on the rear fascia/bumper where the radar sensors are located. The system may also detect blockage if the vehicle is operated in areas with extremely low radar returns such as a desert or parallel to a large elevation drop. If blockage is detected, a "Blind Spot Temporarily Unavailable, Wipe Rear Corners" message will display in the cluster, both mirror lights will illuminate, and BSM and RCP alerts will not occur. This is normal operation. The system will automatically recover and resume function when the condition clears. To minimize system blockage, do not block the area of the rear fascia/bumper where the radar sensors are located with foreign objects (bumper stickers, bicycle racks, etc.) and keep it clear of road contaminants.



#### BSM Radar Location (Left Side Shown)

The BSM system notifies the driver of objects in the detection zones by illuminating the BSM Warning Light located in the outside mirrors in addition to sounding an audible (chime) alert and reducing the radio volume 

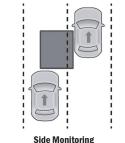


Warning Light Location

The BSM system monitors the detection zone from three different entry points (side, rear, front) while driving to see if an alert is necessary. The BSM system will issue an alert during these types of zone entries.

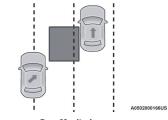
#### **Entering From The Side**

Vehicles that move into your adjacent lanes from either side of the vehicle



#### **Entering From The Rear**

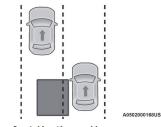
Vehicles that come up from behind your vehicle on either side and enter the rear detection zone with a relative speed of less than 30 mph (48 km/h).



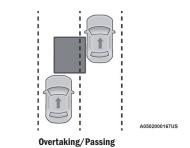
**Rear Monitoring** 

#### **Overtaking Traffic**

If you pass another vehicle slowly with a relative speed less than 15 mph (24 km/h) and the vehicle remains in the blind spot for approximately 1.5 seconds, the warning light will be illuminated. If the difference in speed between the two vehicles is greater than 15 mph (24 km/h), the warning light will not illuminate.



**Overtaking/Approaching** 



The BSM system is designed not to issue an alert on stationary objects such as guardrails, posts, walls, foliage, berms, etc. However, occasionally the system may alert on such objects. This is normal operation and your vehicle does not require service.

The BSM system will not alert you of objects that are traveling in the opposite direction of the vehicle in adjacent lanes  $\Box$  page 352.

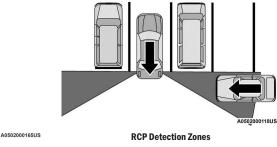
**Opposing Traffic** 

WARNING!

The Blind Spot Monitoring system is only an aid to help detect objects in the blind spot zones. The BSM system is not designed to detect pedestrians, bicyclists, or animals. Even if your vehicle is equipped with the BSM system, always check your vehicle's mirrors, glance over your shoulder, and use your turn signal before changing lanes. Failure to do so can result in serious injury or death.

## Rear Cross Path (RCP)

RCP is intended to aid the driver when backing out of parking spaces where their vision of oncoming vehicles may be blocked. Proceed slowly and cautiously out of the parking space until the rear end of the vehicle is exposed. The RCP system will then have a clear view of the cross traffic and if an oncoming vehicle is detected, alert the driver.



RCP monitors the rear detection zones on both sides of the vehicle, for objects that are moving toward the side of the vehicle with a minimum speed of approximately 3 mph (5 km/h), to objects moving a maximum of approximately 20 mph (32 km/h), such as in parking lot situations.

When RCP is on and the vehicle is in REVERSE, the driver is alerted using both the visual and audible alarms, including reducing the radio volume.

#### NOTE:

In a parking lot situation, oncoming vehicles can be blocked by vehicles parked on either side. If the sensors are blocked by other structures or vehicles, the system will not be able to alert the driver.

#### WARNING!

Rear Cross Path Detection (RCP) is not a backup aid system. It is intended to be used to help a driver detect an oncoming vehicle in a parking lot situation. Drivers must be careful when backing up, even when using RCP. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. Failure to do so can result in serious injury or death.

#### Blind Spot Modes

Blind Spot has three selectable modes of operation that are available in the Uconnect system.

#### Blind Spot Alert Lights Only

When operating in Blind Spot Alert mode, the BSM system will provide a visual alert in the appropriate side view mirror based on a detected object. However, when the system is operating in Rear Cross Path (RCP) mode. the system will respond with both visual and audible alerts when a detected object is present. Whenever an audible alert is requested, the radio is muted.

#### Blind Spot Alert Lights/Chime

When operating in Blind Spot Alert Lights/Chime mode, the BSM system will provide a visual alert in the appropriate side view mirror based on a detected object. If the turn signal is then activated, and it corresponds to an alert present on that side of the vehicle, an audible chime will also be sounded. Whenever a turn signal and detected object are present on the same side at the same time, both the visual and audible alerts will be issued. In addition to the audible alert the radio (if on) will also be muted

#### NOTE:

Whenever an audible alert is requested by the BSM system, the radio is also muted.

When the system is in RCP, the system shall respond with both visual and audible alerts when a detected object is present. Whenever an audible alert is requested, the radio is also muted. Turn/hazard signal status is ignored: the RCP state always requests the chime.

#### Blind Spot Alert Off

When the BSM system is turned off there will be no visual or audible alerts from either the BSM or RCP. systems.

#### NOTE:

The BSM system will store the current operating mode when the vehicle is shut off. Each time the vehicle is started the previously stored mode will be recalled and used

#### Door Removal

selected

When either the front driver or passenger door is removed, the instrument cluster will display "Blind Spot Temporarily Unavailable" and the BSM system will disable. While the system will continue to indicate whatever blind spot mode it was previously in within the Uconnect system, no visual or audible alerts will be provided. As long as the doors are removed, the instrument cluster will provide the "Blind Spot Temporarily Unavailable" pop-up as a reminder that the system is disabled every time the ignition is cycled.

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Upon re-installation of both doors, the system will resume functionality based on the personalized mode

## FORWARD COLLISION WARNING (FCW) WITH MITIGATION — IF EQUIPPED

The FCW with Mitigation system provides the driver with audible warnings, visual warnings (within the instrument cluster display), and may apply a haptic warning in the form of a brake jerk, to warn the driver when it detects a potential frontal collision. The warnings are intended to provide the driver with enough time to react, avoid or mitigate the potential collision.

#### NOTE:

FCW monitors the information from the forward looking sensors as well as Electronic Brake Controller (EBC), to calculate the probability of a forward collision. When the system determines that a forward collision is probable, the driver will be provided with audible and visual warnings as well as a possible haptic warning in the form of a brake jerk.

If the driver does not take action based upon these progressive warnings, then the system will provide a limited level of active braking to help slow the vehicle and mitigate the potential forward collision. If the driver reacts to the warnings by braking and the system determines that the driver intends to avoid the collision by braking but has not applied sufficient brake force, the system will compensate and provide additional brake force as required.

If a FCW with Mitigation event begins at a speed below 32 mph (52 km/h), the system may provide the maximum braking possible to mitigate the potential forward collision. If the Forward Collision Warning with Mitigation event stops the vehicle completely, the system will hold the vehicle at standstill for two seconds and then release the brakes.



#### FCW Message

When the system determines a collision with the vehicle in front of you is no longer probable, the warning message will be deactivated  $\Box$  page 352.

NOTE:

- The minimum speed for FCW activation is 3 mph (5 km/h).
- The FCW alerts may be triggered on objects other than vehicles such as guardrails or sign posts based on the course prediction. This is expected and is a part of normal FCW activation and functionality.
- It is unsafe to test the FCW system. To prevent such misuse of the system, after four Active Braking events within a key cycle, the Active Braking portion of FCW will be deactivated until the next key cycle.
- The FCW system is intended for on-road use only. If the vehicle is taken off-road, the FCW system should be deactivated to prevent unnecessary warnings to the surroundings.

- FCW may not react to irrelevant objects such as overhead objects, ground reflections, objects not in the path of the vehicle, stationary objects that are far away, oncoming traffic, or leading vehicles with the same or higher rate of speed.
- FCW will be disabled like ACC, with the unavailable screens.

#### WARNING!

Forward Collision Warning (FCW) is not intended to avoid a collision on its own, nor can FCW detect every type of potential collision. In rare situations, the system may react to surrounding objects such as tunnels, bridges, guardrails, etc. The driver has the responsibility to avoid a collision by controlling the vehicle via braking, steering, and acceleration. Unintended braking reactions can always be overridden by pressing down hard on the accelerator. Failure to follow this warning could lead to serious injury or death.

## Turning FCW On Or Off

The FCW setting menu can be adjusted through the Uconnect Settings  $\Box$  page 201.

- To turn the FCW system on, select between "Only Warning" and "Warning and Braking" in the FCW menu.
- Select "OFF" in the FCW menu to turn the FCW system off.

#### NOTE:

• When the FCW is "on", this allows the system to warn the driver of a possible collision with the vehicle in front.

- When the FCW is "off", this prevents the system from warning the driver of a possible collision with the vehicle in front. If the FCW is set to "off", "FCW OFF" will be displayed in the instrument cluster display.
- When FCW status is set to "Only Warning", this prevents the system from providing limited active braking, or additional brake support if the driver is not braking adequately in the event of a potential frontal collision.
- When FCW status is set to "Warning and Braking", this allows the system to warn the driver of a possible collision with the vehicle in front using audible/ visual warnings and it applies autonomous braking.
- The system will retain the last setting selected by the driver after ignition shutdown.

## FCW Braking Status And Sensitivity

The FCW Sensitivity and Active Braking status are programmable through the Uconnect system  $\Box$  page 201.

- Far
  - O When the sensitivity of FCW is set to the "Far" setting, this allows the system to warn the driver of a possible more distant collision with the vehicle in front using audible/visual warnings.
  - More cautious drivers that do not mind frequent warnings may prefer this setting.

#### NOTE:

The "Far" setting may result in a greater number of FCW possible collision warnings experienced.

- Medium
  - O When the sensitivity of FCW is set to the "Medium" setting, this allows the system to warn the driver of a possible collision with the vehicle in front using audible/visual warnings.

#### Near

- O When the sensitivity of FCW is set to the "Near" setting, this allows the system to warn the driver of a possible closer collision with the vehicle in front using audible/visual warnings.
- This setting provides less reaction time than the "Far" and "Medium" settings, which allows for a more dynamic driving experience.
- More dynamic or aggressive drivers that want to avoid frequent warnings may prefer this setting.

#### NOTE:

The "Near" setting may result in a lesser number of FCW possible collision warnings experienced.

#### FCW Limited Warning

If the instrument cluster displays "ACC/FCW Limited Functionality" or "ACC/FCW Limited Functionality Clean Front Windshield" momentarily, there may be a condition that limits FCW functionality. Although the vehicle is still drivable under normal conditions, the active braking may not be fully available. Once the condition that limited the system performance is no longer present, the system will return to its full performance state. If the problem persists, see an authorized dealer.

## Service FCW Warning

If the system turns off, and the instrument cluster displays:

- ACC/FCW Unavailable Service Required
- Cruise/FCW Unavailable Service Required

This indicates there is an internal system fault. Although the vehicle is still drivable under normal conditions, have the system checked by an authorized dealer.

# TIRE PRESSURE MONITORING SYSTEM (TPMS)

The Tire Pressure Monitoring System (TPMS) will warn the driver of a low tire pressure based on the vehicle recommended cold placard pressure.

#### NOTE:

The alert warning on the cluster will stay on until the tire is inflated to the placard pressure.

The tire pressure will vary with temperature by approximately 1 psi (7 kPa) for every 12°F (6.5°C). This means that when the outside temperature decreases, the tire pressure will decrease. Tire pressure should always be set based on cold inflation tire pressure. This is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after a three hour period. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall. The tire pressure will also increase as the vehicle is driven. This is normal and there should be no adjustment for this increased pressure.

The TPMS will warn the driver of a low tire pressure if the tire pressure falls below the low-pressure warning limit for any reason, including low temperature effects and natural pressure loss through the tire.

The TPMS will continue to warn the driver of low tire pressure as long as the condition exists, and will not turn off until the tire pressure is at or above the recommended cold placard pressure. Once the low tire pressure warning (Tire Pressure Monitoring System Warning Light) illuminates, you must increase the tire pressure to the recommended cold placard pressure in order for the TPMS Warning Light to turn off.

#### NOTE:

When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the TPMS Warning Light off.

The system will automatically update and the TPMS Warning Light will turn off once the system receives the updated tire pressures. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

For example, your vehicle may have a recommended cold (parked for more than three hours) placard pressure of 33 psi (227 kPa). If the ambient temperature is  $68 \,^\circ$ F (20  $^\circ$ C) and the measured tire pressure is 28 psi (193 kPa), a temperature drop to 20  $^\circ$ F (-7  $^\circ$ C) will decrease the tire pressure to approximately 24 psi (165 kPa). This tire pressure is low enough to turn on the TPMS Warning Light. Driving the vehicle may cause the tire pressure to rise to approximately 28 psi (193 kPa), but the TPMS Warning Light will still be on. In this situation, the TPMS Warning Light will turn off only after the tires are inflated to the vehicle's recommended cold placard pressure value  $\Box$  page 326.

#### NOTE:

When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the TPMS Warning Light off.

#### CAUTION!

 The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warning have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when

#### CAUTION!

using replacement equipment that is not of the same size, type, and/or style. The TPMS sensor is not designed for use on aftermarket wheels, and may contribute to a poor overall system performance. Customers are encouraged to use Original Equipment Manufacturer (OEM) wheels to ensure TPMS feature operation.

- Using aftermarket tire sealants may cause the Tire Pressure Monitoring System (TPMS) sensor to become inoperable. After using an aftermarket tire sealant it is recommended that you take your vehicle to an authorized dealer to have your sensor function checked.
- After inspecting or adjusting the tire pressure always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the TPMS sensor.

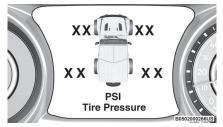
#### NOTE:

- The TPMS is not intended to replace normal tire care and maintenance, or to provide warning of a tire failure or condition.
- The TPMS should not be used as a tire pressure gauge while adjusting your tire pressure, unless your vehicle is equipped with a Tire Fill Alert or Selectable Tire Fill Alert feature.
- Driving on a significantly underinflated tire causes the tire to overheat and can lead to tire failure. Underinflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

- The TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure using an accurate tire pressure gauge, even if underinflation has not reached the level to trigger illumination of the TPMS Warning Light.
- Seasonal temperature changes will affect tire pressure, and the TPMS will monitor the actual tire pressure in the tire.

## System Operation

The Tire Pressure Monitoring System (TPMS) uses wireless technology with wheel rim mounted electronic sensors to monitor tire pressure levels. Sensors, mounted to each wheel as part of the valve stem, transmit tire pressure readings to the receiver module.



**Tire Pressure Monitoring System Display** 

#### NOTE:

It is particularly important for you to check the tire pressure in all of the tires on your vehicle monthly and to maintain the proper pressure.

The TPMS consists of the following components:

- Receiver module
- Four Tire Pressure Monitoring System sensors

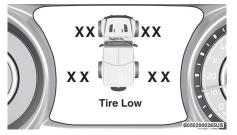
- Various Tire Pressure Monitoring System messages, which display in the instrument cluster
- Tire Pressure Monitoring System Warning Light

## TIRE PRESSURE MONITORING SYSTEM LOW PRESSURE WARNINGS



The TPMS Warning Light will illuminate in the instrument cluster and a chime will sound when tire pressure is low in one or more of the four active road tires. In addition, the

instrument cluster will display a "Tire Low" message for a minimum of five seconds, an "Inflate to XX" message and a graphic showing the pressure values of each tire with the low tire pressure values in a different color.



**Tire Pressure Monitoring System Low Pressure Warning** 

Should this occur, you should stop as soon as possible and inflate the tires with low pressure (those in a different color in the instrument cluster graphic) to the vehicle's recommended cold placard pressure value as shown in the "Inflate to XX" message. Once the system receives the updated tire pressures, the system will automatically update, the pressure values in the graphic display in the instrument cluster will return to their original color, and the TPMS Warning Light will turn off.

#### NOTE:

When filling warm tires, the tire pressure may need to be increased up to an additional 4 psi (28 kPa) above the recommended cold placard pressure in order to turn the TPMS Warning Light off. The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

#### SERVICE TPMS WARNING

When a system fault is detected, the TPMS Warning Light will flash on and off for 75 seconds and then remain on solid. The system fault will also sound a chime. In addition, the instrument cluster will display a "SERVICE TIRE PRESSURE SYSTEM" message for a minimum of five seconds and then display dashes (-) in place of the pressure value to indicate which sensor is not being received.

If the ignition is cycled, this sequence will repeat, providing the system fault still exists. If the system fault no longer exists, the TPMS Warning Light will no longer flash, and the "SERVICE TIRE PRESSURE SYSTEM" message will no longer display, and a pressure value will display in place of the dashes. A system fault can occur due to any of the following:

- Jamming due to electronic devices or driving next to facilities emitting the same radio frequencies as the TPMS sensors
- Installing some form of aftermarket window tinting
  that affects radio wave signals
- Lots of snow or ice around the wheels or wheel housings
- Using tire chains on the vehicle
- Using wheels/tires not equipped with TPMS sensors

#### Vehicles With A Full-Size Matching Spare

- If your vehicle is equipped with a matching full-size spare wheel and tire assembly, it has a Tire Pressure Monitoring System sensor, and can be monitored by the Tire Pressure Monitoring System (TPMS) when swapped with a low pressure road tire.
- 2. In the event that the matching full-size spare tire is swapped with a low pressure road tire, the next ignition switch cycle will still show the TPMS Warning Light to be on, a chime to sound, an Inflate to XX message to appear in the instrument cluster, and the graphic display will still show the low tire pressure value in a different color.
- Driving the vehicle for up to 20 minutes above 15 mph (24 km/h) will turn off the TPMS Warning Light as long as none of road tires are below the low pressure warning threshold.

#### TPMS DEACTIVATION — IF EQUIPPED

The TPMS can be deactivated if replacing all four wheel and tire assemblies (road tires) with wheel and tire assemblies that do not have TPMS sensors, such as when installing winter wheel and tire assemblies on your vehicle.

To deactivate the TPMS, first replace all four wheel and tire assemblies (road tires) with tires not equipped with Tire Pressure Monitoring System sensors. Then, drive the vehicle for 20 minutes above 15 mph (24 km/h). The TPMS will chime, the TPMS Warning Light will flash on and off for 75 seconds and then remain on. The instrument cluster will display the "SERVICE TIRE PRES-SURE SYSTEM" message and then display dashes (–) in place of the pressure values.

Beginning with the next ignition cycle, the TPMS will no longer chime or display the "SERVICE TIRE PRESSURE SYSTEM" message in the instrument cluster but dashes (-) will remain in place of the pressure values.

To reactivate the TPMS, replace all four wheel and tire assemblies (road tires) with tires equipped with TPMS sensors. Then, drive the vehicle for up to 20 minutes above 15 mph (24 km/h). The TPMS will chime, the TPMS Warning Light will flash on and off for 75 seconds and then turn off. The instrument cluster will display the "SERVICE TIRE PRESSURE SYSTEM" message and then display pressure values in place of the dashes. On the next ignition cycle the "SERVICE TIRE PRESSURE SYS-TEM" message will no longer be displayed as long as no system fault exists.

#### TIRE FILL ALERT

This feature notifies the user when the placard tire pressure is attained while inflating or deflating the tire.

The customer may choose to disable or enable the Tire Fill Alert feature in the customer settings menu of the Uconnect system.

#### NOTE:

- Only one tire can be filled at a time when using the Tire Fill Alert system.
- The Tire Fill Alert feature cannot be entered if an existing TPMS fault is set to "active" or if the system is in deactivation mode (if equipped).

The system will be activated when the system detects an increase in tire pressure while filling the tire. The ignition must be in the ON/RUN mode with the transmission in PARK for vehicles equipped with an automatic transmission. For vehicles equipped with a manual transmission, the parking brake must be applied.

#### NOTE:

It is not required to have the engine running to enter Tire Fill Alert mode.

The hazard lamps will come on to confirm the vehicle is in Tire Fill Alert mode. If the hazard lamps do not come on while inflating the tire, the Tire Pressure Monitoring System sensor may be in an inoperative position, preventing the TPMS sensor signal from being received. In this case, the vehicle may need to be moved slightly forward or backward.

When Tire Fill Alert mode is entered, the tire pressure display screen will be displayed in the instrument cluster.

#### Operation:

- The horn will chirp once to let the user know when to stop filling the tire, when it reaches recommended pressure.
- The horn will chirp three times if the tire is overfilled and will continue to chirp every five seconds if the user continues to inflate the tire.
- The horn will chirp once again when enough air is let out to reach proper inflation level.
- The horn will also chirp three times if the tire is then underinflated and will continue to chirp every five seconds if the user continues to deflate the tire.

#### NOTE:

The Tire Fill Alert feature is set to "Disabled" every time the ignition is turned to "OFF". To re-enable the Tire Fill Alert feature at the next ignition "RUN" state, the customer must re-enable the feature through use of the customer settings in the radio.

# SELECTABLE TIRE FILL ALERT (STFA) — IF EQUIPPED

The STFA system is an optional feature that is included as part of the normal Tire Fill Alert system. The system is designed to allow you to select a pressure to inflate or deflate the vehicle's front and rear axle tires to, and to provide feedback while inflating or deflating the vehicle's tires.

#### NOTE:

To use the STFA feature, the Tire Fill Alert feature must be enabled through use of the customer settings in the radio.

In the Selectable Tire Fill Alert application, which is located in the apps menu of the Uconnect system, you will be able to select a pressure setting for both the front and rear axle tire pressures by scrolling through a pressure range from XX to 15 psi in 1 psi increments for each axle setting.

XX = the vehicle's cold placard pressure values for the front and rear axles as shown on the vehicle placard pressure label.

You may also store pressure values chosen for each axle in the Uconnect system application as preset pressure values. Up to two sets of preset pressure values can be stored in the Uconnect system for the front and rear axle. Once you select the tire pressures for the front and rear axles that you want to inflate or deflate to, you can begin inflating or deflating one tire at a time.

#### NOTE:

The STFA system will only support inflating or deflating one tire at a time.

The system will be activated when the TPMS receiver module detects a change in tire pressure. The ignition must be in the ON/RUN mode, with the transmission in PARK in vehicles with an automatic transmission, and in NEUTRAL with the parking brake engaged in vehicles with a manual transmission. The hazard lamps will come on to confirm the vehicle is in Tire Fill Alert mode.

When Tire Fill Alert mode is entered, the tire pressure screen will be displayed in the instrument cluster. If the hazard lamps do not come on while inflating or deflating the tire, the Tire Pressure Monitoring System sensor may be in an inoperative position, preventing the TPMS sensor signal from being received. In this case, the vehicle may need to be moved slightly forward or backward.

Horn chirps will indicate STFA status as tires are inflated/deflated. The horn will chirp under the following STFA states:

- The horn will chirp once when the selected pressure is reached to let you know when to stop inflating or deflating the tire.
- 2. The horn will chirp three times if the tire is overinflated or over-deflated.
- The horn will chirp once again when enough air is added or removed to reach proper selected pressure level.

## **OCCUPANT RESTRAINT SYSTEMS**

Some of the most important safety features in your vehicle are the restraint systems:

# OCCUPANT RESTRAINT SYSTEMS FEATURES

- Seat Belt Systems
- Supplemental Restraint Systems (SRS) Air Bags
- Child Restraints

Some of the safety features described in this section may be standard equipment on some models, or may be optional equipment on others. If you are not sure, ask an authorized dealer.

## IMPORTANT SAFETY PRECAUTIONS

Please pay close attention to the information in this section. It tells you how to use your restraint system properly, to keep you and your passengers as safe as possible.

Here are some simple steps you can take to minimize the risk of harm from a deploying air bag:

- 1. Children 12 years old and under should always ride buckled up in the rear seat of a vehicle with a rear seat.

- 4. Never allow children to slide the shoulder belt behind them or under their arm.
- You should read the instructions provided with your child restraint to make sure that you are using it properly.
- 6. All occupants should always wear their lap and shoulder belts properly.
- The driver and front passenger seats should be moved back as far as practical to allow the front air bags room to inflate.
- Do not lean against the door or window. If your vehicle has side air bags, and deployment occurs, the side air bags will inflate forcefully into the space between occupants and the door and occupants could be injured.

 Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.

WARNING!

 Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

## SEAT BELT SYSTEMS

Buckle up even though you are an excellent driver, even on short trips. Someone on the road may be a poor driver and could cause a collision that includes you. This can happen far away from home or on your own street

Research has shown that seat belts save lives, and they can reduce the seriousness of injuries in a collision. Some of the worst injuries happen when people are thrown from the vehicle. Seat belts reduce the possibility of election and the risk of injury caused by striking the inside of the vehicle. Everyone in a motor vehicle should be belted at all times.

### Enhanced Seat Belt Use Reminder System (BeltAlert)

#### Driver And Passenger BeltAlert - If Equipped



BeltAlert is a feature intended to remind the driver and outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) to buckle their seat belts. The BeltAlert feature is active whenever the ignition switch

is in the START or ON/RUN position.

#### Initial Indication

If the driver is unbuckled when the ignition switch is first in the START or ON/RUN position, a chime will signal for a few seconds. If the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) is unbuckled when the ignition switch is first in the START or ON/RUN position the Seat Belt Reminder Light will turn on and remain on until both outboard front seat belts are buckled. The outboard front passenger seat BeltAlert is not active when an outboard front passenger seat is unoccupied.

#### BeltAlert Warning Sequence

The BeltAlert warning sequence is activated when the vehicle is moving above a specified vehicle speed range and the driver or outboard front seat passenger is unbuckled (if equipped with outboard front passenger seat BeltAlert) (the outboard front passenger seat BeltAlert is not active when the outboard front passenger seat is unoccupied). The BeltAlert warning sequence starts by blinking the Seat Belt Reminder Light and sounding an intermittent chime. Once the BeltAlert warning sequence has completed, the Seat Belt Reminder Light will remain on until the seat belts are buckled. The BeltAlert warning sequence may repeat based on vehicle speed until the driver and occupied outboard front seat passenger seat belts are buckled. The driver should instruct all occupants to buckle their seat belts.

#### Change Of Status

If the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) unbuckles their seat belt while the vehicle is traveling, the BeltAlert warning sequence will begin until the seat belts are buckled again.

The outboard front passenger seat BeltAlert is not active when the outboard front passenger seat is unoccupied. BeltAlert may be triggered when an animal or other items are placed on the outboard front passenger seat or when the seat is folded flat (if equipped). It is recommended that pets be restrained in the rear seat (if equipped) in pet harnesses or pet carriers that are secured by seat belts, and cargo is properly stowed.

BeltAlert can be activated or deactivated by an authorized dealer. FCA US LLC does not recommend deactivating BeltAlert.

#### NOTE:

If BeltAlert has been deactivated and the driver or outboard front seat passenger (if equipped with outboard front passenger seat BeltAlert) is unbuckled the Seat Belt Reminder Light will turn on and remain on until the driver and outboard front seat passenger seat belts are buckled

## Lap/Shoulder Belts

All seating positions in your vehicle are equipped with lap/shoulder belts.

The seat belt webbing retractor will lock only during very sudden stops or collisions. This feature allows the shoulder part of the seat belt to move freely with you under normal conditions. However, in a collision the seat belt will lock and reduce your risk of striking the inside of the vehicle or being thrown out of the vehicle.

#### WARNING!

- Relying on the air bags alone could lead to more severe injuries in a collision. The air bags work with your seat belt to restrain you properly. In some collisions, the air bags won't deploy at all. Always wear your seat belt even though you have air bags.
- In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.
- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed

6

#### WARNING!

- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly. Occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.
- Wearing your seat belt incorrectly could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of the seat belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Two people should never be belted into a single seat belt. People belted together can crash into one another in a collision, hurting one another badly. Never use a lap/shoulder belt or a lap belt for more than one person, no matter what their size.

#### WARNING!

 A lap belt worn too high can increase the risk of injury in a collision. The seat belt forces won't be at the strong hip and pelvic bones, but across your abdomen. Always wear the lap part of your seat belt as low as possible and keep it snug.

(Continued)

#### WARNING!

- A twisted seat belt may not protect you properly. In a collision, it could even cut into you. Be sure the seat belt is flat against your body, without twists. If you can't straighten a seat belt in your vehicle, take it to an authorized dealer immediately and have it fixed.
- A seat belt that is buckled into the wrong buckle will not protect you properly. The lap portion could ride too high on your body, possibly causing internal injuries. Always buckle your seat belt into the buckle nearest you.
- A seat belt that is too loose will not protect you properly. In a sudden stop, you could move too far forward, increasing the possibility of injury. Wear your seat belt snugly.
- A seat belt that is worn under your arm is dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing head and neck injury. A seat belt worn under the arm can cause internal injuries. Ribs aren't as strong as shoulder bones. Wear the seat belt over your shoulder so that your strongest bones will take the force in a collision.
- A shoulder belt placed behind you will not protect you from injury during a collision. You are more likely to hit your head in a collision if you do not wear your shoulder belt. The lap and shoulder belt are meant to be used together.
- A frayed or torn seat belt could rip apart in a collision and leave you with no protection. Inspect the seat belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or

WARNING!

modify the seat belt system. If your vehicle is involved in a collision, or if you have questions regarding seat belt or retractor conditions, take your vehicle to an authorized FCA dealer or authorized FCA Certified Collision Care Program facility for inspection.

# Lap/Shoulder Belt Operating Instructions

- 1. Enter the vehicle and close the door. Sit back and adjust the seat.
- The seat belt latch plate is above the back of the front seat, and next to your arm in the rear seat (for vehicles equipped with a rear seat). Grab the latch plate and pull out the seat belt. Slide the latch plate up the webbing as far as necessary to allow the seat belt to go around your lap.



**Pulling Out The Latch Plate** 

(Continued)

3. When the seat belt is long enough to fit, insert the latch plate into the buckle until you hear a "click."



**Inserting Latch Plate Into Buckle** 

4. Position the lap belt so that it is snug and lies low across your hips, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is too tight, tilt the latch plate and pull on the lap belt. A snug seat belt reduces the risk of sliding under the seat belt in a collision.



**Positioning The Lap Belt** 

- Position the shoulder belt across the shoulder and chest with minimal, if any slack so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the shoulder belt.
- To release the seat belt, push the red button on the buckle. The seat belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the seat belt to retract fully.

### Lap/Shoulder Belt Untwisting Procedure

Use the following procedure to untwist a twisted lap/ shoulder belt.

- 1. Position the latch plate as close as possible to the anchor point.
- At about 6 to 12 inches (15 to 30 cm) above the latch plate, grab and twist the seat belt webbing 180 degrees to create a fold that begins immediately above the latch plate.
- Slide the latch plate upward over the folded webbing. The folded webbing must enter the slot at the top of the latch plate.
- Continue to slide the latch plate up until it clears the folded webbing and the seat belt is no longer twisted.

## Adjustable Upper Shoulder Belt Anchorage

In the driver and outboard front passenger seats, the top of the shoulder belt can be adjusted upward or downward to position the seat belt away from your neck. Push or squeeze the anchorage button to release the anchorage, and move it up or down to the position that serves you best.



Adjustable Upper Anchorage

As a guide, if you are shorter than average, you will prefer the shoulder belt anchorage in a lower position, and if you are taller than average, you will prefer the shoulder belt anchorage in a higher position. After you release the anchorage button, try to move it up or down to make sure that it is locked in position.

#### NOTE:

The adjustable upper shoulder belt anchorage is equipped with an Easy Up feature. This feature allows the shoulder belt anchorage to be adjusted in the upward position without pushing or squeezing the release button. To verify the shoulder belt anchorage is latched, pull downward on the shoulder belt anchorage until it is locked into position.

#### WARNING!

 Wearing your seat belt incorrectly could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of the seat belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.

#### WARNING!

- Position the shoulder belt across the shoulder and chest with minimal, if any slack so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the shoulder belt.
- Misadjustment of the seat belt could reduce the effectiveness of the safety belt in a crash.
- Always make all seat belt height adjustments when the vehicle is stationary.

### Seat Belt Extender

If a seat belt is not long enough to fit properly, even when the webbing is fully extended and the adjustable upper shoulder belt anchorage (if equipped) is in its lowest position, an authorized dealer can provide you with a Seat Belt Extender. The Seat Belt Extender should be used only if the existing seat belt is not long enough. When the Seat Belt Extender is not required for a different occupant, it must be removed.

#### WARNING!

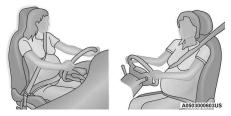
- ONLY use a Seat Belt Extender if it is physically required in order to properly fit the original seat belt system. DO NOT USE the Seat Belt Extender if, when worn, the distance between the front edge of the Seat Belt Extender buckle and the center of the occupant's body is LESS than 6 inches.
- Using a Seat Belt Extender when not needed can increase the risk of serious injury or death in a collision. Only use the Seat Belt Extender when the

(Continued)

#### WARNING!

lap belt is not long enough and only use in the recommended seating positions. Remove and store the Seat Belt Extender when not needed.

#### Seat Belts And Pregnant Women



#### **Seat Belts And Pregnant Women**

Seat belts must be worn by all occupants including pregnant women: the risk of injury in the event of an accident is reduced for the mother and the unborn child if they are wearing a seat belt.

Position the lap belt snug and low below the abdomen and across the strong bones of the hips. Place the shoulder belt across the chest and away from the neck. Never place the shoulder belt behind the back or under the arm.

### Seat Belt Pretensioner

The front and second row outboard seat belt systems are equipped with pretensioning devices that are designed to remove slack from the seat belt in the event of a collision. These devices may improve the performance of the seat belt by removing slack from the seat belt early in a collision. Pretensioners work for all size occupants, including those in child restraints.

#### NOTE:

These devices are not a substitute for proper seat belt placement by the occupant. The seat belt still must be worn snugly and positioned properly.

The pretensioners are triggered by the Occupant Restraint Controller (ORC). Like the air bags, the pretensioners are single use items. A deployed pretensioner or a deployed air bag must be replaced immediately.

#### **Energy Management Feature**

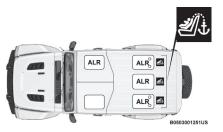
The front and second row outboard seat belt systems are equipped with an Energy Management feature that may help further reduce the risk of injury in the event of a collision. The seat belt system has a retractor assembly that is designed to release webbing in a controlled manner.

# Switchable Automatic Locking Retractor (ALR)

The seat belts in the passenger seating positions are equipped with a Switchable Automatic Locking Retractor (ALR) which is used to secure a child restraint system. The figure below illustrates the locking feature for each seating position  $\Rightarrow$  page 262.



ALR – Switchable Automatic Locking Retractor Locations (Two-Door Models)



ALR — Switchable Automatic Locking Retractor Locations (Four-Door Models) If the passenger seating position is equipped with an ALR and is being used for normal usage, only pull the seat belt webbing out far enough to comfortably wrap around the occupant's mid-section so as to not activate the ALR. If the ALR is activated, you will hear a clicking sound as the seat belt retracts. Allow the webbing to retract completely in this case and then carefully pull out only the amount of webbing necessary to comfort-ably wrap around the occupant's mid-section. Slide the latch plate into the buckle until you hear a "click."

In Automatic Locking Mode, the shoulder belt is automatically pre-locked. The seat belt will still retract to remove any slack in the shoulder belt. Use the Automatic Locking Mode anytime a child restraint is installed in a seating position that has a seat belt with this feature. Children 12 years old and under should always be properly restrained in the rear seat of a vehicle with a rear seat.

#### WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

#### How To Engage The Automatic Locking Mode

- 1. Buckle the combination lap and shoulder belt.
- 2. Grab the shoulder portion and pull downward until the entire seat belt is extracted.
- Allow the seat belt to retract. As the seat belt retracts, you will hear a clicking sound. This indicates the seat belt is now in the Automatic Locking Mode.

#### How To Disengage The Automatic Locking Mode

Unbuckle the combination lap/shoulder belt and allow it to retract completely to disengage the Automatic Locking Mode and activate the vehicle sensitive (emergency) locking mode.

#### WARNING!

- The seat belt assembly must be replaced if the switchable Automatic Locking Retractor (ALR) feature or any other seat belt function is not working properly when checked according to the procedures in the Service Manual.
- Failure to replace the seat belt assembly could increase the risk of injury in collisions.
- Do not use the Automatic Locking Mode to restrain occupants who are wearing the seat belt or children who are using booster seats. The locked mode is only used to install rear-facing or forwardfacing child restraints that have a harness for restraining the child.

## SUPPLEMENTAL RESTRAINT SYSTEMS (SRS)

Some of the safety features described in this section may be standard equipment on some models, or may be optional equipment on others. If you are not sure, ask an authorized dealer.

The air bag system must be ready to protect you in a collision. The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with the electrical Air Bag System Components. Your vehicle may be equipped with the following Air Bag System Components:

### **Air Bag System Components**

- Occupant Restraint Controller (ORC)
- Air Bag Warning Light 🗩
- Steering Wheel and Column
- Instrument Panel
- Knee Impact Bolsters
- Driver and Front Passenger Air Bags
- Seat Belt Buckle Switch
- Supplemental Side Air Bags
- Front and Side Impact Sensors
- Seat Belt Pretensioners
- Seat Track Position Sensors
- Occupant Classification System

## Air Bag Warning Light

The Occupant Restraint Controller (ORC) monitors the readiness of the electronic parts of the air bag system whenever the ignition switch is in the START or ON/RUN position. If the ignition switch is in the OFF position or in the ACC position, the air bag system is not on and the air bags will not inflate.

The ORC contains a backup power supply system that may deploy the air bag system even if the battery loses power or it becomes disconnected prior to deployment.

The ORC turns on the Air Bag Warning Light in the instrument panel for approximately four to eight seconds for a self-check when the ignition switch is first in the ON/RUN position. After the self-check, the Air Bag Warning Light will turn off. If the ORC detects a malfunction in any part of the system, it turns on the Air Bag Warning Light, either momentarily or continuously. A single chime will sound to alert you if the light comes on again after initial startup.

The ORC also includes diagnostics that will illuminate the instrument panel Air Bag Warning Light if a malfunction is detected that could affect the air bag system. The diagnostics also record the nature of the malfunction. While the air bag system is designed to be maintenance free, if any of the following occurs, have an authorized dealer service the air bag system immediately.

- The Air Bag Warning Light does not come on during the four to eight seconds when the ignition switch is first in the ON/RUN position.
- The Air Bag Warning Light remains on after the four to eight-second interval.
- The Air Bag Warning Light comes on intermittently or remains on while driving.

#### NOTE:

If the speedometer, tachometer, or any engine related gauges are not working, the Occupant Restraint Controller (ORC) may also be disabled. In this condition the air bags may not be ready to inflate for your protection. Have an authorized dealer service the air bag system immediately.

#### WARNING!

Ignoring the Air Bag Warning Light in your instrument panel could mean you won't have the air bag system to protect you in a collision. If the light does not come on as a bulb check when the ignition is first turned on, stays on after you start the vehicle, or if it comes on as you drive, have an authorized dealer service the air bag system immediately.

## Redundant Air Bag Warning Light

If a fault with the Air Bag Warning Light is detected, which could affect the Supplemental Restraint System (SRS), the Redundant Air Bag Warning Light will illuminate on the instrument panel. The Redundant Air Bag Warning Light will stay on until the fault is cleared. In addition, a single chime will sound to alert you that the Redundant Air Bag Warning Light has come on and a fault has been detected. If the Redundant Air Bag Warning Light comes on intermittently or remains on while driving have an authorized dealer service the vehicle immediately  $\Box$  page 133.

## Front Air Bags

This vehicle has front air bags and lap/shoulder belts for both the driver and front passenger. The front air bags are a supplement to the seat belt restraint systems. The driver front air bag is mounted in the center of the steering wheel. The passenger front air bag is mounted in the instrument panel, above the glove compartment. The words "SRS AIRBAG" or "AIRBAG" are embossed on the air bag covers.



#### Front Air Bag/Knee Impact Bolster Locations

- 1 Driver And Passenger Front Air Bags
- 2 Driver And Passenger Knee Impact Bolsters

#### WARNING!

 Being too close to the steering wheel or instrument panel during front air bag deployment could cause serious injury, including death. Air bags need room to inflate. Sit back, comfortably extending your arms to reach the steering wheel or instrument panel.

(Continued)

#### WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

# Driver And Passenger Front Air Bag Features

The Advanced Front Air Bag system has multistage driver and front passenger air bags. This system provides output appropriate to the severity and type of collision as determined by the Occupant Restraint Controller (ORC), which may receive information from the front impact sensors (if equipped) or other system components.

The first stage inflator is triggered immediately during an impact that requires air bag deployment. A low energy output is used in less severe collisions. A higher energy output is used for more severe collisions.

This vehicle may be equipped with a driver and/or front passenger seat belt buckle switch that detects whether the driver or front passenger seat belt is buckled. The seat belt buckle switch may adjust the inflation rate of the Advanced Front Air Bags.

This vehicle may be equipped with driver and/or front passenger seat track position sensors that may adjust the inflation rate of the Advanced Front Air Bags based upon seat position. This vehicle has an Occupant Classification System (OCS) in the front passenger seat. The OCS is designed to activate or deactivate the Passenger Advanced Front Air Bag depending on the occupant's seated weight. It is designed to deactivate the Passenger Advanced Front Air Bag for an unoccupied seat and for occupants whose seated weight classifies them in a category other than a properly seated adult. This could be a child, teenager, or even an adult.

The Passenger Air Bag Disable (PAD) Indicator Light (an amber light located on the overhead sports bar) tells the driver and front passenger when the Passenger Advanced Front Air Bag is deactivated. The PAD Indicator Light illuminates the words "PASSENGER AIR BAG OFF" to show that the Passenger Advanced Front Air Bag will not deploy during a collision.

#### NOTE:

When the front passenger seat is empty or when very light objects are placed on the seat, the Passenger Advanced Front Air Bag will not deploy even though the Passenger Air Bag Disable (PAD) System Indicator Light is NOT illuminated.

#### WARNING!

- No objects should be placed over or near the air bag on the instrument panel or steering wheel because any such objects could cause harm if the vehicle is in a collision severe enough to cause the air bag to inflate.
- Do not put anything on or around the air bag covers or attempt to open them manually. You may damage the air bags and you could be injured

(Continued)

#### WARNING!

because the air bags may no longer be functional. The protective covers for the air bag cushions are designed to open only when the air bags are inflating.

 Relying on the air bags alone could lead to more severe injuries in a collision. The air bags work with your seat belt to restrain you properly. In some collisions, air bags won't deploy at all. Always wear your seat belts even though you have air bags.

## Front Air Bag Operation

Front Air Bags are designed to provide additional protection by supplementing the seat belts. Front air bags are not expected to reduce the risk of injury in rear, side, or rollover collisions. The front air bags will not deploy in all frontal collisions, including some that may produce substantial vehicle damage – for example, some pole collisions, truck underrides, and angle offset collisions.

On the other hand, depending on the type and location of impact, front air bags may deploy in crashes with little vehicle front-end damage but that produce a severe initial deceleration.

Because air bag sensors measure vehicle deceleration over time, vehicle speed and damage by themselves are not good indicators of whether or not an air bag should have deployed.

Seat belts are necessary for your protection in all collisions, and also are needed to help keep you in position, away from an inflating air bag. When the Occupant Restraint Controller (ORC) detects a collision requiring the front air bags, it signals the inflator units. A large quantity of non-toxic gas is generated to inflate the front air bags.

The steering wheel hub trim cover and the upper passenger side of the instrument panel separate and fold out of the way as the air bags inflate to their full size. The front air bags fully inflate in less time than it takes to blink your eyes. The front air bags then quickly deflate while helping to restrain the driver and front passenger.

# Occupant Classification System (OCS) — Front Passenger Seat

The Occupant Classification System (OCS) is part of a Federally regulated safety system for this vehicle. It is designed to activate or deactivate the Passenger Advanced Front Air Bag depending on the occupant's seated weight. It is designed to deactivate the Passenger Advanced Front Air Bag for an unoccupied seat and for occupants whose seated weight classifies them in a category other than a properly seated adult. This could be a child, teenager, or even an adult.

## The Occupant Classification System (OCS) Consists Of The Following:

- Occupant Restraint Controller (ORC)
- Occupant Classification Module (OCM) and Sensor located in the front passenger seat
- Passenger Air Bag Disabled (PAD) Indicator Light an amber light located on the overhead sports bar <sup>3</sup>/<sub>2</sub>
- Air Bag Warning Light 🗩
- Passenger Seat Belt

#### Occupant Classification Module (OCM) And Sensor

The Occupant Classification Module (OCM) is located underneath the front passenger seat. The Sensor is located beneath the passenger seat cushion foam. Any weight on the seat will be sensed by the Sensor. The OCM uses input from the Sensor to determine the front passenger's most probable classification. The OCM communicates this information to the ORC. The ORC uses the classification to determine whether it should activate or deactivate the Passenger Advanced Front Air Bag. In order for the OCS to operate as designed, it is important for the front passenger to be seated properly and properly wearing the seat belt. Properly seated passengers are:

- Sitting upright
- · Facing forward
- Sitting in the center of the seat with their feet comfortably on or near the floor
- Sitting with their back against the seat back and the seat back in an upright position



Seated Properly

The OCS may deactivate the deployment of the Passenger Advanced Front Air Bag if the OCS estimates that:

- The front passenger seat is unoccupied or has very light objects in it.
- The front passenger seat is occupied by a rearfacing child restraint.
- The front passenger seat is occupied by a child, including a child seated in a forward-facing child restraint or booster seat.
- The front passenger seat is occupied by a small passenger, including a child or small adult.
- The front passenger is not properly seated or his or her weight is taken off of the seat for a period of time.

| Passenger Air Bag Disable (PAD) System   |   |                                |  |
|--|---|--------------------------------|--|
| Front Passenger Seat Occupant Status   | Front Passenger Advanced Air Bag Disabled<br>Indicator Light ("PAD") Status | Front Passenger Air Bag Status |  |
| Unoccupied seat* Unbuckled   | NOT ILLUMINATED   | DEACTIVATED                    |  |
| Unoccupied seat* Buckled   | "PASSENGER AIR BAG OFF"   | DEACTIVATED                    |  |
| Grocery bags, heavy briefcases, and other relatively light objects             | "PASSENGER AIR BAG OFF"   | DEACTIVATED                    |  |
| Rear-facing child restraint**  | "PASSENGER AIR BAG OFF"   | DEACTIVATED                    |  |
| Child, including a child in a forward-facing child restraint or booster seat** | "PASSENGER AIR BAG OFF"   | DEACTIVATED                    |  |
| Small adult  | "PASSENGER AIR BAG OFF"   | DEACTIVATED                    |  |
| Properly seated adult  | NOT ILLUMINATED   | ACTIVATED                      |  |

\* When the front passenger seat is empty or when very light objects are placed on the seat and the seat belt is unbuckled, the Passenger Advanced Front Air Bag will not deploy even though the PAD System Indicator Light is NOT illuminated.

\*\* It is possible for a child to be classified as an adult, allowing the deployment of the Passenger Advanced Front Air Bag. Never allow children to ride in the front passenger seat and never install a child restraint system, including a rear-facing child restraint, in the front passenger seat.

#### WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

## Passenger Advanced Front Air Bag Disabled (PAD) Indicator Light $\overset{\circ\circ}{\not\gg_2}$

The Passenger Advanced Front Air Bag Disabled (PAD) Indicator Light (an amber light located on the overhead sports bar) tells the driver and front passenger when the Passenger Advanced Front Air Bag is deactivated. The PAD Indicator light illuminates the words "PASSEN-GER AIR BAG OFF" to show that the Passenger Advanced Front Air Bag will not deploy during a collision. When the front passenger seat is empty or when very light objects are placed on the seat and the seat belt is unbuckled, the Passenger Advanced Front Air Bag will not deploy even though the PAD indicator light is NOT illuminated.

SAFETY 249

The PAD indicator light should not be illuminated when an adult passenger is properly seated in the front passenger seat. The driver and adult passenger should verify that the PAD Indicator Light is not illuminated when an adult is riding in the front passenger seat. If an adult is not seated properly, the Passenger Advanced Front Air Bag may deactivate and the PAD Indicator Light will be illuminated.

The PAD Indicator Light should be illuminated and the Passenger Advanced Front Air Bag should be deactivated for most properly seated and restrained children in the passenger seat and for most properly installed child restraint systems. However, under certain conditions, even with a properly installed child restraint system, the PAD Indicator Light may not be illuminated, even though the Passenger Advanced Front Air Bag is deactivated. This can occur if the child restraint is lighter than the lightest weight necessary to illuminate the PAD Indicator Light. **NEVER** assume the Passenger Advanced Front Air Bag is deactivated unless the PAD Indicator Light is illuminated with the words "PASSENGER AIR BAG OFF."

#### NOTE:

If the seat belt is buckled for an empty seat, the PAD Indicator Light will illuminate.

## If The PAD Indicator Light Is Illuminated For An Adult Passenger:

If an adult passenger is seated in the front passenger seat and the PAD Indicator Light is illuminated, the passenger may be sitting improperly. Follow the steps below to allow the OCS to detect the adult passenger's seated weight to activate the Passenger Advanced Front Air Bag:

1. Turn off the vehicle and have the adult passenger step out of the vehicle.

- Remove any extra materials from the passenger seat, such as cushions, pads, seat covers, seat massagers, blankets, extra clothing, etc.
- 3. Place the seatback in the full upright position.
- Have the adult passenger sit in the center of the seat, with the passenger's feet comfortably on or near the floor, and with their back against the seatback.
- 5. Restart the vehicle and have the passenger remain in this seated position for two to three minutes after restarting the vehicle.

#### WARNING!

- If the PAD Indicator Light remains illuminated for an adult passenger, have an authorized dealer service the air bag system immediately. Failure to do so may cause serious injury or death. If the PAD Indicator Light is illuminated with the words "PAS-SENGER AIR BAG OFF," the Passenger Advanced Front Air Bag will not deploy in the event of a collision.
- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

(Continued)

#### WARNING!

 Children 12 years or younger should always ride buckled up in the rear seat of a vehicle with a rear seat.

#### Lighter Weight Passengers (Including Small Adults)

When a lighter weight passenger, including a small adult, occupies the passenger seat, the Passenger Advanced Front Air Bag may be deactivated. Therefore, the Passenger Advanced Front Air Bag may or may not be activated for a lighter weight passenger, including a small adult (depending on size) who is seated in the passenger seat. This does not mean that the OCS is working improperly.

The driver and passenger must always use the PAD Indicator Light as a determination of whether the Passenger Advanced Front Air Bag is activated or deactivated. If the PAD Indicator Light is illuminated with the words "PASSENGER AIR BAG OFF" when an adult is in the front passenger seat, have the passenger reposition his or her body in the seat until the PAD Indicator Light goes out.

If the PAD Indicator Light is illuminated with the words "PASSENGER AIR BAG OFF" the Passenger Advanced Front Air Bag will not inflate in the event of a collision.

#### Do Not Decrease OR Increase The Front Passenger's Seated Weight On The Front Passenger Seat

The front passenger's seated weight must be properly positioned on the front passenger seat. Failure to do so may result in serious injury or death. The OCS determines the most probable classification of the occupant that it detects. The OCS will detect the front passenger's decreased or increased seated weight, which may result in deactivation or activation of the Passenger Advanced Front Air Bag in a collision. This does not mean that the OCS is working improperly. Decreasing the front passenger's seated weight on the front passenger seat may result in deactivation of the Passenger Advanced Front Air Bag causing serious injury or death. Increasing the front passenger's seated weight on the front passenger seat may result in activation of the Passenger Advanced Front Air Bag. Examples of improper front passenger seating include:

- The front passenger's weight is transferred to another part of the vehicle (like the door, arm rest or instrument panel).
- The front passenger leans forward, sideways, or turns to face the rear of the vehicle.
- The front passenger's seatback is not in the full upright position.
- The front passenger carries or holds an object while seated (e.g., backpack, box, etc.).
- Objects are lodged under the front passenger seat.
- Objects are lodged between the front passenger seat and center console.
- Accessories that may change the seated weight on the front passenger seat are attached to the front passenger seat.
- Anything that may decrease or increase the front passenger's seated weight.

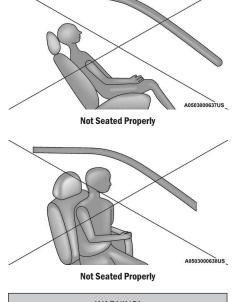
The OCS determines the front passenger's most probable classification. If an occupant in the front passenger seat is seated improperly, the occupant may provide an output signal to the OCS that is different from the occupant's properly seated weight input, for example:

Not Seated Properly

Not Seated Properly

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A0503000636US



#### WARNING!

 If a child restraint system, child, small teenager or adult in the front passenger seat is seated improperly, the occupant may provide an output signal to the OCS that is different from the occupant's properly seated weight input. This may result in serious injury or death in a collision.

(Continued)

#### WARNING!

- Always wear your seat belt and sit properly, with the seatback in an upright position, your back against the seatback, sitting upright, facing forward, in the center of the seat, with your feet comfortably on or near the floor.
- Do not carry or hold any objects (e.g., backpacks, boxes, etc.) while seated in the front passenger seat. Holding an object may provide an output signal to the OCS that is different than the occupant's properly seated weight input, which may result in serious injury or death in a collision.

The Air Bag Warning Light 🛠 will illuminate whenever the OCS is unable to classify the front passenger seat status.

A malfunction in the OCS may affect the operation of the air bag system. If the Air Bag Warning Light \* does not come on, or stays on after you start the vehicle, or it comes on as you drive, take the vehicle to an authorized dealer for service immediately.

#### WARNING!

Ignoring the Air Bag Warning Light in your instrument panel could mean you won't have the air bags to protect you in a collision. If the light does not come on as a bulb check when the ignition is first turned on, stays on after you start the vehicle, or if it comes on as you drive, have an authorized dealer service the air bag system immediately.

(Continued)

#### WARNING!

- Placing an object on the floor under the front passenger seat may prevent the OCS from working properly, which may result in serious injury or death in a collision. Do not place any objects on the floor under the front passenger seat.
- If there is a fault present in the OCS, both the PAD Indicator Light and the Air Bag Warning Light will illuminate to show that the Passenger Advanced Front Air Bag is deactivated. Should this occur, the Passenger Advanced Front Air Bag will remain deactivated until the fault is cleared. This indicates that you should take the vehicle to an authorized dealer for service immediately.

The passenger seat assembly contains critical OCS components that may affect Passenger Advanced Front Air Bag inflation. In order for the OCS to properly classify the seated weight of a front seat passenger, the OCS components must function as designed. Do not make any modifications to the front passenger seat components, assembly, or to the seat cover. If the seat, trim cover, or cushion needs service for any reason, take the vehicle to an authorized dealer. Only FCA US LLC approved seat accessories may be used.

The following requirements must be strictly followed:

- Do not modify the front passenger seat assembly or components in any way.
- Do not use prior or future model year seat covers or cushions not designated by FCA US LLC for the specific model being repaired. Always use the correct seat cover and cushion specified for the vehicle.
- Do not replace the seat cover or cushion with an aftermarket seat cover or cushion.

- Do not add a secondary seat cover or mat.
- At no time should any Supplemental Restraint System (SRS) component or SRS related component or fastener be modified or replaced with any part except those which are approved by FCA US LLC.

#### WARNING!

- Unapproved modifications or service procedures to the passenger seat assembly, its related components, seat cover, or cushion may inadvertently change the air bag deployment in case of a frontal collision. This could result in death or serious injury to the front passenger if the vehicle is involved in a collision. A modified vehicle may not comply with required Federal Motor Vehicle Safety Standards (FMVSS) and/or Canadian Motor Vehicle Safety Standards (CMVSS).
- If it is necessary to modify the air bag system for persons with disabilities, contact an authorized dealer.

### **Knee Impact Bolsters**

The knee impact bolsters help protect the knees of the driver and front passenger, and position the front occupants for improved interaction with the front air bags.

#### WARNING!

- Do not drill, cut, or tamper with the knee impact bolsters in any way.
- Do not mount any accessories to the knee impact bolsters such as alarm lights, stereos, citizen band radios, etc.

### Supplemental Side Air Bags

#### Supplemental Seat-Mounted Side Air Bags (SABs)

This vehicle is equipped with Supplemental Seat-Mounted Side Air Bags (SABs).

Supplemental Seat-Mounted Side Air Bags (SABs) are located in the outboard side of the front seats. The SABs are marked with a "SRS AIRBAG" or "AIRBAG" on a label or on the seat trim on the outboard side of the seats.

The SABs may help to reduce the risk of occupant injury during certain side impacts, in addition to the injury reduction potential provided by the seat belts and body structure.



Supplemental Seat-Mounted Side Air Bag Label

When the SAB deploys, it opens the seam on the outboard side of the seatback's trim cover. The inflating SAB deploys through the seat seam into the space between the occupant and the door. The SAB moves at a very high speed and with such a high force that it could injure occupants if they are not seated properly, or if items are positioned in the area where the SAB inflates. Children are at an even greater risk of injury from a deploying air bag.

#### WARNING!

Do not use accessory seat covers or place objects between you and the Side Air Bags; the performance could be adversely affected and/or objects could be pushed into you, causing serious injury.

# Supplemental Side Air Bag Inflatable Curtains (SABICs)

This vehicle is equipped with Supplemental Side Air Bag Inflatable Curtains (SABICs).

Supplemental Side Air Bag Inflatable Curtains (SABICs) are located above the side windows. The trim covering the SABICs is labeled "SRS AIRBAG" or "AIRBAG."



Supplemental Side Air Bag Inflatable Curtain (SABIC) Label Location

SABICs may help reduce the risk of head and other injuries to front and rear seat outboard occupants in certain side impacts, in addition to the injury reduction potential provided by the seat belts and body structure. The SABIC deploys downward, covering the side windows. An inflating SABIC pushes the outside edge of the headliner out of the way and covers the window. The SABICs inflate with enough force to injure occupants if they are not belted and seated properly, or if items are positioned in the area where the SABICs inflate. Children are at an even greater risk of injury from a deploying air bag.

The SABICs may help reduce the risk of partial or complete ejection of vehicle occupants through side windows in certain side impact events.

#### WARNING!

- Do not mount equipment, or stack luggage or other cargo up high enough to block the deployment of the SABICs. The trim covering above the side windows where the SABIC and its deployment path are located should remain free from any obstructions.
- In order for the SABICs to work as intended, do not install any accessory items in your vehicle which could alter the roof. Do not add an aftermarket sunroof to your vehicle. Do not add roof racks that require permanent attachments (bolts or screws) for installation on the vehicle roof. Do not drill into the roof of the vehicle for any reason.

#### Side Impacts

The Side Air Bags are designed to activate in certain side impacts. The Occupant Restraint Controller (ORC) determines whether the deployment of the Side Air Bags in a particular impact event is appropriate, based on the severity and type of collision. The side impact sensors aid the ORC in determining the appropriate response to impact events. The system is calibrated to deploy the Side Air Bags on the impact side of the vehicle during impacts that require Side Air Bag occupant protection. In side impacts, the Side Air Bags deploy independently; a left side impact deploys the left Side Air Bags only and a right-side impact deploys the right Side Air Bags only. Vehicle damage by itself is not a good indicator of whether or not Side Air Bags should have deployed.

The Side Air Bags will not deploy in all side collisions, including some collisions at certain angles, or some side collisions that do not impact the area of the passenger compartment. The Side Air Bags may deploy during angled or offset frontal collisions where the front air bags deploy.

Side Air Bags are a supplement to the seat belt restraint system. Side Air Bags deploy in less time than it takes to blink your eyes.

#### WARNING!

- Occupants, including children, who are up against or very close to Side Air Bags can be seriously injured or killed. Occupants, including children, should never lean on or sleep against the door, side windows, or area where the side air bags inflate, even if they are in an infant or child restraint.
- Seat belts (and child restraints where appropriate) are necessary for your protection in all collisions. They also help keep you in position, away from an inflating Side Air Bag. To get the best protection from the Side Air Bags, occupants must wear their seat belts properly and sit upright with their backs against the seats. Children must be properly restrained in a child restraint or booster seat that is appropriate for the size of the child.

#### WARNING!

- Side Air Bags need room to inflate. Do not lean against the door or window. Sit upright in the center of the seat.
- Being too close to the Side Air Bags during deployment could cause you to be severely injured or killed.
- Relying on the Side Air Bags alone could lead to more severe injuries in a collision. The Side Air Bags work with your seat belt to restrain you properly. In some collisions, Side Air Bags won't deploy at all. Always wear your seat belt even though you have Side Air Bags.

#### NOTE:

Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.

### Air Bag System Components

#### NOTE:

The Occupant Restraint Controller (ORC) monitors the internal circuits and interconnecting wiring associated with electrical Air Bag System Components listed below:

- Occupant Restraint Controller (ORC)
- Air Bag Warning Light 🗩
- Steering Wheel and Column
- Instrument Panel
- Knee Impact Bolsters
- Driver and Front Passenger Air Bags
- Seat Belt Buckle Switch
- Supplemental Side Air Bags
- Front and Side Impact Sensors

- Seat Belt Pretensioners
- Seat Track Position Sensors
- Occupant Classification System

#### If A Deployment Occurs

The front air bags are designed to deflate immediately after deployment.

#### NOTE:

Front and/or side air bags will not deploy in all collisions. This does not mean something is wrong with the air bag system.

If you do have a collision which deploys the air bags, any or all of the following may occur:

- The air bag material may sometimes cause abrasions and/or skin reddening to the occupants as the air bags deploy and unfold. The abrasions are similar to friction rope burns or those you might get sliding along a carpet or gymnasium floor. They are not caused by contact with chemicals. They are not permanent and normally heal quickly. However, if you haven't healed significantly within a few days, or if you have any blistering, see your doctor immediately.
- As the air bags deflate, you may see some smokelike particles. The particles are a normal by-product of the process that generates the non-toxic gas used for air bag inflation. These airborne particles may irritate the skin, eyes, nose, or throat. If you have skin or eye irritation, rinse the area with cool water. For nose or throat irritation, move to fresh air. If the irritation continues, see your doctor. If these particles settle on your clothing, follow the garment manufacturer's instructions for cleaning.

Do not drive your vehicle after the air bags have deployed. If you are involved in another collision, the air bags will not be in place to protect you.

#### WARNING!

Deployed air bags and seat belt pretensioners cannot protect you in another collision. Have the air bags, seat belt pretensioners, and the seat belt retractor assemblies replaced by an authorized dealer immediately. Also, have the Occupant Restraint Controller System serviced as well.

#### NOTE:

- Air bag covers may not be obvious in the interior trim, but they will open during air bag deployment.
- After any collision, the vehicle should be taken to an authorized dealer immediately.

### Enhanced Accident Response System

In the event of an impact, if the communication network remains intact, and the power remains intact, depending on the nature of the event, the Occupant Restraint Controller (ORC) will determine whether to have the Enhanced Accident Response System perform the following functions:

- Cut off fuel to the engine (if equipped).
- Cut off battery power to the electric motor (if equipped).
- Flash hazard lights as long as the battery has power.

- Turn on the interior lights, which remain on as long as the battery has power or for 15 minutes from the intervention of the Enhanced Accident Response System.
- Unlock the power door locks.

Your vehicle may also be designed to perform any of these other functions in response to the Enhanced Accident Response System:

- Turn off the Fuel Filter Heater, Turn off the HVAC Blower Motor, Close the HVAC Circulation Door
- Cut off battery power to the:
  - O Engine
  - Electric Motor (if equipped)
  - Electric power steering
  - O Brake booster
  - O Electric park brake
  - O Automatic transmission gear selector
  - O Horn
  - O Front wiper

#### NOTE:

After an accident, remember to cycle the ignition to the START or ON/OFF position and remove the key from the ignition switch to avoid draining the battery. Carefully check the vehicle for fuel leaks in the engine compartment and on the ground near the engine compartment and fuel tank before resetting the system and starting the engine. If there are no fuel leaks or damage to the vehicle electrical devices (e.g. headlights) after an accident, reset the system by following the procedure described below. If you have any doubt, contact an authorized dealer.

### Enhanced Accident Response System Reset Procedure – GAS

In order to reset the Enhanced Accident Response System functions after an event, the ignition switch must be changed from ignition START or ON/RUN to ignition OFF. Carefully check the vehicle for fuel leaks in the engine compartment and on the ground near the engine compartment and fuel tank before resetting the system and starting the engine.

After an accident, if the vehicle will not start after performing the reset procedure, the vehicle must be towed to an authorized dealer to be inspected and to have the Enhanced Accident Response System reset.

### Enhanced Accident Response System Reset Procedure – PHEV

After an event occurs requiring activation of the Enhanced Accident Response System, when the system is active, a "Service Hybrid Electric Vehicle System" message will be displayed on the instrument cluster. The vehicle is not drivable in this state.

In order to reset the high voltage battery and engine, the vehicle must be towed to an authorized dealer immediately to be inspected and have the Enhanced Accident Response System reset.

In order to immediately reset the hazard flashers, interior lights, power door locks, or the HVAC blower motor, the ignition switch must be changed from START or ON/RUN to ignition OFF.

### Maintaining Your Air Bag System

#### WARNING!

- Modifications to any part of the air bag system could cause it to fail when you need it. You could be injured if the air bag system is not there to protect you. Do not modify the components or wiring, including adding any kind of badges or stickers to the steering wheel hub trim cover or the upper passenger side of the instrument panel. Do not modify the front fascia/bumper, vehicle body structure, or add aftermarket side steps or running boards.
- It is dangerous to try to repair any part of the air bag system yourself. Be sure to tell anyone who works on your vehicle that it has an air bag system.
- Do not attempt to modify any part of your air bag system. The air bag may inflate accidentally or may not function properly if modifications are made. Take your vehicle to an authorized dealer for any air bag system service. If your seat, including your trim cover and cushion, needs to be serviced in any way (including removal or loosening/tightening of seat attachment bolts), take the vehicle to an authorized dealer. Only manufacturer approved seat accessories may be used. If it is necessary to modify the air bag system for persons with disabilities, contact an authorized dealer.

## Event Data Recorder (EDR)

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- · How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- · How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

#### NOTE:

EDR data are recorded by your vehicle only if a nontrivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

# CHILD RESTRAINTS

Everyone in your vehicle needs to be buckled up at all times, including babies and children. Every state in the United States, and every Canadian province, requires that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it.

Children 12 years or younger should ride properly buckled up in a rear seat, if available. According to crash statistics, children are safer when properly restrained in the rear seats rather than in the front.

#### WARNING!

In a collision, an unrestrained child can become a projectile inside the vehicle. The force required to hold even an infant on your lap could become so great that you could not hold the child, no matter how strong you are. The child and others could be badly injured or killed. Any child riding in your vehicle should be in a proper restraint for the child's size.

There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat Owner's Manual to make sure you have the correct seat for your child. Carefully read and follow all the instructions and warnings in the child restraint Owner's Manual and on all the labels attached to the child restraint.

Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. You should also make sure that you can install it in the vehicle where you will use it.

#### NOTE:

- For additional information, refer to http://www.nhtsa.gov/parents-and-caregivers or call: 1–888–327–4236
- Canadian residents should refer to Transport Canada's website for additional information: https://www.tc.gc.ca/en/services/road/ child-car-seat-safety.html

# Summary Of Recommendations For Restraining Children In Vehicles

|   | Child Size, Height, Weight Or Age   | Recommended Type Of Child Restraint  |
|---|---|--|
| Infants and Toddlers                    | Children who are two years old or younger and who have not<br>reached the height or weight limits of their child restraint    | Either an Infant Carrier or a Convertible Child Restraint, facing rearward in a rear seat of the vehicle |
| Small Children                          | Children who are at least two years old or who have outgrown the height or weight limit of their rear-facing child restraint  | Forward-Facing Child Restraint with a five-point Harness, facing forward in a rear seat of the vehicle   |
| Larger Children                         | Children who have outgrown their forward-facing child restraint,<br>but are too small to properly fit the vehicle's seat belt | Belt Positioning Booster Seat and the vehicle seat belt, seated in a rear seat of the vehicle            |
| Children Too Large for Child Restraints | Children 12 years old or younger, who have outgrown the height or weight limit of their booster seat                          | Vehicle Seat Belt, seated in a rear seat of the vehicle  |

### Infant And Child Restraints

Safety experts recommend that children ride rear-facing in the vehicle until they are two years old or until they reach either the height or weight limit of their rear-facing child restraint. Two types of child restraints can be used rear-facing; infant carriers and convertible child seats.

The infant carrier is only used rear-facing in the vehicle. It is recommended for children from birth until they reach the weight or height limit of the infant carrier. Convertible child seats can be used either rear-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rear-facing direction than infant carriers do, so they can be used rear-facing by children who have outgrown their infant carrier but are still less than at least two years old.

Children should remain rear-facing until they reach the highest weight or height allowed by their convertible child seat.

#### WARNING!

- Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.
- Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

### **Older Children And Child Restraints**

Children who are two years old or who have outgrown their rear-facing convertible child seat can ride forwardfacing in the vehicle. Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who are over two years old or who have outgrown the rear-facing weight or height limit of their rear-facing convertible child seat. Children should remain in a forward-facing child seat with a harness for as long as possible, up to the highest weight or height allowed by the child seat.

All children whose weight or height is above the forward-facing limit for the child seat should use a beltpositioning booster seat until the vehicle's seat belts fit properly. If the child cannot sit with knees bent over the vehicle's seat cushion while the child's back is against the seatback, they should use a belt-positioning booster seat. The child and belt-positioning booster seat are held in the vehicle by the seat belt.

#### WARNING!

- Improper installation can lead to failure of an infant or child restraint. It could come loose in a collision. The child could be badly injured or killed.
   Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.
- After a child restraint is installed in the vehicle, do not move the vehicle seat forward or rearward because it can loosen the child restraint attachments. Remove the child restraint before adjusting the vehicle seat position. When the vehicle seat has been adjusted, reinstall the child restraint.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or LATCH anchorages, or remove it from the vehicle. Do not leave it loose in the vehicle.

#### WARNING!

In a sudden stop or accident, it could strike the occupants or seatbacks and cause serious personal injury.

#### **Children Too Large For Booster Seats**

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seatback, should use the seat belt in a rear seat. Use this simple 5-step test to decide whether the child can use the vehicle's seat belt alone:

- 1. Can the child sit all the way back against the back of the vehicle seat?
- 2. Do the child's knees bend comfortably over the front of the vehicle seat while the child is still sitting all the way back?
- 3. Does the shoulder belt cross the child's shoulder between the neck and arm?

4. Is the lap part of the belt as low as possible, touching the child's thighs and not the stomach?

5. Can the child stay seated like this for the whole trip?

If the answer to any of these questions was "no," then the child still needs to use a booster seat in this vehicle. If the child is using the lap/shoulder belt, check seat belt fit periodically and make sure the seat belt buckle is latched. A child's squirming or slouching can move the belt out of position. If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle, or use a booster seat to position the seat belt on the child correctly.

#### WARNING!

Never allow a child to put the shoulder belt under an arm or behind their back. In a crash, the shoulder belt will not protect a child properly, which may result in serious injury or death. A child must always wear both the lap and shoulder portions of the seat belt correctly.

(Continued)

### **Recommendations For Attaching Child Restraints**

| Restraint Type                    | Combined Weight of the    |                               | Use Any Attachment Method Shown With An "X" Below |  |                                  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|---------------------------|-------------------------------|---|--|----------------------------------|--|--|--|--|--|--|--|--|--|
|                                   | Child + Child Restraint   | LATCH – Lower Anchors<br>Only | Seat Belt Only                                    | LATCH – Lower Anchors<br>+ Top Tether Anchor | Seat Belt + Top Tether<br>Anchor |  |  |  |  |  |  |  |  |  |
| Rear-Facing Child Restraint       | Up to 65 lb (29.5 kg)     | Х                             | Х   |  |                                  |  |  |  |  |  |  |  |  |  |
| Rear-Facing Child Restraint       | More than 65 lb (29.5 kg) |                               | Х   |  |                                  |  |  |  |  |  |  |  |  |  |
| Forward-Facing Child<br>Restraint | Up to 65 lb (29.5 kg)     |                               |   | х  | Х                                |  |  |  |  |  |  |  |  |  |
| Forward-Facing Child<br>Restraint | More than 65 lb (29.5 kg) |                               |   |  | Х                                |  |  |  |  |  |  |  |  |  |

# Lower Anchors And Tethers For CHildren (LATCH) Restraint System

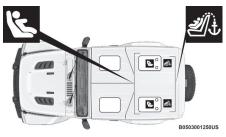


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#### LATCH Label

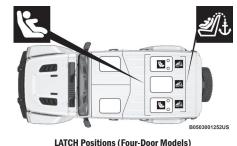
Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tethers for CHildren. The LATCH system has three vehicle anchor points for installing LATCHequipped child seats. There are two lower anchorages located at the back of the seat cushion where it meets the seatback and one top tether anchorage located behind the seating position. These anchorages are used to install LATCH-equipped child seats without using the vehicle's seat belts. Some seating positions may have a top tether anchorage but no lower anchorages. In these seating positions, the seat belt must be used with the top tether anchorage to install the child restraint. Please see the following table for more information.

# LATCH Positions For Installing Child Restraints In This Vehicle



#### LATCH Positions (Two-Door Models)

Lower Anchorage Symbol
 (2 Anchorages Per Seating Position)
 Top Tether Anchorage Symbol



## Lower Anchorage Symbol (2 Anchorages Per Seating Position)

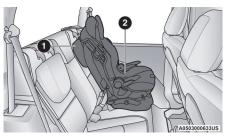
| Frequently Asked  | Questions About Installing Child Rest                                     | raints With LATCH   |
|---|---|---|
| What is the weight limit (child's weight + weight of the child restraint) for using the LATCH anchorage system to attach the child restraint? | 65 lb (29.5 kg)   | Use the LATCH anchorage system until the combined weight of the child and the child restraint is 65 lb (29.5 kg). Use the seat belt and tether anchor instead of the LATCH system once the combined weight is more than 65 lb (29.5 kg).  |
| Can the LATCH anchorages and the seat belt be used together to attach a rear-facing or forward-facing child restraint?                        | No  | Do not use the seat belt when you use the LATCH anchorage sys-<br>tem to attach a rear-facing or forward-facing child restraint.<br>Booster seats may be attached to the LATCH anchorages if<br>allowed by the booster seat manufacturer. See your booster seat<br>owner's manual for more information. |
| Can a child seat be installed in the center position using the inner LATCH lower anchorages from the outboard seating positions?              | Two Door Models – No Center Seating<br>Position<br>Four Door Models – Yes | Four Door Only: You can install child restraints with flexible lower<br>anchors in the center position. The inner anchorages are<br>18.5 inches (484 mm) apart. Do not install child restraints with<br>rigid lower anchors in the center position.   |
| Can two child restraints be attached using a common lower<br>LATCH anchorage?   | No  | Never "share" a LATCH anchorage with two or more child<br>restraints. If the center position does not have dedicated LATCH<br>lower anchorages, use the seat belt to install a child seat in the<br>center position next to a child seat using the LATCH anchorages in<br>an outboard position.         |
| Can the rear-facing child restraint touch the back of the front pas-<br>senger seat?  | Yes   | The child seat may touch the back of the front passenger seat if<br>the child restraint manufacturer also allows contact. See your<br>child restraint owner's manual for more information.  |
| Can the rear head restraints be removed?  | Two Door Models – No<br>Four Door Models – Yes                            | Two Door Models – None<br>Four Door – The center head restraint can be removed if it inter-<br>feres with the installation of the child restraint.<br>For further information, see $\Box$ page 63.  |

#### NOTE:

If the folding, non-adjustable head restraint interferes with the installation of the child restraint, the head restraint may be folded and the child seat installed in front of it (Two-Door Models).

#### WARNING!

Always make sure the head restraint is in its upright position when the seat is to be used by an occupant who is not in a child restraint. Sitting in a seat with the head restraint in its lowered position could result in serious injury or death in a collision.



**Car Seat With Head Restraint Folded** 

- 1 Folded Headrest
- 2 Child Restraint

# Locating The LATCH Anchorages

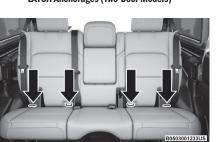


The lower anchorages are round bars that are found at the rear of the seat cushion where it meets the seatback. They are just visible when you lean into the rear seat to

install the child restraint. You will easily feel them if you run your finger along the gap between the seatback and seat cushion. If your vehicle is equipped with anchorage symbols on the seatback, they will be located just above the lower anchorages.



LATCH Anchorages (Two-Door Models)



LATCH Anchorages (Four-Door Models)

# Locating The Upper Tether Anchorages



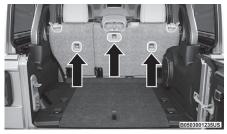
There are tether strap anchorages behind each rear seating position located on the back of the seat, near the floor.



Tether Strap Anchorages (Two-Door Models)

#### Four-Door Models:

There are tether strap anchorages behind each rear seating position located on the back of the seat.



Tether Strap Anchorages (Four-Door Models)

LATCH-compatible child restraint systems will be equipped with a rigid bar or a flexible strap on each side. Each will have a hook or connector to attach to the lower anchorage and a way to tighten the connection to the anchorage. Forward-facing child restraints and some rear-facing child restraints will also be equipped with a tether strap. The tether strap will have a hook at the end to attach to the top tether anchorage and a way to tighten the strap after it is attached to the anchorage.

## **Center Seat LATCH**

#### Two-Door Models:

#### WARNING!

This vehicle does not have a center seating position. Do not use the center lower LATCH anchorages to install a child seat in the center of the back seat.

#### Four-Door Models:

Do not install child restraints with rigid lower attachments in the center seating position. Only install this type of child restraint in the outboard seating positions. Child restraints with flexible, webbing mounted lower attachments can be installed in any rear seating position.

#### WARNING!

Never use the same lower anchorage to attach more than one child restraint. If you are installing LATCHcompatible child restraints next to each other, you must use the seat belt for the center position. You can then use either the LATCH anchors or the vehicle's seat belt for installing child seats in the outboard positions.

Always follow the directions of the child restraint manufacturer when installing your child restraint. Not all child restraint systems will be installed as described here.

# To Install A LATCH-Compatible Child Restraint

If the selected seating position has a Switchable Automatic Locking Retractor (ALR) seat belt, stow the seat belt, following the instructions below. See  $\Rightarrow$  page 262 to check what type of seat belt each seating position has.

- Loosen the adjusters on the lower straps and on the tether strap of the child seat so that you can more easily attach the hooks or connectors to the vehicle anchorages.
- 2. Place the child seat between the lower anchorages for that seating position. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.
- Attach the lower hooks or connectors of the child restraint to the lower anchorages in the selected seating position.

- Tighten all of the straps as you push the child restraint rearward and downward into the seat. Remove slack in the straps according to the child restraint manufacturer's instructions.
- Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

# How To Stow An Unused Switchable-ALR (ALR) Seat Belt:

When using the LATCH attaching system to install a child restraint, stow all ALR seat belts that are not being used by other occupants or being used to secure child restraints. An unused belt could injure a child if they play with it and accidentally lock the seat belt retractor. Before installing a child restraint using the LATCH system, buckle the seat belt behind the child restraint and out of the child's reach. If the buckled seat belt interferes with the child restraint, noute the seat belt through the child restraint, note the seat belt through the child restraint belt path and then buckle it. Do not lock the seat belts are not toys and that they should not play with them.

#### WARNING!

 Improper installation of a child restraint to the LATCH anchorages can lead to failure of the restraint. The child could be badly injured or killed.
 Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.

#### WARNING!

 Child restraint anchorages are designed to withstand only those loads imposed by correctly-fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.

# Installing Child Restraints Using The Vehicle Seat Belt

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

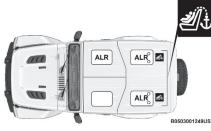
#### WARNING!

- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.

The seat belts in the passenger seating positions are equipped with a Switchable Automatic Locking Retractor (ALR) that is designed to keep the lap portion of the seat belt tight around the child restraint so that it is not necessary to use a locking clip. The ALR retractor can be "switched" into a locked mode by pulling all of the webbing out of the retractor and then letting the webbing retract back into the retractor. If it is locked, the ALR will make a clicking noise while the webbing is pulled back into the retractor.

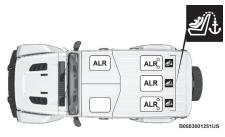
Refer to the "Automatic Locking Mode" description in "Switchable Automatic Locking Retractors (ALR)"  $\Box$  page 244 for additional information on ALR. Please see the table below and the following sections for more information.

# Lap/Shoulder Belt Systems For Installing Child Restraints In This Vehicle



Automatic Locking Retractor Locations (Two-Door Models)

ALR — Switchable Automatic Locking Retractor



#### Automatic Locking Retractor Locations (Four-Door Models)

ALR — Switchable Automatic Locking Retractor

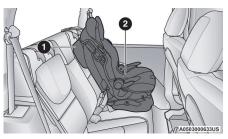
| Frequently Asked Q   | Frequently Asked Questions About Installing Child Restraints With Seat Belts |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| What is the weight limit (child's weight + weight of the child restraint) for using the Tether Anchor with the seat belt to attach a forward-facing child restraint? | Weight limit of the Child Restraint  | Always use the tether anchor when using the seat belt to install a forward-facing child restraint, up to the recommended weight limit of the child restraint.                  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can the rear-facing child restraint touch the back of the front passenger seat?  | Yes  | Contact between the front passenger seat and the child restraint is allowed, if the child restraint manufacturer also allows contact.  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can the rear head restraints be removed?   | Two Door Models – No<br>Four Door Models – Yes                               | Two Door - NoneFour Door - The center head restraint can be removed if it interferes with the installation of the child restraint.For further information, see $\Box$ page 63. |  |  |  |  |  |  |  |  |  |  |  |  |
| Can the buckle stalk be twisted to tighten the seat belt against the belt path of the child restraint?   | No   | Do not twist the buckle stalk in a seating position with an ALR retractor.   |  |  |  |  |  |  |  |  |  |  |  |  |

#### NOTE:

If the folding, non-adjustable head restraint interferes with the installation of the child restraint, the head restraint may be folded and the child seat installed in front of it (Two-Door Models).

#### WARNING!

Always make sure the head restraint is in its upright position when the seat is to be used by an occupant who is not in a child restraint. Sitting in a seat with the head restraint in its lowered position could result in serious injury or death in a collision.



**Car Seat With Head Restraint Folded** 

- $1-{\rm Folded}\;{\rm Headrest}$
- 2 Child Restraint

### Installing A Child Restraint With A Switchable Automatic Locking Retractor (ALR):

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt.

#### WARNING!

- Improper installation or failure to properly secure a child restraint can lead to failure of the restraint. The child could be badly injured or killed.
- Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.
- Place the child seat in the center of the seating position. If the second row seat can be reclined, you may recline the seat and/or raise the head restraint (if adjustable) to get a better fit. If the rear seat can be moved forward and rearward in the vehicle, you may

#### 264 SAFETY

wish to move it to its rear-most position to make room for the child seat. You may also move the front seat forward to allow more room for the child seat.

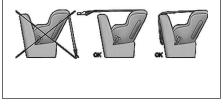
- Pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.
- 3. Slide the latch plate into the buckle until you hear a "click."
- 4. Pull on the webbing to make the lap portion tight against the child seat.
- 5. To lock the seat belt, pull down on the shoulder part of the belt until you have pulled all the seat belt webbing out of the retractor. Then, allow the webbing to retract back into the retractor. As the webbing retracts, you will hear a clicking sound. This means the seat belt is now in the Automatic Locking mode.
- Try to pull the webbing out of the retractor. If it is locked, you should not be able to pull out any webbing. If the retractor is not locked, repeat step 5.
- Finally, pull up on any excess webbing to tighten the lap portion around the child restraint while you push the child restraint rearward and downward into the vehicle seat.
- If the child restraint has a top tether strap and the seating position has a top tether anchorage, connect the tether strap to the anchorage and tighten the tether strap. See G> page 264 for directions to attach a tether anchor.
- Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

Any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

# Installing Child Restraints Using The Top Tether Anchorage

#### WARNING!

Do not attach a tether strap for a rear-facing car seat to any location in front of the car seat, including the seat frame or a tether anchorage. Only attach the tether strap of a rear-facing car seat to the tether anchorage that is approved for that seating position, located behind the top of the vehicle seat. For the location of approved tether anchorages in your vehicle, see  $r_{2}$  page 258.



 Look behind the seating position where you plan to install the child restraint to find the tether anchorage. If the seat can be moved, you may need to move the seat forward to provide better access to the tether anchorage. If there is no top tether anchorage for that seating position, move the child restraint to another position in the vehicle if one is available. 2. Route the tether strap to provide the most direct path for the strap between the anchor and the child seat. If your vehicle is equipped with adjustable rear head restraints, raise the head restraint, and where possible, route the tether strap under the head restraint and between the two posts. If not possible, lower the head restraint and pass the tether strap around the outboard side of the head restraint.



Tether Strap Mounting (Two-Door Models)



Tether Strap Mounting (Four-Door Models With Center Armrest)

- 3. Attach the tether strap hook of the child restraint to the top tether anchorage as shown in the diagram.
- 4. Remove slack in the tether strap according to the child restraint manufacturer's instructions.

#### WARNING!

- An incorrectly anchored tether strap could lead to increased head motion and possible injury to the child. Use only the anchorage position directly behind the child seat to secure a child restraint top tether strap.
- If your vehicle is equipped with a split rear seat, make sure the tether strap does not slip into the opening between the seatbacks as you remove slack in the strap.

# Center Tether Attachment — Four-Door Without Center Armrest

- 1. If adjustable, lower the adjustable center head restraint to the full down position.
- 2. Route the tether strap over the seatback and head restraint.



Tether Strap Mounting (Four-Door Models Without Center Armrest)

- Attach the tether strap hook of the child restraint to the center tether anchorage located on the back of the seat.
- 4. Remove slack in the tether strap according to the child restraint manufacturer's instructions.

# **SAFETY TIPS**

# TRANSPORTING PASSENGERS

NEVER TRANSPORT PASSENGERS IN THE CARGO AREA.

#### WARNING!

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat buildup may cause serious injury or death.
- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.

#### WARNING!

- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

# TRANSPORTING PETS

Air Bags deploying in the front seat could harm your pet. An unrestrained pet will be thrown about and possibly injured, or injure a passenger during panic braking or in a collision.

Pets should be restrained in the rear seat (if equipped) in pet harnesses or pet carriers that are secured by seat belts.

# CONNECTED VEHICLES

Privacy of any wireless and wired communications cannot be ensured. Third parties may unlawfully intercept information and private communications without your consent. For further information, refer to "Data Collection & Privacy" in your Uconnect Radio Instruction Manual or "Onboard Diagnostic System (OBD II) Cybersecurity" i page 142.

#### WARNING!

It is not possible to know or to predict all of the possible outcomes if your vehicle's systems are breached. It may be possible that vehicle systems, including safety related systems, could be impaired or a loss of vehicle control could occur that may result in an accident involving serious injury or death. 6

(Continued)

# SAFETY CHECKS YOU SHOULD MAKE INSIDE THE VEHICLE

### Seat Belts

Inspect the seat belt system periodically, checking for cuts, frays, and loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system.

If your vehicle is involved in a collision, or if you have questions regarding seat belt or retractor conditions, take your vehicle to an authorized FCA dealer or authorized FCA Certified Collision Care Program facility for inspection.

# Air Bag Warning Light



The Air Bag Warning Light will turn on for four to eight seconds as a bulb check when the ignition switch is first placed in the ON/RUN position. If the light is either not on

during starting, stays on, or turns on while driving, have the system inspected at an authorized dealer as soon as possible. This light will illuminate with a single chime when a fault with the Air Bag Warning Light has been detected, it will stay on until the fault is removed. If the light comes on intermittently or remains on while driving, have an authorized dealer service the vehicle immediately. See ⊑> page 239 for further information.

## Defroster

Check operation by selecting the defrost mode and place the blower control on high speed. You should be able to feel the air directed against the windshield. See an authorized dealer for service if your defroster is inoperable.

# Floor Mat Safety Information

Always use floor mats designed to fit your vehicle. Only use a floor mat that does not interfere with the operation of the pedal assemblies. Only use a floor mat that is securely attached using the floor mat fasteners so it cannot slip out of position and interfere with the pedal assemblies or impair safe operation of your vehicle in other ways.

#### WARNING!

An improperly attached, damaged, folded, or stacked floor mat, or damaged floor mat fasteners may cause your floor mat to interfere with the accelerator, brake, or clutch pedals and cause a loss of vehicle control. To prevent SERIOUS INJURY or DEATH:

- ALWAYS securely attach your floor mat using the floor mat fasteners. DO NOT install your floor mat upside down or turn your floor mat over. Lightly pull to confirm mat is secured using the floor mat fasteners on a regular basis.
- ALWAYS REMOVE THE EXISTING FLOOR MAT FROM THE VEHICLE before installing any other floor mat. NEVER install or stack an additional floor mat on top of an existing floor mat.



 ONLY install floor mats designed to fit your vehicle. NEVER install a floor mat that cannot be properly attached and secured to your vehicle. If a floor mat needs to be replaced, only use a FCA approved floor mat for the specific make, model, and year of your vehicle.

(Continued)

#### WARNING!

- ONLY use the driver's side floor mat on the driver's side floor area. To check for interference, with the vehicle properly parked with the engine off, fully depress the accelerator, the brake, and the clutch pedal (if present) to check for interference. If your floor mat interferes with the operation of any pedal, or is not secure to the floor, remove the floor mat from the vehicle and place the floor mat in your trunk.
- ONLY use the passenger's side floor mat on the passenger's side floor area.
- ALWAYS make sure objects cannot fall or slide into the driver's side floor area when the vehicle is moving. Objects can become trapped under accelerator, brake, or clutch pedals and could cause a loss of vehicle control.
- NEVER place any objects under the floor mat (e.g., towels, keys, etc.). These objects could change the position of the floor mat and may cause interference with the accelerator, brake, or clutch pedals.
- If the vehicle carpet has been removed and re-installed, always properly attach carpet to the floor and check the floor mat fasteners are secure to the vehicle carpet. Fully depress each pedal to check for interference with the accelerator, brake, or clutch pedals then re-install the floor mats.
- It is recommended to only use mild soap and water to clean your floor mats. After cleaning, always check your floor mat has been properly installed and is secured to your vehicle using the floor mat fasteners by lightly pulling mat.

# PERIODIC SAFETY CHECKS YOU SHOULD MAKE OUTSIDE THE VEHICLE

## Tires

Examine tires for excessive tread wear and uneven wear patterns. Check for stones, nails, glass, or other objects lodged in the tread or sidewall. Inspect the tread for cuts and cracks. Inspect sidewalls for cuts, cracks, and bulges. Check the lug nut/bolt torque for tightness. Check the tires (including spare) for proper cold inflation pressure.

# Lights

Have someone observe the operation of brake lights and exterior lights while you work the controls. Check turn signal and high beam indicator lights on the instrument panel.

## **Door Latches**

Check for proper closing, latching, and locking.

## Fluid Leaks

Check area under vehicle after overnight parking for fuel, coolant, oil, or other fluid leaks. Also, if gasoline fumes are detected or if fuel or brake fluid leaks are suspected, the cause should be located and corrected immediately.

# EXHAUST GAS

#### WARNING!

Exhaust gases can injure or kill. They contain carbon monoxide (CO), which is colorless and odorless. Breathing it can make you unconscious and can eventually poison you. To avoid breathing (CO), follow these safety tips:

- Do not run the engine in a closed garage or in confined areas any longer than needed to move your vehicle in or out of the area.
- If you are required to drive with the trunk/liftgate/ rear doors open, make sure that all windows are closed and the climate control BLOWER switch is set at high speed. DO NOT use the recirculation mode.
- If it is necessary to sit in a parked vehicle with the engine running, adjust your heating or cooling controls to force outside air into the vehicle. Set the blower at high speed.

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system.

Whenever a change is noticed in the sound of the exhaust system, when exhaust fumes can be detected inside the vehicle, or when the underside or rear of the vehicle is damaged, have an authorized dealer inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, inspect the exhaust system each time the vehicle is raised for lubrication or oil change. Replace as required.

# CARBON MONOXIDE WARNINGS

#### WARNING!

Carbon monoxide (CO) in exhaust gases is deadly. Follow the precautions provided to prevent carbon monoxide poisoning:

- Do not inhale exhaust gases. They contain carbon monoxide, a colorless and odorless gas, which can kill. Never run the engine in a closed area, such as a garage, and never sit in a parked vehicle with the engine running for an extended period. If the vehicle is stopped in an open area with the engine running for more than a short period, adjust the ventilation system to force fresh, outside air into the vehicle.
- Guard against carbon monoxide with proper maintenance. Have the exhaust system inspected every time the vehicle is raised. Have any abnormal conditions repaired promptly. Until repaired, drive with all side windows fully open.
- When exiting the vehicle, always make sure the ignition is in the OFF position, remove the key fob from the vehicle and lock your vehicle.

# IN CASE OF EMERGENCY

# HAZARD WARNING FLASHERS

The Hazard Warning Flashers button is located on the instrument panel below the climate controls.



**Hazard Warning Flashers Button** 

Push the button to turn on the Hazard Warning Flashers. When the button is activated, all directional turn signals will flash on and off to warn oncoming traffic of an emergency. Push the button a second time to turn off the Hazard Warning Flashers.

This is an emergency warning system and it should not be used when the vehicle is in motion. Use it only when your vehicle is disabled or signaling a safety hazard warning for other motorists.

When you must leave the vehicle to seek assistance, the Hazard Warning Flashers will continue to operate even though the ignition is placed in the OFF position.

#### NOTE:

With extended use the Hazard Warning Flashers may wear down your battery.

# ASSIST AND SOS SYSTEM — IF EQUIPPED



#### ASSIST And SOS Buttons

- 1 ASSIST Button
- 2-SOS Button

If equipped, the overhead console contains an ASSIST and an SOS button.

#### WARNING!

ALWAYS obey traffic laws and pay attention to the road. ALWAYS drive safely with your hands on the steering wheel. You have full responsibility and

#### WARNING!

assume all risks related to the use of the features and applications in this vehicle. Only use the features and applications when it is safe to do so. Failure to do so may result in an accident involving serious injury or death.

#### NOTE:

- The ASSIST and SOS buttons will only function if you are connected to an operable LTE (voice/data) or 4G (data) network, which comes as a built-in function. Other Uconnect services will only be operable if your SiriusXM Guardian<sup>™</sup> service is active and you are connected to an operable LTE (voice/data) or 4G (data) network.

#### ASSIST Call

The ASSIST Button is used to automatically connect you to any one of the following support centers:

- Roadside Assistance If you get a flat tire, or need a tow, just push the ASSIST button and you'll be connected to someone who can help. Roadside Assistance will know what vehicle you're driving and its location. Additional fees may apply for roadside assistance.
- SiriusXM Guardian<sup>™</sup> Customer Care In-vehicle support for SiriusXM Guardian<sup>™</sup>.
- Vehicle Customer Care Total support for all other vehicle issues.
- Uconnect Customer Care Total support for Radio, Phone and NAV issues.

(Continued)

#### SOS Call

1. Push the SOS Call button on the overhead console.

#### NOTE:

In case the SOS Call button is pushed in error, there will be a 10 second delay before the SOS Call system initiates a call to an SOS operator. To cancel the SOS Call connection, push the SOS call button on the overhead console or press the cancellation button on the Device Screen. Termination of the SOS Call will turn off the green LED light on the overhead console.

- 2. The LED light located within the ASSIST and SOS buttons on the overhead console will turn green once a connection to an SOS operator has been made.
- Once a connection between the vehicle and an SOS operator is made, the SOS Call system may transmit the following important vehicle information to an SOS operator:
  - O Indication that the occupant placed an SOS Call
  - O The vehicle brand
  - O The last known GPS coordinates of the vehicle
- You should be able to speak with the SOS operator through the vehicle audio system to determine if additional help is needed.

#### WARNING!

ALWAYS obey traffic laws and pay attention to the road. ALWAYS drive safely with your hands on the steering wheel. You have full responsibility and assume all risks related to the use of the features and applications in this vehicle. Only use the features

(Continued)

#### WARNING!

and applications when it is safe to do so. Failure to do so may result in an accident involving serious injury or death.

#### NOTE:

- Your vehicle may be transmitting data as authorized by the subscriber.
- Once a connection is made between the vehicle's SOS Call system and the SOS operator, the SOS operator may be able to open a voice connection with the vehicle to determine if additional help is needed. Once the SOS operator opens a voice connection with the vehicle's SOS Call system, the operator should be able to speak with you or other vehicle occupants and hear sounds occurring in the vehicle. The vehicle's SOS Call system will attempt to remain connected with the SOS operator until the SOS operator terminates the connection.
- The SOS operator may attempt to contact appropriate emergency responders and provide them with important vehicle information and GPS coordinates.

#### WARNING!

- If anyone in the vehicle could be in danger (e.g., fire or smoke is visible, dangerous road conditions or location), do not wait for voice contact from an Emergency Services Agent. All occupants should exit the vehicle immediately and move to a safe location.
- Never place anything on or near the vehicle's operable network and GPS antennas. You could prevent operable network and GPS signal reception,

#### WARNING!

which can prevent your vehicle from placing an emergency call. An operable network and GPS signal reception is required for the SOS Call system to function properly.

- The SOS Call system is embedded into the vehicle's electrical system. Do not add aftermarket electrical equipment to the vehicle's electrical system. This may prevent your vehicle from sending a signal to initiate an emergency call. To avoid interference that can cause the SOS Call system to fail, never add aftermarket equipment (e.g., two-way mobile radio, CB radio, data recorder, etc.) to your vehicle's electrical system or modify the antennas on your vehicle. IF YOUR VEHICLE LOSES BATTERY POWER FOR ANY REASON (INCLIDING DURING OR AFTER AN ACCIDENT), THE UCONNECT FEATURES, APPS AND SERVICES, AMONG OTHERS, WILL NOT OPERATE.
- Modifications to any part of the SOS Call system could cause the air bag system to fail when you need it. You could be injured if the air bag system is not there to help protect you.

#### SOS Call System Limitations

Vehicles sold in Mexico **DO NOT** have SOS Call system capabilities.

SOS or other emergency line operators in Mexico may not answer or respond to SOS system calls.

If the SOS Call system detects a malfunction, any of the following may occur at the time the malfunction is detected, and at the beginning of each ignition cycle:

• The light located within the ASSIST and SOS buttons will continuously illuminate red.

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- The Device Screen will display the following message "Vehicle device requires service. Please contact an authorized dealer."
- An In-Vehicle Audio message will state "Vehicle device requires service. Please contact an authorized dealer."

#### WARNING!

- Ignoring the Rearview Mirror light could mean you will not have SOS Call services. If the Rearview Mirror light is illuminated, have an authorized dealer service the SOS Call system immediately.
- The Occupant Restraint Control module turns on the air bag Warning Light on the instrument panel if a malfunction in any part of the system is detected. If the Air Bag Warning Light is illuminated, have an authorized dealer service the Occupant Restraint Control system immediately.

Even if the SOS Call system is fully functional, factors beyond FCA US LLC's control may prevent or stop the SOS Call system operation. These include, but are not limited to, the following factors:

- The ignition is in the OFF position
- · The vehicle's electrical systems are not intact
- The SOS Call system software and/or hardware are damaged during a crash
- The vehicle battery loses power or becomes disconnected during a vehicle crash
- LTE (voice/data) or 4G (data) network and/or Global Positioning Satellite signals are unavailable or obstructed
- · Equipment malfunction at the SOS operator facility
- Operator error by the SOS operator

- LTE (voice/data) or 4G (data) network congestion
- Weather
- Buildings, structures, geographic terrain, or tunnels

#### WARNING!

ALWAYS obey traffic laws and pay attention to the road. ALWAYS drive safely with your hands on the steering wheel. You have full responsibility and assume all risks related to the use of the features and applications in this vehicle. Only use the features and applications when it is safe to do so. Failure to do so may result in an accident involving serious injury or death.

#### CAUTION!

To avoid damage to the mirror during cleaning, never spray any cleaning solution directly onto the mirror. Apply the solution onto a clean cloth and wipe the mirror clean.

#### NOTE:

- Your vehicle may be transmitting data as authorized by the subscriber.
- Never place anything on or near the vehicle's LTE (voice/data) or 4G (data) and GPS antennas. You could prevent LTE (voice/data) or 4G (data) and GPS signal reception, which can prevent your vehicle from placing an emergency call. An operable LTE (voice/data) or 4G (data) network connection and a GPS signal is required for the SOS Call system to function properly.

#### NOTE:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Automatic SOS — If Equipped

Automatic SOS is a hands-free safety service that can immediately connect you with help in the event that your vehicle's airbags deploy. Please refer to your provided radio supplement for complete information.

# **JACKING AND TIRE CHANGING**

Use this QR code to access your digital experience.



#### WARNING!

- Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.
- Being under a jacked-up vehicle is dangerous. The vehicle could slip off the jack and fall on you. You could be crushed. Never put any part of your body under a vehicle that is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.
- Never start or run the engine while the vehicle is on a jack.

#### WARNING!

 The jack is designed to be used as a tool for changing tires only. The jack should not be used to lift the vehicle for service purposes. The vehicle should be jacked on a firm level surface only. Avoid ice or slippery areas.

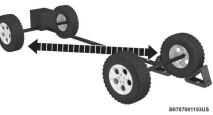
# PREPARATIONS FOR JACKING

1. Park on a firm, level surface. Avoid ice or slippery areas.

#### WARNING!

Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid being hit when operating the jack or changing the wheel.

- 2. Turn on the Hazard Warning Flashers.
- 3. Apply the parking brake.
- 4. Shift the automatic transmission into PARK (P), or a manual transmission into REVERSE (R).
- 5. Turn the ignition OFF.
- Block both the front and rear of the wheel diagonally opposite of the jacking position. For example, if the driver's front wheel is being changed, block the passenger's rear wheel.



## Wheel Blocked Example

#### NOTE:

Passengers should not remain in the vehicle when the vehicle is being lifted or raised.

# JACK LOCATION

The jack and lug wrench are located in the rear cargo area. To remove jack and tools proceed as follows:

1. Lift the load floor in the cargo area.

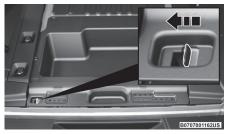


**Load Floor Handle** 

#### NOTE:

The load floor can be removed for easier access by pulling the load floor handle up and directly rearward.

2. Remove the hardware storage cover by pinching the latch on the left side and pulling upward.



#### Hardware Storage Cover Latch

3. Turn the plastic wing nut counterclockwise to loosen the jack from the storage bin.



**Plastic Wing Nut Location** 

# SPARE TIRE REMOVAL

- 1. To remove the spare tire from the carrier, remove the tire cover, if equipped.
- Remove the Rear Camera Cover by turning the lock bolt counterclockwise with the #T40 torx head driver and ratchet from the supplied tool kit.



#### **Unlock Rear Camera Cover**

3. Remove the lug nuts with the lug wrench turning them counterclockwise. If equipped, remove the locking lug nut with the lock key (located in the glove box) turning it counterclockwise.



**Removing The Spare Tire** 

# JACKING INSTRUCTIONS

#### WARNING!

Carefully follow these tire changing warnings to help prevent personal injury or damage to your vehicle:

- Always park on a firm, level surface as far from the edge of the roadway as possible before raising the vehicle.
- Turn on the Hazard Warning Flashers.
- Apply the parking brake firmly and shift an automatic transmission into PARK; a manual transmission into REVERSE.
- Block the wheel diagonally opposite the wheel to be raised.
- Never start or run the engine with the vehicle on a jack.
- Do not let anyone sit in the vehicle when it is on a jack.
- Do not get under the vehicle when it is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.
- Only use the jack in the positions indicated and for lifting this vehicle during a tire change.
- If working on or near a roadway, be extremely careful of motor traffic.
- To assure that spare tires, flat or inflated, are securely stowed, spares must be stowed with the valve stem facing the ground.



#### 060600714

#### **Jack Warning Label**

- 1. Remove the spare tire, jack and tools from the stored location.
- Loosen (but do not remove) the wheel lug nuts by turning them to the left one turn while the wheel is still on the ground.
- Assemble the jack and jacking tools. Connect the jack handle driver to the extension, then to the lug wrench.

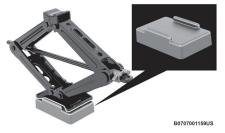


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**Assembled Jack And Tools** 

#### NOTE:

If your vehicle comes with factory equipped 35 inch (88.9 cm) tires, a jack lift block is provided in the rear cargo area. The jack lift block is used to provide higher ground clearance when changing a flat or spare tire. When placing the jack lift block under the jack, be sure the bottom of the jack fits securely inside of the raised edges of the block.



#### Jack Lift Box Usage

 Operate the jack from the front or the rear of the vehicle. Place the jack under the axle tube, as shown. Do not raise the vehicle until you are sure the jack is fully engaged.



#### **Front Lifting Point**

#### NOTE:

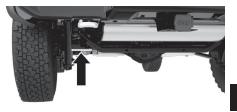
Keep the jack and tools aligned while raising the vehicle to prevent tool damage.

#### CAUTION!

Do not attempt to raise the vehicle by jacking on locations other than those indicated.



**Front Jacking Location** 



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7

#### **Rear Lifting Point**



#### **Rear Jacking Location**

 Raise the vehicle by turning the jack screw clockwise. Raise the vehicle only until the tire just clears the surface and enough clearance is obtained to install the spare tire. Minimum tire lift provides maximum stability.

#### WARNING!

Raising the vehicle higher than necessary can make the vehicle less stable. It could slip off the jack and hurt someone near it. Raise the vehicle only enough to change the tire.

- 6. Remove the lug nuts and wheel.
- 7. Mount the spare tire on the axle.
- 8. Install the lug nuts with the cone-shaped end toward the wheel. Lightly tighten the lug nuts clockwise.

#### WARNING!

To avoid the risk of forcing the vehicle off the jack, do not tighten the wheel nuts fully until the vehicle has been lowered. Failure to follow this warning may result in serious injury.

- 9. Lower the vehicle by turning the jack screw to the counterclockwise, and remove the jack.
- 10. Finish tightening the wheel bolts. Push down on the wrench while at the end of the handle for increased leverage. Tighten the wheel bolts in a star pattern until each wheel bolt has been tightened twice page 342. If in doubt about the correct tightness, have them checked with a torque wrench by an authorized dealer or at a service station.
- 11. After 25 miles (40 km), check the lug nut torque with a torque wrench to ensure that all lug nuts are properly seated against the wheel.
- 12. Remove the jack assembly and wheel blocks.
- 13. Secure the jack and tools in their proper locations.
- 14. Secure the damaged wheel/tire on the spare tire carrier. Torque down lug nuts and locking lug nut.
- 15. Return the lock bolt to the lock position on the camera cover by turning the lock clockwise using the provided #40 torx head driver and ratchet. Then, reinstall the camera cover by slipping it over the camera/tire carrier until it snaps into place.



Lock Bolt Location

#### WARNING!

A loose tire or jack thrown forward in a collision or hard stop, could endanger the occupants of the vehicle. Always stow the jack parts and the spare tire in the places provided.

# JUMP STARTING

If your vehicle has a discharged battery, it can be jump started using a set of jumper cables and a battery in another vehicle, or by using a portable battery booster pack. Jump starting can be dangerous if done improperly, so please follow the procedures in this section carefully.

The vehicle requires its 12 Volt battery power to turn-on the vehicle's high voltage battery. The high voltage battery is used to charge the 12 Volt battery, provide electric vehicle operation, and to start the vehicle's gas engine. If the 12 Volt battery has been discharged, the vehicle can be jump started using a set of jumper cables and a battery in another vehicle or by using a portable battery booster pack.

If the vehicle's high voltage battery has also been discharged, it will need to be recharged to a minimum operating State Of Charge (SOC) before the vehicle can be started:

- If the vehicle can be connected to a Level 1 or Level 2 charger where it is currently parked, the vehicle will still require a jump start to allow the vehicle to begin the battery charging process. Once the vehicle charging has begun (indicated by the charge status indicator on top of the vehicle's instrument panel), the jumper cables can be removed from the vehicle jump posts.
- If the vehicle cannot be connected to a Level 1 or Level 2 charger where it is currently parked, the vehicle can be moved by connecting 12 Volt power to the vehicle's jump posts and then shifting the transmission from PARK (P) into NEUTRAL (N).
   Power provided by the jumper cables will also allow the Electric Park Brake to be released. Carefully move the vehicle to a Level 1 or Level 2 charge location. While the vehicle is being moved, the external 12 Volt power must remain connected to the vehicle jump posts.

#### NOTE:

Be careful when moving the vehicle - ensure that control of the vehicle is maintained. Also, ensure that vehicle is secured to prevent unitentional movement during and after moving the vehicle. If the external 12 Volt power becomes disconnected from the vehicle jump posts or there is an interruption of the 12 Volt power while moving the vehicle, the vehicle's transmission may engage PARK. Do not allow the jumper cables to come in contact with each other or to the vehicle, this will result in a short.

When the vehicle is at the charging location, shift the transmission back to PARK, apply the Electric Park Brake, and start the high voltage battery charging. Once the vehicle has been secured against unintentional movement and high voltage battery charging has been initiated, the jumper cables can be removed from the vehicle jump posts.

#### WARNING!

Do not attempt jump starting if the battery is frozen. It could rupture or explode and cause personal injury.

#### CAUTION!

Do not use a portable battery booster pack or any other booster source with a system voltage greater than 12 Volts or damage to the battery, starter motor, alternator or electrical system may occur.

#### NOTE:

When using a portable battery booster pack, follow the manufacturer's operating instructions and precautions.

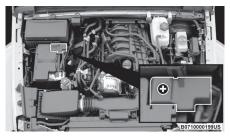
# PREPARATIONS FOR JUMP START

#### WARNING!

- Only use the positive battery post on the main battery to jump start your vehicle. Serious injury or death could result if you attempt to jump start using the supplemental battery.
- Battery gas is flammable and explosive. Keep flame or sparks away from the battery. Do not use a booster battery or any other booster source with an output greater than 12 Volts. Do not allow cable clamps to touch each other.
- Never use a fast battery charger to start the engine, as this could damage the electronic systems of your vehicle, particularly the ignition and engine fuel supply control units.
- If a "fast charger" is used while the battery is in the vehicle, disconnect both vehicle battery cables before connecting the charger to the battery.
- Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

The battery in your vehicle is located in the right rear of the engine compartment.

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Positive (+) Battery Post



Positive (+) Battery Post (6.4 Engine)

#### NOTE:

The positive (+) battery post is covered with a protective cap. Lift up on the cap to gain access to the post.

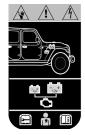
See the following steps to prepare for jump starting:

- Apply the parking brake, shift the automatic transmission into PARK (P) (manual transmission in NEU-TRAL) and turn the ignition OFF.
- 2. Turn off the heater, radio, and all electrical accessories.
- 3. Pull upward and remove the protective cover over the positive (+) battery post.
- If using another vehicle to jump start the battery, park the vehicle within the jumper cable's reach, apply the parking brake and make sure the ignition is OFF.

#### WARNING!

- Do not allow vehicles to touch each other as this could establish a ground connection and personal injury could result.
- Take care to avoid the radiator cooling fan whenever the hood is raised. It can start anytime the ignition switch is ON. You can be injured by moving fan blades.
- Remove any metal jewelry such as rings, watch bands and bracelets that could make an inadvertent electrical contact. You could be seriously injured.
- Batteries contain sulfuric acid that can burn your skin or eyes and generate hydrogen gas which is flammable and explosive. Keep open flames or sparks away from the battery.

If your vehicle is equipped with a Stop/Start system, it will be equipped with two batteries  $\Box$  page 167.



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#### Supplemental Battery - If Equipped

# JUMP STARTING PROCEDURE

#### WARNING!

Failure to follow this jump starting procedure could result in personal injury or property damage due to battery explosion.

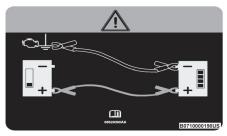
#### **Connecting The Jumper Cables**

- 1. Connect the positive (+) end of the jumper cable to the positive (+) post of the discharged vehicle.
- Connect the opposite end of the positive (+) jumper cable to the positive (+) post of the booster battery.
- 3. Connect the negative (-) end of the jumper cable to the negative (-) post of the booster battery.

4. Connect the opposite end of the negative (-) jumper cable to a good engine ground. A "ground" is an exposed metallic/unpainted part of the engine, frame or chassis, such as an accessory bracket or large bolt. The ground must be away from the battery and the fuel injection system.

#### WARNING!

Do not connect the jumper cable to the negative (-) post of the discharged battery. The resulting electrical spark could cause the battery to explode and could result in personal injury.



**Jump Starting Label** 

#### CAUTION!

Make sure at all times that unused ends of jumper cables are not contacting each other or either vehicle while making connections. Failure to follow these procedures could result in damage to the charging system of the booster vehicle or the discharged vehicle.  Start the engine in the vehicle that has the booster battery, let the engine idle a few minutes, and then start the engine in the vehicle with the discharged battery.

#### CAUTION!

Do not run the booster vehicle engine above 2,000 RPM since it provides no charging benefit, wastes fuel, and can damage booster vehicle engine.

6. Once the engine is started, remove the jumper cables in the reverse sequence.

#### **Disconnecting The Jumper Cables**

- 1. Disconnect the negative (-) end of the jumper cable from the engine ground of the vehicle with the discharged battery.
- 2. Disconnect the opposite end of the negative (-) jumper cable from the negative (-) post of the booster battery.
- 3. Disconnect the positive (+) end of the jumper cable from the positive (+) post of the booster battery.
- Disconnect the opposite end of the positive (+) jumper cable from the positive (+) post of the discharged vehicle.
- 5. Reinstall the protective cover over the positive (+) post of the discharged vehicle.

#### NOTE:

If frequent jump starting is required to start your vehicle you should have the battery and charging system tested at an authorized dealer.

#### CAUTION!

Accessories plugged into the vehicle power outlets draw power from the vehicle's battery, even when not in use (i.e., cellular devices, etc.). Eventually, if plugged in long enough without engine operation, the vehicle's battery will discharge sufficiently to degrade battery life and/or prevent the engine from starting.

# **IF YOUR ENGINE OVERHEATS**

If the vehicle is overheating, it will need to be serviced by an authorized dealer.

Potential signs of vehicle overheating:

- Temperature gauge is at HOT (H)
- · Strong smell of coolant
- · White smoke coming from engine or exhaust
- · Coolant bottle coolant has bubbles present

#### WARNING!

You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood, do not open the hood until the radiator has had time to cool. Never try to open a cooling system pressure cap when the radiator or coolant bottle is hot. If the temperature gauge is moving towards or close to the HOT (H) position, you can reduce the potential for overheating by taking the appropriate action.

- On highways slow down.
- In city traffic while stopped, place the transmission in NEUTRAL (N), but do not increase the engine idle speed while preventing vehicle motion with the brakes.
- Turn the Air Conditioner (A/C) off. The A/C system adds heat to the engine cooling system and turning the A/C off can help remove this heat.
- Turn the temperature control to maximum heat, and the blower control to high. This allows the heater core to act as a supplement to the radiator and aids in removing heat from the engine cooling system.

#### CAUTION!

Driving with a hot cooling system could damage your vehicle. If the temperature gauge reads HOT (H), pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on HOT (H), and you hear continuous chimes, turn the engine off immediately and call for service.

# **MANUAL PARK RELEASE**

In order to move the vehicle in cases where the transmission will not shift out of PARK (P) (such as a depleted battery), a Manual Park Release is available.

#### WARNING!

Always secure your vehicle by fully applying the parking brake before activating the Manual Park Release. In addition, you should be seated in the driver's seat with your foot firmly on the brake pedal when activating the Manual Park Release. Activating the Manual Park Release will allow your vehicle to roll away if it is not secured by the parking brake, or by proper connection to a tow vehicle. Activating the Manual Park Release on an unsecured vehicle could lead to serious injury or death for those in or around the vehicle.

See the following steps to use the Manual Park Release:

- 1. Firmly apply the parking brake.
- Using a small screwdriver or similar tool, remove the manual park release cover located in front of the gear selector, to access the release tether strap.



#### **Manual Park Release Cover**

3. Fish the tether strap up through the opening in the console base.



**Tether Strap** 

- 4. Press and maintain firm pressure on the brake pedal.
- Pull the tether strap up until the release lever locks into place in the vertical position. The vehicle is now out of PARK (P) and can be moved. Release the parking brake only when the vehicle is securely connected to a tow vehicle.



Vertical Released Position

#### To Reset The Manual Park Release:

- 1. Pull upward on the tether strap, releasing it from the "locked" position.
- 2. Lower the Manual Park Release lever downward and to the left, into its original position.



**Original Tether Position** 

Tuck the tether strap into the base of the console, and reinstall the cover.

#### NOTE:

When the lever is locked in the release position the access cover cannot be reinstalled.

# FREEING A STUCK VEHICLE

If your vehicle becomes stuck in mud, sand or snow, it can often be moved using a rocking motion. Turn the steering wheel right and left to clear the area around the front wheels. For vehicles with automatic transmission, push and hold the lock button on the gear selector. Then, shift back and forth between DRIVE (D) and REVERSE (R) (with automatic transmission) or SECOND (2) gear and REVERSE (R) (with manual transmission), while gently pressing the accelerator. Use the least amount of accelerator pedal pressure that will maintain the rocking motion, without spinning the wheels or racing the engine.

#### NOTE:

- For vehicles with automatic transmission: Shifts between DRIVE (D) and REVERSE (R) can only be achieved at wheel speeds of 5 mph (8 km/h) or less. Whenever the transmission remains in NEU-TRAL (N) for more than two seconds, you must press the brake pedal to engage DRIVE (D) or REVERSE (R).

#### WARNING!

Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause damage, or even failure, of the axle and tires. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping when you are stuck and do not let anyone near a spinning wheel, no matter what the speed.

#### CAUTION!

- Racing the engine or spinning the wheels may lead to transmission overheating and failure. Allow the engine to idle with the transmission in NEUTRAL for at least one minute after every five rockingmotion cycles. This will minimize overheating and reduce the risk of clutch or transmission failure during prolonged efforts to free a stuck vehicle.
- When "rocking" a stuck vehicle by shifting between DRIVE/SECOND gear and REVERSE, do not spin the wheels faster than 15 mph (24 km/h), or drivetrain damage may result.
- Revving the engine or spinning the wheels too fast may lead to transmission overheating and failure. It can also damage the tires. Do not spin the wheels above 30 mph (48 km/h) while in gear (no transmission shifting occurring).

# **TOWING A DISABLED VEHICLE**

This section describes procedures for towing a disabled vehicle using a commercial towing service.

If the transmission and drivetrain are operable, disabled 4x4 vehicles may also be towed as described 📫 page 193.

| Towing Condition           | Wheels OFF The Ground | 4WD MODELS   |
|----------------------------|-----------------------|--|
| Flat Tow                   | NONE                  | <ul> <li>Automatic Transmission in PARK (P)</li> <li>Manual Transmission in gear (NOT in NEUTRAL)</li> <li>Transfer Case in NEUTRAL (N)</li> <li>Tow in Forward direction</li> </ul> |
| W/seel Lift Or Delly Terry | Front                 | NOT ALLOWED  |
| Wheel Lift Or Dolly Tow    | Rear                  | NOT ALLOWED  |
| Flatbed                    | ALL                   | BEST METHOD  |
| NOTE                       |                       |  |

NOTE:

When towing your vehicle, always follow applicable state and provincial laws. Contact state and provincial Highway Safety offices for additional details.

Proper towing or lifting equipment is required to prevent damage to your vehicle. Use only tow bars and other equipment designed for this purpose, following equipment manufacturer's instructions. Use of safety chains is mandatory. Attach a tow bar or other towing device to main structural members of the vehicle, not to fascia/ bumpers or associated brackets. State and local laws regarding vehicles under tow must be observed.

If you must use the accessories (wipers, defrosters, etc.) while being towed, the ignition must be in the ON/RUN position, not the ACC position.

If the vehicle's battery is discharged, follow the instructions on shifting the automatic transmission out of PARK (P) in order to move the vehicle  $\Box$  page 278.

#### CAUTION!

- Do not use sling type equipment when towing. Vehicle damage may occur.
- When securing the vehicle to a flatbed truck, do not attach to front or rear suspension components. Damage to your vehicle may result from improper towing.
- If the vehicle being towed requires steering, the ignition switch must be in the ACC or ON/RUN mode, not in the OFF mode.

# FOUR-WHEEL DRIVE MODELS

FCA US LLC recommends towing with all wheels **OFF** the ground. Acceptable methods are to tow the vehicle on a flatbed or with one end of the vehicle raised and the opposite end on a towing dolly.

If flatbed equipment is not available and the transfer case is operable, the vehicle may be towed (in the forward direction, with ALL wheels on the ground), IF the transfer case is in NEUTRAL (N) and the transmission is in PARK (P) (for automatic transmissions) or in gear NOT in NEUTRAL, for manual transmissions)  $\Box$  page 193.

#### CAUTION!

- Front or rear wheel lifts must not be used (if the remaining wheels are on the ground). Internal damage to the transmission or transfer case will occur if a front or rear wheel lift is used when towing.
- Towing this vehicle in violation of the approved requirements can cause severe transmission and/or transfer case damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

# WITHOUT THE KEY FOB

Special care must be taken when the vehicle is towed with the ignition in the OFF mode. The only approved method of towing without the key fob is with a flatbed truck. Proper towing equipment is necessary to prevent damage to the vehicle.

# EMERGENCY TOW HOOKS – IF EQUIPPED

If your vehicle is equipped with tow hooks, they are mounted in the front and the rear fascia/bumpers.

#### NOTE:

For off-road recovery, it is recommended to use both of the front tow hooks to minimize the risk of damage to the vehicle. Always use an appropriately rated tow strap.





**Rear Tow Hook** 

#### WARNING!

- Stand clear of vehicles when pulling with tow hooks. Tow straps may become disengaged, causing serious injury.
- Do not use a chain for freeing a stuck vehicle. Chains may break, causing serious injury or death.
- Failure to follow proper tow hook usage may cause components to break resulting in serious injury or death.

#### CAUTION!

- Tow hooks are for emergency use only, to rescue a vehicle stranded off road. Tow straps are recommended when towing the vehicle, chains may cause vehicle damage.
- The tow hooks must not be used to move the vehicle off the road or where there are obstacles.
- Do not use the tow hooks for tow truck hookup or highway towing.
- Do not use the tow hooks to pull a vehicle onto a flatbed truck.
- Do not use the tow hooks to free a stuck vehicle
   page 279.

# ENHANCED ACCIDENT RESPONSE SYSTEM (EARS)

This vehicle is equipped with an Enhanced Accident Response System.

This feature is a communication network that takes effect in the event of an impact.  $\Box$  page 254

# **EVENT DATA RECORDER (EDR)**

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record data that will assist in understanding how a vehicle's systems performed under certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle.  $\Box$  page 255

# SERVICING AND MAINTENANCE

# **SCHEDULED SERVICING**

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer towing, and extremely hot or cold ambient temperatures will influence when the "Change Oil" or "Oil Change Required" message is displayed. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

On vehicles equipped with an instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

#### NOTE:

**PHEV (If Equipped):** Even though the vehicle may not have been driven, both the fuel in the tank and oil in the engine will still degrade over time. Additionally, there will be a notification to the driver if the engine is being run to maintain the oil and fuel systems.

An authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than an authorized dealer, the message can be reset by referring to the steps described under Instrument Cluster Display riphi page 124.

#### NOTE:

Under no circumstances should oil change intervals exceed 10,000 miles (16,000 km), 12 months or 350 hours of engine run time, whichever comes first. The 350 hours of engine run or idle time is generally only a concern for fleet customers.

#### Once A Month Or Before A Long Trip:

- Check the engine oil level.
- Check the windshield washer fluid level.
- Check the tire inflation pressures and look for unusual wear or damage, rotate at the first sign of irregular wear.
- Check the fluid levels of the coolant reservoir, brake master cylinder, and power steering, and fill as needed.
- Check the function of all interior and exterior lights.

# MAINTENANCE PLAN

Refer to the maintenance plan for the required maintenance intervals.

| At Every Oil Change Interval As Indicated By Oil Change Indicator System  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| Change oil and filter.  |  |  |  |  |  |  |  |  |
| <ul> <li>Rotate the tires. Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.</li> </ul> |  |  |  |  |  |  |  |  |
| <ul> <li>Inspect 12 Volt battery and clean and tighten terminals as required.</li> </ul>  |  |  |  |  |  |  |  |  |
| Inspect the CV/Universal joints.  |  |  |  |  |  |  |  |  |
| <ul> <li>Inspect brake pads, shoes, rotors, drums, hoses and parking brake.</li> </ul>  |  |  |  |  |  |  |  |  |
| Inspect engine cooling system protection and hoses.   |  |  |  |  |  |  |  |  |
| Inspect exhaust system.   |  |  |  |  |  |  |  |  |

#### At Every Oil Change Interval As Indicated By Oil Change Indicator System

• Inspect engine air cleaner filter if using in dusty or off-road conditions; replace engine air cleaner filter if necessary.

• Inspect all door latches for presence of grease; reapply if necessary.

#### NOTE:

Using white lithium grease, lubricate the door hinge joints twice a year to prevent premature wear.

| Mileage Or Time Passed<br>(Whichever Comes First):                                 | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000    | 80,000     | 000'06   | 100,000    | 110,000  | 120,000 | 130,000 | 140,000 | 150,000 |
|--|--------|--------|--------|--------|--------|-----------|------------|----------|------------|----------|---------|---------|---------|---------|
| Or Years:  | 2      | 3      | 4      | 5      | 6      | 7         | 8          | 9        | 10         | 11       | 12      | 13      | 14      | 15      |
| Or Kilometers:   | 32,000 | 48,000 | 64,000 | 80,000 | 96,000 | 112,000   | 128,000    | 144,000  | 160,000    | 176,000  | 192,000 | 208,000 | 224,000 | 240,000 |
| Additional Inspections   |        |        |        |        |        |           |            |          |            |          |         |         |         |         |
| Inspect the CV/Universal joints.   | Х      | Х      | X      | Х      | Х      | Х         | Х          | Х        | Х          | Х        | Х       | Х       | Х       | Х       |
| Inspect front suspension, tie rod ends, rear suspension, and replace if necessary. | х      |        | х      |        | х      |           | Х          |          | х          |          | х       |         | х       |         |
| Inspect the front and rear axle fluid.   | Х      |        |        |        | Х      |           |            |          | Х          |          |         |         | Х       |         |
| Inspect the brake linings, replace as necessary.                                   | х      |        | х      |        | х      |           | Х          |          | х          |          | х       |         | х       |         |
| Adjust parking brake on vehicles equipped with four wheel disc brakes.             | х      |        | х      |        | х      |           | х          |          | х          |          | х       |         | х       |         |
| Inspect transfer case fluid.   |        | Х      |        |        |        |           |            | Х        |            |          |         |         |         | Х       |
| Additional Maintenance   |        |        |        |        |        |           |            |          |            |          |         |         |         |         |
| Replace engine air cleaner filter.   |        | Х      |        |        | Х      |           |            | Х        |            |          | Х       |         |         | Х       |
| Replace cabin air filter.  |        |        |        |        |        | To be rep | laced ever | y 12,000 | miles (19, | 000 km). |         |         |         |         |
| Replace Spark Plugs – 2.0L Engine.**   |        |        |        |        | Х      |           |            |          |            |          | Х       |         |         |         |

\*\* The spark plug change interval is mileage based only; yearly intervals do not apply.

#### 284 SERVICING AND MAINTENANCE

| Mileage Or Time Passed<br>(Whichever Comes First):   | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000  | 80,000  | 90,000  | 100,000 | 110,000 | 120,000 | 130,000 | 140,000 | 150,000 |
|--|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Or Years:  | 2      | 3      | 4      | 5      | 6      | 7       | 8       | 9       | 10      | 11      | 12      | 13      | 14      | 15      |
| Or Kilometers:   | 32,000 | 48,000 | 64,000 | 80,000 | 96,000 | 112,000 | 128,000 | 144,000 | 160,000 | 176,000 | 192,000 | 208,000 | 224,000 | 240,000 |
| Replace spark plugs – 3.6L Engine.**   |        |        |        |        |        |         |         |         | Х       |         |         |         |         |         |
| Flush and replace the engine, intercooler<br>(if equipped), power electronics<br>(if equipped), and battery (if equipped) cool-<br>ant at 10 years or 150,000 miles<br>(240,000 km) whichever comes first.   |        |        |        |        |        |         |         |         | х       |         |         |         |         | x       |
| Change the manual transmission fluid if<br>using your vehicle for any of the following:<br>trailer towing, snow plowing, heavy loading,<br>taxi, police, delivery service (commercial<br>service), off-road, desert operation or more<br>than 50% of your driving is at sustained<br>high speeds during hot weather, above<br>90°F (32°C). |        | Х      |        |        | Х      |         |         | Х       |         |         | Х       |         |         | х       |
| Change transfer case fluid if using your<br>vehicle for any of the following: police, taxi,<br>fleet, or frequent trailer towing.  |        |        |        |        | Х      |         |         |         |         |         | х       |         |         |         |
| Inspect and replace PCV valve if necessary.  |        |        |        |        |        |         |         |         | Х       |         |         |         |         |         |
| Change front and rear axle fluid if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.   |        |        | х      |        |        |         | Х       |         |         |         | Х       |         |         |         |

\*\* The spark plug change interval is mileage based only; yearly intervals do not apply.

#### WARNING!

- You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.
- Failure to properly inspect and maintain your vehicle could result in a component malfunction and affect vehicle handling and performance. This could cause an accident.

# SCHEDULED SERVICING - 6.4L

The Scheduled Maintenance services listed in this manual must be done at the times or mileages specified to protect the vehicle warranty and ensure the best vehicle performance and reliability. More frequent maintenance may be needed for vehicles in severe operating conditions, such as dusty areas and very short trip driving. Inspection and service should also be done anytime a malfunction is suspected.

The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

The instrument cluster display will display an "Oil Change Required" message and a single chime will sound, indicating that an oil change is necessary.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

#### NOTE:

- The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been six months since your last oil change, even if the oil change indicator message is NOT illuminated.
- Change your engine oil more often if you drive your vehicle off-road for an extended period of time.
- Under no circumstances should oil change intervals exceed 6,000 miles (10,000 km) or six months, whichever comes first.

An authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than an authorized dealer, the message can be reset by referring to the steps described under Instrument Cluster Display  $\Box$  page 124

#### Severe Duty All Models

Vehicles that are operated in a dusty and off-road environment, or predominately at idle or very low engine RPM are known as Severe Duty vehicles. It is recommended that you change engine oil at 4,000 miles (6,500 km) or 350 hours of engine run time.

#### At Each Stop For Fuel

- Check the engine oil level.
- Check the windshield washer solvent and add if required.

#### Once A Month

- Check tire pressure and look for unusual wear or damage.
- Inspect the battery and clean and tighten the terminals as required.

- Check the fluid levels of the coolant reservoir, engine oil, brake master cylinder, and add as needed.
- Check all lights and other electrical items for correct operation.

#### At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Inspect the CV/Universal joints.

#### CAUTION!

Failure to perform the required maintenance items may result in damage to the vehicle.

# MAINTENANCE PLAN

| Miles:  | 6,000  | 12,000 | 18,000 | 24,000 | 30,000 | 36,000 | 42,000 | 48,000 | 54,000 | 60,000  | 66,000  | 72,000  | 78,000  | 84,000  | 90,000  | 96,000  | 102,000 | 108,000 | 114,000 | 120,000 | 126,000 | 132,000 | 138,000 | 144,000 | 150,000 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Or Months:  | 6      | 12     | 18     | 24     | 30     | 36     | 42     | 48     | 54     | 60      | 66      | 72      | 78      | 84      | 90      | 96      | 102     |         | 114     | 120     | 126     | 132     | 138     | 144     | 150     |
| Or Kilometers:  | 10,000 | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000 | 80,000 | 90,000 | 100,000 | 110,000 | 120,000 | 130,000 | 140,000 | 150,000 | 160,000 | 170,000 | 180,000 | 190,000 | 200,000 | 210,000 | 220,000 | 230,000 | 240,000 | 250,000 |
| Change the engine oil and engine oil filter.  | х      | х      | х      | х      | х      | х      | х      | х      | х      | х       | Х       | х       | х       | х       | х       | Х       | х       | х       | х       | х       | х       | х       | х       | х       | х       |
| Rotate the tires. Rotate at the first sign<br>of irregular wear, even if it occurs<br>before scheduled maintenance.   | х      | x      | х      | x      | x      | х      | x      | х      | х      | x       | х       | х       | х       | х       | x       | х       | х       | х       | х       | x       | x       | x       | х       | х       | х       |
| If using your vehicle for any of the fol-<br>lowing: dusty or off-road conditions.<br>Inspect the engine air cleaner filter;<br>replace if necessary.   |        | x      |        | x      |        | x      |        | x      |        | x       |         | х       |         | x       |         | х       |         | x       |         | x       |         | x       |         | х       |         |
| Inspect the brake linings; replace if necessary.  |        | х      |        | х      |        | х      |        | х      |        | х       |         | х       |         | х       |         | Х       |         | х       |         | х       |         | х       |         | х       |         |
| Inspect the CV/Universal joints.  | Х      | Х      | Х      | Х      | Х      | Х      | Х      | Х      | Х      | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       | Х       |
| Inspect the exhaust system.   |        | Х      |        | Х      |        | Х      |        | Х      |        | Х       |         | Х       |         | Х       |         | Х       |         | Х       |         | Х       |         | Х       |         | Х       |         |
| Adjust the parking brake on vehicles equipped with four wheel disc brakes.  |        |        |        |        | х      |        |        |        |        | Х       |         |         |         |         | Х       |         |         |         |         | х       |         |         |         |         | х       |
| Drain the transfer case and refill.   |        |        |        |        | Х      |        |        |        |        | Х       |         |         |         |         | Х       |         |         |         |         | Х       |         |         |         |         | Х       |
| Inspect the accessory drive belts, replace if necessary.  |        |        |        |        |        |        |        |        |        | Х       |         |         |         |         |         |         |         |         |         | х       |         |         |         |         |         |
| Inspect the front and rear axle fluid.<br>Change if using your vehicle for any of<br>the following: police, taxi, fleet, sus-<br>tained high speed driving, off-road or<br>frequent trailer towing. |        |        |        | x      |        |        |        | х      |        |         |         | х       |         |         |         | х       |         |         |         | x       |         |         |         | х       |         |

| Miles:   | 6,000  | 12,000 | 18,000 | 24,000 | 30,000 | 36,000 | 42,000 | 48,000 | 54,000 | 60,000  | 66,000  | 72,000  | 78,000  | 84,000  | 90,000  | 96,000  | 102,000 | 108,000 | 114,000 | 120,000 | 126,000 | 132,000 | 138,000 | 144,000 | 150,000 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Or Months:   | 6      | 12     | 18     | 24     | 30     | 36     | 42     | 48     | 54     | 60      | 66      | 72      | 78      | 84      | 90      | 96      | 102     | 108     | 114     | 120     | 126     | 132     | 138     | 144     | 150     |
| Or Kilometers:   | 10,000 | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000 | 80,000 | 90,000 | 100,000 | 110,000 | 120,000 | 130,000 | 140,000 | 150,000 | 160,000 | 170,000 | 180,000 | 190,000 | 200,000 | 210,000 | 220,000 | 230,000 | 240,000 | 250,000 |
| Inspect front suspension, tie rod ends,<br>and boot seals for cracks or leaks and<br>all parts for damage, wear, improper<br>looseness or end play; replace if<br>necessary. |        | x      |        | x      |        | x      |        | х      |        | x       |         | x       |         | x       |         | х       |         | х       |         | x       |         | х       |         | x       |         |
| Replace the engine air cleaner filter.   |        |        |        |        | Х      |        |        |        |        | Х       |         |         |         |         | Х       |         |         |         |         | Х       |         |         |         |         | Х       |
| Replace cabin air filter.  |        |        |        |        |        |        |        |        | To be  | e repla | aced e  | every   | 12,00   | 0 mil   | es (19  | 9,000   | km).    |         |         |         |         |         |         |         |         |
| Inspect and replace the PCV Valve if necessary.  |        |        |        |        |        |        |        |        |        |         |         |         |         |         | Х       |         |         |         |         |         |         |         |         |         |         |
| Replace the spark plugs – 6.4L Engine. **  |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         | Х       |         |         |         |         |         |         |         |         |         |
| Flush and replace the engine coolant at 120 months if not done at 150,000 miles (240,000 km).  |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         | x       |         |         |         |         | x       |

\*\* The spark plug change interval is mileage based only, monthly intervals do not apply.

#### WARNING!

 You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

#### WARNING!

 Failure to properly inspect and maintain your vehicle could result in a component malfunction and affect vehicle handling and performance. This could cause an accident. 288 SERVICING AND MAINTENANCE

# **ENGINE COMPARTMENT**

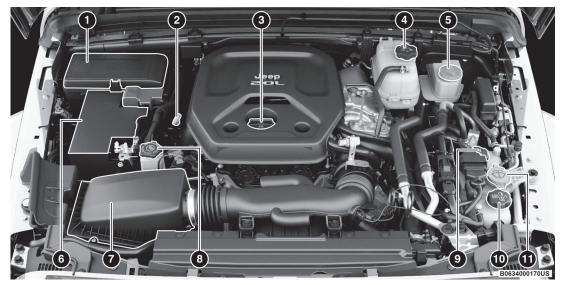
2.0L ENGINE



- 1 Battery
- 2 Power Distribution Center (Fuses)
- 3 Engine Oil Dipstick
- 4 Engine Oil Fill
- 5 Engine Coolant Pressure Cap

- 6 Brake Fluid Reservoir Cap
- 7 Washer Fluid Reservoir Cap
- 8 Engine Air Cleaner Filter
- 9 Power Steering Reservoir Cap
- 10 Intercooler Coolant Reservoir Cap

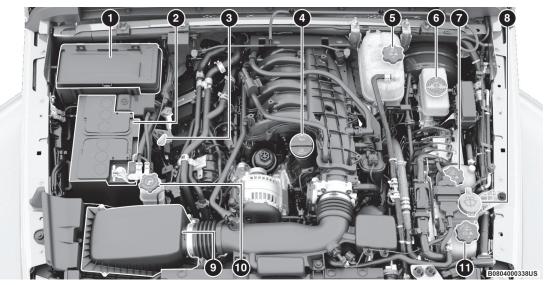
## 2.0L PHEV ENGINE



- 1 Power Distribution Center (Fuses)
- 2 Engine Oil Dipstick
- 3 Engine Oil Fill
- 4 Engine Coolant Reservoir Cap
- 5 Brake Fluid Reservoir Cap
- 6-12 Volt Battery

- 7 Engine Air Cleaner Filter
- 8 Power Steering Fluid Reservoir Cap
- 9 Battery Coolant Reservoir Cap
- 10 Intercooler/Power Electronics Coolant Reservoir Cap
- 11 Washer Fluid Reservoir Cap

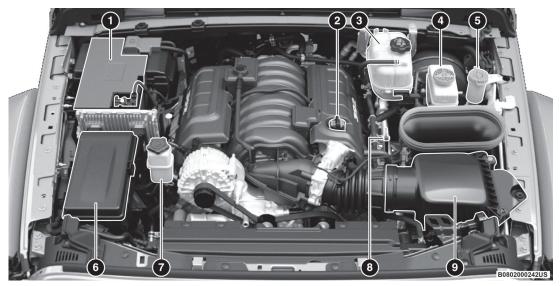
## 3.6L ENGINE



- 1 Power Distribution Center (Fuses)
- 2 Battery
- 3 Engine Oil Dipstick
- 4 Engine Oil Fill
- 5 Engine Coolant Pressure Cap
- 6 Brake Fluid Reservoir Cap

- 7 Power Pack Unit Pressure Cap If Equipped
- 8 Washer Fluid Reservoir Cap
- 9 Engine Air Cleaner Filter
- 10 Power Steering Reservoir Cap
- 11 Motor Generator Unit Coolant Pressure Cap- If Equipped

# 6.4L ENGINE



- 1 Battery
- 2 Engine Oil Fill
- 3 Engine Coolant Reservoir
- 4 Brake Fluid Reservoir
- 5 Washer Fluid Reservoir Cap

- 6 Power Distribution Center (Fuses)
- 7 Power Steering Fluid Reservoir
- 8 Engine Oil Dipstick 9 Engine Air Cleaner Filter

# CHECKING OIL LEVEL

To ensure proper engine lubrication, the engine oil must be maintained at the correct level. Check the oil level at regular intervals, such as every fuel stop. The best time to check the engine oil level is about five minutes after a fully warmed up engine is shut off.

Checking the oil while the vehicle is on level ground will improve the accuracy of the oil level readings.

There are four possible dipstick types:

- · Crosshatched zone.
- Crosshatched zone marked SAFE.
- Crosshatched zone marked with MIN at the low end of the range and MAX at the high end of the range.
- Crosshatched zone marked with dimples at the MIN and the MAX ends of the range.

#### NOTE:

Always maintain the oil level within the crosshatch markings on the dipstick.

#### NOTE:

Use care when filling under hood fluids such as engine oil, washer fluid, antifreeze, etc., to minimize spillage onto the top of the engine. Any excess fluid that is spilled onto the top of the engine should be removed using compressed air or an absorbent cloth.

Adding 1 qt (1 L) of oil when the reading is at the low end of the dipstick range will raise the oil level to the high end of the range marking.

#### CAUTION!

Overfilling or underfilling the crankcase will cause aeration or loss of oil pressure. This could damage your engine.

## ADDING WASHER FLUID

The fluid reservoir for the windshield washers and the rear window washer (if equipped) is shared. The fluid reservoir is located in the engine compartment. Be sure to check the fluid level at regular intervals. Fill the reservoir with windshield washer solvent only (not radiator antifreeze). When refilling the washer fluid reservoir, take some washer fluid and apply it to a cloth or towel and wipe clean the wiper blades; this will help blade performance.

To prevent freeze-up of your windshield washer system in cold weather, select a solution or mixture that meets or exceeds the temperature range of your climate. This rating information can be found on most washer fluid containers.

#### NOTE:

Use care when filling under hood fluids such as engine oil, washer fluid, antifreeze, etc., to minimize spillage onto the top of the engine. Any excess fluid that is spilled onto the top of the engine should be removed using compressed air or an absorbent cloth.

#### WARNING!

Commercial windshield washer solvents are flammable. They could ignite and burn you. Care must be exercised when filling or working around the washer solution.

## MAINTENANCE-FREE BATTERY

Your vehicle is equipped with a maintenance-free battery. You will never have to add water, and periodic maintenance is not required.

#### WARNING!

- Battery fluid is a corrosive acid solution and can burn or even blind you. Do not allow battery fluid to contact your eyes, skin, or clothing. Do not lean over a battery when attaching clamps. If acid splashes in eyes or on skin, flush the area immediately with large amounts of water 
  \$\sigma\$ page 274.
- Battery gas is flammable and explosive. Keep flame or sparks away from the battery. Do not use a booster battery or any other booster source with an output greater than 12 Volts. Do not allow cable clamps to touch each other.
- Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.
- Vehicles with the Stop/Start system will be equipped with two batteries. Both the main and the supplemental batteries must be disconnected to completely de-energize the 12 Volt electrical system.
- Serious injury or death could result if you do not disconnect both batteries. To learn how to properly disconnect, see an authorized dealer.

#### CAUTION!

- It is essential when replacing the cables on the battery that the positive cable is attached to the positive post and the negative cable is attached to the negative post. Battery posts are marked positive (+) and negative (-) and are identified on the battery case. Cable clamps should be tight on the terminal posts and free of corrosion.
- If a "fast charger" is used while the battery is in the vehicle, disconnect both vehicle battery cables before connecting the charger to the battery. Do not use a "fast charger" to provide starting voltage.
- Vehicles with the Stop/Start system will be equipped with two batteries. Both the main and the supplemental batteries must be disconnected to completely de-energize the 12 Volt electrical system.
- If the negative battery cables are not isolated properly it can cause a potential power spike or surge in the system, resulting in damage to essential electrical components.

## PRESSURE WASHING

Cleaning the engine compartment with a high pressure washer is not recommended.

#### CAUTION!

Precautions have been taken to safeguard all parts and connections however, the pressures generated by these machines is such that complete protection against water ingress cannot be guaranteed.

# **VEHICLE MAINTENANCE**

An authorized dealer has the qualified service personnel, special tools, and equipment to perform all service operations in an expert manner. Service Manuals are available which include detailed service information for your vehicle. Refer to these Service Manuals before attempting any procedure yourself.

#### NOTE:

Intentional tampering with emissions control systems may void your warranty and could result in civil penalties being assessed against you.

#### WARNING!

You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

# ENGINE OIL

## **Engine Oil Selection**

For engine oil selection  $\Box$  page 346.

#### NOTE:

Hemi engines (6.4L) at times can tick right after startup and then quiet down after approximately 30 seconds. This is normal and will not harm the engine. This characteristic can be caused by short drive cycles. For example, if the vehicle is started then shut off after driving a short distance. Upon restarting, you may experience a ticking sound. Other causes could be if the vehicle is unused for an extended period of time, incorrect oil, extended oil changes or extended idling. If the engine continues to tick or if the Malfunction Indicator Light (MIL) comes on, see the nearest authorized dealer.

## American Petroleum Institute (API) Approved Engine Oil

These symbols mean that the oil has been certified by the API. The manufacturer only recommends API trademark oils.



The API Starburst trademark certifies 0W-20, 0W-30 and 5W-30 engine oils.



The API Donut trademark certifies OW-40 and 5W-40 engine oil.

#### CAUTION!

Do not use chemical flushes in your engine oil as the chemicals can damage your engine. Such damage is not covered by the New Vehicle Limited Warranty.

## Synthetic Engine Oils

Your engine was designed for synthetic engine oils, only use synthetic API approved engine oils.

Synthetic engine oils which do not have both the correct API trademark and the correct SAE viscosity grade numbers should not be used.

## Materials Added To Engine Oil

The manufacturer strongly recommends against the addition of any additives (other than leak detection dyes) to the engine oil. Engine oil is an engineered product and its performance may be impaired by supplemental additives.

# Disposing Of Used Engine Oil And Oil Filters

Care should be taken in disposing of used engine oil and oil filters from your vehicle. Used oil and oil filters, indiscriminately discarded, can present a problem to the environment. Contact an authorized dealer, service station or governmental agency for advice on how and where used oil and oil filters can be safely discarded in your area.

# ENGINE OIL FILTER

The engine oil filter should be replaced with a new filter at every engine oil change.

#### **Engine Oil Filter Selection**

A full-flow type disposable oil filter should be used for replacement. The quality of replacement filters varies considerably. We recommend using a Mopar® Engine Oil Filter. If Mopar® Engine Oil Filters are unavailable, only use filters that meet or exceed SAE/USCAR-36 Filter Performance Requirements.

# ENGINE AIR CLEANER FILTER

For the proper maintenance intervals  $\Box$  page 282.

#### NOTE:

Be sure to follow the "Severe Duty Conditions" maintenance interval if applicable.

#### WARNING!

The air induction system (air cleaner, hoses, etc.) can provide a measure of protection in the case of engine backfire. Do not remove the air induction system (air cleaner, hoses, etc.) unless such removal is necessary for repair or maintenance. Make sure that no one is near the engine compartment before starting the vehicle with the air induction system (air cleaner, hoses, etc.) removed. Failure to do so can result in serious personal injury.

#### Engine Air Cleaner Filter Selection

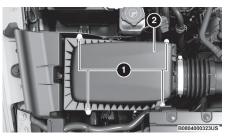
The quality of replacement engine air cleaner filters varies considerably. Only high quality Mopar® filters should be used.

# Engine Air Cleaner Filter Inspection and Replacement

Follow the recommended maintenance intervals as shown in the Maintenance Schedule in this section.

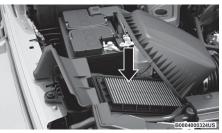
#### Engine Air Cleaner Filter Removal

1. Loosen the fasteners from the engine air cleaner filter cover using a suitable tool.



#### **Engine Air Cleaner Filter Cover**

- 1 Fasteners
- 2 Engine Air Cleaner Filter Cover
- 2. Lift the engine air cleaner filter cover to access the engine air cleaner filter.
- 3. Remove the engine air cleaner filter from the housing assembly.



**Engine Air Cleaner Filter Cover** 

#### Engine Air Cleaner Filter Installation

#### NOTE:

Inspect and clean the housing if significant dirt or debris is present before replacing the engine air cleaner filter.

- Install the engine air cleaner filter into the housing assembly with the engine air cleaner filter inspection surface facing downward.
- 2. Tighten engine air cleaner filter cover fasteners using a suitable tool.

#### CAUTION!

Do not overtighten the engine air cleaner filter cover lid screws or damage may result.

## First Water Separation Chamber Removal – 6.4L Engine

The vehicle is equipped with a hood duct system for filtering out water, dirt and debris to keep them out of the engine air cleaner filter. The first water separation chamber can be removed for cleaning if necessary.

#### Removal

1. Loosen the six captured fasteners from the first water separation chamber using a suitable tool.



#### **First Water Separation Chamber**

1 - Captured Fasteners

#### NOTE:

The captured fasteners are made to stay with the first water separation chamber and must NOT be removed.

2. Pull on the hood duct at the top to disengage the push pin clip along with the rubber grommet and remove from vehicle.



**First Water Chamber Removal** 

#### Installation

#### NOTE:

Inspect and clean the housing if dirt or debris is present before reinstallation.

 Align the first water separation chamber to hood/ second chamber then engage the push pin clip and grommet.



#### **First Water Separation Chamber**

1 – Push Pin

2 - Grommet (On The Backside)

#### NOTE:

Both components should click-in. The cone shape of the second chamber can aid in locating parts.

- 2. Hand start the six captured fasteners.
- 3. Tighten the captured fasteners. Do not overtighten.

# Engine Air Cleaner Filter Inspection and Replacement — 6.4L Engine

Follow the recommended maintenance intervals as shown in the Maintenance Plan in this section.

#### Engine Air Cleaner Filter Removal

1. Loosen the fasteners from the air cleaner cover using a suitable tool.



#### **Engine Air Cleaner Cover**

- 1 Engine Air Cleaner Filter Cover
- 2 Fasteners
- Lift the engine air cleaner filter cover to access the engine air cleaner filter by rotating at the hinge and pulling the cover away from the engine.
- 3. Remove the engine air cleaner filter from the housing assembly.

#### Engine Air Cleaner Filter Installation

#### NOTE:

Inspect and clean the housing if significant dirt or debris is present before replacing the engine air cleaner filter.

- 1. Install the engine air cleaner filter into the housing assembly with the engine air cleaner filter inspection surface facing downward.
- 2. Tighten engine air cleaner filter cover fasteners using a suitable tool.

## CAUTION!

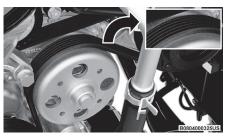
Do not overtighten the engine air cleaner filter cover lid screws or damage may result.

# ACCESSORY DRIVE BELT INSPECTION

#### WARNING!

- Do not attempt to inspect an accessory drive belt with the vehicle running.
- When working near the radiator cooling fan, disconnect the fan motor lead. The fan is temperature controlled and can start at any time regardless of ignition mode. You could be injured by the moving fan blades.
- You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

When inspecting accessory drive belts, small cracks that run across the ribbed surface of the belt, from rib to rib, are considered normal. These are not a reason to replace a belt. However, cracks running along a rib (not across) are not normal. Any belt with cracks running along a rib must be replaced. Also have the belt replaced if it has excessive wear, frayed cords, or severe glazing.



#### Accessory Belt (Serpentine Belt)

Conditions that would require replacement:

- Rib chunking (one or more ribs has separated from belt body)
- Rib or belt wear
- Longitudinal belt cracking (cracks between two ribs)
- Belt slips
- Groove jumping (belt does not maintain correct position on pulley)
- Belt broken
- Noise (objectionable squeal, squeak, or rumble is heard or felt while drive belt is in operation)

#### NOTE:

Identify and correct problem before new belt is installed.

Some conditions can be caused by a faulty component such as a belt pulley. Belt pulleys should be carefully inspected for damage and proper alignment.

Belt replacement on some models requires the use of special tools, we recommend having your vehicle serviced at an authorized dealer.

## AIR CONDITIONER MAINTENANCE

For best possible performance, your air conditioner should be checked and serviced by an authorized dealer at the start of each warm season. This service should include cleaning of the condenser fins and a performance test. Drive belt tension should also be checked at this time.

#### WARNING!

- Use only refrigerants and compressor lubricants approved by the manufacturer for your air conditioning system. Some unapproved refrigerants are flammable and can explode, injuring you. Other unapproved refrigerants or lubricants can cause the system to fail, requiring costly repairs. Refer to Warranty Information Book, located in your owner's information kit, for further warranty information.
- The air conditioning system contains refrigerant under high pressure. To avoid risk of personal injury or damage to the system, adding refrigerant or any repair requiring lines to be disconnected should be done by an experienced technician.

#### CAUTION!

Do not use chemical flushes in your air conditioning system as the chemicals can damage your air conditioning components. Such damage is not covered by the New Vehicle Limited Warranty.

# Refrigerant Recovery And Recycling – R-1234yf

R-1234yf Air Conditioning Refrigerant is a Hydrofluoroolefin (HFO) that is endorsed by the Environmental Protection Agency and is an ozone-friendly substance with a low global-warming potential. The manufacturer recommends that air conditioning service be performed by an authorized dealer using recovery and recycling equipment.

#### NOTE:

Use only the manufacturer approved A/C system PAG compressor oil, and refrigerants.

### **Cabin Air Filter**

#### WARNING!

Do not remove the cabin air filter while the vehicle is running, or while the ignition is in the ACC or ON/RUN mode. With the cabin air filter removed and the blower operating, the blower can contact hands and may propel dirt and debris into your eyes, resulting in personal injury.

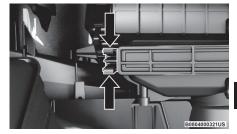
The cabin air filter is located in the fresh air inlet behind the glove compartment. Perform the following procedure to replace the filter:

- 1. Open the glove compartment and remove all contents.
- 2. Push up on the glove compartment travel stop and lower the door.



#### **Glove Compartment Travel Stop**

- 3. Pivot the glove compartment downward.
- 4. Disengage the two retaining tabs that secure the air filter access door to the HVAC housing.



**Air Filter Retaining Tabs** 

#### 298 SERVICING AND MAINTENANCE

 Remove the air filter from the HVAC air inlet housing. Pull the filter elements out pinching them to the right for clearance.



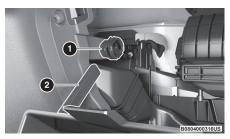
**Air Filter** 

Install the cabin air filter with the air filter position indicators pointing in the same direction as removal.

#### CAUTION!

The cabin air filter is identified with an arrow to indicate airflow direction through the filter. Failure to properly install the filter will result in the need to replace it more often.

- 7. Close cabin air filter access door and secure retaining tabs.
- Rotate the glove compartment door back into position ensuring you have properly engaged the travel dampener.



#### **Travel Dampener**

1 – Travel Dampener Housing

2 – Travel Dampener Rod

For the proper maintenance intervals, see  $\Box$  page 282.

## BODY LUBRICATION

Locks and all body pivot points, including such items as seat tracks, door hinge pivot points and rollers, liftgate, tailgate, decklid, sliding doors and hood hinges, should be lubricated periodically with a lithium based grease, such as Mopar® Spray White Lube to ensure quiet, easy operation and to protect against rust and wear. Prior to the application of any lubricant, the parts concerned should be wiped clean to remove dust and grit; after lubricating excess oil and grease should be removed. Particular attention should also be given to hood latching components to ensure proper function. When performing other underhood services, the hood latch release mechanism, and safety catch should be cleaned and lubricated. The external lock cylinders should be lubricated twice a year, preferably in the Fall and Spring. Apply a small amount of a high quality lubricant, such as Mopar® Lock Cylinder Lubricant directly into the lock cylinder.

## WINDSHIELD WIPER BLADES

Clean the rubber edges of the wiper blades and the windshield periodically with a sponge or soft cloth and a mild nonabrasive cleaner. This will remove accumulations of salt or road film.

Operation of the wipers on dry glass for long periods may cause deterioration of the wiper blades. Always use washer fluid when using the wipers to remove salt or dirt from a dry windshield.

Avoid using the wiper blades to remove frost or ice from the windshield. Keep the blade rubber out of contact with petroleum products such as engine oil, gasoline, etc.

#### NOTE:

Life expectancy of wiper blades varies depending on geographical area and frequency of use. Poor performance of blades may be present with chattering, marks, water lines or wet spots. If any of these conditions are present, clean the wiper blades or replace as necessary.

The wiper blades and wiper arms should be inspected periodically, not just when wiper performance problems are experienced. This inspection should include the following points:

- · Wear or uneven edges
- Foreign material
- Hardening or cracking
- Deformation or fatigue

If a wiper blade or wiper arm is damaged, replace the affected wiper arm or blade with a new unit. Do not attempt to repair a wiper arm or blade that is damaged.

## Wiper Blade Removal/Installation

#### CAUTION!

Do not allow the wiper arm to spring back against the glass without the wiper blade in place or the glass may be damaged.

1. Lift the wiper arm to raise the wiper blade off of the glass, until the wiper arm is in the full up position.



#### B0804000313US

#### Wiper Blade With Release Tab In Locked Position

- 1 Wiper Blade
- 2 Wiper Arm
- 3 Release Tab

2. To disengage the wiper blade from the wiper arm. push the release tab on the wiper blade and while holding the wiper arm with one hand, slide the wiper blade down towards the base of the wiper arm.



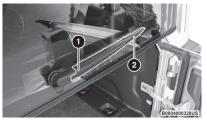
#### B0804000314US

#### Wiper Blade With Release Tab In Unlocked Position

- 1 Wiper Blade
- 2 Wiper Arm J Hook
- 3 J Hook Retainer
- 3. With the wiper blade disengaged, remove the wiper blade from the wiper arm.
- 4. Gently lower the wiper arm onto the glass. Installing The Front Wipers
- 1. Lift the wiper arm off of the glass, until the wiper arm is in the full up position.
- 2. Position the wiper blade near the hook on the tip of the wiper arm.
- 3. Slide the wiper blade up into the hook on the wiper arm, latch engagement will be accompanied by an audible click
- 4. Gently lower the wiper blade onto the glass.

## Rear Wiper Blade Removal/Installation

1. Open swing gate to access the wiper arm.



#### **Rear Wiper Assembly**

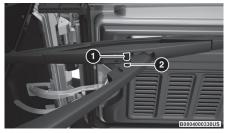
- 1 Wiper Arm
- 2 Wiper Blade
- 2. Lift wiper arm off of the glass and rotate wiper blade outward to disengage the wiper blade from the wiper arm.



#### Wiper Blade And Wiper Arm

1 – Wiper Arm 2 – Wiper Blade

#### 3. Gently set the arm on the glass.



Wiper Blade Removed From Wiper Arm

1- Wiper Blade Pivot Pin

2 – Wiper Arm Receptacle

#### Installing The Rear Wiper

- 1. Lift the wiper arm off of the glass.
- Insert the wiper blade pivot pin into the opening on the end of the wiper arm and rotate the wiper in to place.
- 3. Place with wiper on the glass and close the tail gate.

# EXHAUST SYSTEM

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system.

If you notice a change in the sound of the exhaust system; or if exhaust fumes can be detected inside the vehicle; or when the underside or rear of the vehicle is damaged; have an authorized technician inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, have the exhaust system inspected each time the vehicle is raised for lubrication or oil changes. Replace as required.

### WARNING!

- A hot exhaust system can start a fire if you park over materials that can burn. Such materials might be grass or leaves coming into contact with your exhaust system. Do not park or operate your vehicle in areas where your exhaust system can contact anything that can burn.

### CAUTION!

- The catalytic converter requires the use of unleaded fuel only. Leaded gasoline will destroy the effectiveness of the catalyst as an emissions control device and may seriously reduce engine performance and cause serious damage to the engine.
- Damage to the catalytic converter can result if your vehicle is not kept in proper operating condition. In the event of engine malfunction, particularly involving engine misfire or other apparent loss of performance, have your vehicle serviced promptly. Continued operation of your vehicle with a severe

#### CAUTION!

malfunction could cause the converter to overheat, resulting in possible damage to the converter and vehicle.

Under normal operating conditions, the catalytic converter will not require maintenance. However, it is important to keep the engine properly tuned to ensure proper catalyst operation and prevent possible catalyst damage.

#### NOTE:

Intentional tampering with emissions control systems can result in civil penalties being assessed against you.

In unusual situations involving grossly malfunctioning engine operation, a scorching odor may suggest severe and abnormal catalyst overheating. If this occurs, stop the vehicle, turn off the engine and allow it to cool. Service, including a tune-up to manufacturer's specifications, should be obtained immediately.

To minimize the possibility of catalytic converter damage:

- Do not interrupt the ignition when the transmission is in gear and the vehicle is in motion.
- Do not try to start the vehicle by pushing or towing the vehicle.
- Do not idle the engine with any ignition components disconnected or removed, such as during diagnostic testing, or for prolonged periods during very rough idle or malfunctioning operating conditions.

(Continued)

## COOLING SYSTEM

#### WARNING!

- You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood, do not open the hood until the radiator has had time to cool. Never open a cooling system pressure cap when the radiator or coolant bottle is hot.
- Keep hands, tools, clothing, and jewelry away from the radiator cooling fan when the hood is raised. The fan starts automatically and may start at any time, whether the engine is running or not.
- When working near the radiator cooling fan, disconnect the fan motor lead or turn the ignition to the OFF mode. The fan is temperature controlled and can start at any time the ignition is in the ON mode.

## **Coolant Checks**

Check the engine, battery (if equipped), intercooler (if equipped), and Motor Generator Unit (MGU) (if equipped) coolant (antifreeze) protection every 12 months (before the onset of freezing weather, where applicable). If the engine, battery (if equipped), intercooler (if equipped), and MGU (if equipped) coolant is dirty or rusty in appearance, the system should be drained, flushed and refilled with fresh OAT coolant (conforming to MS.90032) by an authorized dealer. Check the front of the A/C condenser (if equipped) or radiator for any accumulation of bugs, leaves, etc. If dirty, clean by gently spraying water from a garden hose vertically down the face of the A/C condenser (if equipped) or the back of the radiator core. Check the engine, battery (if equipped), intercooler (if equipped), and MGU (if equipped) cooling system hoses for brittle rubber, cracking, tears, cuts, and tightness of the connection at the coolant recovery bottle and radiator. Inspect the entire system for leaks. DO NOT REMOVE THE COOLANT PRESSURE CAP WHEN THE COOLING SYSTEM IS HOT.

## Cooling System - Drain, Flush And Refill

#### NOTE:

Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system please contact an authorized dealer.

If the engine coolant (antifreeze) is dirty or contains visible sediment, have an authorized dealer clean and flush with OAT coolant (conforming to MS.90032).

For the proper maintenance intervals, see  $\Box$  page 282.

# Electric/Battery Coolant System – PHEV (If Equipped)

These coolant systems must be serviced by an authorized dealer. If the coolant level is below what is specified on the reservoir, contact an authorized dealer for service.

These systems require the use of high purity water, such as deionized, or distilled water, when mixing the water and coolant (antifreeze) solution. The use of lower quality water will reduce the amount of corrosion protection in the cooling systems. If the coolant level of the battery coolant system is low, the Hybrid Electric Vehicle System Service Light will be illuminated on the instrument cluster.

### Selection Of Coolant

For further information  $\Box$  page 346.

#### NOTE:

- Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant, may result in engine damage and may decrease corrosion protection. OAT engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant or any "globally compatible" coolant. If a non-OAT engine coolant is introduced into the cooling system in an emergency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032), by an authorized dealer as soon as possible.
- Do not use water alone or alcohol-based engine coolant (antifreeze) products. Do not use additional rust inhibitors or anti-rust products, as they may not be compatible with the radiator engine coolant and may plug the radiator.
- This vehicle has not been designed for use with propylene glycol-based engine coolant. Use of propylene glycol-based engine coolant is not recommended.
- Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system please contact an authorized dealer.

## **Adding Coolant**

Your vehicle has been built with an improved engine coolant (OAT coolant conforming to MS.90032) that allows extended maintenance intervals. This engine coolant (antifreeze) can be used up to 10 years or 150,000 miles (240,000 km) before replacement. To prevent reducing this extended maintenance period, it is important to use the same engine coolant (OAT coolant conforming to MS.90032) throughout the life of your vehicle.

Please review these recommendations for using Organic Additive Technology (OAT) engine coolant that meets the requirements of the manufacturer Material Standard MS.90032. When adding engine coolant (antifreeze):

- We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) that meets the requirements of the manufacturer Material Standard MS.90032.
- Mix a minimum solution of 50% OAT engine coolant that meets the requirements of the manufacturer Material Standard MS.90032 and distilled water. Use higher concentrations (not to exceed 70%) if temperatures below -34°F (-37°C) are anticipated. Please contact an authorized dealer for assistance.
- Use only high purity water such as distilled or deionized water when mixing the water/engine coolant solution. The use of lower quality water will reduce the amount of corrosion protection in the engine cooling system.

#### NOTE:

- It is the owner's responsibility to maintain the proper level of protection against freezing according to the temperatures occurring in the area where the vehicle is operated.
- Use care when filling under hood fluids such as engine oil, washer fluid, antifreeze, etc., to minimize spillage onto the top of the engine. Any excess fluid that is spilled onto the top of the engine should be removed using compressed air or an absorbent cloth.
- Some vehicles require special tools to add coolant properly. Failure to fill these systems properly could lead to severe internal engine damage. If any coolant is needed to be added to the system, please contact an authorized dealer.
- Mixing engine coolant types is not recommended and can result in cooling system damage. If HOAT and OAT coolant are mixed in an emergency, have an authorized dealer drain, flush, and refill with OAT coolant (conforming to MS.90032) as soon as possible.

## **Cooling System Pressure Cap**

The cap must be fully tightened to prevent loss of engine coolant (antifreeze), and to ensure that engine coolant will return to the radiator from the coolant expansion bottle/recovery tank if so equipped.

The cap should be inspected and cleaned if there is any accumulation of foreign material on the sealing surfaces.

#### WARNING!

- Do not open hot engine cooling system. Never add engine coolant (antifreeze) when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

## **Disposal Of Used Coolant**

Used ethylene glycol-based coolant (antifreeze) OAT or HOAT, is a regulated substance requiring proper disposal. Check with your local authorities to determine the disposal rules for your community. To prevent ingestion by animals or children, do not store ethylene glycolbased coolant in open containers or allow it to remain in puddles on the ground, clean up any ground spills immediately. If ingested, seek emergency assistance immediately.

### **Coolant Level**

The coolant bottle provides a quick visual method for determining that the coolant level is adequate. With the engine OFF and cold, the level of the engine coolant (antifreeze) in the bottle should be between the ranges indicated on the bottle.

The radiator normally remains completely full, so there is no need to remove the radiator/coolant pressure cap unless checking for engine coolant freeze point or replacing coolant. Advise your service attendant of this. As long as the engine operating temperature is satisfactory, the coolant bottle need only be checked once a month.

When additional engine coolant is needed to maintain the proper level, only OAT coolant that meets the requirements of the manufacturer Material Standard MS.90032 should be added to the coolant bottle. Do not overfill.

## Engine Coolant Level – 2.0L

#### WARNING!

- Do not open hot engine cooling system. Never add engine coolant (antifreeze) when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

With the engine OFF and cold, the level of the engine coolant should be within the OK range between the ADD and FULL range on the dipstick.

- 1. Remove the cap with level dipstick from the engine coolant bottle.
- 2. Clean off the coolant from the dipstick.
- 3. Rest the cap on the opening of the coolant bottle without tightening the cap.
- 4. Remove the cap with dipstick and check the coolant level on the dipstick.

The radiator normally remains completely full, so there is no need to remove the radiator/coolant pressure cap unless checking for engine coolant freeze point or replacing coolant. Advise your service attendant of this. As long as the engine operating temperature is satisfactory, the coolant bottle need only be checked once a month.

When additional engine coolant is needed to maintain the proper level, only OAT coolant that meets the requirements of the manufacturer Material Standard MS.90032 should be added to the coolant bottle. Do not overfill.

## **Cooling System Notes**

#### NOTE:

When the vehicle is stopped after a few miles/ kilometers of operation, you may observe vapor coming from the front of the engine compartment. This is normally a result of moisture from rain, snow, or high humidity accumulating on the radiator and being vaporized when the thermostat opens, allowing hot engine coolant (antifreeze) to enter the radiator.

If an examination of your engine compartment shows no evidence of radiator or hose leaks, the vehicle may be safely driven. The vapor will soon dissipate.

- Do not overfill the coolant expansion bottle.
- Check the coolant freeze point in the radiator and in the coolant expansion bottle. If engine coolant needs to be added, the contents of the coolant expansion bottle must also be protected against freezing.
- If frequent engine coolant additions are required, the cooling system should be pressure tested for leaks.

- Maintain engine coolant concentration at a minimum of 50% OAT coolant (conforming to MS.90032) and distilled water for proper corrosion protection of your engine which contains aluminum components.
- Make sure that the coolant expansion bottle overflow hoses are not kinked or obstructed.
- Keep the front of the radiator clean. If your vehicle is equipped with air conditioning, keep the front of the condenser clean.
- Do not change the thermostat for Summer or Winter operation. If replacement is ever necessary, install ONLY the correct type thermostat. Other designs may result in unsatisfactory engine cooling performance, poor gas mileage, and increased emissions.

## BRAKE SYSTEM

In order to ensure brake system performance, all brake system components should be inspected periodically. For the proper maintenance intervals  $\Box$  page 282.

#### WARNING!

Riding the brakes can lead to brake failure and possibly a collision. Driving with your foot resting or riding on the brake pedal can result in abnormally high brake temperatures, excessive lining wear, and possible brake damage. You would not have your full braking capacity in an emergency.

# Fluid Level Check — Brake Master Cylinder

The fluid level of the master cylinder should be checked whenever the vehicle is serviced, or immediately if the Brake System Warning Light is on. If necessary, add fluid to bring level within the designated marks on the side of the reservoir of the brake master cylinder. Be sure to clean the top of the master cylinder area before removing cap. With disc brakes, fluid level can be expected to fall as the brake pads wear. Brake fluid level should be checked when pads are replaced. If the brake fluid is abnormally low, check the system for leaks □ page 347.

#### WARNING!

- Use only the manufacturer recommended brake fluid page 347. Using the wrong type of brake fluid can severely damage your brake system and/or impair its performance. The proper type of brake fluid for your vehicle is also identified on the original factory installed hydraulic master cylinder reservoir.
- To avoid contamination from foreign matter or moisture, use only new brake fluid or fluid that has been in a tightly closed container. Keep the master cylinder reservoir cap secured at all times. Brake fluid in an open container absorbs moisture from the air resulting in a lower boiling point. This may cause it to boil unexpectedly during hard or prolonged braking, resulting in sudden brake failure. This could result in a collision.

#### WARNING!

- Overfilling the brake fluid reservoir can result in spilling brake fluid on hot engine parts, causing the brake fluid to catch fire. Brake fluid can also damage painted and vinyl surfaces, care should be taken to avoid its contact with these surfaces.
- Do not allow petroleum-based fluid to contaminate the brake fluid. Brake seal components could be damaged, causing partial or complete brake failure. This could result in a collision.

## FRONT/REAR AXLE FLUID

For normal service, periodic fluid level checks are not required. When the vehicle is serviced for other reasons the exterior surfaces of the axle assembly should be inspected. If gear oil leakage is suspected inspect the fluid level.

## Fluid Level Check

Lubricant should be approximately 1/8 inch (3 mm) below the bottom edge of the oil fill hole.

#### NOTE:

Make sure that the vehicle is level and supported by the axles.

### Adding Fluid

Add lubricant only at the fill hole and only to the level specified.

## Selection Of Lubricant

## TRANSFER CASE

### Fluid Level Check

The fluid level should be to the bottom edge of the fill hole when the vehicle is in a level position.



**Transfer Case** 

1 – Fill hole 2 – Drain hole

## **Drain And Refill**

For the proper maintenance intervals  $\Box$  page 282.

### Selection Of Lubricant

(Continued)

# MANUAL TRANSMISSION – IF EQUIPPED

## Fluid Level Check

Check the fluid level by removing the fill plug. The fluid level should be between the bottom of the fill hole and a point not more than 3/16 of an inch (4.76 mm) below the bottom of the hole.

Add fluid, if necessary, to maintain the proper level.

## **Frequency Of Fluid Change**

Under normal operating conditions, the fluid installed at the factory will give satisfactory lubrication for the life of the vehicle. If the fluid becomes contaminated with water, it should be changed immediately. Otherwise, change the fluid as recommended in the Maintenance Plan. Refer to the Maintenance Plan for the proper maintenance intervals rightarrow page 282.

## Selection Of Lubricant

# AUTOMATIC TRANSMISSION – IF EQUIPPED

## **Special Additives**

It is strongly recommended against using any special additives in the transmission. Automatic Transmission Fluid (ATF) is an engineered product and its performance may be impaired by supplemental additives. Therefore, do not add any fluid additives to the transmission. Avoid using transmission sealers as they may adversely affect seals.

#### CAUTION!

Do not use chemical flushes in your transmission as the chemicals can damage your transmission components. Such damage is not covered by the New Vehicle Limited Warranty.

## Fluid Level Check

The fluid level is preset at the factory and does not require adjustment under normal operating conditions. Routine fluid level checks are not required; therefore the transmission has no dipstick. An authorized dealer can check your transmission fluid level using special service tools. If you notice fluid leakage or transmission malfunction, visit an authorized dealer immediately to have the transmission fluid level checked. Operating the vehicle with an improper fluid level can cause severe transmission damage.

#### CAUTION!

If a transmission fluid leak occurs, visit an authorized dealer immediately. Severe transmission damage may occur. An authorized dealer has the proper tools to adjust the fluid level accurately.

## Fluid And Filter Changes

Under normal operating conditions, the fluid installed at the factory will provide satisfactory lubrication for the life of the vehicle.

Routine fluid and filter changes are not required. However, change the fluid and filter if the fluid becomes contaminated (with water, etc.), or if the transmission is disassembled for any reason.

## Selection Of Lubricant

It is important to use the proper transmission fluid to ensure optimum transmission performance and life. Use only the manufacturer specified transmission fluid raccippies 247. It is important to maintain the transmission fluid at the correct level using the recommended fluid.

#### NOTE:

No chemical flushes should be used in any transmission; only the approved lubricant should be used.

#### CAUTION!

Using a transmission fluid other than the manufacturer recommended fluid may cause deterioration in transmission shift quality and/or torque converter shudder  $\Box$  page 347.

## FUSES

## **General Information**

#### WARNING!

When replacing a blown fuse, always use an appropriate replacement fuse with the same amp rating as the original fuse. Never replace a fuse with another fuse of higher amp rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected.

#### WARNING!

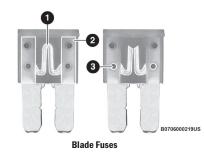
Never replace a blown fuse with metal wires or any other material. Failure to use proper fuses may result in serious personal injury, fire and/or property damage.

- Before replacing a fuse, make sure that the ignition is off and that all the other services are switched off and/or disengaged.
- If the replaced fuse blows again, contact an authorized dealer.
- If a general protection fuse for safety systems (air bag system, braking system), power unit systems (engine system, gearbox system) or steering system blows, contact an authorized dealer.

The fuses protect electrical systems against excessive current.

When a device does not work, you must check the fuse element inside the blade fuse for a break/melt.

Also, please be aware that using power outlets for extended periods of time with the engine off may result in vehicle battery discharge.



1 – Fuse Element

 $2-\mbox{Blade}$  Fuse with a good/functional fuse element

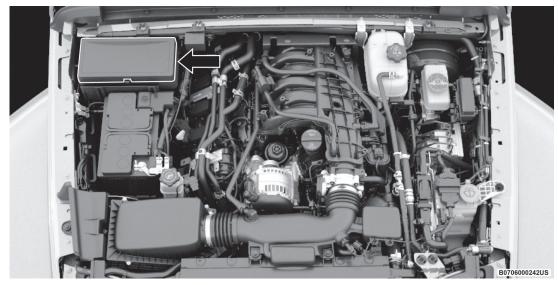
3 – Blade Fuse with a bad/not functional fuse element (blown fuse)

## **Power Distribution Center**

The Power Distribution Centers (PDC) are located in the engine compartment near the battery. This center contains cartridge fuses, mini fuses, and relays. The PDC top cover is labeled with each serviceable fuse/relay location, function, and size.

#### CAUTION!

When installing the power distribution center cover, it is important to ensure the cover is properly positioned and fully latched. Failure to do so may allow water to get into the power distribution center and possibly result in an electrical system failure.



**Power Distribution Center Location** 



Power Distribution Center Location (6.4 Engine)

#### GASOLINE ENGINE FUSES

| Cavity | Cartridge Fuse | Micro Fuse    | Description  |
|--------|----------------|---------------|--|
|        |                | * If Equipped | ·  |
| F01    | -              | -             | Spare *  |
| F02    | 40 Amp Green   | -             | Starter  |
| F03    | -              | 5 Amp Tan     | Intelligent Battery Sensor (IBS)                   |
| F04    | -              | 20 Amp Yellow | Fuel Pump MTR / FPCM                               |
| F05    | -              | 5 Amp Tan     | Security Gateway                                   |
| F06    | -              | -             | Spare *  |
| F07    | -              | 15 Amp Blue   | LTR Coolant Pump *                                 |
| F08    | -              | 15 Amp Blue   | TCM-8HP CYGNUS                                     |
| F09    | -              | -             | Spare *  |
| F10    | -              | 15 Amp Blue   | ESCL   |
| F11    | -              | 10 Amp Red    | UCI Port (USB & AUX)                               |
| F12    | -              | 25 Amp Clear  | HIFI Amplifier                                     |
| F13    | -              | -             | Spare *  |
| F14    | -              | -             | Spare *  |
| F15    | -              | 15 Amp Blue   | IPC / Switch Bank-HD Elec                          |
| F16    | -              | -             | Spare *  |
| F17    | -              | -             | Spare *  |
| F18    | -              | 10 Amp Red    | AC Clutch  |
| F19    | -              | -             | Spare *  |
| F20    | 30 Amp Pink    | -             | Central Body Controller (CBC) 1-INTERIOR LIGHTS    |
| F21    | -              | 20 Amp Yellow | REAR WIPER   |
| F22    | -              | 10 Amp Red    | ECM / ETC  |
| F23    | -              | 10 Amp Red    | ECM  |
| F24    | 30 Amp Pink    | -             | Pass Pwr Seat                                      |
| F25    | -              | 10 Amp Red    | MOD_SBW  |
| F26    | 40 Amp Green   | -             | Central Body Controller (CBC) 2-EXTERIOR LIGHTS #1 |
| F27    | 30 Amp Pink    | -             | Front Wipers                                       |

| Cavity | Cartridge Fuse | Micro Fuse    | Description  |
|--------|----------------|---------------|--|
|        | ·              | * If Equipped |  |
| F28    | 40 Amp Green   | _             | Central Body Controller (CBC) 3-POWER LOCKS        |
| F29    | 40 Amp Green   | _             | Central Body Controller (CBC) 4-EXTERIOR LIGHTS #2 |
| F30    | 30 Amp Pink    | -             | Power Step/Slider                                  |
| F31    | -              | 10 Amp Red    | DIAGNOSTIC PORT                                    |
| F32    | -              | 10 Amp Red    | HVAC CTRL MOD / SCL / OCM / DPDM                   |
| F33    | -              | 10 Amp Red    | PTS / IRCM / Airbag Disable Lamps                  |
| F34    | -              | 10 Amp Red    | ESC / EHPS / SBCM Wake Up                          |
| F35    | 30 Amp Pink    | -             | BRAKE VAC PMP *                                    |
| F36    | 30 Amp Pink    | -             | TRAILER TOW ELEC BRK MOD *                         |
| F37    | 30 Amp Pink    | -             | TRAILER TOW CONN 7W *                              |
| F38    | 20 Amp Blue    | -             | ECM  |
| F39    | -              | -             | Spare *  |
| F40    | -              | 15 Amp Blue   | DTCM / Axle Lock FT_RR                             |
| F41    | -              | 15 Amp Blue   | IC / SGW Wake Up                                   |
| F42    | -              | 10 Amp Red    | PCR Ctrl Feed (ESS) *                              |
| F43    | -              | 20 Amp Yellow | PWR OUTLET (CARGO) BATT                            |
| F44    | -              | 10 Amp Red    | IRCAM HEATERS                                      |
| F45    | -              | 20 Amp Yellow | PWR OUTLET (CARGO) IGN *                           |
| F46    | -              | 10 Amp Red    | AUTO HDLP LVL MOD / LVL MTR / HDLP SW              |
| F47    | -              | -             | Spare *  |
| F48    | -              | -             | Spare *  |
| F49    | -              | 10 Amp Red    | Occupant Restraint Controller (ORC)                |
| F50    | -              | 10 Amp Red    | HD ACC *   |
| F51    | -              | 10 Amp Red    | Digital TV Inline / USB / ISRVM / Compass Mod      |
| F52    | -              | 20 Amp Yellow | CIGAR LTR  |
| F53    | -              | -             | Spare *  |
| F54    | -              | -             | Spare *  |
| F55    | -              | 10 Amp Red    | Central Vision Processing Module (CVPM)            |

| Cavity | Cartridge Fuse | Micro Fuse    | Description                             |
|--------|----------------|---------------|---|
|        |                | * If Equipped |   |
| F56    | -              | 10 Amp Red    | IN-CAR Temp Sesr / PTC Htr Coil Feed    |
| F57    | -              | 20 Amp Yellow | Driver Heated Seats                     |
| F58    | -              | 20 Amp Yellow | Pass Heated Seats                       |
| F59    | 30 Amp Pink    | -             | Driver Pwr Seat                         |
| F60    | -              | 15 Amp Blue   | CSWM (Htd Str Wheel)                    |
| F61    | -              | 15 Amp Blue   | LBSS / RBSS / CADM-LO *                 |
| F62    | -              | 10 Amp Red    | Exhaust Sol *                           |
| F63    | -              | 10 Amp Red    | ORC                                     |
| F64    | -              | -             | Spare *                                 |
| F65    | -              | -             | Spare *                                 |
| F66    | 40 Amp Green   | -             | HVAC Blower Mtr Front                   |
| F67    | -              | -             | Spare *                                 |
| F68    | -              | -             | Spare *                                 |
| F69    | -              | 10 Amp Red    | KIN / RF Hub                            |
| F70    | -              | 25 Amp Clear  | INJ / IGN COIL                          |
| F71    | -              | -             | Spare *                                 |
| F72    | -              | 10 Amp Red    | HD ELEC ACC PKG *                       |
| F73    | 20 Amp Blue    | -             | PWR TOP LT                              |
| F74    | 20 Amp Blue    | -             | PWR TOP RT                              |
| F75    | -              | -             | Spare *                                 |
| F76    | -              | 20 Amp Yellow | ECM                                     |
| F77    | -              | 10 Amp Red    | Heated Mirrors                          |
| F78    | -              | 10 Amp Red    | Intrusion Mod / SIREN / Intrusion Snsrs |
| F79    | -              | 20 Amp Yellow | Smart Bar Ctrl Mod                      |
| F80    | -              | 15 Amp Blue   | SOL 1,2 BLOCK SHIFT *                   |
| F81    | 30 Amp Pink    | -             | Rear Defrost (EBL)                      |
| F82    | -              | -             | Spare *                                 |
| F83    | -              | -             | Spare *                                 |

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| Cavity | Cartridge Fuse | Micro Fuse    | Description  |
|--------|----------------|---------------|--|
|        | L.             | * If Equipped |  |
| F84    | -              | -             | Spare *  |
| F85    | -              | -             | Spare *  |
| F86    | -              | _             | Spare *  |
| F87    | -              | _             | Spare *  |
| F88    | -              | _             | Spare *  |
| F89    | -              | 10 Amp Red    | SCCM / Cruise Ctl / DTV / EVIC / Airbag Disable Lamp |
| F90    | 20 Amp Blue    | _             | Trailer Tow Park Lmp *                               |
| F91    | -              | 20 Amp Yellow | Horn   |
| F92    | 40 Amp Green   | _             | HD ACCY #2*  |
| F93    | 40 Amp Green   | _             | HD ACCY #1*  |
| F94    | -              | 10 Amp Red    | Dual USB Port  |
| F95    | -              | -             | Spare *  |
| F96    | -              | 10 Amp Red    | Pwr Mirror SW  |
| F97    | -              | 20 Amp Yellow | Radio  |
| F98    | -              | 10 Amp Red    | SW BANK-HD ELEC / OFF ROAD                           |
| F99    | -              | _             | Spare *  |
| F100   | 30 Amp Pink    | -             | ESC-ECU & Valves                                     |
| F101   | 30 Amp Pink    | _             | DTCM   |
| F102   | -              | 15 Amp Blue   | TBM2 / DCSD Mod                                      |
| F103   | -              | 15 Amp Blue   | HD ACCY #3 *   |
| F104   | -              | 15 Amp Blue   | Lumbar SW (Driver & Pass)                            |
| F105   | -              | 10 Amp Red    | ICS / HVAC / ETC                                     |
| F106   | 50 Amp Red     | -             | ESC -Pump Mtr  |
| F107   | -              | 20 Amp Yellow | Trailer Tow Stop/Turn LT *                           |
| F108   | -              | 15 Amp Blue   | HD ACCY #4 *   |
| F109   | -              | 20 Amp Yellow | Trailer Tow Stop/Turn RT *                           |
| F110   | 30 Amp Pink    | -             | Power Inverter                                       |
| F111   | 20 Amp Blue    | _             | Trailer Tow Backup *                                 |

PHEV FUSES

| Cavity      | Cartridge Fuse | Micro Fuse    | Description                          |
|-------------|----------------|---------------|--------------------------------------|
| · · · · · · |                | * If Equipped | · ·                                  |
| F01         | -              | 5 Amp Tan     | HV Electric Coolant Heater Enable    |
| F02         | -              | _             | Spare*                               |
| F03         | -              | 5 Amp Tan     | Intelligent Battery Sensor (IBS)     |
| F04         | -              | 20 Amp Yellow | Fuel Pump MTR / FPCM                 |
| F05         | -              | 5 Amp Tan     | Security Gateway                     |
| F06         | -              | 15 Amp Blue   | BPCM                                 |
| F07         | -              | 15 Amp Blue   | PECP-2 (LTR COOLANT PUMP)            |
| F08         | -              | 15 Amp Blue   | Trans Control Module TCM-8HP CYGNUS  |
| F09         | -              | 5 Amp Tan     | IDCM                                 |
| F10         | -              | 15 Amp Blue   | ESCL                                 |
| F11         | -              | 10 Amp Red    | UCI Port (USB & AUX)                 |
| F12         | -              | 25 Amp Clear  | HIFI Amplifier                       |
| F13         | -              | 10 Amp Red    | PIM - Redundant Main Pwr Supply      |
| F14         | -              | 10 Amp Red    | PIM - Main Pwr Supply                |
| F15         | -              | 15 Amp Blue   | IPC / Switch Bank-HD ELEC            |
| F16         | -              | -             | Spare*                               |
| F17         | 40 Amp Green   | -             | Trans Oil Pump                       |
| F18         | -              | 10 Amp Red    | Electric Air Conditioning Compressor |
| F19         | -              | 5 Amp Tan     | Charge Port Indicator                |
| F20         | 30 Amp Pink    | -             | CBC 1-INTERIOR LIGHTS                |
| F21         | -              | 20 Amp Yellow | Rear Wiper *                         |
| F22         | -              | 10 Amp Red    | ECM / PIM / ETC                      |
| F23         | -              | -             | Spare*                               |
| F24         | 30 Amp Pink    | -             | Pass Power Seat                      |
| F25         | -              | 10 Amp Red    | MOD_SBW                              |
| F26         | 40 Amp Green   | -             | CBC 2-EXTERIOR LIGHTS #1             |
| F27         | 30 Amp Pink    | -             | Front Wipers                         |
| F28         | 40 Amp Green   | -             | CBC 3-POWER LOCKS                    |

| Cavity | Cartridge Fuse | Micro Fuse    | Description  |
|--------|----------------|---------------|--|
|        |                | * If Equipped |  |
| F29    | 40 Amp Green   | -             | CBC 4-EXTERIOR LIGHTS #2   |
| F30    | 30 Amp Pink    | -             | Power Step Slider *  |
| F31    | -              | 10 Amp Red    | DIAGNOSTIC PORT  |
| F32    | -              | 10 Amp Red    | HVAC CTRL MOD / Steering Column Lock (SCL) / Occupant Classifi-<br>cation Module (OCM) / Driver Presence Detection Module (DPDM) |
| F33    | -              | 10 Amp Red    | PTS / IRCM MODULE  |
| F34    | -              | 10 Amp Red    | Electronic Stability Control (ESC) / Electric Hydraulic Power Steering (EHPS) / Smart Bar Control Module (SBCM) WAKE UP          |
| F35    | -              | -             | Spare*   |
| F36    | 30 Amp Pink    | -             | Trailer Tow Electric Brake Mod   |
| F37    | 30 Amp Pink    | -             | Trailer Tow Conn 7W  |
| F38    | 20 Amp Blue    | -             | Engine Control Module (ECM)  |
| F39    | -              | -             | Spare*   |
| F40    | -              | 15 Amp Blue   | DriveTrain Control Module (DTCM) / Axle Lock FT_RR   |
| F41    | -              | 15 Amp Blue   | Instrument Cluster (IC) / Security GateWay (SGW) WAKE UP   |
| F42    | -              | -             | Spare*   |
| F43    | -              | 20 Amp Yellow | PWR OUTLET (CARGO) BATT  |
| F44    | -              | 10 Amp Red    | InfraRed Camera (IRCAM) HEATERS  |
| F45    | -              | 20 Amp Yellow | PWR OUTLET (CARGO) IGN*  |
| F46    | -              | 10 Amp Red    | AUTO HDLP LVL MOD / LVL MTR / HDLP SW  |
| F47    | -              | 10 Amp Red    | QVPM - Quiet Vehicle Pedestrian Module   |
| F48    | -              | 10 Amp Red    | Spare*   |
| F49    | -              | 10 Amp Red    | Occupant Restraint Controller (ORC)  |
| F50    | -              | 10 Amp Red    | HD ACC   |
| F51    | -              | 10 Amp Red    | DTV / USB / ISRVM / Compass Mod / Inverter 400W */ ECM / PIM   |
| F52    | -              | 20 Amp Yellow | CIGAR LTR  |
| F53    | -              | 10 Amp Red    | Wireless Speaker *   |
| F54    | _              | -             | Spare *  |
| F55    | _              | 10 Amp Red    | CVPM   |
| F56    | -              | 10 Amp Red    | IN-CAR TEMP SENSOR   |

| Cavity | Cartridge Fuse | Micro Fuse    | Description  |
|--------|----------------|---------------|--|
|        |                | * If Equipped |  |
| F57    | -              | 20 Amp Yellow | Driver Heated Seats                                      |
| F58    | -              | 20 Amp Yellow | Pass Heated Seats  |
| F59    | 30 Amp Pink    | _             | Driver Power Seat  |
| F60    | -              | 15 Amp Blue   | HTD STR WHEEL  |
| F61    | -              | 15 Amp Blue   | LBSS / RBSS / CADM-LO *                                  |
| F62    | -              | -             | Spare *  |
| F63    | -              | 10 Amp Red    | Occupant Restraint Controller (ORC)                      |
| F64    | -              | -             | Spare *  |
| F65    | 50 Amp Red     | -             | Power Inverter 400W                                      |
| F66    | 40 Amp Green   | -             | HVAC Blower Mtr Front                                    |
| F67    | -              | 15 Amp Blue   | BCP - Lo Temp Active Pump                                |
| F68    | -              | -             | Spare*   |
| F69    | -              | 10 Amp Red    | KIN / RF Hub   |
| F70    | -              | 25 Amp Clear  | IGN COIL / FUEL INJECTOR                                 |
| F71    | -              | 10 Amp Red    | Battery Coolant Heater                                   |
| F72    | -              | 10 Amp Red    | HD ELEC ACC PKG  |
| F73    | 20 Amp Blue    | -             | PWR TOP LT *   |
| F74    | 20 Amp Blue    | -             | PWR TOP RT *   |
| F75    | -              | 5 Amp Tan     | Battery Charge Indicator / Sw Bank PHEV Mode             |
| F76    | -              | 20 Amp Yellow | ECM  |
| F77    | -              | 10 Amp Red    | Heated Mirrors   |
| F78    | -              | 10 Amp Red    | Intrusion Mod / Siren / Intrusion Sensors *              |
| F79    | -              | 20 Amp Yellow | Smart Bar CTRL Mod                                       |
| F80    | -              | 15 Amp Blue   | SOL 1 2 Block Shift / Mod ELCM / SOL Fuel Tank Isolation |
| F81    | 30 Amp Pink    | -             | Rear Defroster (EBL)                                     |
| F82    | -              | -             | Spare*   |
| F83    | 50 Amp Red     | -             | ESC-ECU & Valves   |
| F84    | 20 Amp Blue    | -             | PIM - High Side Drive Power                              |
| F85    | -              | 15 Amp Blue   | PECP - Lo Temp Passive Pump                              |

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| Cavity | Cartridge Fuse | Micro Fuse    | Description   |
|--------|----------------|---------------|---|
|        | ·              | * If Equipped |   |
| F86    | -              | -             | Spare *   |
| F87    | -              | 15 Amp Blue   | AHP - Hi Temp Aux Pump                              |
| F88    | -              | -             | Spare *   |
| F89    | -              | 10 Amp Red    | SCCM / CRUISE CTL / EVIC / DTV / AIRBAG DISABLE LMP |
| F90    | 20 Amp Blue    | -             | TRAILER TOW PARK LMP                                |
| F91    | -              | 20 Amp Yellow | HORN  |
| F92    | 40 Amp Green   | -             | HD ACCY #2  |
| F93    | 40 Amp Green   | -             | HD ACCY #1  |
| F94    | -              | 10 Amp Red    | Dual USB Port                                       |
| F95    | -              | -             | Spare *   |
| F96    | -              | 10 Amp Red    | PWR MIRROR SW                                       |
| F97    | -              | 20 Amp Yellow | RADIO   |
| F98    | -              | 10 Amp Red    | SW BANK-HD ELEC / OFF ROAD                          |
| F99    | -              | -             | Spare*  |
| F100   | -              | -             | Spare*  |
| F101   | 30 Amp Pink    | -             | DriveTrain Control Module (DTCM)                    |
| F102   | -              | 15 Amp Blue   | TBM2 / DCSD Mod                                     |
| F103   | -              | 15 Amp Blue   | HD ACCY #3  |
| F104   | -              | 15 Amp Blue   | Lumbar SW (Drive & Pass)                            |
| F105   | -              | 10 Amp Red    | ICS / HVAC / ETC                                    |
| F106   | 50 Amp Red     | -             | Electronic Speed Control (ESC)-PUMP MTR             |
| F107   | -              | 20 Amp Yellow | TRAILER TOW STOP / TURN LT                          |
| F108   | -              | 15 Amp Blue   | HD ACCY #4  |
| F109   | -              | 20 Amp Yellow | TRAILER TOW STOP / TURN RT                          |
| F110   | 30 Amp Pink    | -             | POWER INVERTER 150W                                 |
| F111   | 20 Amp Blue    | -             | TRAILER TOW BACKUP                                  |

Customer can select to switch the Cargo Power Outlet from F43 battery fed power to this position F45 which is fed when the ignition in ON.

## **BULB REPLACEMENT**

## Replacement Bulbs, Names, And Part Numbers

In the instance a bulb needs to be replaced, this section includes bulb description and replacement part numbers.

#### NOTE:

See an authorized dealer for LED bulb replacement.

| Interior Bulbs  |             |  |  |  |  |
|---|-------------|--|--|--|--|
| Bulb Name   | Bulb Number |  |  |  |  |
| Automatic Transmission Indicator Lamp                                   | 658         |  |  |  |  |
| Heater Control Lamps (2)  | 194         |  |  |  |  |
| Rocker Switch Indicator Lamp (Rear Window Defogger, and Rear Wash/Wipe) | **          |  |  |  |  |
| Soundbar Dome Lamp  | 912         |  |  |  |  |
| ** Bulbs only available from an authorized dealer.                      |             |  |  |  |  |

| Exterior Bulbs                           |                  |  |  |  |
|--|------------------|--|--|--|
| Bulb Name                                | Bulb Number      |  |  |  |
| Headlamps (2)                            | H13              |  |  |  |
| Premium Head Lamps                       | LED              |  |  |  |
| Sport Front Park/Turn Signal Lamps (2)   | 7444NALL         |  |  |  |
| Premium Front Park/Turn Signal Lamps (2) | LED              |  |  |  |
| Base (Sahara/Rubicon) Turn Lamp          | 7440NALL/WY21WLL |  |  |  |
| Base (Sahara/Rubicon) Park DRL Lamp      | 7443LL           |  |  |  |
| Front Side Marker Lamps (2)              | LED              |  |  |  |
| Base Fog Lamps                           | PSX24W           |  |  |  |
| Premium Fog Lamps                        | LED              |  |  |  |

#### 318 SERVICING AND MAINTENANCE

| Exterior Bulbs                          |             |  |  |  |
|---|-------------|--|--|--|
| Bulb Name                               | Bulb Number |  |  |  |
| Rear Premium LED Tail Lamps             | LED         |  |  |  |
| Rear Base Tail Lamp Stop/Tail/Turn Bulb | 3157        |  |  |  |
| Rear Base Tail Lamp Backup Bulb         | 7440        |  |  |  |
| Rear Base Tail Lamp Side Marker         | LED         |  |  |  |
| Center High Mounted Stop Lamp (CHMSL)   | LED         |  |  |  |
| License Lamp                            | LED         |  |  |  |

#### NOTE:

Numbers refer to commercial bulb types that can be purchased from an authorized dealer. If a bulb needs to be replaced, visit an authorized dealer or refer to the applicable Service Manual.

## **Bulb Replacement**

#### NOTE:

Lens fogging can occur under certain atmospheric conditions. This will usually clear as atmospheric conditions change to allow the condensation to change back into a vapor. Turning the lamps on will usually accelerate the clearing process.

#### HALOGEN HEADLAMPS

See the following steps to replace:

- 1. Open hood and support using prop rod.
- 2. Remove the front grille. Turn the retainers along the top a quarter turn counterclockwise and remove.

- 3. Pull the bottom of the grille away starting at one side and working toward the other.
- 4. Remove the three screws holding the headlamp to the vehicle.
- 5. Remove lamp from the vehicle.
- 6. Remove the lamp from the collar.
- 7. Grab the bulb and rotate a quarter turn counterclockwise.
- 8. Pull the bulb from the housing.
- 9. Push connector locking tab to the unlock position.
- 10. Remove connector from bulb.

11. Push connector onto new bulb base, and push the connector locking tab to the lock position.

#### CAUTION!

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with any oily surface, clean the bulb with rubbing alcohol.

12. Reinstall bulb housing. Rotate the bulb a quarter turn clockwise.

#### FRONT PARK/TURN SIGNAL

See the following steps to replace:

1. Remove the front wheel liner fasteners to access bulb sockets.



#### Wheel Liner

 Turn the socket assembly a quarter turn counterclockwise and remove from housing. Pull the bulb straight from the socket to replace.

#### LED FRONT SIDE MARKER

See the following steps to replace:

- 1. Remove the front wheel liner fasteners to access side maker screw and electrical connector.
- Remove fastening screw in the back of the front side maker assembly and disconnect electrical connector.
- 3. Remove and replace LED front side marker light assembly.

#### HALOGEN FRONT FOG LAMP

See the following steps to replace:

- 1. Reach under the vehicle to access the back of the front fog lamp.
- 2. Disconnect the wire harness connector from the front fog lamp connector receptacle.
- 3. Firmly grab the bulb by the two latch features and squeeze them together to unlock the bulb from the back of the front fog lamp housing.
- 4. Pull the bulb straight out from the keyed opening in the housing and then connect the replacement bulb.

## CAUTION!

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with any oily surface, clean the bulb with rubbing alcohol.

#### LED Front Fog Lamp

If your vehicle is equipped with LED fog lamps they are replaced as an assembly.

# REAR TAIL, STOP, TURN SIGNAL, AND BACKUP LAMP

See the following steps to replace:

1. Remove interior trim panel cap to access single retaining screw for tail lamp assembly.



#### Trim Cap

 Remove retaining screw and disconnect electrical connector, then remove tail lamp assembly from the vehicle.

#### NOTE:

If necessary, push in on the assembly tab located inboard behind the lamp housing.

- 3. Remove the three screws from assembly bracket to access bulb sockets.
- Rotate the appropriate socket a quarter turn counterclockwise, then remove it from the housing.



B0705000487US

**Bulb Removal** 5. Pull the bulb straight from the socket to replace.

# CENTER HIGH MOUNTED STOP LAMP (CHMSL)

The stop lamp is mounted on a bracket that extends upward from the swing gate behind the spare tire. If service is needed, obtain the LED Assembly from an authorized dealer.

See the following steps to replace:

- 1. Remove the spare tire.
- 2. Remove the screws holding the tire carrier cover.
- Remove two screws from lamp assembly and disconnect electrical connector.

### LICENSE PLATE LAMPS

See the following steps to replace:

#### NOTE:

To install a new bulb, reverse the previously mentioned procedure. When installing the new bulb, care should be taken to not allow bare skin to come in contact with the bulb.

See an authorized dealer to replace LED lamps.

# TIRES

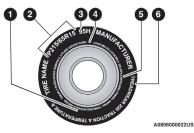
# TIRE SAFETY INFORMATION

Tire safety information will cover aspects of the following information: Tire Markings, Tire Identification Numbers, Tire Terminology and Definitions, Tire Pressures, and Tire Loading.

## NOTE:

If your vehicle is equipped with bead-lock wheels, please refer to your vehicles bead-lock specific part number for additional information and instructions on mopar.com or by contacting an authorized dealer.

## **Tire Markings**



Tire Markings

- 1-US DOT Safety Standards Code (TIN)
- 2 Size Designation
- 3 Service Description
- 4 Maximum Load
- 5 Maximum Pressure
- 6 Treadwear, Traction and Temperature Grades

#### NOTE:

- P (Passenger) Metric tire sizing is based on US design standards. P-Metric tires have the letter "P" molded into the sidewall preceding the size designation. Example: P215/65R15 95H.
- European Metric tire sizing is based on European design standards. Tires designed to this standard have the tire size molded into the sidewall beginning with the section width. The letter "P" is absent from this tire size designation. Example: 215/65R15 96H.
- LT (Light Truck) Metric tire sizing is based on US design standards. The size designation for LT-Metric tires is the same as for P-Metric tires except for the letters "LT" that are molded into the sidewall preceding the size designation. Example: LT235/85R16.
- Temporary spare tires are designed for temporary emergency use only. Temporary high pressure compact spare tires have the letter "T" or "S" molded into the sidewall preceding the size designation. Example: T145/80D18 103M.
- High flotation tire sizing is based on US design standards and it begins with the tire diameter molded into the sidewall. Example: 31x10.5 R15 LT.

#### TIRE SIZING CHART

| EXAMPLE:   |
|--|
| Example Size Designation: P215/65R15XL 95H, 215/65R15 96H, LT235/85R16C, T145/80D18 103M, 31x10.5 R15 LT   |
| P = Passenger car tire size based on US design standards, or   |
| "blank" = Passenger car tire based on European design standards, or  |
| LT = Light truck tire based on US design standards, or   |
| T or S = Temporary spare tire or   |
| 31 = Overall diameter in inches (in)   |
| 215, 235, 145 = Section width in millimeters (mm)  |
| <ul> <li>65, 85, 80 = Aspect ratio in percent (%)</li> <li>Ratio of section height to section width of tire, or</li> </ul>   |
| 10.5 = Section width in inches (in)  |
| R = Construction code         "R" means radial construction, or         "D" means diagonal or bias construction  |
| 15, 16, 18 = Rim diameter in inches (in)   |
| Service Description:   |
| 95 = Load Index  |
| A numerical code associated with the maximum load a tire can carry   |
| <ul> <li>H = Speed Symbol</li> <li>A symbol indicating the range of speeds at which a tire can carry a load corresponding to its load index under certain operating conditions</li> <li>The maximum speed corresponding to the speed symbol should only be achieved under specified operating conditions (i.e., tire pressure, vehicle loading, road conditions, and posted speed limits)</li> </ul> |
| Load Identification:         Absence of the following load identification symbols on the sidewall of the tire indicates a Standard Load (SL) tire:         XL = Extra load (or reinforced) tire, or         LL = Light load tire or         C, D, E, F, G = Load range associated with the maximum load a tire can carry at a specified pressure   |
| Maximum Load - Maximum load indicates the maximum load this tire is designed to carry  |
| Maximum Pressure - Maximum pressure indicates the maximum permissible cold tire inflation pressure for this tire   |

## Tire Identification Number (TIN)

The TIN may be found on one or both sides of the tire; however, the date code may only be on one side.

Tires with white sidewalls will have the full TIN, including the date code, located on the white sidewall side of the tire.

Look for the TIN on the outboard side of black sidewall tires as mounted on the vehicle. If the TIN is not found on the outboard side, then you will find it on the inboard side of the tire.

| EXAMPLE:  |  |  |
|---|--|--|
| DOT MA L9 ABCD 0301   |  |  |
| <ul> <li>DOT = Department of Transportation</li> <li>This symbol certifies that the tire is in compliance with the US Department of Transportation tire safety standards and is approved for highway use</li> </ul>   |  |  |
| MA = Code representing the tire manufacturing location (two digits)   |  |  |
| L9 = Code representing the tire size (two digits)   |  |  |
| ABCD = Code used by the tire manufacturer (one to four digits)  |  |  |
| <ul><li>03 = Number representing the week in which the tire was manufactured (two digits)</li><li>03 means the 3rd week</li></ul>   |  |  |
| <ul> <li>01 = Number representing the year in which the tire was manufactured (two digits)</li> <li>01 means the year 2001</li> <li>Prior to July 2000, tire manufacturers were only required to have one number to represent the year in which the tire was manufactured. Example: 031 could represent the 3rd week of 1981 or 1991</li> </ul> |  |  |

## **Tire Terminology And Definitions**

| Term                                     | Definition   |
|--|--|
| B-pillar                                 | The vehicle B-pillar is the structural member of the body located behind the front door.   |
| Cold Tire Inflation Pressure             | Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after sitting for a minimum of three hours. Inflation pressure is measured in units of psi (pounds per square inch) or kPa (kilopascals). |
| Maximum Inflation Pressure               | The maximum inflation pressure is the maximum permissible cold tire inflation pressure for this tire. The maximum inflation pressure is molded into the sidewall.  |
| Recommended Cold Tire Inflation Pressure | Vehicle manufacturer's recommended cold tire inflation pressure as shown on the tire placard.  |
| Tire Placard                             | A label permanently attached to the vehicle describing the vehicle's loading capacity, the original equip-<br>ment tire sizes and the recommended cold tire inflation pressures.   |

### **Tire Loading And Tire Pressure**

### NOTE:

The proper cold tire inflation pressure is listed on the driver's side B-pillar or the rear edge of the driver's side door.

Check the inflation pressure of each tire, including the spare tire (if equipped), at least monthly and inflate to the recommended pressure for your vehicle.



Example Tire Placard Location (Door)



B0806000019US

Example Tire Placard Location (B-pillar)

**Tire And Loading Information Placard** 



### 811b5a9a

### **Tire And Loading Information Placard**

This placard tells you important information about the:

- 1. Number of people that can be carried in the vehicle.
- 2. Total weight your vehicle can carry.
- 3. Tire size designed for your vehicle.
- 4. Cold tire inflation pressures for the front, rear, and spare tires.

### Loading

The vehicle maximum load on the tire must not exceed the load carrying capacity of the tire on your vehicle. You will not exceed the tire's load carrying capacity if you adhere to the loading conditions, tire size, and cold tire inflation pressures specified on the Tire And Loading Information Placard  $r_{2}$  page 187.

### NOTE:

Under a maximum loaded vehicle condition, Gross Axle Weight Rating (GAWR) for the front and rear axles must not be exceeded.

For further information on GAWR, vehicle loading, and trailer towing  $\Box$  page 187.

To determine the maximum loading conditions of your vehicle, locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs" on the Tire And Loading Information Placard. The combined weight of occupants, cargo/luggage and trailer tongue weight (if applicable) should never exceed the weight referenced here.

## Steps For Determining Correct Load Limit—

(1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.

(2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.

(4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 650 lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

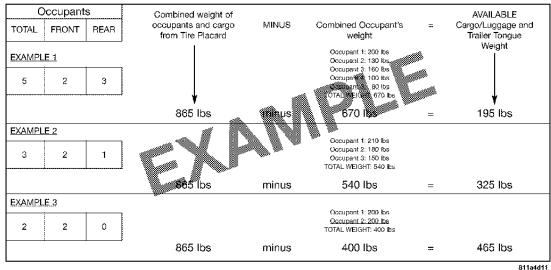
(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

### Metric Example For Load Limit

For example, if "XXX" amount equals 635 kg and there will be five 68 kg passengers in your vehicle, the amount of available cargo and luggage load capacity is 295 kg (635-340 (5x68) = 295 kg) as shown in step 4.

### NOTE:

- If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. The following table shows examples on how to calculate total load, cargo/luggage, and towing capacities of your vehicle with varying seating configurations and number and size of occupants. This table is for illustration purposes only and may not be accurate for the seating and load carry capacity of your vehicle.
- For the following example, the combined weight of occupants and cargo should never exceed 865 lb (392 kg).



#### WARNING!

Overloading of your tires is dangerous. Overloading can cause tire failure, affect vehicle handling, and increase your stopping distance. Use tires of the recommended load capacity for your vehicle. Never overload them.

## TIRES - GENERAL INFORMATION

### **Tire Pressure**

Proper tire inflation pressure is essential to the safe and satisfactory operation of your vehicle. Four primary areas are affected by improper tire pressure:

- Safety
- Fuel Economy
- Tread Wear
- Ride Comfort and Vehicle Stability

### Safety

### WARNING!

- Improperly inflated tires are dangerous and can cause collisions.
- Underinflation increases tire flexing and can result in overheating and tire failure.
- Overinflation reduces a tire's ability to cushion shock. Objects on the road and chuckholes can cause damage that result in tire failure.
- Overinflated or underinflated tires can affect vehicle handling and can fail suddenly, resulting in loss of vehicle control.
- Unequal tire pressures can cause steering problems. You could lose control of your vehicle.
- Unequal tire pressures from one side of the vehicle to the other can cause the vehicle to drift to the right or left.
- Always drive with each tire inflated to the recommended cold tire inflation pressure.

Both underinflation and overinflation affect the stability of the vehicle and can produce a feeling of sluggish response or over responsiveness in the steering.

### NOTE:

- Unequal tire pressures from side to side may cause erratic and unpredictable steering response.
- Unequal tire pressure from side to side may cause the vehicle to drift left or right.

### Fuel Economy

Underinflated tires will increase tire rolling resistance resulting in higher fuel consumption.

### Tread Wear

Improper cold tire inflation pressures can cause abnormal wear patterns and reduced tread life, resulting in the need for earlier tire replacement.

### **Ride Comfort And Vehicle Stability**

Proper tire inflation contributes to a comfortable ride. Overinflation produces a jarring and uncomfortable ride.

### **Tire Inflation Pressures**

The proper cold tire inflation pressure is listed on the driver's side B-pillar or rear edge of the driver's side door.

At least once a month:

- Check and adjust tire pressure with a good quality pocket-type pressure gauge. Do not make a visual judgement when determining proper inflation. Tires may look properly inflated even when they are under-inflated.
- Inspect tires for signs of tire wear or visible damage.

### CAUTION!

After inspecting or adjusting the tire pressure, always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the valve stem.

Inflation pressures specified on the placard are always "cold tire inflation pressure". Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after sitting for a minimum of three hours. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall.

Check tire pressures more often if subject to a wide range of outdoor temperatures, as tire pressures vary with temperature changes.

Tire pressures change by approximately 1 psi (7 kPa) per 12°F (7°C) of air temperature change. Keep this in mind when checking tire pressure inside a garage, especially in the Winter.

Example: If garage temperature =  $68 \,^{\circ}$ F ( $20 \,^{\circ}$ C) and the outside temperature =  $32 \,^{\circ}$ F ( $0 \,^{\circ}$ C) then the cold tire inflation pressure should be increased by 3 psi (21 kPa), which equals 1 psi (7 kPa) for every 12  $^{\circ}$ F ( $7 \,^{\circ}$ C) for this outside temperature condition.

Tire pressure may increase from 2 to 6 psi (13 to 40 kPa) during operation. DO NOT reduce this normal pressure build up or your tire pressure will be too low.

### Tire Pressures For High Speed Operation

The manufacturer advocates driving at safe speeds and within posted speed limits. Where speed limits or conditions are such that the vehicle can be driven at high speeds, maintaining correct tire inflation pressure is very important. Increased tire pressure and reduced vehicle loading may be required for high-speed vehicle operation. Refer to an authorized tire dealer or original equipment vehicle dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

### WARNING!

High speed driving with your vehicle under maximum load is dangerous. The added strain on your tires could cause them to fail. You could have a serious collision. Do not drive a vehicle loaded to the maximum capacity at continuous speeds above 75 mph (120 km/h).

### **Radial Ply Tires**

### WARNING!

Combining radial ply tires with other types of tires on your vehicle will cause your vehicle to handle poorly. The instability could cause a collision. Always use radial ply tires in sets of four. Never combine them with other types of tires.

### Tire Repair

If your tire becomes damaged, it may be repaired if it meets the following criteria:

- The tire has not been driven on when flat.
- The damage is only on the tread section of your tire (sidewall damage is not repairable).

• The puncture is no greater than 1/4 of an inch (6 mm).

Consult an authorized tire dealer for tire repairs and additional information.

Damaged Run Flat tires, or Run Flat tires that have experienced a loss of pressure should be replaced immediately with another Run Flat tire of identical size and service description (Load Index and Speed Symbol). Replace the tire pressure sensor as well as it is not designed to be reused.

### Run Flat Tires — If Equipped

Run Flat tires allow you the capability to drive 50 miles (80 km) at 50 mph (80 km/h) after a rapid loss of inflation pressure. This rapid loss of inflation is referred to as the Run Flat mode. A Run Flat mode occurs when the tire inflation pressure is of/or below 14 psi (96 kPa). Once a Run Flat tire reaches the run flat mode it has limited driving capabilities and needs to be replaced immediately. A Run Flat tire is not repairable. When a Run Flat tire is changed after being driven in a Run Flat mode 14 psi (96 kPa) condition, please replace the TPMS sensor as it is not designed to be reused.

### NOTE:

TPMS sensor must be replaced after driving the vehicle on a flat tire condition.

It is not recommended driving a vehicle loaded at full capacity or to tow a trailer while a tire is in the Run Flat mode.

See the Tire Pressure Monitoring System section for more information.

### **Tire Spinning**

When stuck in mud, sand, snow, or ice conditions, do not spin your vehicle's wheels above 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping. For further information  $\Box$  page 279.

### WARNING!

Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause tire damage or failure. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) for more than 30 seconds continuously when you are stuck, and do not let anyone near a spinning wheel, no matter what the speed.

### **Tread Wear Indicators**

Tread wear indicators are in the original equipment tires to help you in determining when your tires should be replaced.



1 – Tread Wear Indicators

### 328 SERVICING AND MAINTENANCE

These indicators are molded into the bottom of the tread grooves. They will appear as bands when the tread depth becomes 1/16 of an inch (1.6 mm). When the tread is worn to the tread wear indicators, the tire should be replaced.

For further information  $\Box$  page 328.

### Life Of Tire

The service life of a tire is dependent upon varying factors including, but not limited to:

- Driving style.
- Tire pressure Improper cold tire inflation pressures can cause uneven wear patterns to develop across the tire tread. These abnormal wear patterns will reduce tread life, resulting in the need for earlier tire replacement.
- Distance driven.
- Performance tires, tires with a speed rating of V or higher, and Summer tires typically have a reduced tread life. Rotation of these tires per the vehicle scheduled maintenance is highly recommended.

### WARNING!

Tires and the spare tire should be replaced after six years, regardless of the remaining tread. Failure to follow this warning can result in sudden tire failure. You could lose control and have a collision resulting in serious injury or death.

### NOTE:

Wheel valve stem must be replaced as well when installing new tires due to wear and tear in existing tires.

Keep dismounted tires in a cool, dry place with as little exposure to light as possible. Protect tires from contact with oil, grease, and gasoline.

### **Replacement Tires**

The tires on your new vehicle provide a balance of many characteristics. They should be inspected regularly for wear and correct cold tire inflation pressures. The manufacturer strongly recommends using tires equivalent to the originals in size, quality and performance when replacement is needed. Refer to the paragraph on "Tread Wear Indicators" in this section. Refer to the Tire And Loading Information Placard or the Vehicle Certification Label for the size designation of your tire. The Load Index and Speed Symbol for your tire will be found on the original equipment tire sidewall.

For more information relating to the Load Index and Speed Symbol of a tire  $\ \Box\!\!\!\!\!\!\!>$  page 321.

It is recommended to replace the two front tires or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling. If you ever replace a wheel, make sure that the wheel's specifications match those of the original wheels.

It is recommended you contact an authorized tire dealer or original equipment dealer with any questions you may have on tire specifications or capability. Failure to use equivalent replacement tires may adversely affect the safety, handling, and ride of your vehicle.

### WARNING!

 Do not use a tire, wheel size, load rating, or speed rating other than that specified for your vehicle. Some combinations of unapproved tires and wheels may change suspension dimensions and performance characteristics, resulting in changes to steering, handling, and braking of your vehicle. This can cause unpredictable handling and stress to steering and suspension components. You could

(Continued)

### WARNING!

- lose control and have a collision resulting in serious injury or death. Use only the tire and wheel sizes with load ratings approved for your vehicle.
- Never use a tire with a smaller load index or capacity, other than what was originally equipped on your vehicle. Using a tire with a smaller load index could result in tire overloading and failure. You could lose control and have a collision.
- Failure to equip your vehicle with tires having adequate speed capability can result in sudden tire failure and loss of vehicle control.

### CAUTION!

Replacing original tires with tires of a different size may result in false speedometer and odometer readings.

## TIRE TYPES

### All Season Tires - If Equipped

All Season tires provide traction for all seasons (Spring, Summer, Autumn, and Winter). Traction levels may vary between different all season tires. All season tires can be identified by the M+S, M&S, M/S or MS designation on the tire sidewall. Use all season tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

### Summer Or Three Season Tires -If Equipped

Summer tires provide traction in both wet and dry conditions, and are not intended to be driven in snow or on ice. If your vehicle is equipped with Summer tires, be aware these tires are not designed for Winter or cold driving conditions. Install Winter tires on your vehicle when ambient temperatures are less than 40°F (5°C) or if roads are covered with ice or snow. For more information, contact an authorized dealer.

Summer tires do not contain the all season designation or mountain/snowflake symbol on the tire sidewall. Use Summer tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

### WARNING!

Do not use Summer tires in snow/ice conditions. You could lose vehicle control, resulting in severe injury or death. Driving too fast for conditions also creates the possibility of loss of vehicle control.

### Snow Tires

Some areas of the country require the use of snow tires during the Winter. Snow tires can be identified by a "mountain/snowflake" symbol on the tire sidewall.



If you need snow tires, select tires equivalent in size and type to the original equipment tires. Use snow tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

Snow tires generally have lower speed ratings than what was originally equipped with your vehicle and should not be operated at sustained speeds over 75 mph (120 km/h). For speeds above 75 mph

(120 km/h) refer to original equipment or an authorized tire dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

While studded tires improve performance on ice, skid and traction capability on wet or dry surfaces may be poorer than that of non-studded tires. Some states prohibit studded tires; therefore, local laws should be checked before using these tire types.

## SPARE TIRES — IF EOUIPPED

### NOTE:

For vehicles equipped with Tire Service Kit instead of a spare tire, please refer to "Tire Service Kit" in "In Case Of Emergency" for further information.

### CAUTION!

Because of the reduced ground clearance, do not take your vehicle through an automatic car wash with a compact or limited use temporary spare installed. Damage to the vehicle may result.

For restrictions when towing with a spare tire designated for temporary emergency use  $\Box$  page 191.

### Spare Tire Matching Original Equipped Tire And Wheel — If Equipped

Your vehicle may be equipped with a spare tire and wheel equivalent in look and function to the original equipment tire and wheel found on the front or rear axle of your vehicle. This spare tire may be used in the tire rotation for your vehicle. If your vehicle has this option, refer to an authorized tire dealer for the recommended tire rotation pattern.

### Compact Spare Tire — If Equipped

The compact spare is for temporary emergency use only. You can identify if your vehicle is equipped with a compact spare by looking at the spare tire description on the Tire And Loading Information Placard located on the driver's side door opening or on the sidewall of the tire. Compact spare tire descriptions begin with the letter "T" or "S" preceding the size designation. Example: T145/80D18 103M.

### T, S = Temporary Spare Tire

Since this tire has limited tread life, the original equipment tire should be repaired (or replaced) and reinstalled on your vehicle at the first opportunity.

Do not install a wheel cover or attempt to mount a conventional tire on the compact spare wheel, since the wheel is designed specifically for the compact spare tire. Do not install more than one compact spare tire and wheel on the vehicle at any given time.

### WARNING!

Compact and collapsible spares are for temporary emergency use only. With these spares, do not drive more than 50 mph (80 km/h). Temporary use spares have limited tread life. When the tread is worn to the tread wear indicators, the temporary use spare tire needs to be replaced. Be sure to follow the warnings, which apply to your spare. Failure to do so could result in spare tire failure and loss of vehicle control.

### Full Size Spare — If Equipped

The full size spare is for temporary emergency use only. This tire may look like the originally equipped tire on the front or rear axle of your vehicle, but it is not. This spare tire may have limited tread life. When the tread is worn to the tread wear indicators, the temporary use full size spare tire needs to be replaced. Since it is not the same as your original equipment tire, replace (or repair) the original equipment tire and reinstall on the vehicle at the first opportunity.

### Limited Use Spare — If Equipped

The limited use spare tire is for temporary emergency use only. This tire is identified by a label located on the limited use spare wheel. This label contains the driving limitations for this spare. This tire may look like the original equipped tire on the front or rear axle of your vehicle, but it is not. Installation of this limited use spare tire affects vehicle handling. Since it is not the same as your original equipment tire, replace (or repair) the original equipment tire and reinstall on the vehicle at the first opportunity.

### WARNING!

Limited use spares are for emergency use only. Installation of this limited use spare tire affects vehicle handling. With this tire, do not drive more than the speed listed on the limited use spare wheel. Keep inflated to the cold tire inflation pressures listed on your Tire And Loading Information Placard located on the driver's side B-pillar or the rear edge of the driver's side door. Replace (or repair) the original equipment tire at the first opportunity and reinstall it on your vehicle. Failure to do so could result in loss of vehicle control.

## WHEEL AND WHEEL TRIM CARE

All wheels and wheel trim, especially aluminum and chrome plated wheels, should be cleaned regularly using mild (neutral Ph) soap and water to maintain their luster and to prevent corrosion. Wash wheels with the same soap solution recommended for the body of the vehicle and remember to always wash when the surfaces are not hot to the touch.

Your wheels are susceptible to deterioration caused by salt, sodium chloride, magnesium chloride, calcium chloride, etc., and other road chemicals used to melt ice or control dust on dirt roads. Use a soft cloth or sponge and mild soap to wipe away promptly. Do not use harsh chemicals or a stiff brush. They can damage the wheel's protective coating that helps keep them from corroding and tarnishing.

### CAUTION!

Avoid products or automatic car washes that use acidic solutions or strong alkaline additives or harsh brushes. Many aftermarket wheel cleaners and automatic car washes may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, Mopar® Wheel Cleaner or equivalent is recommended.

When cleaning extremely dirty wheels including excessive brake dust, care must be taken in the selection of tire and wheel cleaning chemicals and equipment to prevent damage to the wheels. Mopar® Wheel Treatment or Mopar® Chrome Cleaner or their equivalent is recommended or select a non-abrasive, non-acidic cleaner for aluminum or chrome wheels.

### CAUTION!

Do not use scouring pads, steel wool, a bristle brush, metal polishes or oven cleaner. These products may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, Mopar® Wheel Cleaner or equivalent is recommended.

### NOTE:

If you intend parking or storing your vehicle for an extended period after cleaning the wheels with wheel cleaner, drive your vehicle and apply the brakes to remove the water droplets from the brake components. This activity will remove the red rust on the brake rotors and prevent vehicle vibration when braking.

Dark Vapor Chrome, Black Satin Chrome, or Low Gloss Clear Coat Wheels

#### CAUTION!

If your vehicle is equipped with these specialty wheels, DO NOT USE wheel cleaners, abrasives, or polishing compounds. They will permanently damage this finish and such damage is not covered by the New Vehicle Limited Warranty. HAND WASH ONLY USING MILD SOAP AND WATER WITH A SOFT CLOTH. Used on a regular basis; this is all that is required to maintain this finish.

## SNOW TRACTION DEVICES

Use of traction devices require sufficient tire-to-body clearance. Due to limited clearance, the following snow traction devices are recommended. Follow these recommendations to guard against damage.

- Snow traction device must be of proper size for the tire, as recommended by the snow traction device manufacturer.
- No other tire sizes are recommended for use with the snow traction device.
- Please follow the table for the recommended tire size, axle and snow traction device:

| Gasoline Engines<br>Trim Level | Axle  | Tire/Wheel Size              | Snow Traction Device (Maximum<br>Projection Beyond Tire Profile Or<br>Equivalent) |
|--------------------------------|---|------------------------------|---|
|                                |   | 245/75R17                    | S Class or Autosock   |
| Sport                          |   | LT285/75R17C<br>LT315/70R17C |   |
| Sahara                         |   | 255/70R18                    |   |
| Rubicon                        | Rear LT255/75R17C<br>LT285/70R17C<br>LT315/70R17C | LT285/70R17C                 | Autosock  |
| Rubicon 392                    |   | LT315/70R17C                 |   |
| Summit                         | mit   | 275/55R20                    |   |

| PHEV Engine<br>Trim Level | Axle | Tire/Wheel Size                 | Snow Traction Device (Maximum<br>Projection Beyond Tire Profile Or<br>Equivalent) |
|---------------------------|------|---------------------------------|---|
| Sport                     |      | 275/55R20<br>LT285/70R17C       |   |
| Sahara                    | Rear | 255/70R18<br>275/55R20 Autosock | Autosock  |
| Summit                    |      | 275/55R20                       |   |
| Rubicon                   |      | LT255/75R17C<br>LT285/70R17C    |   |

### WARNING!

Using tires of different size and type (M+S, Snow) between front and rear axles can cause unpredictable handling. You could lose control and have a collision.

### CAUTION!

To avoid damage to your vehicle or tires, observe the following precautions:

- Because of restricted traction device clearance between tires and other suspension components, it is important that only traction devices in good condition are used. Broken devices can cause serious damage. Stop the vehicle immediately if noise occurs that could indicate device breakage. Remove the damaged parts of the device before further use.
- Install device as tightly as possible and then retighten after driving about <sup>1</sup>/<sub>2</sub> mile (0.8 km). Autosock traction devices do not require retightening.
- Do not exceed 30 mph (48 km/h).
- Drive cautiously and avoid severe turns and large bumps, especially with a loaded vehicle.
- Do not drive for a prolonged period on dry pavement.
- Observe the traction device manufacturer's instructions on the method of installation, operating speed, and conditions for use. Always use the suggested operating speed of the device manufacturer's if it is less than 30 mph (48 km/h).
- Do not use traction devices on a compact spare tire.

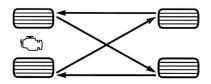
## TIRE ROTATION RECOMMENDATIONS

The tires on the front and rear of your vehicle operate at different loads and perform different steering, handling, and braking functions. For these reasons, they wear at unequal rates.

These effects can be reduced by timely rotation of tires. The benefits of rotation are especially worthwhile with aggressive tread designs such as those on On/Off Road type tires. Rotation will increase tread life, help to maintain mud, snow, and wet traction levels, and contribute to a smooth, quiet ride.

For the proper maintenance intervals  $rac{\label{eq:space}}{\label{eq:space}}$  page 282. The reasons for any rapid or unusual wear should be corrected prior to rotation being performed.

The suggested rotation method is the "rearward cross" shown in the following diagram.



CAUTION!

Proper operation of four-wheel drive vehicles depends on tires of equal size, type, and circumference on each wheel. Any difference in tire size can cause damage to the transfer case. Tire rotation schedule should be followed to balance tire wear.

## DEPARTMENT OF TRANSPORTATION UNIFORM TIRE QUALITY GRADES

The following tire grading categories were established by the National Highway Traffic Safety Administration. The specific grade rating assigned by the tire's manufacturer in each category is shown on the sidewall of the tires on your vehicle.

All passenger vehicle tires must conform to Federal safety requirements in addition to these grades.

055703771

Tire Rotation (Rearward Cross)

## TREADWEAR

The Treadwear grade is a comparative rating, based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

### TRACTION GRADES

The Traction grades, from highest to lowest, are AA, A, B, and C. These grades represent the tire's ability to stop on wet pavement, as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

### WARNING!

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

## TEMPERATURE GRADES

The Temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat, when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance, which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel, than the minimum required by law.

### WARNING!

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

## **STORING THE VEHICLE**

### WARNING!

- Take care to avoid the radiator cooling fan whenever the hood is raised. It can start anytime the ignition switch is ON. You can be injured by moving fan blades.
- Remove any metal jewelry such as rings, watch bands and bracelets that could make an inadvertent electrical contact. You could be seriously injured.
- Vehicles with the Stop/Start system will be equipped with two batteries. Both the main and the supplemental batteries must be disconnected to completely de-energize the 12 Volt electrical system.

8

### WARNING!

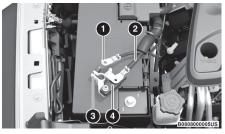
 Serious injury or death could result if you do not disconnect both batteries. To learn how to properly disconnect, see an authorized dealer.

### CAUTION!

If the negative battery cables are not isolated properly it can cause a potential power spike or surge in the system, resulting in damage to essential electrical components.

If you are storing your vehicle for more than three weeks, we recommend that you take the following steps to minimize the drain on your vehicle's battery:

- Disconnect the negative cable from battery.
- If your vehicle is equipped with Stop/Start system then disconnect both the main and supplemental negative battery cables.
- Any time you store your vehicle or keep it out of service (i.e., vacation) for two weeks or more, run the air conditioning system at idle for about five minutes in the fresh air and high blower setting. This will ensure adequate system lubrication to minimize the possibility of compressor damage when the system is started again.
- If assistance is needed to disconnect the battery system, see an authorized dealer.



### **Battery Cable Disconnect**

- 1 Supplemental Negative Battery Cable
- 2 Main Negative Battery Cable
- 3 Main Negative Battery Terminal
- 4 Intelligent Battery Sensor (IBS)

### NOTE:

- You must isolate the supplemental battery connection point, as well as the main battery terminal from the post, as shown in the image, to fully de-energize both batteries for storage. If assistance is needed to disconnect the battery system, see an authorized dealer.
- Do not disconnect the Intelligent Battery Sensor (IBS), or your Stop/Start system may not function for up to 24 hours, due to the IBS being set into learn mode.

## STORING THE VEHICLE — PHEV (IF EQUIPPED)

If the vehicle should remain stationary for more than a month, observe the following precautions:

- Park your vehicle in a covered, dry and possibly airy location with the windows open slightly.
- · Check that the parking brake is not engaged.
- Disconnect the negative (-) terminal from the battery post and be sure that the battery is fully charged. During storage check battery charge quarterly.

### NOTE:

Disconnecting the 12 Volt battery will prevent the High Voltage (HV) battery from accepting a charge from the Electric Vehicle Supply Equipment (EVSE). Also, the vehicle will not condition the HV battery (if needed and connected to a powered EVSE). If the HV battery is not able to condition itself and it becomes cold enough (or hot enough), the vehicle will not start until the HV battery's cell temperatures are between -22°F (-30°C) and 122°F (50°C).

- If you do not disconnect the battery from the electrical system, check the battery charge every 30 days.
- Whenever you leave the vehicle stationary for two weeks or more, idle the vehicle for approximately five minutes, with the air conditioning system on and high fan speed. This will ensure proper lubrication of the system, thus minimizing the possibility of damage to the compressor when the vehicle is put back into operation.
- Plug in the vehicle when not using it whenever possible.

### NOTE:

The hybrid has a feature of periodic wake-up that occurs every three weeks. This feature charges the 12 Volt battery from the HV battery. This will happen as long as the HV battery remains above the minimum state of charge  $\Box$  page 146.

### CAUTION!

Before removal of the positive and negative terminals to the battery, wait at least a minute with ignition switch in the OFF position and close the driver's door. When reconnecting the positive and negative terminals to the battery be sure the ignition switch is in the OFF position and the driver's door is closed.

## BODYWORK

## PROTECTION FROM ATMOSPHERIC AGENTS

Vehicle body care requirements vary according to geographic locations and usage. Chemicals that make roads passable in snow and ice and those that are sprayed on trees and road surfaces during other seasons are highly corrosive to the metal in your vehicle. Outside parking, which exposes your vehicle to airborne contaminants, road surfaces on which the vehicle is operated, extreme hot or cold weather and other extreme conditions will have an adverse effect on paint, metal trim, and underbody protection.

The following maintenance recommendations will enable you to obtain maximum benefit from the corrosion resistance built into your vehicle.

### What Causes Corrosion?

Corrosion is the result of deterioration or removal of paint and protective coatings from your vehicle.

The most common causes are:

- Road salt, dirt and moisture accumulation.
- Stone and gravel impact.
- Insects, tree sap and tar.
- Salt in the air near seacoast localities.
- Atmospheric fallout/industrial pollutants.

## BODY AND UNDERBODY MAINTENANCE

### **Cleaning Headlights**

Your vehicle is equipped with plastic headlights and fog lights that are lighter and less susceptible to stone breakage than glass headlights.

Plastic is not as scratch resistant as glass and therefore different lens cleaning procedures must be followed.

To minimize the possibility of scratching the lenses and reducing light output, avoid wiping with a dry cloth. To remove road dirt, wash with a mild soap solution followed by rinsing.

Do not use abrasive cleaning components, solvents, steel wool or other aggressive material to clean the lenses.

## PRESERVING THE BODYWORK

### Washing

- Wash your vehicle regularly. Always wash your vehicle in the shade using Mopar® Car Wash, or a mild car wash soap and rinse the panels completely with water.
- If insects, tar, or other similar deposits have accumulated on your vehicle, use Mopar® Super Kleen Bug and Tar Remover to remove.
- Use a high quality cleaner wax, such as Mopar® Cleaner Wax to remove road film, stains and to protect your paint finish. Use precautions to not scratch the paint.
- Avoid using abrasive compounds and power buffing that may diminish the gloss or thin out the paint finish.

### CAUTION!

- Do not use abrasive or strong cleaning materials such as steel wool or scouring powder that will scratch metal and painted surfaces.
- Use of power washers exceeding 1,200 psi (8,274 kPa) can result in damage or removal of paint and decals.

### **Special Care**

- If you drive on salted or dusty roads or if you drive near the ocean, hose off the undercarriage at least once a month.
- It is important that the drain holes in the lower edges of the doors, rocker panels, and trunk be kept clear and open.

### 336 SERVICING AND MAINTENANCE

- If you detect any stone chips or scratches in the paint, touch them up immediately. The cost of such repairs is considered the responsibility of the owner.
- If your vehicle is damaged due to a collision or similar cause that destroys the paint and protective coating, have your vehicle repaired as soon as possible. The cost of such repairs is considered the responsibility of the owner.
- If you carry special cargo such as chemicals, fertilizers, de-icer salt, etc., be sure that such materials are well packaged and sealed.
- If a lot of driving is done on gravel roads, consider mud or stone shields behind each wheel.
- Use Mopar® Touch Up Paint on scratches as soon as possible. An authorized dealer has touch up paint to match the color of your vehicle.

### Appearance Care For Fabric Top Models

To maintain the appearance of your vehicle's interior trim and top, follow these precautions:

- Do not run a fabric top through an automatic car wash. Window scratches and wax build-up may result.
- Avoid leaving your vehicle unattended with the top down, as exposure to sun or rain may damage interior trim.
- Do not use harsh cleaners or bleaching agents on top material, as damage may result.
- Do not allow any vinyl cleaner to run down and dry on the paint, leaving a streak.
- After cleaning your vehicle's fabric top, always make sure it is completely dry before lowering.
- Be especially careful when washing the windows by following the directions for "Care of Fabric Top Windows."

Washing – Use Mopar® Car Wash or equivalent, or mild soap suds, lukewarm water, and a brush with soft bristles. If extra cleaning is required, use Mopar® Convertible Cloth Top Cleaner or equivalent, or a mild foaming cleaner on the entire top, but support the top from underneath.

**Rinsing** – Be sure to remove all traces of cleaner by rinsing the top thoroughly with clean water. Remember to allow the top to dry before lowering it.

### CAUTION!

Failure to follow these cautions may cause interior water damage, stains, or mildew of the top material:

- Do not run a fabric top through an automatic car wash. Window scratches and wax build-up may result.
- It is recommended that the top be free of water prior to opening it. Operating the top, opening a door or lowering a window while the top is wet may allow water to drip into the vehicle's interior.
- Use care when washing the vehicle, water pressure directed at the weather strip seals may cause water to leak into the vehicle's interior.
- Careless handling and storage of the removable roof panels may damage the seals, causing water to leak into the vehicle's interior.
- The front panel(s) must be positioned properly to ensure sealing. Improper installation can cause water to leak into the vehicle's interior.

### CAUTION!

- Avoid washing with rollers and/or brushes in washing stations. Wash the vehicle only by hand using neutral pH detergents; dry it with a wet chamois leather. Abrasive products and/or polishes should not be used for cleaning the car.
- Bird droppings must be washed off immediately and thoroughly as the acid they contain is particularly aggressive.
- Avoid (if at all possible) parking the vehicle under trees; remove vegetable resins immediately as, when dried, it may only be possible to remove them with abrasive products and/or polishes, which is highly inadvisable as they could alter the typical opaqueness of the paint.
- Do not use pure windshield washer fluid for cleaning the front windshield and rear window; dilute it to a minimum of 50% water. Only use pure windshield washer fluid when strictly necessary due to outside temperature conditions.

### **Care Of Fabric Top Windows**

Your vehicle's fabric top has pliable plastic windows which can be scratched unless special care is taken by following these directions:

 Never use a dry cloth to remove dust. Instead, use a microfiber towel or soft cotton cloth moistened with cold or warm, clean water, and wipe across the window, not up and down. Mopar® Jeep® Soft Glass Window Cleaner or equivalent will safely clean all plastic windows without scratching. It removes fine scratches to improve visibility and provides UV protection to help prevent yellowing.

- When washing, **never use hot water** or anything stronger than a mild soap. Never use solvents such as alcohol or harsh cleaning agents.
- Always rinse thoroughly with cold water, then wipe with a soft and slightly moist, clean cloth.
- When removing frost, snow or ice, never use a scraper or de-icing chemicals. Use warm water only if you must clean the window quickly.
- Debris (sand, mud/dirt, dust, or salt) from off-road driving will have an impact on plastic retainer operation. Even normal on-road driving and vehicle washing will eventually impact window plastic retainer operation. To maintain ease of use of the window plastic retainers, each window plastic retainer should be cleaned and lubricated regularly. Clean them with a mild soap solution and a small brush. Cleaning products are available through an authorized dealer.
- Never paste stickers, gummed labels or any tape to the windows. Adhesives are hard to remove and may damage the windows.

## INTERIORS

## CARPET SAFETY INFORMATION

Always use carpet designed to fit your vehicle. Only use carpet that does not interfere with the operation of the pedal assemblies. Only operate the vehicle when the carpet is securely attached by the grommets so it cannot slip out of position and interfere with the pedal assemblies or impair safe operation of your vehicle in other ways.

### WARNING!

- If operating the vehicle without carpet in place the floor may become hot, and there is a risk of burns.
- An improperly attached, damaged, folded, or damaged grommets may cause your carpet to interfere with the accelerator, brake, or clutch pedals and cause a loss of vehicle control. To prevent SERI-OUS INJURY or DEATH: ALWAYS securely attach your carpet using the grommets.
- ALWAYS make sure objects cannot fall or slide into the driver's side floor area when the vehicle is moving. Objects can become trapped under accelerator, brake, or clutch pedals and could cause a loss of vehicle control.
- NEVER place any objects under the carpet (e.g., towels, keys, etc.). These objects could change the position of the carpet and may cause interference with the accelerator, brake, or clutch pedals.
- ONLY install carpet designed to fit your vehicle. NEVER install carpet that cannot be properly attached and secured to your vehicle. If the carpet needs to be replaced, only use manufacturer approved carpet for the specific make, model, and year of your vehicle.
- If the vehicle carpet has been removed and re-installed, always properly attach carpet to the floor and check that the floor mat fasteners are secure to the vehicle carpet. Fully depress each pedal to check for interference with the accelerator, brake, or clutch pedals then re-install the floor mats.

### CARPET REMOVAL

Front Carpets (Two And Four Door Models):

1. Remove the front grommets.



**Front Carpet** 

1 – Grommets

2. Pull the carpet out from the front to the rear.



Front Carpet Pulled Away

### 338 SERVICING AND MAINTENANCE

3. Remove the grommets under the front seat. First for the rear carpet and then the front carpet.



Front And Rear Carpet Split

 Under the back of the front seat, open the carpet split and then pull out the rear edge and slide the carpet to the front (do not remove the harness).



**Rear Underside Of Front Seat Carpet Split** 

5. Finally open the carpet split around seat bracket and then remove the last two grommets.



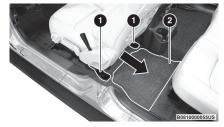
### Front Seat And Floor

### 1 – Grommets

6. When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

### Rear Carpet (Four Door Models):

- 1. Remove the grommets under the front seat (one left and one right).
- 2. Then pull the carpet out, to the rear and open the carpet split around the front seats brackets.



**Pull Toward The Rear Of Vehicle** 

1 – Carpet Split 2 – Rear Carpet

- Remove the grommets under the rear seat (one left and one right). First the grommet for the cargo carpet and then the rear carpet.
- 4. Pull the carpet out to the front and open the carpet split around the rear seats brackets.



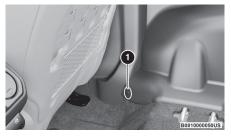
**Under Rear Seat** 

1 – Carpet Split

5. When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

### Rear Carpet (Two Door Models):

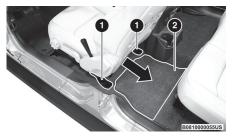
- 1. Remove the rear seats.
- 2. Remove the sides grommets (one left and one right). First the grommet from the side carpet and then the rear carpet.



Side Carpet

### 1 - Grommet

- 3. Remove the grommets under the front seat (one left and one right).
- 4. Then pull the carpet out to the rear and open the carpet split around the front seats brackets.



### **Pull Carpet To The Rear**

1 – Carpet Split

2 - Rear Carpet

 When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

### Cargo Carpet (Four Door Models):

- 1. Remove the grommets under the rear seat (one left and one right).
- 2. Pull the carpet out to the rear and open the carpet split around the seat belt attachment.



**Under Rear Seat** 

1 – Carpet Split 2 – Rear Carpet

3. Remove the carpet under the load floor and the side support and then pull the carpet out.



**Rear Load Floor** 

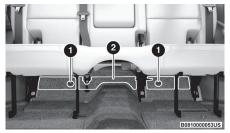
- 1-Side Support
- 2 Load Floor
- 3 Side Support

### 340 SERVICING AND MAINTENANCE

 When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

### Cargo Carpet (Four Door Models) With Gap Hider:

- 1. Remove the grommets under the rear seat (one left and one right).
- 2. Pull the carpet out to the front and open the carpet split around the seat belt attachment and under the center seat bracket.



### **Under Rear Seat**

- 1 Grommets
- 2 Carpet Split
- 3. When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

### Side Carpet (Four Door Models):

- 1. Remove the side grommet (one left and one right).
- 2. Pull the carpet out starting on the top flange, then all around the perimeter and open the carpet split around the seat belt attachment.



### Inside Sidewall

- 1 Top Flange
- 2 Grommet
- 3 Side Carpet
- 3. When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

### Side Carpet (Two Door Models):

- 1. Remove the side grommet and then the lower one (left and right).
- 2. Pull the carpet out starting on the top flange, then all around the perimeter and open the carpet split around the seat belt attachment.

3. When reinstalling carpet please perform these steps in reverse order making sure that the carpet is tucked under the scuffs, B-pillar, console, and refasten grommets.

## SEATS AND FABRIC PARTS

Use  $\operatorname{Mopar}\nolimits ^{ { \mathrm{ I\! B} } }$  Total Clean to clean fabric upholstery and carpeting.

### WARNING!

Do not use volatile solvents for cleaning purposes. Many are potentially flammable, and if used in closed areas they may cause respiratory harm.

### Seat Belt Maintenance

Do not bleach, dye or clean the belts with chemical solvents or abrasive cleaners. This will weaken the fabric. Sun damage can also weaken the fabric.

If the belts need cleaning, use a mild soap solution or lukewarm water. Do not remove the belts from the vehicle to wash them. Dry with a soft cloth.

Replace the belts if they appear frayed or worn or if the buckles do not work properly.

### WARNING!

A frayed or torn seat belt could rip apart in a collision and leave you with no protection. Inspect the seat belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the seat belt system. If your vehicle is involved in a collision, or if

(Continued)

### WARNING!

you have questions regarding seat belt or retractor conditions, take your vehicle to an authorized FCA dealer or authorized FCA Certified Collision Care Program facility for inspection.

## PLASTIC AND COATED PARTS

Use Mopar® Total Clean to clean vinyl upholstery.

### CAUTION!

- Direct contact of air fresheners, insect repellents, suntan lotions, or hand sanitizers to the plastic, painted, or decorated surfaces of the interior may cause permanent damage. Wipe away immediately.
- Damage caused by these type of products may not be covered by your New Vehicle Limited Warranty.

## Cleaning Plastic Instrument Cluster Lenses

The lenses in front of the instruments in this vehicle are molded in clear plastic. When cleaning the lenses, care must be taken to avoid scratching the plastic.

Clean with a wet soft cloth. A mild soap solution may be used, but do not use high alcohol content or abrasive cleaners. If soap is used, wipe clean with a clean damp cloth. Dry with a soft cloth.

## LEATHER SURFACES

Mopar® Total Clean is specifically recommended for leather upholstery.

Your leather upholstery can be best preserved by regular cleaning with a damp soft cloth. Small particles of dirt can act as an abrasive and damage the leather upholstery and should be removed promptly with a damp cloth. Stubborn soils can be removed easily with a soft cloth and Mopar® Total Clean. Care should be taken to avoid soaking your leather upholstery with any liquid. Please do not use polishes, oils, cleaning fluids, solvents, detergents, or ammonia-based cleaners to clean your leather upholstery.

### NOTE:

If equipped with light colored leather, it tends to show any foreign material, dirt, and fabric dye transfer more so than darker colors. The leather is designed for easy cleaning, and FCA recommends Mopar® total care leather cleaner applied on a cloth to clean the leather seats as needed.

### CAUTION!

Do not use alcohol and alcohol-based and/or ketone based cleaning products to clean leather upholstery, as damage to the upholstery may result.

## GLASS SURFACES

All glass surfaces should be cleaned on a regular basis with Mopar® Glass Cleaner, or any commercial household-type glass cleaner. Never use an abrasive type cleaner. Use caution when cleaning the inside rear window equipped with electric defrosters or windows equipped with radio antennas. Do not use scrapers or other sharp instruments that may scratch the elements.

When cleaning the rearview mirror, spray cleaner on the towel or cloth that you are using. Do not spray cleaner directly on the mirror.

## TECHNICAL SPECIFICATIONS

## **VEHICLE IDENTIFICATION NUMBER (VIN)**

The VIN is found on the left front corner of the A-pillar, visible from outside of the vehicle through the windshield.



### Vehicle Identification Number

### NOTE:

It is illegal to remove or alter the VIN plate.

## **BRAKE SYSTEM**

Your vehicle is equipped with dual hydraulic brake systems. If either of the two hydraulic systems lose normal capability, the remaining system will still function. However, there will be some loss of overall braking effectiveness. You may notice increased pedal travel during application, greater pedal force required to slow or stop, and potential activation of the Brake Warning Light. In the event power assist is lost for any reason (i.e., repeated brake applications with the engine off) the brakes will still function. However, the effort required to brake the vehicle will be much greater than that required with the power system operating.

# WHEEL AND TIRE TORQUE SPECIFICATIONS

Proper lug nut/bolt torque is very important to ensure that the wheel is properly mounted to the vehicle. Any time a wheel has been removed and reinstalled on the vehicle, the lug nuts/bolts should be torqued using a properly calibrated torque wrench using a six-sided (hex) deep wall socket.

## TORQUE SPECIFICATIONS

| Lug Nut/Bolt           | **Lug Nut/Bolt | Lug Nut/Bolt |
|------------------------|----------------|--------------|
| Torque                 | Size           | Socket Size  |
| 130 ft-lb<br>(176 N·m) | M14 x 1.50     | 22 mm        |

\*\*Use only authorized dealer recommended lug nuts/ bolts and clean or remove any dirt or oil before tightening.

Inspect the wheel mounting surface prior to mounting the tire and remove any corrosion or loose particles.

### Spare Tire Torque Specifications

| Lug Nut/Bolt         | **Lug Nut/Bolt | Lug Nut/Bolt |
|----------------------|----------------|--------------|
| Torque               | Size           | Socket Size  |
| 59 ft-lb<br>(80 N·m) | M14 x 1.50     | 22 mm        |

\*\*Use only authorized dealer recommended lug nuts/ bolts and clean or remove any dirt or oil before tightening.

Spare tire torque is for the spare tire, located on the swing gate.



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### Wheel Mounting Surface

Tighten the lug nuts/bolts in a star pattern until each nut/bolt has been tightened twice. Ensure that the socket is fully engaged on the lug nut/bolt (do not insert it halfway).



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**Torque Patterns** 

After 25 miles (40 km), check the lug nut/bolt torque to be sure that all the lug nuts/bolts are properly seated against the wheel.

### WARNING!

To avoid the risk of forcing the vehicle off the jack, do not tighten the lug nuts/bolts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

## FUEL REQUIREMENTS

While operating on gasoline with the required octane number, hearing a light knocking sound from the engine is not a cause for concern. However, if the engine is heard making a heavy knocking sound, see a dealer immediately. Use of gasoline with an octane number lower than recommended can cause engine failure and may void the New Vehicle Limited Warranty. Poor quality gasoline can cause problems such as hard starting, stalling, and hesitations. If you experience these symptoms, try another brand of gasoline before considering service for the vehicle.

## 2.0L ENGINE



This engine is designed to meet all emissions requirements, and provide satisfactory fuel economy and performance, when using high-quality unleaded regular gasoline hav-

ing an octane rating of 87, as specified by the (R+M)/ 2 method. The use of 91 or higher octane premium gasoline will allow these engines to operate to optimal performance. This increase in performance is most noticeable in hot weather or under heavy load conditions such as while towing.

## 3.6L ENGINE



This engine is designed to meet all emissions regulations and provide satisfactory fuel economy and performance when using high-quality unleaded regular gasoline having an octane rating of 87 as specified by the (R+M)/ 2 method. The use of higher octane premium gasoline will not provide any benefit over regular gasoline in these engines.

## 6.4L ENGINE

Do not use E-85 flex fuel or ethanol blends greater than 15% in this engine.

This engine is designed to meet all emis-IMENDED OCTANE sions regulations, provide optimal fuel 91 economy and performance when using highquality unleaded premium gasoline having a posted octane number of 91 as specified by the (R+M)/ 2 method. The use of 91 or higher octane premium gasoline is required in these engines.

## REFORMULATED GASOLINE

Many areas of the country require the use of cleaner burning gasoline referred to as "reformulated gasoline". Reformulated gasoline contains oxygenates and are specifically blended to reduce vehicle emissions and improve air quality.

The use of reformulated gasoline is recommended. Properly blended reformulated gasoline will provide improved performance and durability of engine and fuel system components.

## MATERIALS ADDED TO FUEL

Besides using unleaded gasoline with the proper octane rating, gasolines that contain detergents, corrosion and stability additives are recommended. Using gasolines that have these additives will help improve fuel economy, reduce emissions, and maintain vehicle performance.



Designated TOP TIER Detergent Gasoline TOP contains a higher level of detergents to further aide in minimizing engine and fuel sys-

tem deposits. When available, the usage of TOP TIER Detergent gasoline is recommended. Visit www.toptiergas.com for a list of TOP TIER Detergent Gasoline retailers

Indiscriminate use of fuel system cleaning agents should be avoided. Many of these materials intended for gum and varnish removal may contain active solvents or similar ingredients. These can harm fuel system gasket and diaphragm materials.

## GASOLINE/OXYGENATE BLENDS

Some fuel suppliers blend unleaded gasoline with oxygenates such as ethanol.

### CAUTION!

DO NOT use E-85, gasoline containing methanol, or gasoline containing more than 15% ethanol (E-15). Use of these blends may result in starting and drivability problems, damage critical fuel system components, cause emissions to exceed the applicable standard, and/or cause the Malfunction Indicator Light to illuminate. Please observe pump labels as they should clearly communicate if a fuel contains greater than 15% ethanol (E-15).

Problems that result from using gasoline containing more than 15% ethanol (E-15) or gasoline containing methanol are not the responsibility of the manufacturer and may void or not be covered under New Vehicle Limited Warranty.

## DO NOT USE E-85 IN NON-FLEX FUEL VEHICLES

Non-Flex Fuel Vehicles (FFV) are compatible with gasoline containing up to 15% ethanol (E-15). Use of gasoline with higher ethanol content may void the New Vehicle Limited Warranty.

If a Non-FFV vehicle is inadvertently fueled with E-85 fuel, the engine will have some or all of these symptoms:

- Operate in a lean mode
- OBD II Malfunction Indicator Light on
- Poor engine performance
- Poor cold start and cold drivability
- Increased risk for fuel system component corrosion

## CNG AND LP FUEL SYSTEM MODIFICATIONS

Modifications that allow the engine to run on Compressed Natural Gas (CNG) or Liquid Propane (LP) may result in damage to the engine, emissions, and fuel system components. Problems that result from running CNG or LP are not the responsibility of the manufacturer and may void or not be covered under the New Vehicle Limited Warranty.

## MMT IN GASOLINE

Methylcyclopentadienyl Manganese Tricarbonyl (MMT) is a manganese-containing metallic additive that is blended into some gasolines to increase octane. Gasoline blended with MMT provides no performance advantage beyond gasoline of the same octane number without MMT. Gasoline blended with MMT reduces spark plug life and reduces emissions system performance in some vehicles. The manufacturer recommends that gasoline without MMT be used in your vehicle. The MMT content of gasoline may not be indicated on the gasoline pump; therefore, you should ask your gasoline retailer whether the gasoline contains MMT. MMT is prohibited in Federal and California reformulated gasoline.

## FUEL SYSTEM CAUTIONS

### CAUTION!

Follow these guidelines to maintain your vehicle's performance:

- The use of leaded gasoline is prohibited by Federal law. Using leaded gasoline can impair engine performance and damage the emissions control system.
- An out-of-tune engine or certain fuel or ignition malfunctions can cause the catalytic converter to overheat. If you notice a pungent burning odor or some light smoke, your engine may be out of tune or malfunctioning and may require immediate service. Contact an authorized dealer for service assistance.
- The use of fuel additives, which are now being sold as octane enhancers, is not recommended. Most of these products contain high concentrations of methanol. Fuel system damage or vehicle performance problems resulting from the use of such fuels or additives is not the responsibility of the manufacturer and may void or not be covered under the New Vehicle Limited Warranty.

### NOTE:

Intentional tampering with the emissions control system can result in civil penalties being assessed against you.

## **FLUID CAPACITIES**

|   | US       | Metric |
|---|----------|--------|
| Fuel (Approximate)  |          |        |
| 4Xe Models  | 17.2 gal | 65 L   |
| Two Door Models   | 17.5 gal | 66 L   |
| Four Door Models  | 21.5 gal | 81 L   |
| Engine Oil with Filter  |          |        |
| 2.0L Engine   | 5 qt     | 4.73 L |
| 3.6L Engine   | 5 qt     | 4.73 L |
| 6.4L Engine   | 7.5 qt   | 7.1 L  |
| Cooling System *  |          |        |
| 2.0L Engine   | 12 qt    | 11.4 L |
| 2.0L Engine Intercooler   | 3.7 qt   | 3.5 L  |
| 2.0L PHEV Battery Coolant (Contact an authorized dealer for service)              | 5.6 qt   | 5.3 L  |
| 2.0L PHEV Power Electronics Coolant<br>(Contact an authorized dealer for service) | 5.7 qt   | 5.4 L  |
| 3.6L Engine   | 13.4 qt  | 12.7 L |
| 3.6L Motor Generator Unit (MGU)   | 2.3 qt   | 2.2 L  |
| 3.6L Power Pack Unit (PPU) Coolant  | 3.3 qt   | 3.1 L  |
| 6.4L Engine   | 15.6 qt  | 14.8 L |
| * Includes coolant recovery bottle filled to MAX level.                           |          |        |

## **ENGINE FLUIDS AND LUBRICANTS**

| Component                           | Fluid, Lubricant, or Genuine Part   |
|-------------------------------------|---|
| Engine Coolant                      | We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) or equivalent meeting the requirements of the manufacturer Material Standard MS.90032.   |
| Intercooler                         | We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) or equivalent meeting the requirements of the manufacturer Material Standard MS.90032.   |
| Battery, and Power Electric Coolant | We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) or equivalent meeting the requirements of the manufacturer Material Standard MS.90032.   |
| Engine Oil – 2.0L Engine            | We recommend using Mopar® API SP/GF-6A Certified SAE 5W-30 Full Synthetic Engine Oil which meets the requirements of the manufacturer Material Standard MS-13340. Equivalent full synthetic 5W-30 API SP engine oil can be used but must have the API Donut trademark ♀ page 293. |
|                                     | CAUTION!  |
|                                     | Failure to use the recommended API SP/GF-6A or equivalent oil can cause engine<br>damage not covered by the vehicle warranty.   |
| Engine Oil — 3.6L Engine            | We recommend using Mopar® SAE 0W-20 Full Synthetic Engine Oil which meets the requirements of the manufacturer Material Standard MS-6395. Equivalent full synthetic SAE 0W-20 engine oil can be used but must have the API Starburst trademark $$ page 293.                       |
| Engine Oil — 6.4L Engine            | We recommend using Mopar® API Certified SAE 0W-40 Full Synthetic Engine Oil which meets the requirements of the manufacturer Material Standard MS-A0921. Equivalent full synthetic SAE 0W-40 engine oil can be used but must have the API Donut trademark                         |
| Fuel Selection – 2.0L Engine        | 87 Octane (R+M)/2 Method, 0-15% Ethanol.  |
| Fuel Selection – 3.6L Engine        | 87 Octane (R+M)/2 Method, 0-15% Ethanol.  |
| Fuel Selection – 6.4L Engine        | Premium Unleaded 91 Octane Only or Higher (R+M)/2 Method, 0-15% Ethanol (Do Not Use E-85).  |

### CAUTION!

 Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant (antifreeze), may result in engine damage and may decrease corrosion protection. Organic Additive Technology (OAT) engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant (antifreeze) or any "globally compatible" coolant (antifreeze). If a non-OAT engine coolant (antifreeze) is introduced into the cooling system in an emer-

(Continued)

## **CHASSIS FLUIDS AND LUBRICANTS**

### CAUTION!

gency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032), by an authorized dealer as soon as possible.

 Do not use water alone or alcohol-based engine coolant (antifreeze) products. Do not use additional rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may plug the radiator. CAUTION!

 This vehicle has not been designed for use with propylene glycol-based engine coolant (antifreeze).
 Use of propylene glycol-based engine coolant (antifreeze) is not recommended.

(Continued)

| Component   | Fluid, Lubricant, or Genuine Part  |
|---|--|
| Automatic Transmission – If Equipped              | Use only Mopar® ZF 8 & 9 Speed Automatic Transmission Fluid (ATF) or equivalent.<br>Failure to use the correct fluid may affect the function or performance of your<br>transmission. |
| Manual Transmission – If Equipped                 | We recommend using Mopar® ATF+4 Automatic Transmission Fluid.  |
| Transfer Case                                     | We recommend using Mopar® ATF+4 Automatic Transmission Fluid.  |
| Front Axle Differential                           | We recommend using Mopar® Gear & Axle Lubricant (SAE 75W85)(API GL-5).   |
| Rear Axle Differential (M200 Sales Code DRZ)      | We recommend using Mopar® Gear & Axle Lubricant (SAE 75W140)(API GL-5).  |
| Rear Axle Differential (M220 Sales Codes DRE/DRF) | We recommend using Mopar® Gear & Axle Lubricant (SAE 75W85)(API GL-5). Models equipped with Trac-Lok Limited Slip Differential require a friction modifier additive.                 |
| Brake Master Cylinder                             | We recommend using Mopar® DOT 3 Brake Fluid, SAE J1709.  |
| Power Steering Reservoir                          | We recommend using Mopar® Electric Steering Pump Fluid.  |

## CUSTOMER ASSISTANCE

## SUGGESTIONS FOR OBTAINING SERVICE FOR YOUR VEHICLE

## PREPARE FOR THE APPOINTMENT

All work to be performed may not be covered by the warranty. Discuss additional charges with the service manager. Keep a maintenance log of your vehicle's service history. This can often provide a clue to the current problem.

## PREPARE A LIST

Make a written list of your vehicle's problems or the specific work you want done. If you've had an accident or work done that is not on your maintenance log, let the service advisor know.

## BE REASONABLE WITH REQUESTS

If you list a number of items and you must have your vehicle by the end of the day, discuss the situation with the service advisor and list the items in order of priority. At many authorized dealers, you may obtain a rental vehicle (additional charges may apply). If you need a rental, it is advisable to make these arrangements when you call for an appointment.

## **IF YOU NEED ASSISTANCE**

FCA US LLC and its authorized dealers are vitally interested in your satisfaction. We want you to be happy with our products and services.

Warranty service must be done by an authorized dealer. We strongly recommend that you take the vehicle to an authorized dealer. They know your vehicle the best, and are most concerned that you get prompt and high quality service. FCA US LLC's authorized dealers have the facilities, factory-trained technicians, special tools, and the latest information to ensure the vehicle is fixed correctly and in a timely manner.

This is why you should always talk to an authorized dealer's service manager first. If for some reason you are still not satisfied, talk to the general manager or owner of the authorized dealer. They want to know if you need assistance. If an authorized dealer is unable to resolve the concern, you may contact FCA US LLC's Customer Assistance center.

Any communication to FCA US LLC's customer center should include the following information:

- Owner's name and address
- Owner's telephone number (mobile, home and office)
- Authorized dealer name
- Vehicle Identification Number (VIN)
- · Vehicle delivery date and mileage

## ROADSIDE ASSISTANCE

Available 24 hours, 7 days a week.

Call 1-800-521-2779 or visit chrysler.rsahelp.com(USA) Call 1-800-363-4869 or visit fca.roadsideaid.com (Canada)

#### Who is Covered

You are covered by Roadside Assistance services if you are a purchaser for use of the vehicle. Roadside Assistance services last for five years or 60,000 miles on the odometer, whichever occurs first, calculated from the start date of the Basic Limited Warranty, as set forth in your Warranty Information book. <sup>1</sup>

 Towing services provided through Cross Country Motor Club, Inc. Medford, MA 02155, except in AK,CA, HI, OR, WI, and WY, where services are provided by Cross Country Motor Club of California, Inc., Thousand Oaks, CA 91360.

### What to Do

If your vehicle requires jump start assistance, out of gas/fuel delivery, tire service, lockout service or towing as a result of a mechanical breakdown, dial toll-free: USA: 1-800-521-2779/Canada: 1-800-363-4869. Provide your name, Vehicle Identification Number (VIN) required for covered services, license plate number, and your location, including the telephone number from which you are calling. Briefly describe the nature of the problem and answer a few simple questions. You will be given the name of the service provider and an estimated time of arrival. If you feel you are in an unsafe situation, please let us know. With your consent, we will contact local police or safety authorities.

#### If Unable to Contact Roadside Assistance

If you are unable to contact Roadside Assistance or unable to provide a valid Vehicle Identification Number (VIN), and you obtain towing services on your own, you may submit your original receipts from the licensed towing or service facility, for services rendered within30 days of the occurrence. Be sure to include your VIN, odometer mileage at the time of service, and current mailing address. We will process the claim based on vehicle and service eligibility. If eligible, we will reimburse you for the reasonable amount actually paid, based on the usual and customary charges for that service in the area where they were provided. FCA US LLC's determination relating to reimbursement is final. Correspondence should be mailed to:

FCA US LLC Customer Assistance

P.O. Box 9145

Medford, MA 02155

Attention Claims Department

FCA US LLC reserves the right to modify the terms or discontinue the Roadside Assistance Program at any time. The Roadside Assistance program is subject to restrictions and conditions of use, which are determined solely by FCA US LLC.

### Flat Tire Service

If you are inconvenienced by a flat tire, we will dispatch a service provider to use your vehicle's temporary spare tire (if equipped) as recommended in your Owner's Manual. This is not a permanent flat tire repair.

### Out of Gas/Fuel Delivery

Drivers cannot always count on a gas station being nearby, especially when traveling away from home. We will dispatch a service provider to deliver a small amount of fuel (maximum two gallons) to get you to a nearby station. This service is limited to two occurrences in a 12-month period.

#### **Battery Jump Assistance**

No time is a good time for a depleted battery. With Roadside Assistance, you do not have to worry about being stranded. We will dispatch a service provider to provide you with a battery jump anytime, day or night.

### Lockout Service

Whether the keys are locked in your vehicle or frozen locks are keeping you from getting on your way, help is just a phone call away. This service is limited to providing access to the vehicle's seating area. It does not cover the cost of replacement keys.

### **Towing Service**

Our towing service gives you peace of mind and confidence. If your vehicle becomes disabled as a result of a mechanical breakdown, Roadside Assistance will dispatch a towing service to transport your vehicle to the closest authorized Chrysler, Dodge, Jeep®, or Ram dealer. If you choose to go to another dealer, you will be responsible for the cost if the extra distance exceeds 10 miles.

## FCA US LLC CUSTOMER CENTER

P.O. Box 21-8004 Auburn Hills, MI 48321-8004 Phone: (877) 426-5337

## FCA CANADA INC. CUSTOMER CENTER

P.O. Box 1621 Windsor, Ontario N9A 4H6 Phone: (800) 465-2001 English / (800) 387-9983 French

## MEXICO

Av. Prolongacion Paseo de la Reforma, 1240 Sante Fe C.P. 05109 Mexico, D.F. In Mexico City: (800) 505-1300 Outside Mexico City: +(52) 55 50817568

## PUERTO RICO AND US VIRGIN ISLANDS

FCA Caribbean LLC P.O. Box 191857 San Juan 00919-1857 Phone: (877) 426-5337

## CUSTOMER ASSISTANCE FOR THE HEARING OR SPEECH IMPAIRED (TDD/TTY)

To assist customers who have hearing difficulties, FCA US LLC has installed special Telecommunication Devices for the Deaf (TDD) equipment at its customer center. Any hearing or speech impaired customer, who has access to a TDD or a conventional teletypewriter (TTY) in the United States, can communicate with the manufacturer by dialing 1-800-380-2479.

Canadian residents with hearing difficulties that require assistance can use the special needs relay service offered by Bell Canada. For TTY teletypewriter users, dial 711 and for Voice callers, dial 1-800-855-0511 to connect with a Bell Relay Service operator.

## SERVICE CONTRACT

You may have purchased a service contract for a vehicle to help protect you from the high cost of unexpected repairs after FCA US LLC's New Vehicle Limited Warranty expires. The Mopar® Vehicle Protection plans are the ONLY vehicle extended protection plans authorized, endorsed and backed by FCA US LLC to provide additional protection beyond your vehicle's warranty. If you purchased a Mopar® Vehicle Protection Plan, you will receive Plan Provisions and a Owner Identification Card in the mail within three weeks of the vehicle delivery date. If you have any questions about the service contract, call the manufacturer's Service Contract National Customer Hotline at 1-800-521-9922 (Canadian residents, call (800) 465-2001 English / (800) 387-9983 French).

FCA US LLC is not responsible for any service contract you may have purchased from another manufacturer. If you require service after FCA US LLC's New Vehicle Limited Warranty expires, please refer to the contract documents, and contact the person listed in those documents.

We appreciate that you have made a major investment when you purchased the vehicle. An authorized dealer has also made a major investment in facilities, tools, and training to assure that you are absolutely delighted with the ownership experience.

### WARNING!

Engine exhaust (internal combustion engines only), some of its constituents, and certain vehicle components contain, or emit, chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain, or emit, chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm.

## WARRANTY INFORMATION

See the Warranty Information for the terms and provisions of FCA US LLC warranties applicable to this vehicle and market. Refer to www.mopar.com/om for further information.

See the Warranty Information for the terms and provisions of FCA Canada Inc. warranties applicable to this vehicle and market. Use this QR code to access your digital experience.



## **MOPAR® PARTS**

Mopar® original equipment parts & accessories and factory filled fluids are available from an authorized dealer. They are recommended for your vehicle to keep it operating at its best and maintain its original condition.

## **REPORTING SAFETY DEFECTS**

## IN THE 50 UNITED STATES AND WASHINGTON, D.C.

If you believe that your vehicle has a defect that could cause a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying FCA US LLC. If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, an authorized dealer, or FCA US LLC.

To contact NHTSA, you may call the Vehicle Safety Hotline toll free at 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Avenue, SE., West Building, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

### IN CANADA

If you believe that your vehicle has a safety defect, you should contact the Customer Service Department immediately. Canadian customers who wish to report a safety defect to the Canadian government should contact Transport Canada, Motor Vehicle Defect Investigations and Recalls at 1-800-333-0510 or go to wwwapps.tc.gc.ca/Saf-Sec-Sur/7/ PCDB-BDPP.

## **PUBLICATION ORDER FORMS**

To order the following manuals, you may use either the website or the phone numbers listed below.

#### Service Manuals

These comprehensive Service Manuals provide a complete working knowledge of the vehicle, system, and/or components and is written in straightforward language with illustrations, diagrams, and charts.

### **Diagnostic Procedure Manuals**

Diagnostic Procedure Manuals are filled with diagrams, charts and detailed illustrations. These manuals make it easy to find and fix problems on computer-controlled vehicle systems and features. They show exactly how to find and correct problems, using step-by-step troubleshooting and drivability procedures, proven diagnostic tests and a complete list of all tools and equipment.

To order a digital copy of your Service or Diagnostic Procedure manuals, visit:

www.techauthority.com (US and Canada).

#### **Owner's Manuals**

These Owner's Manuals have been prepared with the assistance of service and engineering specialists to acquaint you with specific FCA vehicles.

To access your Owner's Information online, visit www.mopar.com/om (US) or www.owners.mopar.ca (Canada).

#### Or visit:

www.techauthority.com to order physical copies of Owner's Manuals (US).

Owner's Manuals, Radio Manuals and Warranty Information Books can be ordered through Archway at:

• 1-800-387-1143 (Canada)

## **Change Of Ownership Or Address**

\*If you have purchased this vehicle used or have changed your address, please provide the following information and mail to:

### FCA US LLC

P.O. Box 21-8008

Auburn Hills, MI 48321-8004

Make sure to include the following:

- Date of Sale (mm/dd/yy)
- Vehicle Indentification Number (17 Character ID located on top left of the instrument panel)
- Exact Odometer Reading
- First and Last Name
- Phone Number
- Street Address, City, State and Zip Code
- Email Address

## **General Information**

**IRCM Module** 

Model / FCC ID: L2C0054TR IC: 3432A-0054TR This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme aux CNR d'Industrie Canada a applicables aux appareils radio exempts de licence. L'exploitation est autorisée à condition que l'appareil ne produise pas de brouillage préjudiciable et qu'il accepte tout brouillage, même celui susceptible d'en compromettre le fonctionnement.

### NOTE:

Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC." before the radio certification number only signifies that Industry Canada technical specifications were met.

### NOTE:

This equipment complies with radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

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The driver's primary responsibility is the safe operation of the vehicle. Driving while distracted can result in loss of vehicle control, resulting in an accident and personal injury. FCA US LLC strongly recommends that the driver use extreme caution when using any device or feature that may take their attention off the road. Use of any electrical devices, such as cellular telephones, computers, portable radios, vehicle navigation or other devices by the driver while the vehicle is moving is dangerous and could lead to a serious accident. Texting while driving is also dangerous and should never be done while the vehicle is moving. If you find yourself unable to devote your full attention to vehicle operation, pull off the road to a safe location and stop your vehicle. Some states or provinces prohibit the use of cellular telephones or texting while driving. It is always the driver's responsibility to comply with all local laws.

This Owner's Manual has been prepared to help you get acquainted with your new Jeep' brand vehicle and to provide a convenient reference source for common questions.

Not all features shown in this manual may apply to your vehicle. For additional information, visit **mopar.com/om** (USA), **owners.mopar.ca** (Canada) or your local Jeep<sup>\*</sup> brand dealer.

**U.S. Residents:** If you are the first registered retail owner of your vehicle, you may obtain a complimentary printed copy of the Warranty Booklet by calling **1-877-426-5337** or by contacting your dealer. Replacement kits can be purchased by visiting **www.techauthority.com**.

Canadian Residents: If you are the first registered retail owner of your vehicle, you may obtain a complimentary printed copy of the Warranty Booklet or purchase a replacement kit by calling 1-800-387-1143 or by contacting your dealer.

## **DRIVING AND ALCOHOL**

Drunk driving is one of the most frequent causes of accidents. Your driving ability can be seriously impaired with blood alcohol levels far below the legal minimum. If you are drinking, don't drive. Ride with a designated non-drinking driver, call a cab, a rideshare, a friend or use public transportation.

## WARNING

Driving after drinking can lead to an accident. Your perceptions are less sharp, your reflexes are slower and your judgment is impaired when you have been drinking. Never drink and then drive.

Jeep

Whether it's providing information about specific product features, taking a tour through your vehicle's heritage, knowing what steps to take following an accident or scheduling your next appointment, we know you'll find the app an important extension of your Jeep® brand vehicle. Simply download the app, select your make and model and enjoy the ride. To get this app, go directly to the App Store® or Google Play® Store and enter the search keyword "JEEP" (U.S. residents only).

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