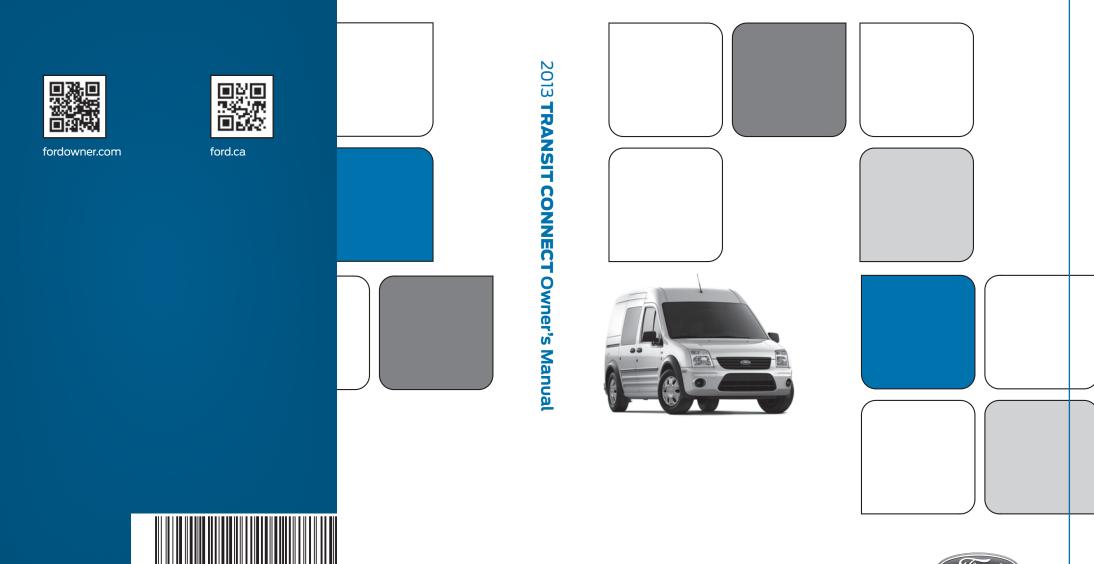
## 2013 TRANSIT CONNECT Owner's Manual



DTIJ 19A321 AA | December 2012 | Second Printing | Owner's Manual | Transit Connect | Litho in Europe



Table of Contents	1
Introduction	7
Introduction  Child Safety Child seats. Child seat positioning. Booster seats. Installing child safety seats Child safety locks.  Safety Belts Fastening the safety belts. Safety belt warning light and indicator chime. Safety belt-minder	1618202332 333539
Child restraint and safety belt maintenance	
Supplementary Restraints System  Driver and passenger airbags  Front passenger sensing system  Side airbags  Crash sensors and airbag indicator  Airbag disposal.	48 51 53
Keys and Remote Control  General information on radio frequencies.  Remote control  Keys  Replacing a lost key or remote control.	56 56
Locks Locking and unlocking	62
SecuriLock® passive anti-theft system	62

## 2 **Table of Contents**

Steering Wheel	65
Adjusting the steering wheel	65
Wipers and Washers	68
Windshield wipers	68
Windshield washers	69
Lighting	70
Headlamps	70
Front fog lamps	71
Direction indicators	72
Interior lamps	73
Windows and Mirrors	74
Power windows	74
Exterior mirrors	75
Interior mirrors	76
Sun visors	77
Instrument Cluster	78
Gauges	78
Warning lamps and indicators	79
Audible warnings and indicators	84
Information Displays	85
Trip computer	85
Audio System	86
AM/FM stereo	88
AM/FM/CD with SYNC	89
Auxiliary input jack	91
USB port	93
Climate Control	94
Manual heating and air conditioning	94
Rear window defroster	

Table of Contents	3
Seats	99
Sitting in the correct position	.99
Head restraints	
Manual seats	102
Rear seats	103
Auxiliary Power Points 1	106
Storage Compartments 1	107
Center console	107
Overhead console	107
Starting and Stopping the Engine	108
Ignition switch	109
Engine block heater	110
Fuel and Refueling	112
Fuel quality	113
Running out of fuel	114
Refueling	114
Fuel consumption	116
Transmission 1	121
Brakes 1	125
Brakes	125
Hints on driving with anti-lock brakes	126
Parking brake	126
Traction Control 1	127
Traction Control <sup>TM</sup>	127
Stability Control 1	128
AdvanceTrac®	129

## 4 Table of Contents

Parking Aids130Sensing system.130Rear-view camera system.132
Cruise Control 134
Driving Aids 136
Load Carrying137Vehicle loading
Towing 143 Trailer towing
Recreational towing
Driving Hints148Economical driving.148Floor mats.141
Roadside Emergencies148Getting roadside assistance.148Hazard warning flashers.150Fuel cut-off switch.151Jump-starting the vehicle.151
Customer Assistance158Reporting safety defects (U.S. only)
Fuses 163 Changing a fuse

Table of Contents	5
Maintenance	172
General information	
Opening and closing the hood	
Under hood overview	
Engine oil dipstick	176
Engine oil check	176
Engine coolant check	177
Automatic transmission fluid check	
Power steering fluid check	
Fuel filter	
Washer fluid check	
Changing the vehicle battery	
Checking the wiper blades	
Changing the wiper blades	
Air filter(s)	
Adjusting the headlamps	
Changing a bulb	
Removing a headlamp	
Bulb replacement	195
Bulb specification chart	
Vehicle Care	201
Cleaning products	201
Cleaning the exterior	201
Waxing	203
Repairing minor paint damage	203
Cleaning the engine	203
Cleaning the windows and wiper blades	
Cleaning the interior	
Cleaning the instrument panel and instrument cluster lens	
Cleaning leather seats	206
Cleaning the alloy wheels	206
Vehicle storage	

## Table of Contents

6

Wheels and Tires	210
Tire care	.212
Tire Pressure Monitoring System (TPMS)	.229
Changing a road wheel	
Technical specifications	.242
Wheel lug nut torque	.242
Capacities and Specifications	243
Engine specifications	.243
Part numbers	.246
Vehicle identification number	.246
Vehicle certification label	.247
Transmission code designation	.248
Accessories	249
Accessories	.249
Ford Extended Service Plan	251
Scheduled Maintenance	254
Normal scheduled maintenance and log	.259
SYNC®	270
Pairing your phone for the first time	.275
Appendices	307
Index	315

The information contained in this publication was correct at the time of going to print. In the interest of continuous development, we reserve the right to change specifications, design or equipment at any time without notice or obligation. No part of this publication may be reproduced, transmitted, stored in a retrieval system or translated into any language in any form by any means without our written permission. Errors and omissions excepted.

© Ford Motor Company 2012

#### **ABOUT THIS MANUAL**

Thank you for choosing Ford. We recommend that you take some time to get to know your vehicle by reading this manual. The more that you know about it, the greater the safety and pleasure you will get from driving it.



**WARNING:** Always drive with due care and attention when using and operating the controls and features on your vehicle.

**Note:** This manual describes a range of product features and options, sometimes before they are generally available. Therefore, you may find options in this manual that are not found on your vehicle.

**Note:** Some of the illustrations in this manual may be used for different models, so they may appear different than your vehicle. However, the essential information in the illustrations is always correct.

**Note:** Always use and operate your vehicle in line with all applicable laws and regulations.

**Note:** Pass on this manual when selling your vehicle. It is an integral part of the vehicle.

This manual may qualify the location of a component as left-hand side or right-hand side. The side is determined when facing forward in the seat.



- A. Right-hand side
- B. Left-hand side

#### **Protecting the Environment**



You must play your part in protecting the environment. Correct vehicle usage and the authorized disposal of waste, cleaning and lubrication materials are significant steps toward this aim.

## **SYMBOL GLOSSARY**

**WARNING:** You risk death or serious injury to yourself and others if you do not follow the instruction highlighted by the warning symbol.

These are some of the symbols you may see on your vehicle.

Symbol	Description	Symbol	Description	Symbol	Description
<u></u>	Safety alert	曲	See Owner's Manual	(ABS)	Anti-lock braking system
	Avoid smoking, flames, or sparks	<del></del>	Battery		Battery acid
	Brake fluid – non petroleum base		Brake system	<b>;</b> ;	Cabin air filter
₹*	Check fuel cap	AR AR	Child Safety Door Lock and Unlock		Child seat lower anchor
(L)	Child seat tether anchor		Cruise control		Do not open when hot
	Engine air filter		Engine coolant	<b>₹</b>	Engine coolant temperature
47	Engine oil		Explosive gas	**	Fan warning
Ä	Fasten safety belt		Front airbag	却	Front fog lamps

Symbol	Description	Symbol	Description	Symbol	Description
<b>Syntholic</b>	Fuel pump reset	夕 UU	Fuse compartment		Hazard warning flasher
- IIII	Heated rear window		Interior luggage compartment release	$\bigcirc$	Jack
A	Lighting control	<u>(!)</u>	Low tire pressure warning	MAX	Maintain correct fluid level
<b>□</b> (ĵ))	Panic alarm	P'n▲	Parking aid system	<b>(P)</b>	Parking brake system
	Power steering fluid	<b>A</b> B	Power windows front and rear		Power window lockout
	Service engine soon	<b>40</b>	Side airbag	<b>??</b>	Stability control
***	Windshield defrost and demist		Windshield washer and wiper		

#### **DATA RECORDING**

### **Service Data Recording**

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle, such as engine, throttle, steering or brake systems. In order to properly diagnose and service your vehicle, Ford Motor Company, Ford of Canada, and service and repair facilities may access or share among them vehicle diagnostic information received through a direct connection to your vehicle when diagnosing or servicing your vehicle. Additionally, when your vehicle is in for service or repair, Ford Motor Company, Ford of Canada, and service and repair facilities may access or share among them data for vehicle improvement purposes. For U.S. only (if equipped), if you choose to use the SYNC® Vehicle Health Report, you consent that certain diagnostic information may also be accessed electronically by Ford Motor Company and Ford authorized service facilities, and that the diagnostic information may be used for any purpose. See the SYNC® chapter for more information.

#### **Event Data Recording**

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 airbag deployment or hitting a road obstacle; this data 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 the brake pedal;
- How fast the vehicle was travelling;
- Where the driver was positioning the steering wheel.

This data can help provide a better understanding of the circumstances in which crashes and injuries occur.

Note: EDR data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the EDR under normal driving conditions and no personal data or information (e.g., name, gender, age, and crash location) is recorded (see limitations regarding 911 Assist and Traffic, Directions and Information privacy below). However, 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 such special equipment, can read the information if they have access to the vehicle or the EDR. Ford Motor Company and Ford of Canada do not access event data recorder information without obtaining consent, unless pursuant to court order or where required by law enforcement, other government authorities or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada.

Note: Including to the extent that any law pertaining to Event Data Recorders applies to SYNC® or its features, please note the following: Once 911 Assist (if equipped) is enabled (set ON), 911 Assist may, through any paired and connected cell phone, disclose to emergency services that the vehicle has been in a crash involving the deployment of an airbag or, in certain vehicles, the activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable of being used to electronically or verbally provide to 911 operators the vehicle location (such as latitude and longitude), and/or other details about the vehicle or crash or personal information about the occupants to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not activate the 911 Assist feature. See your SYNC® chapter for more information.

Additionally, when you connect to Traffic, Directions and Information (if equipped, U.S. only), the service uses GPS technology and advanced vehicle sensors to collect the vehicle's current location, travel direction, and speed ("vehicle travel information"), only to help provide you with the directions, traffic reports, or business searches that you request. If you do not want Ford or its vendors to receive this information, do not activate the service. Ford Motor Company and the vendors it uses to provide you with this information do not store your vehicle travel information. For more information, see Traffic, Directions and Information, Terms and Conditions. See your SYNC® chapter for more information.

#### **CALIFORNIA PROPOSITION 65**

**WARNING:** Some constituents of engine exhaust, certain vehicle components, 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.

#### PERCHLORATE MATERIAL

**Note:** Certain components in your vehicle, such as airbag modules, safety belt pretensioners, and remote control batteries, may contain perchlorate material. Special handling may apply for service or vehicle end of life disposal. See www.dtsc.ca.gov/hazardouswaste/perchlorate for more information.

#### FORD CREDIT (U.S. ONLY)

Ford Credit offers a full range of financing and lease plans to help you acquire your vehicle. If you have financed or leased your vehicle through Ford Credit, thank you for your business.

For your convenience, we offer a number of ways to contact us, as well as help manage your account.

Phone: 1-800-727-7000

For more information regarding Ford Credit, as well as access to Account Manager, please go to www.fordcredit.com.

#### REPLACEMENT PARTS RECOMMENDATION

Your vehicle has been built to the highest standards using quality parts. We recommend that you demand the use of genuine Ford and Motorcraft parts whenever your vehicle requires scheduled maintenance or repair. You can clearly identify genuine Ford and Motorcraft parts by looking for the Ford, FoMoCo or Motorcraft branding on the parts or their packaging.

## **Scheduled Maintenance and Mechanical Repairs**

One of the best ways for you to make sure that your vehicle provides years of service is to have it maintained in line with our recommendations using parts that conform to the specifications detailed in this owner's manual. Genuine Ford and Motorcraft parts meet or exceed these specifications.

## **Collision Repairs**

We hope that you never experience a collision, but accidents do happen. Genuine Ford replacement collision parts meet our stringent requirements for fit, finish, structural integrity, corrosion protection and dent resistance. During vehicle development, we validate that these parts deliver the intended level of protection as a whole system. A great way to know for sure you are getting this level of protection is to use genuine Ford replacement collision parts.

#### Warranty on Replacement Parts

Genuine Ford and Motorcraft replacement parts are the only replacement parts that benefit from a Ford Warranty. Damage caused to your vehicle as a result of the failure of non-Ford parts may not be covered by the Ford Warranty. For additional information, see the terms and conditions of the Ford Warranty.

#### **SPECIAL NOTICES**

### **New Vehicle Limited Warranty**

For a detailed description of what is covered and what is not covered by your vehicle's New Vehicle Limited Warranty, see the warranty information that is provided to you along with your owner's manual.

## **Special Instructions**

For your added safety, your vehicle is fitted with sophisticated electronic controls.



**WARNING:** Please read the Supplementary Restraints System chapter. Failure to follow the specific warnings and instructions could result in personal injury.



**WARNING:** Front seat mounted rear-facing child or infant seats should **NEVER** be placed in front of an active passenger airbag.

## Notice to owners of pickup trucks and utility type vehicles



**WARNING:** Utility vehicles have a significantly higher rollover rate than other types of vehicles.

Before you drive your vehicle, please read this Owner's Manual carefully. Your vehicle is not a passenger car. As with other vehicles of this type, failure to operate your vehicle correctly may result in loss of vehicle control, vehicle rollover, personal injury or death.

#### Using your vehicle with a snowplow

## Do not use this vehicle for snowplowing.

Your vehicle is not equipped with a snowplowing package.

## Using your vehicle as an ambulance

#### Do not use this vehicle as an ambulance.

Your vehicle is not equipped with the Ford Ambulance Preparation Package.

#### MOBILE COMMUNICATIONS EQUIPMENT

Using mobile communications equipment is becoming increasingly important in the conduct of business and personal affairs. However, you must not compromise your own or others' safety when using such equipment. Mobile communications can enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits.

Mobile communication equipment includes, but is not limited to, cellular phones, pagers, portable email devices, text messaging devices and portable two-way radios.

**WARNING:** Driving while distracted can result in loss of vehicle control, accident and injury. Ford strongly recommends that you use extreme caution when using any device or feature that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any handheld device while driving, encourage the use of voice operated systems when possible and that you become aware of applicable state and local laws that may affect use of electronic devices while driving.

# EXPORT UNIQUE (NON-UNITED STATES/CANADA) VEHICLE SPECIFIC INFORMATION

For your particular global region, your vehicle may be equipped with features and options that are different from the features and options that are described in this owner's manual. A market unique supplement may be supplied that complements this book. By referring to the market unique supplement, if provided, you can properly identify those features, recommendations and specifications that are unique to your vehicle. This owner's manual is written primarily for the U.S. and Canadian Markets. Features or equipment listed as standard may be different on units built for Export. See this owner's manual for all other required information and warnings.

#### **GENERAL INFORMATION**

See the following sections for directions on how to properly use safety restraints for children.

**WARNING:** Always make sure your child is secured properly in a device that is appropriate for their height, age and weight. Child safety restraints must be bought separately from your vehicle. Failure to follow these instructions and guidelines may result in an increased risk of serious injury or death to your child.

WARNING: All children are shaped differently. The recommendations for safety restraints are based on probable child height, age and weight thresholds from NHTSA and other safety organizations, or are the minimum requirements of law. Ford recommends checking with a NHTSA Certified Child Passenger Safety Technician and consulting your pediatrician to make sure your child seat is appropriate for your child, and is compatible with and properly installed in your vehicle. To locate a child seat fitting station and CPST, contact the NHTSA toll free at 1-888-327-4236 or locate NHTSA on the internet. In Canada, check with your local St. John Ambulance office for referral to a CPST or for further information, contact your provincial ministry of transportation, or locate your local St. John Ambulance office by searching for St. John Ambulance on the internet, or Transport Canada at 1–800–333–0371 (http://www.tc.gc.ca). Failure to properly restrain children in safety seats made especially for their height, age, and weight may result in an increased risk of serious injury or death to your child.

Recommendations for Safety Restraints for Children					
	Child size, height, weight, or age	Recommended			
	Clind Size, height, weight, or age	restraint type			
Infants	Children weighing 40 lb (18 kg) or less	Use a child safety			
or	(generally age four or younger).	seat (sometimes			
toddlers		called an infant			
		carrier, convertible			
		seat, or toddler			
		seat).			

Re	Recommendations for Safety Restraints for Children					
	Child size, height, weight, or age	Recommended restraint type				
Small children	Children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 ft. 9 in. (1.45 m) tall, are greater than age four (4) and less than age twelve (12), and between 40 lb (18 kg) and 80 lb (36 kg) and upward to 100 lb (45 kg) if recommended by your child restraint manufacturer).	Use a belt-positioning booster seat.				
Larger children	Children who have outgrown or no longer properly fit in a belt-positioning booster seat (generally children who are at least 4 ft. 9 in. (1.45 m) tall or greater than 80 lb (36 kg) or 100 lb (45 kg) if recommended by child restraint manufacturer).	Use a vehicle safety belt having the lap belt snug and low across the hips, shoulder belt centered across the shoulder and chest, and seat back upright.				

- You are required by law to properly use safety seats for infants and toddlers in the United States and Canada.
- Many states and provinces require that small children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms). Check your local and state or provincial laws for specific requirements about the safety of children in your vehicle.
- When possible, always properly restrain children twelve (12) years of age and under in a rear seating position of your vehicle. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in a front seating position. See *Front Passenger Sensing System* in the *Supplementary Restraints System* chapter for more information.

#### **CHILD SEATS**



Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat) for infants, toddlers or children weighing 40 pounds (18 kilograms) or less (generally age four or younger).

## **CHILD SEAT POSITIONING**

WARNING: Airbags can kill or injure a child in a child seat.

NEVER place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the vehicle seat upon which the child seat is installed all the way back. When possible, all children age 12 and under should be properly restrained in a rear seating position. If all children cannot be seated and restrained properly in a rear seating position, properly restrain the largest child in the front seat.

**WARNING:** Always carefully follow the instructions and warnings provided by the manufacturer of any child restraint to determine if the restraint device is appropriate for your child's size, height, weight, or age. Follow the child restraint manufacturer's instructions and warnings provided for installation and use in conjunction with the instructions and warnings provided by your vehicle manufacturer. A safety seat that is improperly installed or utilized, is inappropriate for your child's height, age, or weight or does not properly fit the child may increase the risk of serious injury or death.

**WARNING:** Never let a passenger hold a child on his or her lap while your vehicle is moving. The passenger cannot protect the child from injury in a crash, which may result in serious injury or death.

**WARNING:** Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a crash.

WARNING: Always restrain an unoccupied child seat or booster seat. These objects may become projectiles in a crash or sudden stop, which may increase the risk of serious injury.

**WARNING:** Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.



WARNING: Do not leave children or pets unattended in your vehicle.

		Use any attachment method as indicated below by X.				
Restraint Type	Child Weight	LATCH (lower anchors and top tether anchor)	LATCH (lower anchors only)	Safety belt and top tether anchor	Safety belt and LATCH (lower anchors and top tether anchor)	Safety belt only
Rear- facing child seat	Up to 48 lb (21 kg)		X			X
Forward- facing child seat	Up to 48 lb (21 kg)	X		X	X	
Forward- facing child seat	Over 48 lb (21 kg)			X	X	

**Note:** The child seat must rest tightly against the vehicle seat upon which it is installed. It may be necessary to lift or remove the head restraint. See the *Seats* chapter for information on head restraints.

#### **BOOSTER SEATS**

**WARNING:** Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

Use a belt-positioning booster seat for children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 feet 9 inches (1.45 meters) tall, are greater than age four (4) and less than age twelve (12), and between 40 pounds (18 kilograms) and 80 pounds (36 kilograms) and upward to 100 pounds (45 kilograms) if recommended by your child restraint manufacturer). Many state and provincial laws require that children use approved booster seats until they reach age eight (8), a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms).

Booster seats should be used until you can answer YES to ALL of these questions when the child is seated without a booster seat.



- Can the child sit all the way back against their vehicle seat with knees bent comfortably at the edge of the seat cushion?
- Can the child sit without slouching?
- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

Always use booster seats in conjunction with your vehicle lap and shoulder belt.

## **Types of Booster Seats**



• Backless booster seats

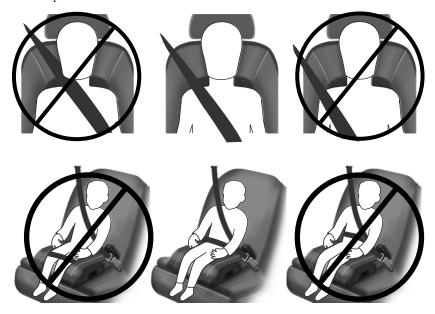
If your backless booster seat has a removable shield, remove the shield. If a vehicle seating position has a low seat back or no head restraint, a backless booster seat may place your child's head (as measured at the tops of the ears) above the top of the seat. In this case, move the backless booster to another seating position with a higher seat back or head restraint and lap and shoulder belts, or consider using a high back booster seat.



• High back booster seats

If, with a backless booster seat, you cannot find a seating position that adequately supports your child's head, a high back booster seat would be a better choice.

Children and booster seats vary in size and shape. Choose a booster that keeps the lap belt low and snug across the hips, never up across the stomach, and lets you adjust the shoulder belt to cross the chest and rest snugly near the center of the shoulder. The following drawings compare the ideal fit (center) to a shoulder belt uncomfortably close to the neck and a shoulder belt that could slip off the shoulder. The drawings also show how the lap belt should be low and snug across the child's hips.



If the booster seat slides on the vehicle seat upon which it is being used, placing a rubberized mesh sold as shelf or carpet liner under the booster seat may improve this condition. Do not introduce any item thicker than this under the booster seat. Check with the booster seat manufacturer's instructions.

#### **INSTALLING CHILD SEATS**

### **Using Lap and Shoulder Belts**

**WARNING:** Airbags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

**WARNING:** Airbags can kill or injure a child in a child seat. Children 12 and under should be properly restrained in the rear seat whenever possible.

**WARNING:** Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain safety belt buckle assemblies or LATCH lower anchors, rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

When installing a child safety seat with combination lap and shoulder

- Use the correct safety belt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place the vehicle seat upon which the child seat will be installed in the upright position.
- Put the safety belt in the automatic locking mode. See Step 5. This vehicle does not require the use of a locking clip.

Perform the following steps when installing the child seat with combination lap and shoulder belts:

**Note:** Although the child seat illustrated is a forward-facing child seat, the steps are the same for installing a rear-facing child seat.



1. Position the child safety seat in a seat with a combination lap and shoulder belt.



2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out.

**Note:** The automatic locking mode is available on the front passenger and rear seats. This vehicle does not require the use of a locking clip.

- 6. Allow the belt to retract to remove slack. The belt will click as it retracts to indicate it is in the automatic locking mode.
- 7. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode. You should not be able to pull more belt out. If the retractor is not locked, unbuckle the belt and repeat Steps 5 and 6.



8. Remove remaining slack from the belt. Force the seat down with extra weight, for example, by pressing down or kneeling on the child restraint while pulling up on the shoulder belt in order to force slack from the belt.

This is necessary to remove the remaining slack that will exist once the extra weight of the child is added to the child restraint. It also helps to achieve the proper snugness of the child seat to your vehicle. Sometimes, a slight lean toward the buckle will additionally help to remove remaining slack from the belt.

9. Attach the tether strap (if the child seat is equipped). See *Using Tether Straps* later in this chapter.



10. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place.

To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 1 inch (2.5 centimeters) of movement for proper installation.

Ford recommends checking with a NHTSA Certified Child Passenger Safety Technician (CPST) to make certain the child restraint is properly installed. In Canada, check with your local St. John Ambulance office for referral to a CPST.

#### Using Lower Anchors and Tethers for CHildren (LATCH)

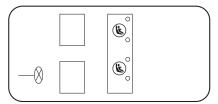
**WARNING:** Never attach two child safety seats to the same anchor. In a crash, one anchor may not be strong enough to hold two child safety seat attachments and may break, causing serious injury or death.

**WARNING:** Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain safety belt buckle assemblies or LATCH lower anchors, rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

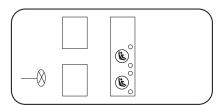
The LATCH system is composed of three vehicle anchor points: two lower anchors located where the vehicle seat back and seat cushion meet (called the seat bight) and one top tether anchor located behind that seating position.

LATCH compatible child safety seats have two rigid or webbing mounted attachments that connect to the two lower anchors at the LATCH equipped seating positions in your vehicle. This type of attachment method eliminates the need to use safety belts to attach the child seat, however the safety belt can still be used to attach the child seat. For forward-facing child seats, the top tether strap must also be attached to the proper top tether anchor, if a top tether strap has been provided with your child seat.

Your vehicle has LATCH lower anchors for child seat installation at the seating positions marked with the child seat symbol.



• Taxi version



All others



The LATCH lower anchors are located at the rear section of the rear seat between the cushion and seatback, below the locator symbols on the seat back. Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments.

Follow the instructions on attaching child safety seats with tether straps. Refer to *Using Tether Straps* later in this chapter.

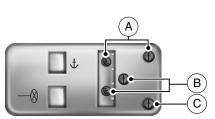
Attach LATCH lower attachments of the child seat only to the anchors shown.

# Combining Safety Belt and LATCH Lower Anchors for Attaching Child Safety Seats

When used in combination, either the safety belt or the LATCH lower anchors may be attached first, provided a proper installation is achieved. Attach the tether strap afterward, if included with the child seat.

# Combining LATCH lower anchors with tethers for attaching child safety seats (5-passenger Taxi only)

When the LATCH lower anchors and tethers are used together, use the following attachment combinations only:



- Use LATCH lower anchor A with tether A as depicted in the graphic.
- Use LATCH lower anchor B with tether B as depicted in the graphic.
- **Note:** Do not use the LATCH lower anchors in combination with tether C.

## **Using Tether Straps**



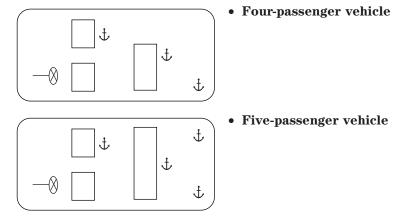
Many forward-facing child safety seats include a tether strap which extends from the back of the child safety seat and hooks to an anchoring point called the top tether anchor. Tether

straps are available as an accessory for many older safety seats.

Contact the manufacturer of your child seat for information about ordering a tether strap, or to obtain a longer tether strap if the tether strap on your safety seat does not reach the appropriate top tether anchor in the vehicle.

The rear seating positions of your vehicle are equipped with built-in tether strap anchors located behind the seats on the d-pillar in the cargo area as described below.

The tether strap anchors in your vehicle are in the following positions (shown from top view):



Perform the following steps to install a child safety seat with tether anchors:

**Note:** If you install a child seat with rigid LATCH attachments, and have attached the top tether strap to the proper top tether anchor, do not tighten the tether strap enough to lift the child seat off the vehicle seat cushion when the child is seated in it. Keep the tether strap just snug without lifting the front of the child seat. Keeping the child seat just touching the vehicle seat gives the best protection in a severe crash.

## Front passenger seating position

The tether can be attached directly to the rear of the front seat.

 $1.\ {\rm Route}$  the tether strap under the head restraint and between the head restraint posts.



2. Clip the tether strap to the anchor as shown.

## Second row center seating position

The tether can be attached directly to the rear of the second row center seat

1. Route the tether strap under the head restraint and between the head restraint posts.



2. Locate the anchor for the center seating position.



3. Clip the tether strap to the anchor as shown.

## Second-row outboard seating positions

**Note:** Place the head restraint underneath the back of the front seat for storage.

- 1. Remove the head restraint.
- 2. Locate the correct anchor for the selected seating position.



• On five-passenger vehicles, anchors are located on the passenger-side and driver-side upper rear door frame area close to the roof.



• On four-passenger vehicles, the anchor is located on the driver-side upper rear door frame area close to the roof.



3. Clip the tether strap to the anchor as shown.

If the tether strap is clipped incorrectly, the child safety seat may not be retained properly in the event of a collision.

4. Tighten the child safety seat tether strap according to the manufacturer's instructions.

If the safety seat is not anchored properly, the risk of a child being injured in a collision greatly increases.

If your child restraint system is equipped with a tether strap, and the child restraint manufacturer recommends its use, Ford also recommends its use

#### **CHILD SAFETY LOCKS**

When these locks are set, the rear doors cannot be opened from the inside.



The childproof locks are located on the rear edge of each rear door and must be set separately for each door.

- Driver side: turn counterclockwise to lock and clockwise to unlock.
- Passenger side: turn clockwise to lock and counterclockwise to unlock.

#### PRINCIPLES OF OPERATION

**WARNING:** Never let a passenger hold a child on his or her lap while the vehicle is moving. The passenger cannot protect the child from injury in a crash.

**WARNING:** It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, 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 safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly.



**WARNING:** Always drive and ride with your seat back upright and the lap belt snug and low across the hips.



**WARNING:** To reduce the risk of injury, make sure children sit where they can be properly restrained.

**WARNING:** All occupants of the vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.



**WARNING:** In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a safety belt.

**WARNING:** Each seating position in your vehicle has a specific safety belt assembly which is made up of one buckle and one tongue that are designed to be used as a pair. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing the safety belt around your neck over the inside shoulder. 3) Never use a single belt for more than one person.

**WARNING:** When possible, all children 12 years old and under should be properly restrained in a rear seating position. Failure to follow this could seriously increase the risk of injury or death.

**WARNING:** Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check seat covers and buckles before you place a child anywhere near them.

**WARNING:** Front and rear seat occupants, including pregnant women, should wear safety belts for optimum protection in an accident.

All seating positions in this vehicle have lap and shoulder safety belts. All occupants of the vehicle should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.

The safety belt system consists of:

- lap and shoulder safety belts
- shoulder safety belt with automatic locking mode (except driver safety belt)
- height adjuster at the front outboard seating positions
- safety belt pretensioner at the front outboard seating positions
- belt tension sensor at the front outboard passenger seating position.



• safety belt warning light and chime. See *Safety belt warning light and indicator chime* later in this chapter.



• crash sensors and monitoring system with readiness indicator. See *Crash sensors and airbag indicator* in the *Supplemental Restraint System* chapter.

The safety belt pretensioners are designed to activate in frontal, near-frontal and side crashes, and in rollovers. The safety belt pretensioners at the front seating positions are designed to tighten the safety belts firmly against the occupant's body when activated. This helps increase the effectiveness of the safety belts. In frontal crashes, the safety belt pretensioners can be activated alone or, if the crash is of sufficient severity, together with the front airbags.

## **FASTENING THE SAFETY BELTS**

The front outboard and rear safety restraints in your vehicle are combination lap and shoulder belts.



1. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.



2. To unfasten, press the release button and remove the tongue from the buckle.



When in use, place the rear safety belts in the belt guides on the outboard seat backs.

## **Restraint of Pregnant Women**

**WARNING:** Always ride and drive with your seat back upright and the safety belt properly fastened. The lap portion of the safety belt should fit snug and be positioned low across the hips. The shoulder portion of the safety belt should be positioned across the chest. Pregnant women should also follow this practice. See the following figure.



Pregnant women should always wear their safety belts. The lap belt portion of a combination lap and shoulder belt should be positioned low across the hips below the belly and worn as tight as comfort will allow. The shoulder belt should be positioned to cross the middle of the shoulder and the center of the chest.

## Safety Belt Locking Modes

**WARNING:** After any vehicle crash, the safety belt system at all passenger seating positions must be checked by an authorized dealer to verify that the automatic locking retractor feature for child seats is still functioning properly. In addition, all safety belts should be checked for proper function.

**WARNING:** BELT AND RETRACTOR ASSEMBLY MUST BE REPLACED if the safety belt assembly automatic locking retractor feature or any other safety belt function is not operating properly when checked by an authorized dealer. Failure to replace the belt and retractor assembly could increase the risk of injury in crashes.

All safety restraints in the vehicle are combination lap and shoulder belts. The driver safety belt has the first type of locking mode, and the front outboard passenger and rear seat safety belts have both types of locking modes described as follows:

#### Vehicle Sensitive Mode

This is the normal retractor mode, which allows free shoulder belt length adjustment to your movements and locking in response to vehicle movement. For example, if the driver brakes suddenly or turns a corner sharply, or the vehicle receives an impact of about 5 mph (8 km/h) or more, the combination safety belts will lock to help reduce forward movement of the driver and passengers.

In addition, the retractor is designed to lock if the webbing is pulled out too quickly. If this occurs, let the belt retract slightly and pull webbing out again in a slow and controlled manner.

#### Automatic Locking Mode

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt. The automatic locking mode is not available on the driver safety belt.

### When to Use the Automatic Locking Mode

This mode should be used any time a child safety seat, except a booster, is installed in passenger front or rear seating positions. Children 12 years old and under should be properly restrained in a rear seating position whenever possible. See the *Child Safety* chapter.

#### How to Use the Automatic Locking Mode



- 1. Buckle the combination lap and shoulder belt.
- 2. Grasp the shoulder portion and pull downward until the entire belt is pulled out.
- 3. Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the automatic locking mode.

#### How to Disengage the Automatic Locking Mode

Unbuckle the combination lap and shoulder belt and allow it to retract completely to disengage the automatic locking mode and activate the vehicle sensitive (emergency) locking mode.

## Safety Belt Extension Assembly



**WARNING:** Do not use extensions to change the fit of the shoulder belt across the torso.

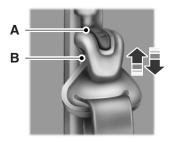
If the safety belt is too short when fully extended, you can obtain a safety belt extension assembly from an authorized dealer.

Use only extensions manufactured by the same supplier as the safety belt. Manufacturer identification is located at the end of the webbing on the label. Also, use the safety belt extension only if the safety belt is too short for you when fully extended.

## SAFETY BELT HEIGHT ADJUSTMENT

**WARNING:** Position the safety belt height adjusters so that the belt rests across the middle of your shoulder. Failure to adjust the safety belt properly could reduce the effectiveness of the safety belt and increase the risk of injury in a crash.

Adjust the height of the shoulder belt so the belt rests across the middle of your shoulder.



To adjust the shoulder belt height downward, press the button (A) and slide the height adjuster (B) upwards slightly and then down. Release the button and pull down on the height adjuster to make sure it is locked in place.

To adjust the belt upward, slide the adjuster up. You do not need to push the button to slide the adjuster upwards.

#### SAFETY BELT WARNING LIGHT AND INDICATOR CHIME



This lamp illuminates and an audible warning will sound if the driver's safety belt has not been fastened when the vehicle's ignition is turned on.

#### **Conditions of Operation**

If	Then
The driver's safety belt is not	The safety belt warning light
buckled before the ignition	illuminates 1-2 minutes and the
switch is turned to the on	warning chime sounds 4-8 seconds.
position	
The driver's safety belt is	The safety belt warning light and
buckled while the indicator	warning chime turn off.
light is illuminated and the	
warning chime is sounding	
The driver's safety belt is	The safety belt warning light and
buckled before the ignition	indicator chime remain off.
switch is turned to the on	
position	

#### **SAFETY BELT-MINDER®**

This feature supplements the safety belt warning function by providing additional reminders by intermittently sounding a chime and illuminating the safety belt warning light when the driver's or front passenger's seat is occupied and the safety belt is unbuckled.

The system uses information from the front passenger sensing system to determine if a front seat passenger is present and therefore potentially in need of a warning. To avoid activating the Belt-Minder® feature for objects placed in the front passenger seat, warnings will only be given to front seat occupants as determined by the front passenger sensing system.

If the Belt-Minder® warnings have expired (warnings for about five minutes) for one occupant (driver or front passenger), the other occupant can still activate the Belt-Minder® feature.

# **Safety Belts**

If	Then
The driver's and front	The Belt-Minder® feature will not
passenger's safety belts are	activate.
buckled before the ignition	
switch is turned to the	
on position or less than	
1-2 minutes have elapsed since	
the ignition switch has been	
turned to on	
The driver's or front	The Belt-Minder® feature is activated
passenger's safety belt is not	- the safety belt warning light
buckled when the vehicle	illuminates and the warning chime
has reached at least 6 mph	sounds for six seconds every
(9.7 km/h) and 1-2 minutes	25 seconds, repeating for about
have elapsed since the ignition	five minutes or until the safety belts
switch has been turned to on	are buckled.
The driver's or front	The Belt-Minder® feature is activated
passenger's safety belt becomes	- the safety belt warning light
unbuckled for about one	illuminates and the warning chime
minute while the vehicle is	sounds for six seconds every
traveling at least 6 mph	25 seconds, repeating for about
(9.7 km/h) and more than	five minutes or until the safety belts
1-2 minutes have elapsed since	are buckled.
the ignition switch has been	
turned to on	

#### Deactivating and Activating the Belt-Minder® Feature

WARNING: While the design allows you to deactivate your Belt-Minder®, this system is designed to improve your chances of being safely belted and surviving an accident. We recommend you leave the Belt-Minder system activated for yourself and others who may use the vehicle. To reduce the risk of injury, do not deactivate or activate the Belt-Minder feature while driving the vehicle.

Read Steps 1 - 3 thoroughly before proceeding with the programming procedure.

The Belt-Minder feature can be deactivated and activated by performing the following procedure:

Before following the procedure, make sure that:

- the parking brake is set.
- ullet the transmission selector lever is in position  ${f P}.$
- the ignition is off.
- the driver and front passenger safety belts are unbuckled.
- 1. Turn the ignition on. DO NOT START THE ENGINE.
- 2. Wait until the safety belt warning light turns off (about one to two minutes).
- Step 3 must be completed within 50 seconds after the safety belt warning light turns off.
- 3. Buckle then unbuckle the driver's safety belt nine times at a moderate speed, ending in the unbuckled state. As confirmation, the safety belt warning light will flash three times.
- This will disable the Belt-Minder feature for that seating position if it is currently enabled.
- This will enable the Belt-Minder feature for that seating position if it is currently disabled.

#### CHILD RESTRAINT AND SAFETY BELT MAINTENANCE

Inspect the vehicle safety belts and child safety seat systems periodically to make sure they work properly and are not damaged. Inspect the vehicle and child seat safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All vehicle safety belt assemblies, including retractors, buckles, front safety belt buckle assemblies, buckle support assemblies (slide bar-if equipped), shoulder belt height adjusters (if equipped), shoulder belt guide on seat back (if equipped), child safety seat LATCH and tether anchors, and attaching hardware, should be inspected after a crash. Read the child restraint manufacturer's instructions for additional inspection and maintenance information specific to the child restraint.

Ford Motor Company recommends that all safety belt assemblies in use in vehicles involved in a crash be replaced. However, if the crash was minor and an authorized dealer finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a crash should also be inspected and replaced if either damage or improper operation is noted.

For proper care of soiled safety belts, see  $Cleaning\ the\ Interior$  in the  $Vehicle\ Care$  chapter.

#### PERSONAL SAFETY SYSTEM™

The Personal Safety System provides an improved overall level of frontal crash protection to front seat occupants and is designed to help further reduce the risk of airbag-related injuries. The system is able to analyze different occupant conditions and crash severity before activating the appropriate safety devices to help better protect a range of occupants in a variety of frontal crash situations.

Your vehicle's Personal Safety System consists of:

- Driver and passenger dual-stage airbag supplemental restraints.
- Front outboard safety belts with pretensioners, energy management retractors (first row only), and safety belt usage sensors.
- Driver's seat position sensor.
- Front passenger sensing system.
- Passenger airbag off and on indicator lamp.
- Front crash severity sensors.
- Restraints control module with impact and safing sensors.
- Restraint system warning light and backup tone.
- The electrical wiring for the airbags, crash sensor(s), safety belt pretensioners, front safety belt usage sensors, driver seat position sensor, front passenger sensing system, and indicator lights.

#### How Does the Personal Safety System Work?

The Personal Safety System can adapt the deployment strategy of your vehicle's safety devices according to crash severity and occupant conditions. A collection of crash and occupant sensors provides information to the restraints control module. During a crash, the restraints control module may activate the safety belt pretensioners and/or either one or both stages of the dual-stage airbag supplemental restraints based on crash severity and occupant conditions.

## 44 Supplementary Restraints System

#### PRINCIPLES OF OPERATION

**WARNING:** Airbags do not inflate slowly or gently, and the risk of injury from a deploying airbag is the greatest close to the trim covering the airbag module.

**WARNING:** All occupants of your vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.



**WARNING:** Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints.

**WARNING:** Never place your arm over the airbag module as a deploying airbag can result in serious arm fractures or other injuries.

**WARNING:** Airbags can kill or injure a child in a child seat. NEVER place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

**WARNING:** Do not attempt to service, repair, or modify the airbag supplemental restraint systems or its fuses. Contact your authorized dealer as soon as possible.



**WARNING:** Several airbag system components get hot after inflation. Do not touch them after inflation.

**WARNING:** If the airbag has deployed, the airbag will not function again and must be replaced immediately. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The airbags are a supplemental restraint system and are designed to work with the safety belts to help protect the driver and right front passenger from certain upper body injuries. Airbags do not inflate slowly; there is a risk of injury from a deploying airbag.

**Note:** You will hear a loud bang and see a cloud of harmless powdery residue if an airbag deploys. This is normal.

The airbags inflate and deflate rapidly upon activation. After airbag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (for example, baking soda) that result from the combustion process that inflates the airbag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic. While the system is designed to help reduce serious injuries, contact with a deploying airbag may also cause abrasions or swelling. Temporary hearing loss is also a possibility as a result of the noise associated with a deploying airbag. Because airbags must inflate rapidly and with considerable force, there is the risk of death or serious injuries, such as fractures, facial and eye injuries or internal injuries, particularly to occupants who are not properly restrained or are otherwise out of position at the time of airbag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the airbag module as possible while maintaining vehicle control.

Routine maintenance of the airbags is not required.

## SOS POST-CRASH ALERT SYSTEM™

The system flashes the turn signal lamps and sounds the horn (intermittently) in the event of a serious impact that deploys an airbag equipped on your vehicle, such as front, side, side curtain or Safety Canopy®.

The horn and lamps will turn off when:

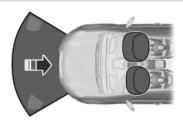
- the hazard control button is pressed
- the panic button (if equipped) is pressed on the remote entry transmitter, or
- your vehicle runs out of power.

## 46 Supplementary Restraints System

#### **DRIVER AND PASSENGER AIRBAGS**

**WARNING:** Never place your arm or any objects over an airbag module. Placing your arm over a deploying airbag can result in serious arm fractures or other injuries. Objects placed on or over the airbag inflation area may cause those objects to be propelled by the airbag into your face and torso causing serious injury.

**WARNING:** Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.



The driver and front passenger airbags will deploy during significant frontal and near-frontal crashes.

The driver and passenger front airbag system consists of:

• driver and passenger airbag modules



- crash sensors and monitoring system with readiness indicator. See *Crash Sensors and Airbag Indicator* later in this chapter.
- front passenger sensing system

## **Proper Driver and Front Passenger Seating Adjustment**

**WARNING:** The National Highway Traffic Safety Administration recommends a minimum distance of at least 10 inches (25 centimeters) between an occupant's chest and the driver airbag module.

To properly position yourself away from the airbag:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.
- Recline the seat slightly (one or two degrees) from the upright position.

After all occupants have adjusted their seats and put on safety belts, it is very important that they continue to sit properly. Properly seated occupants sit upright, lean against the seat back, and center themselves on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.

#### **Children and Airbags**

**WARNING:** Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.



Children must always be properly restrained. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position. Failure to follow these instructions may increase the risk of injury in a crash.

## 48 Supplementary Restraints System

#### FRONT PASSENGER SENSING SYSTEM



**WARNING:** Even with Advanced Restraints Systems, children 12 and under should be properly restrained in a rear seating position.

**WARNING:** Sitting improperly out of position or with the seat back reclined too far can take off weight from the seat cushion and affect the decision of the front passenger sensing system, resulting in serious injury or death in a crash.

Always sit upright against your seatback, with your feet on the floor.

WARNING: To reduce the risk of possible serious injury:
Do not stow objects in seat back map pocket (if equipped) or
hang objects off seat back if a child is in the front passenger seat.
Do not place large objects (unless storing rear seat headrests)
underneath the front passenger seat. or between the seat and the
center console (if equipped).

Check the pass airbag off indicator lamp for proper airbag Status. Failure to follow these instructions may interfere with the passenger seat sensing system.

**WARNING:** Any alteration/modification to the front passenger seat may affect the performance of the front passenger sensing system.

This system works with sensors that are part of the front passenger's seat and safety belt to detect the presence of a properly seated occupant and determine if the front passenger's frontal airbag should be enabled (may inflate) or not.



The front passenger sensing system uses a pass airbag off indicator which will illuminate and stay lit to remind you that the front passenger

frontal airbag is disabled. The indicator lamp is located at the top of the instrument panel center stack area above the radio.

**Note:** The indicator lamp will illuminate for a short period of time when the ignition is turned to the on position to confirm it is functional.

The front passenger sensing system is designed to disable (will not inflate) the front passenger's frontal airbag when a rear facing infant seat, a forward-facing child restraint, or a booster seat is detected. Even with this technology, parents are **STRONGLY** encouraged to always properly restrain children in the rear seat. The sensor also turns off the passenger front airbag and seat-mounted side airbag when the passenger seat is empty.

- When the front passenger sensing system disables (will not inflate)
  the front passenger frontal airbag, the indicator lamp will illuminate
  and stay lit to remind you that the front passenger frontal airbag is
  disabled.
- If the child restraint has been installed and the indicator lamp is not lit, then turn the vehicle off, remove the child restraint from the vehicle and reinstall the restraint following the child restraint manufacturer's instructions.

The front passenger sensing system is designed to enable (may inflate) the front passenger's frontal airbag anytime the system senses that a person of adult size is sitting properly in the front passenger seat.

• When the front passenger sensing system enables the front passenger frontal airbag (may inflate), the indicator will be unlit and stay unlit.

If a person of adult size is sitting in the front passenger's seat, but the passenger airbag off or pass airbag off indicator lamp is lit, it is possible that the person isn't sitting properly in the seat. If this happens:

- Turn the vehicle off and ask the person to place the seatback in the full upright position.
- Have the person sit upright in the seat, centered on the seat cushion, with the person's legs comfortably extended.
- Restart the vehicle and have the person remain in this position for about two minutes. This will allow the system to detect that person and enable the passenger's frontal airbag.
- If the indicator lamp remains lit even after this, the person should be advised to ride in the rear seat.

## 50 Supplementary Restraints System

Occupant	Pass Airbag Off Indicator Lamp	Passenger Airbag
Empty	Unlit	Disabled
Small child	Lit	Disabled
Adult	Unlit	Enabled

**Note:** When the passenger airbag off light is illuminated, the passenger (seat mounted) side airbag may be disabled to avoid the risk of airbag deployment injuries.

After all occupants have adjusted their seats and put on safety belts, it's very important that they continue to sit properly. A properly seated occupant sits upright, leaning against the seat back, and centered on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.



To know if the front passenger sensing system is operating properly, refer to *Crash Sensors and Airbag Indicator* later in this chapter.

#### If the airbag readiness lamp is lit, do the following:

The driver and adult passengers should check for any objects that may be lodged underneath the front passenger seat or cargo interfering with the seat.

If objects are lodged and/or cargo is interfering with the seat; please take the following steps to remove the obstruction:

- Pull the vehicle over.
- Turn the vehicle off.
- Driver or adult passengers should check for any objects lodged underneath the front passenger seat or cargo interfering with the seat.
- Remove the obstruction(s) (if found).
- Restart the vehicle.
- Wait at least two minutes and verify that the airbag readiness lamp is no longer illuminated
- If the airbag readiness lamp remains illuminated, this may or may/not be a problem due to the front passenger sensing system.

DO NOT attempt to repair or service the system; take your vehicle immediately to an authorized dealer.

If it is necessary to modify an advanced front airbag system to accommodate a person with disabilities, contact the Ford Customer Relationship Center at the phone number shown in the *Customer Assistance* section of this Owner's Manual.

#### SIDE AIRBAGS

**WARNING:** Do not place objects or mount equipment on or near the airbag cover, on the side of the seat backs (of the front seats), or in front seat areas that may come into contact with a deploying airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.

**WARNING:** Do not use accessory seat covers. The use of accessory seat covers may prevent the deployment of the side airbags and increase the risk of injury in an accident.



**WARNING:** Do not lean your head on the door. The side airbag could injure you as it deploys from the side of the seat back.

**WARNING:** Do not attempt to service, repair, or modify the airbag, its fuses or the seat cover on a seat containing an airbag, as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

**WARNING:** If the side airbag has deployed, the airbag will not function again. The side airbag system (including the seat) must be inspected and serviced by an authorized dealer. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

## 52 Supplementary Restraints System

The side airbags are located on the outboard side of the seat backs of the front seats. In certain lateral crashes, the airbag on the side affected by the crash will be inflated, except that the passenger sensing system will deactivate the passenger seat-mounted side airbag if it detects an empty passenger seat.



The system consists of the following:

- a tag on the seat back indicating that side airbags are found on your vehicle
- side airbags located inside the seat back of the driver and front passenger seats.



- crash sensors and monitoring system with readiness indicator. See Crash Sensors and Airbag Indicator later in this chapter.
- front passenger sensing system.

**Note:** The passenger sensing system will deactivate the passenger seat-mounted side airbag if it detects an empty passenger seat.

The design and development of the side airbag system included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags.

#### CRASH SENSORS AND AIRBAG INDICATOR

**WARNING:** Modifying or adding equipment to the front end of your vehicle (including frame, bumper, front end body structure and tow hooks) may affect the performance of the airbag system, increasing the risk of injury. Do not modify the front end of your vehicle.

Your vehicle has a collection of crash and occupant sensors which provide information to the restraints control module which deploys (activates) the front safety belt pretensioners, driver airbag, passenger airbag, seat mounted side airbags, and the Safety Canopy. Based on the type of accident (frontal impact, side impact or rollover) the restraints control module will deploy the appropriate safety devices.

The restraints control module also monitors the readiness of the above safety devices plus the crash and occupant sensors. The readiness of the safety system is indicated by a warning indicator light in the instrument cluster or by a backup tone if the warning light is not working. See the *Instrument Cluster* chapter. Routine maintenance of the airbag is not required.

A difficulty with the system is indicated by one or more of the following:



- The readiness light will either flash or stay lit.
- The readiness light will not illuminate immediately after the ignition is turned on.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem or light are repaired.

If any of these things happen, even intermittently, have the supplemental restraint system serviced at an authorized dealer immediately. Unless serviced, the system may not function properly in the event of a crash.

## 54 Supplementary Restraints System

The safety belt pretensioners and the airbag supplemental restraint system are designed to activate when the vehicle sustains longitudinal or lateral deceleration sufficient to cause the restraints control module to deploy a safety device or when a certain likelihood of a rollover event is detected by the rollover sensor.

The fact that the safety belt pretensioners or airbags did not activate for both front seat occupants in a crash does not mean that something is wrong with the system. Rather, it means the restraints control module determined the accident conditions (such as crash severity, belt usage) were not appropriate to activate these safety devices.

- Front airbags are designed to activate only in frontal and near-frontal crashes (not rollovers, side impacts or rear impacts) unless the crash causes sufficient longitudinal deceleration.
- The safety belt pretensioners are designed to activate in frontal, near-frontal and side crashes, and in rollovers.
- Side airbags are designed to inflate in side-impact crashes, not rollovers, rear impacts, frontal or near-frontal crashes, unless the crash causes sufficient lateral deceleration.
- The Safety Canopy is designed to inflate in certain side impact crashes or rollover events, not in rear impact, frontal or near-frontal crashes, unless the crash causes sufficient lateral deceleration or rollover likelihood.

#### **AIRBAG DISPOSAL**

Contact your authorized dealer as soon as possible. Airbags MUST BE disposed of by qualified personnel.

#### **GENERAL INFORMATION ON RADIO FREQUENCIES**

This device control 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.

**Note:** Changes or modifications not expressly 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 specification were met.

The typical operating range for your transmitter is approximately 33 feet (10 meters). A decrease in operating range could be caused by:

- weather conditions
- nearby radio towers
- structures around the vehicle
- other vehicles parked next to your vehicle.

The radio frequency used by your remote control can also be used by other short distance radio transmissions, for example amateur radios, medical equipment, wireless headphones, remote controls and alarm systems. If the frequencies are jammed, you will not be able to use your remote control. You can lock and unlock the doors with the key.

**Note:** Make sure your vehicle is locked before leaving it unattended.

**Note:** If you are in range, the remote control will operate if you press any button unintentionally.

#### REMOTE CONTROL

## **Integrated Keyhead Transmitters (If Equipped)**



Your vehicle may be equipped with two integrated keyhead transmitters. The key blade is used to start the vehicle and unlock or lock the driver's door from outside the vehicle. The transmitter portion functions as the remote control.

Remote entry receiver certification numbers		
Country	Part Label/Type Approval	
Canada	SIEMENS VDO 5WK4 7899	
	IC: 267T - 5WK47899	
USA	SIEMENS VDO 5WK4 7899	
	FCC ID: KR55WK47899	

## Replacing the Battery

**Note:** Refer to local regulations when disposing of transmitter batteries.

Note: Do not wipe off any grease on the battery terminals or on the

back surface of the circuit board.

Note: Replacing the battery will not delete the transmitter from the

vehicle. The transmitter should operate normally.

The remote control uses one coin-type three-volt lithium battery  ${\rm CR}2032$  or equivalent.

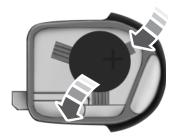
## Integrated Keyhead Transmitter (IKT)



1. Carefully insert a flat object (e.g. a screwdriver) into the recess on the back of the key and remove the key blade.



2. Release the retaining clips with a flat object and separate the two halves of the transmitter.



- 3. Carefully pry out the battery with a flat object. Be careful not to touch the battery contacts or the printed circuit board with the flat object.
- 4. Insert the new battery with the + facing upwards.
- 5. Snap the two halves of the transmitter back together.

#### REPLACING A LOST KEY OR REMOTE CONTROL

You can purchase replacement or additional keys or remote controls from an authorized dealer. A dealer can program the transmitters to your vehicle or you may be able to program them yourself. See the *Security* chapter for information on programming your transmitters.

58 Locks

#### LOCKING AND UNLOCKING

You can use the remote control to lock and unlock the vehicle.

### **Central Locking and Unlocking**

**Note:** Your vehicle can be configured to unlock only the front doors. See your authorized dealer for more details.

- Turn the key toward the front of the vehicle to unlock the front and sliding doors.
- Turn the key toward the rear of the vehicle to lock all doors.

#### **Remote Control**

The lock and unlock buttons work only when the ignition is off. The cargo door button works in any ignition mode.

### Unlocking the Doors (Two-Stage Unlock)



Press the button to unlock the front and sliding doors.

Press the button again within three seconds to unlock all doors.

Press and hold both the lock and unlock buttons on the remote control for four seconds to disable or enable two-stage unlocking. Disabling two-stage unlocking allows all vehicle doors to unlock with one press of the button. The turn signals will flash twice to indicate the unlocking mode was changed.

#### Locking the Doors



Press and release to lock all the doors. If all doors are closed the turn signal lamps will flash twice.

## **Unlocking Cargo Doors**



Press the button to unlock the cargo doors. Press again within three seconds to unlock all the vehicle doors.

Make sure that the cargo doors are closed and latched before driving your vehicle. Unlatched cargo doors may cause objects to fall out.

Locks 59

## **Illuminated Entry**

The interior lamps illuminate when the remote entry system is used to unlock the doors.

The illuminated entry system will turn off the interior lights if:

- the ignition switch is turned to the on position, or
- the remote transmitter lock control is pressed, or
- after 25 seconds of illumination.

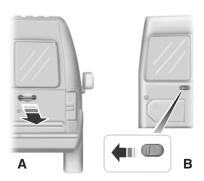
The dome lamp control (if equipped) must not be set to the off position for the illuminated entry system to operate.

The inside lights will not turn off if:

- they have been turned on with the dome lamp control, or
- any door is open.

#### **DUAL REAR DOORS**

Open the right hand door first from either the outside (A) or inside (B) the vehicle.



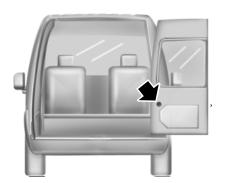
60 Locks



Open the left hand door second by squeezing the handle to unlatch the door and pulling it open.

**Note:** The dual rear doors should be closed before driving your vehicle. Leaving the doors open could cause serious damage to them and their components. The left door must be closed first.

## **Opening the Doors Fully**



Push the yellow button located on the door and swing it open. The check arms will automatically re-engage when the doors are closed.

## **OPENING THE SLIDING DOOR**

**Note:** The right-hand sliding door is inhibited from opening fully when the fuel filler flap is unlocked and open.

#### SECURILOCK® PASSIVE ANTI-THEFT SYSTEM (IF EQUIPPED)

**Note:** The system is not compatible with non-Ford aftermarket remote start systems. Use of these systems may result in vehicle starting problems and a loss of security protection.

**Note:** Metallic objects, electronic devices or a second coded key on the same key chain may cause vehicle starting issues if they are too close to the key when starting the engine. Prevent these objects from touching the coded key while starting the engine. Switch the ignition off, move all objects on the key chain away from the coded key and restart the engine if a problem occurs.

**Note:** Do not leave a duplicate coded key in the vehicle. Always take your keys and lock all doors when leaving the vehicle.

The system is an engine immobilization system. It is designed to help prevent the engine from being started unless a coded key programmed to your vehicle is used. Using the wrong key may prevent the engine from starting.

### **Automatic Arming**

Your vehicle arms immediately after you switch the ignition off.

#### **Anti-Theft Indicator**

The anti-theft indicator is located in the instrument cluster.



- When the ignition is off, the indicator will flash once every two seconds to indicate the SecuriLock system is functioning as a theft deterrent.
- When the ignition is on, the indicator will glow for three seconds, then turn off to indicate normal system functionality.

If a problem occurs with the SecuriLock system, the indicator will flash rapidly or glow steadily when the ignition is on. If this occurs, switch the ignition off then back on to make sure there was no electronic interference with the programmed key. If your vehicle does not start, try to start it with the second programmed key and if successful contact your authorized dealership for key replacement. If the indicator still flashes rapidly or glows steadily, your vehicle will not start. Contact your authorized dealer as soon as possible for service.

## **Automatic Disarming**

Your vehicle disarms when you switch the ignition on with a coded key.

#### **Replacement Keys**

If your keys are lost or stolen and you don't have an extra coded key, you will need to have your vehicle towed to an authorized dealer. The key codes need to be erased from your vehicle and new coded keys will need to be programmed.

Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. See your authorized dealer to purchase additional spare or replacement keys.

#### **Programming Spare Keys**

Note: A maximum of eight keys can be coded to your vehicle.

You can program your own coded keys to your vehicle.

You must have two previously programmed coded keys and the new unprogrammed key readily accessible. See your authorized dealer to have the spare key programmed if two previously programmed coded keys are not available.

The process for programming SecuriLock® keys is independent of the process for programming remote entry transmitters. If your vehicle is equipped with SecuriLock® and remote entry, you must perform both learning procedures in order to program both the immobilizer and remote locking functions of the key fob.

Read and understand the entire procedure before you begin.

- 1. Insert a previously programmed coded key into the ignition.
- 2. Turn the ignition from off to on. Keep the ignition on for at least one second, but no more than 10 seconds.
- 3. Turn the ignition off.

- 4. Remove the previously programmed coded key from the ignition.
- 5. After three seconds but within 10 seconds of removing the previously programmed coded key, insert the other previously programmed coded key into the ignition.
- 6. Turn the ignition from off on. Keep the ignition on for at least one second but not more than 10 seconds.
- 7. Turn the ignition off.
- 8. Remove the previously programmed coded key from the ignition.
- 9. After three seconds but within 20 seconds of removing the previously programmed coded key, insert the unprogrammed key into the ignition.
- 10. Turn the ignition from off to on. Keep the ignition on for at least one second, but no more than 10 seconds.
- 11. Your new, unprogrammed key is now programmed.

If the key has been successfully programmed it will start the vehicle's engine and the theft indicator light will illuminate for three seconds and then go out.

If the key was not successfully programmed, it will not start your vehicle's engine and the theft indicator light will flash on and off, or stay on for more than three seconds. If failure repeats, bring your vehicle to your authorized dealer to have the new key programmed.

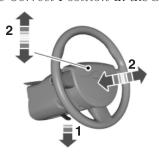
To program an additional new unprogrammed key, repeat this procedure from Step 1 for each additional key.

#### **ADJUSTING THE STEERING WHEEL**



**WARNING:** Do not adjust the steering wheel when your vehicle is moving.

**Note:** Make sure that you are sitting in the correct position. See Sitting in the Correct Position in the Seats chapter.



- 1. Unlock the steering column.
- 2. Adjust the steering wheel to the desired position.



3. Lock the steering column.

## **AUDIO CONTROL (IF EQUIPPED)**

### Volume



Press to increase or decrease the volume.

## Seek, Next or Previous



Press the seek button to:

- tune the radio to the next or previous stored preset
- play the next or previous track.

Press and hold the seek button to:

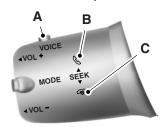
- tune the radio to the next station up or down the frequency band
- seek through a track.

#### Mode



Press to select the audio source.

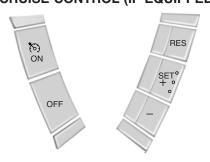
## **VOICE CONTROL (IF EQUIPPED)**



- A. Voice recognition
- B. Receive a call
- C. End a call

See the SYNC chapter.

## **CRUISE CONTROL (IF EQUIPPED)**



See the Cruise Control chapter.

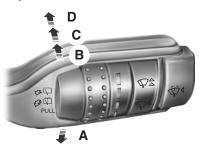
#### **WINDSHIELD WIPERS**

**Note:** Fully defrost the windshield before switching on the windshield wipers.

**Note:** Make sure the windshield wipers are switched off before entering car wash.

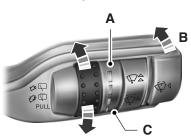
**Note:** Clean the windshield and wiper blades if they begin to leave streaks or smears. If that does not resolve the issue, install new wiper blades.

**Note:** Do not operate the wipers on a dry windshield. This may scratch the glass, damage the wiper blades or cause the wiper motor to burn out. Always use the windshield washer before wiping a dry windshield.



- A. Single wipe
- B. Intermittent wipe
- C. Normal wipe
- D. High-speed wipe

## **Intermittent Wipe**



- A. Shortest wipe interval
- B. Intermittent wipe
- C. Longest wipe interval

Use the rotary control to adjust the intermittent wipe interval.

#### **WINDSHIELD WASHERS**

**Note:** Do not operate the washers when the washer reservoir is empty. This may cause the washer pump to overheat.



The washer will spray for as long as the lever is pressed in. After you release the lever, the wipers will operate for a short time.

## REAR WINDOW WIPER AND WASHER (IF EQUIPPED)

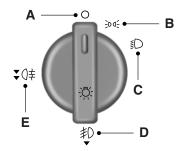


Pull the lever toward you for intermittent wiping.

Pull the lever past the intermittent position to operate the washer. The wiper will operate for a short time and will activate once more after pausing to clear the windshield.

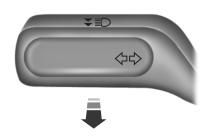
When you select reverse gear, the rear wiper will switch on to intermittent if the front wipers are activated.

#### **LIGHTING CONTROL**



- A. Off
- B. Parking lamps, instrument panel lamps, license plate lamps and tail lamps
- C. Headlamps
- D. Refer to  $Front\ Fog\ Lamps$  if equipped.
- E. Refer to *Rear Fog Lamp* if equipped.

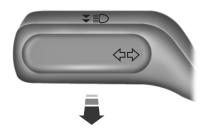
## **High Beams**



With the head lamps turn on:

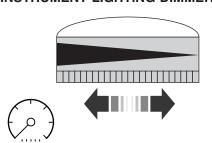
- Pull the lever fully past the detent to switch the high beams on.
- Pull the lever fully again to switch the high beams off.

## **Headlamp Flasher**



•Pull toward you slightly to activate and release to deactivate.

#### **INSTRUMENT LIGHTING DIMMER**



Use to adjust the brightness of the instrument panel and all applicable switches in the vehicle during headlamp and parking lamp operation.

Move the control from left to right to increase the brightness. Move the control from right to left to reduce the brightness.

## **DAYTIME RUNNING LAMPS (IF EQUIPPED)**

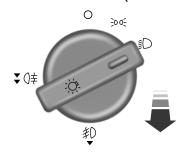
**WARNING:** Always remember to turn on your headlamps at dusk or during inclement weather. The Daytime Running Lamp (DRL) system does not activate the tail lamps and generally may not provide adequate lighting during these conditions. Failure to activate your headlamps under these conditions may result in a collision.

The system switches the headlamps on with a reduced output.

To switch the system on:

- 1. Switch the ignition on.
- 2. Switch the lighting control to the off position.

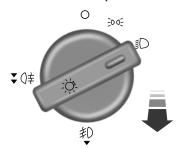
## FRONT FOG LAMPS (IF EQUIPPED)



The headlamp control operates the front fog lamps. You can switch the front fog lamps on when the lighting control is in any position except off.

Pull the headlamp control towards you until you feel the first detent to turn the front fog lamps on. The front fog lamp indicator light will illuminate.

# **REAR FOG LAMP (IF EQUIPPED)**



The headlamp control operates the rear fog lamp. You can switch the rear fog lamp on when the lighting control is in any position except off.

Pull the headlamp control towards you until you feel the second detent to turn the rear fog lamp on. The rear fog lamp indicator light will illuminate.

**Note:** Do not use the rear fog lamp when it is raining or snowing and visibility is more than 165 feet (50 m).

#### **DIRECTION INDICATORS**



Push the lever up or down to use the direction indicators.

**Note:** Tap the lever up or down to make the direction indicators flash three times to indicate a lane change.

#### **INTERIOR LAMPS**

## **Dome Lamp**



The dome lamp will illuminate when:

- the doors are closed and the switch is in the right position.
- the switch is in the middle position and any door is open.

When the dome lamp switch is in the left position, it will not illuminate when you open the doors.

## **Theater Dimming**

If the dome lamp switch is in the middle position and you open and close a door, the dome lamp will dim about 20 seconds after you close the door.

## Reading Lamps (If Equipped)



The reading lamps are operated by separate on/off controls.

## **Approach Lamps (If Equipped)**

The approach lamps will turn on and off automatically when you open and close the doors. If you unlock the doors with the remote control, they will come on. They will turn off automatically after a short period of time.

## **POWER WINDOWS (IF EQUIPPED)**

**WARNING:** Do not leave children unattended in your vehicle and do not let children play with the power windows. They may seriously injure themselves.

**WARNING:** When closing the power windows, you should verify they are free of obstructions and make sure that children and pets are not in the proximity of the window openings.

The window controls are located on the center console near the cupholders.



Press the switch to open the window.

Lift the switch to close the window.

## **One-Touch Down (If Equipped)**

Press the switch fully and release it. Press again or lift it to stop the window.

#### **EXTERIOR MIRRORS**

# **Power Exterior Mirrors (If Equipped)**



**WARNING:** Do not adjust the mirror while your vehicle is in motion.



- A. Left mirror
- B. Off
- C. Right mirror

To adjust your mirrors:

- 1. Select the mirror you want to adjust.
- 2. Move the control in the direction you want to tilt the mirror.
- 3. Return the control to the center position to lock mirrors in place.

#### **Fold-Away Exterior Mirrors**

Push the mirror toward the door window glass. Make sure that you fully engage the mirror in its support when returning it to its original position.

#### **Heated Exterior Mirror (If Equipped)**

The heated exterior mirrors switch on with the heated rear window. See *Heated Windows and Mirrors* in the *Climate Control* chapter.

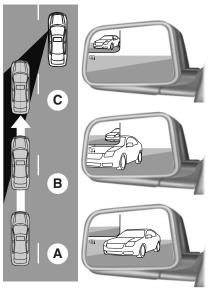
#### **Integrated Blind Spot Mirrors**



**WARNING:** Objects in the blind spot mirror are closer than they appear.

Blind spot mirrors have an integrated convex mirror built into the upper outboard corner of the exterior mirrors. They are designed to assist you by increasing visibility along the side of your vehicle.

Check the main mirror first before a lane change, then check the blind spot mirror. If no vehicles are present in the blind spot mirror and the traffic in the adjacent lane is at a safe distance, signal that you are going to change lanes. Glance over your shoulder to verify traffic is clear, and carefully change lanes.



The image of the approaching vehicle is small and near the inboard edge of the main mirror when it is at a distance. The image becomes larger and begins to move outboard across the main mirror as the vehicle approaches (A). The image will transition from the main mirror and begin to appear in the blind spot mirror as the vehicle approaches (B). The vehicle will transition to your peripheral field of view as it leaves the blind spot mirror (C).

#### **INTERIOR MIRROR**



**WARNING:** Do not adjust the mirror when your vehicle is moving.

**Note:** Do not clean the housing or glass of any mirror with harsh abrasives, fuel or other petroleum or ammonia based cleaning products.

You can adjust the interior mirror to your preference. Some mirrors also have a second pivot point. This lets you move the mirror head up or down and from side to side.

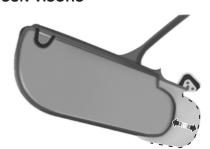
Pull the tab below the mirror toward you to reduce glare at night.

# **Auto-Dimming Mirror (If Equipped)**

**Note:** Do not block the sensors on the front and back of the mirror. Mirror performance may be affected. A rear center passenger or raised rear center head restraint may also block light from reaching the sensor.

The mirror will dim automatically to reduce glare when bright lights are detected from behind your vehicle. It will automatically return to normal reflection when you select reverse gear to make sure you have a clear view when backing up.

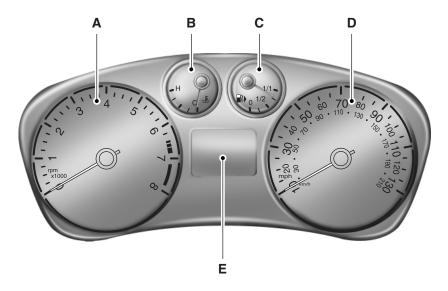
## **SUN VISORS**



Rotate the visor toward the side window and extend it rearward for extra sunlight coverage.

# **GAUGES**

Cluster shown in standard measure – metric clusters similar.



- A. Tachometer
- B. Engine coolant temperature gauge
- C. Fuel gauge
- D. Speedometer
- E. Information display. See  $Information\ displays$  for more information.

## **Engine Coolant Temperature Gauge**

Shows the temperature of the engine coolant. At normal operating temperature, the needle will remain in the center section. If the needle enters the red section, the engine is overheating. Stop the engine, switch the ignition off and determine the cause once the engine has cooled down.

**Note:** Do not restart the engine until the cause of overheating has been resolved.



**WARNING:** Never remove the coolant reservoir cap while the engine is running or hot.

## **Fuel Gauge**

Indicates approximately how much fuel is left in the fuel tank (when the ignition is on). The fuel gauge may vary slightly when the vehicle is in motion or on a grade. The fuel icon and arrow indicates which side of the vehicle the fuel filler door is located.

#### **Information Display**

#### Odometer

Located in the bottom of the information display Registers the accumulated distance your vehicle has travelled.

#### **Trip Computer**

See Trip Computer in Information Displays.

#### WARNING LAMPS AND INDICATORS

The following warning lamps and indicators will alert you to a vehicle condition that may become serious. Some lamps will illuminate when you start your vehicle to make sure they work. If any lamps remain on after starting your vehicle, refer to the respective system warning lamp for further information.

**Note:** Some warning indicators appear in the information display and function the same as a warning lamp but do not display when you start your vehicle.

#### Airbag - Front



If it fails to illuminate on startup, continues to flash or remains on, it indicates a malfunction. Have the system checked by your authorized dealer. A chime will sound when there is a malfunction

in the indicator light.

## Anti-Lock Braking System



If it illuminates when you are driving, this indicates a malfunction. You will continue to have the normal braking system (without ABS) unless the brake warning lamp is also illuminated. Have the system checked by your authorized dealer.

#### **Anti-Theft System**



Flashes when the SecuriLock® passive Anti-Theft system has been activated.

## **Brake System**



(1) (2) It will illuminate when the parking brake is engaged and the BRAKE ignition is on.

If it illuminates when you are driving, check that the parking brake is not engaged. If the parking brake is not engaged, this indicates low brake fluid level or a brake system malfunction. Have the system checked immediately by your authorized dealer.

**WARNING:** Driving a vehicle with the brake system warning light on is dangerous. A significant decrease in braking performance may occur. It will take you longer to stop the vehicle. Have the vehicle checked by your authorized dealer as soon as possible. Driving extended distances with the parking brake engaged can cause brake failure and the risk of personal injury.

#### Charging



Illuminates 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 your authorized dealer as soon as

possible. This indicates a problem with the electrical system or a related component.

# **Cruise Control (if equipped)**



It will illuminate when you switch this feature on.

#### **Direction Indicator**



Illuminates when the left or right turn signal or the hazard warning flasher is turned on. If the indicators stay on or flash faster, check for a burned out bulb.

#### Door Ajar



Displays when the ignition is on and any door is not completely closed.

# **Engine Oil**



If it illuminates with the engine running or when you are driving, this indicates a malfunction. Stop your vehicle as soon as it is safe to do so and switch the engine off. Check the engine oil level.

Note: Do not resume your journey if it illuminates despite the level being correct. Have the system checked by your authorized dealer.

#### **Fasten Safety Belt**



It will illuminate and a chime will sound to remind you to fasten your safety belt.

#### Fog Lamps – Front (if equipped)



It will illuminate when you switch the front fog lamps on.

#### Fog Lamps - Rear



It will illuminate when you switch the rear fog lamps on.

#### **High Beam**



It will illuminate when the headlamp high beam is switched on. It will flash when you use the headlamp flasher.

#### Low Fuel Level



It will illuminate when the fuel level is low or near empty. Refuel as soon as possible.

# **Low Tire Pressure Warning**



It illuminates when your tire pressure is low. If the lamp remains on with the engine running or when driving, check your tire pressure as soon as possible.

The lamp also illuminates momentarily when you switch the ignition on to confirm the lamp is functional. If it does not illuminate when you switch the ignition on, or begins to flash at any time, have the system checked by your authorized dealer.

## Overdrive Cancel (if equipped)



O/D It will illuminate when the overdrive function of the transmission has been turned off.

## **Parking Lamps**



It will illuminate when you switch the parking lamps on.

#### **Powertrain Malfunction**



Illuminates when a powertrain fault has been detected. Contact your authorized dealer as soon as possible.

# **Service Engine Soon**



If the service engine soon indicator light stays illuminated after the engine is started, it indicates that the On Board Diagnostics system (OBD-II) has detected a malfunction of the vehicle

emissions control system. Refer to *On board diagnostics (OBD-II)* in the *Fuel and Refueling* chapter for more information about having your vehicle serviced.

If the light is blinking, engine misfire is occurring which could damage your catalytic converter. Drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle serviced immediately.

**Note:** Under engine misfire conditions, excessive exhaust temperatures could damage the catalytic converter or other vehicle components.

The service engine soon indicator light illuminates when the ignition is first turned on prior to engine start to check the bulb and to indicate whether the vehicle is ready for Inspection/Maintenance (I/M) testing.

Normally, the service engine soon light will stay on until the engine is cranked, then turn itself off if no malfunctions are present. However, if after 15 seconds the service engine soon light blinks eight times, it means that the vehicle is not ready for I/M testing. See Readiness for Inspection/Maintenance (I/M) testing in the Fuel and Refueling chapter.

## Stability Control System / Traction Control System (if equipped)



It will illuminate when you switch the ignition on to confirm it is functional. If it remains illuminated or does not illuminate when you switch the ignition on, this indicates a malfunction.

During a malfunction the system will switch off. Have the system checked by your authorized dealer.

#### **AUDIBLE WARNINGS AND INDICATORS**

**Key In Ignition Warning Chime:** Sounds when the key is left in the ignition in the off or accessory position and the driver's door is opened.

**Park Warning Chime:** Sounds when the transmission is not in park, the driver's door is opened and the ignition is off or in accessory position.

**Headlamps On Warning Chime:** Sounds when the headlamps or parking lamps are on and the driver's door is opened.

**Seatbelt Warning Chime:** The seatbelt chime sounds when the driver's seatbelt is not fastened. When the ignition is in run and the seatbelt is not fastened, the chime will chime for six seconds. The chime will turn off if the driver's seatbelt is fastened or if the ignition returns to off or accessory position.

**Belt-Minder® Warning Chime:** This chime periodically sounds to remind the driver and/or passenger that their seatbelt is unbuckled. The seatbelt warning lamp in the cluster will also illuminate once vehicle speed has exceeded 6 mph (10 km/h).

**Airbag Secondary Warning Chime:** This chime sounds to indicate a fault with the supplemental restraint system in the event that the airbag readiness warning light is not operating.

**Door Ajar Warning Chime:** The door ajar reminder chime informs the driver that one or more doors are open while the ignition is in the run position.

# TRIP COMPUTER

**Note:** The information display will remain on for several minutes after you switch off the ignition.





- A. Distance to empty
- B. Trip odometer
- C. Odometer
- D. Reset button

If SHON or SHIP ON is displayed, the vehicle shipping mode is switched on. Have your dealer switch off the vehicle shipping mode.

#### Distance to F

Indicates the approximate distance the vehicle will travel on the fuel remaining in the tank. Changes in driving pattern may cause the value to vary.

## **Trip Odometer**

Registers the distance of individual journeys.

#### **Odometer**

Registers the total accumulated distance for the lifetime of the vehicle. This value cannot be reset.

# **Resetting the Trip Computer**

Press and hold button (4) until the trip odometer resets.

#### **GENERAL INFORMATION**

## **Radio Frequencies and Reception Factors**

AM and FM frequencies are established by the Federal Communications Commission (FCC) and the Canadian Radio and Telecommunications Commission (CRTC). Those frequencies are:

AM: 530, 540–1700, 1710 kHz FM: 87.9–107.7, 107.9 MHz

Radio reception factors	
Distance and	The further you travel from an FM station,
strength	the weaker the signal and the weaker the
	reception.
Terrain	Hills, mountains, tall buildings, bridges,
	tunnels, freeway overpasses, parking garages,
	dense tree foliage and thunderstorms can
	interfere with the reception.
Station overload	When you pass a ground-based broadcast
	repeating tower, a stronger signal may
	overtake a weaker one and result in the audio
	system muting.

#### **CD and CD Player Information**

**Note:** CD units play commercially pressed 4.75-inch (12 centimeter) audio compact discs only. Due to technical incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford CD players.

**Note:** Do not insert CDs with homemade paper (adhesive) labels into the CD player as the label may peel and cause the CD to become jammed. You should use a permanent felt tip marker rather than adhesive labels on your homemade CDs. Ballpoint pens may damage CDs. Please contact your authorized dealer for further information.

**Note:** Do not use any irregularly shaped discs or discs with a scratch protection film attached.

Always handle discs by their edges only. Clean the disc with an approved CD cleaner only. Wipe it from the center of the disc toward the edge. Do not clean in a circular motion.

Do not expose discs to direct sunlight or heat sources for extended periods.

#### MP3 Track and Folder Structure

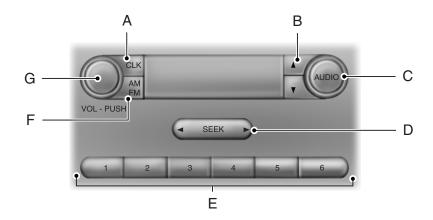
Audio systems capable of recognizing and playing MP3 individual tracks and folder structures work as follows:

- There are two different modes for MP3 disc playback: MP3 track mode (system default) and MP3 folder mode.
- MP3 track mode ignores any folder structure on the MP3 disc. The
  player numbers each MP3 track on the disc (noted by the .mp3 file
  extension) from T001 to a maximum of T255. Note: The maximum
  number of playable MP3 files may be less depending on the structure
  of the CD and exact model of radio present.
- MP3 folder mode represents a folder structure consisting of one level of folders. The CD player numbers all MP3 tracks on the disc (noted by the .mp3 file extension) and all folders containing MP3 files, from F001 (folder) T001 (track) to F253 T255.
- Creating discs with only one level of folders helps with navigation through the disc files.

If you are burning your own MP3 discs, it is important to understand how the system reads the structures you create. While various files may be present, (files with extensions other than mp3), only files with the .mp3 extension are played; other files are ignored by the system. This enables you to use the same MP3 disc for a variety of tasks on your work computer, home computer and your in-vehicle system.

In track mode, the system displays and plays the structure as if it were only one level deep (all .mp3 files play, regardless of being in a specific folder). In folder mode, the system only plays the .mp3 files in the current folder.

#### AM/FM



**WARNING:** Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

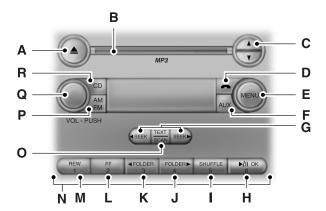
- A. **CLK:** Press this button to switch the display between the clock and radio frequency. To set the time:
- 1. Press and hold **CLK** until the hours start to flash.
- 2. Press the arrow buttons to adjust the hours. Repeat Steps 1 and 2 to set the minutes.
- 3. Press **CLK** again to exit clock mode.
- B. **Tune:** Press these arrow buttons to manually search through the radio frequency band. Press and hold for a fast search. In AUDIO mode, press the buttons to adjust different sound settings.
- C. **AUDIO:** Press this button to access settings for Treble, Middle, Bass, Fade and Balance.
- D. **SEEK:** Press this button to go to the previous or next strong station on the frequency band.

- E. **Memory presets:** Store your favorite radio stations. To store a radio station, tune to the station, then press and hold a preset button until sound returns.
- F. **AM/FM:** Press this button to select a frequency band and access media through the auxiliary input jack.

## G. VOL-PUSH:

- Press this button to switch the system off and on.
- Turn the control to adjust the volume.

#### AM/FM/CD WITH SYNC®



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

A. **Eject:** Press this button to eject a CD.

B. **CD slot:** Insert a CD.

C. **Tune:** Press this button to manually search through the radio frequency band. Press and hold for a fast search.

- D. **Phone:** Press this button to access the phone features of the SYNC® system. See the SYNC® chapter for more information.
- E. **MENU:** Press this button to access different audio system features.
- If your vehicle is equipped with satellite radio, you can access different menus by pressing **OK**.
- Set the time by pressing MENU until SET HOURS or SET MINUTES appears and using the arrow buttons to adjust the time.
- Set the strongest stations on the radio frequency by pressing MENU until AUTOSET appears. AUTOSET does not override your original presets.
- SPEEDVOL (speed compensated volume) allows you to adjust radio volume to compensate for noise levels when vehicle speed increases.
- **Track/Folder** is only available on MP3 files when in CD mode. In track mode, pressing the **SEEK** arrows allows you to scroll through all the tracks on the disc. In folder mode, pressing the **SEEK** arrows allows you to scroll through all the tracks within the selected folder. Press the **FOLDER** buttons to access other folders.
- **COMPRESS** (Compression) is only available in CD and MP3 modes. Switching compression on brings the soft and loud passages together for a more consistent listening level. Use the **SEEK** buttons and up and down arrow buttons to switch it on and off.
- F. **AUX:** Press this button to access the media features of the SYNC® system. See the *SYNC*® chapter for more information.

#### G. SEEK:

- In radio mode, press and release these buttons to go to the next (or previous) preset radio station or disc track.
- In CD and MP3 modes, press these buttons to select the next (or previous) track, or press and hold to advance (or reverse) within the same track.

#### H. Play, Pause and OK:

- Play and Pause allow you to play or pause a track when listening to a CD.
- **OK** allows you to confirm commands with phone and media features of the SYNC system. See the SYNC® chapter for more information.
- I. **SHUFFLE:** Play music on the selected CD or MP3 folder in random order.
- J. Folder: Press this button to access the next folder on an MP3 disc.
- K. **Folder:** Press this button to access the previous folder on an MP3 disc.

- L. FF: Press this button to manually fast forward in a CD track or MP3 file.
- M. REW: Press this button to manually rewind in a CD track or MP3 file.
- N. **Memory presets:** Store your favorite radio stations. To store a radio station, tune to the station, then press and hold a preset button until sound returns.

#### O. TEXT/SCAN:

- In radio, CD and MP3 modes, press and hold to hear a brief sampling of radio stations, CD tracks or MP3 files.
- In CD and MP3 modes, press and release to display track title, artist name and disc title.

**Note:** In text mode, sometimes the display requires additional text to show. When the </>
/ > indicator is on, press TEXT and then use the SEEK buttons to view the additional display text.

P. **AM/FM:** Press this button to select a frequency band.

#### Q. VOL-PUSH:

- Press this button to switch the system off and on.
- Turn it to adjust the volume.
- R. CD: Press this button to enter CD or MP3 mode.

#### **AUXILIARY INPUT JACK**

**WARNING:** Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**WARNING:** For safety reasons, do not connect or adjust the settings on your portable music player while your vehicle is moving.

**WARNING:** Store the portable music player in a secure location, such as the center console or the glove box, when your vehicle is moving. Hard objects may become projectiles in a crash or sudden stop, which may increase the risk of serious injury. The audio extension cable must be long enough to allow the portable music player to be safely stored while your vehicle is moving.



The auxiliary input jack allows you to connect and play music from your portable music player through your vehicle speakers. You can use any portable music player designed for use with headphones. Your audio extension cable must have male ½-inch (3.5 millimeter) connectors at each end.

- 1. Switch off the engine, radio and portable music player. Set the parking brake and put the transmission in position  ${\bf P}$ .
- 2. Plug the extension cable from the portable music player into the auxiliary input jack.
- 3. Switch the radio on. Select either a tuned FM station or a CD.
- 4. Adjust the volume as desired.
- 5. Switch your portable music player on and adjust its volume to half its maximum level.

- 6. If your vehicle is not equipped with a CD player, press AM/FM until IN appears in the display. If your vehicle is equipped with a CD player, press AUX until LINE or LINE IN appears in the display. You should hear music from your device even if it is low.
- 7. Adjust the volume on your portable music player until it reaches the volume level of the FM station or CD. Do this by switching back and forth between the AUX and FM or CD controls (if equipped with a CD player) or switching back and forth between IN and FM (if not equipped with a CD player).

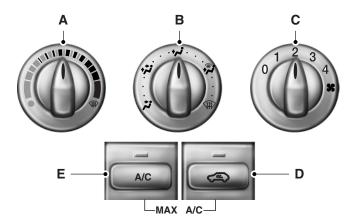
# **USB PORT (IF EQUIPPED)**

**WARNING:** Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.



The USB port allows you to plug in media playing devices, memory sticks and charge devices (if supported). See the *SYNC* chapter for more information.

#### MANUAL CLIMATE CONTROL



- A. **Temperature control:** Controls the temperature of the air circulated in your vehicle. Adjust to select the desired temperature.
- B. **Air distribution control:** Adjust to select the desired air distribution.
- Select to distribute air through the instrument panel air vents.
- Select to distribute air through the instrument panel and footwell air vents.
- Select to distribute air through the footwell air vents.
- Select to distribute air through the windshield and footwell air vents.
- Select to distribute air through the windshield air vents. You can also use this setting to defog and clear the windshield of a thin covering of ice. You can also increase the temperature and fan speed to improve clearing.
- C. **Fan speed control:** Controls the volume of air circulated in your vehicle. Adjust to select the desired fan speed or switch off. If you switch the fan off, the windshield may fog up.

- D. **Recirculated air:** Press to switch between outside air and recirculated air. When you select recirculated air, the button illuminates and the air currently in the passenger compartment recirculates. This can reduce the time needed to cool the interior and reduce unwanted odors from entering your vehicle.
- E. **Air conditioning:** Press to switch the air conditioning off and on. Air conditioning cools your vehicle using outside air. To improve air conditioning when starting your vehicle, drive with the windows slightly open for two to three minutes.

If you select recirculated air and A/C, the system distributes recirculated air through the instrument panel air vents. This mode is more economical and efficient than normal air conditioning.

## **AUXILIARY CLIMATE CONTROL (IF EQUIPPED)**



Your auxiliary climate controls are located on the rear of the center console and can be used when the front climate control system is on. The temperature is set by the front controls. Use the rear control to adjust the fan speed or turn the auxiliary controls off (O).



In order to supply heat or cool air to the auxiliary climate unit, set the front airflow distribution control to instrument panel/footwell, footwell or footwell/defrost.



Some vehicles are equipped with an A/C button which controls the rear fan. Press to switch the rear fan off and on.

#### HINTS ON CONTROLLING THE INTERIOR CLIMATE

#### **General Hints**

**Note:** Prolonged use of recirculated air may cause the windows to fog up.

**Note:** A small amount of air may be felt from the footwell air vents regardless of the air distribution setting.

**Note:** To reduce humidity build-up inside your vehicle, do not drive with the system switched off or with recirculated air always switched on.

**Note:** Do not place objects under the front seats as this may interfere with the airflow to the rear seats.

**Note:** Remove any snow, ice or leaves from the air intake area at the base of the windshield.

**Note:** To reduce fogging of the windshield during humid weather, adjust the air distribution control to the windshield air vents position. Increase the temperature and fan speed to improve clearing if required.

## **Heating the Interior Quickly**

1	Adjust the fan speed to the highest speed setting.
2	Adjust the temperature control to the highest setting.
3	Adjust the air distribution control to the footwell air vents position.

## **Recommended Settings for Heating**

1	Adjust the fan speed to the second speed setting.	
2	Adjust the temperature control to the midway point of the hot settings.	
3	Adjust the air distribution control to the footwell and windshield air vents position.	

# **Cooling the Interior Quickly**

1	Adjust the fan speed to the highest speed setting.
2	Adjust the temperature control to <b>MAX A/C.</b>
3	Adjust the air distribution control to the instrument panel air vents position.

# **Recommended Settings for Cooling**

1	Adjust the fan speed to the second speed setting.
2	Adjust the temperature control to the midway point of the cold settings.
3	Adjust the air distribution control to the instrument panel air vents position.

# **Vehicle Stationary for Extended Periods During Extreme High Ambient Temperatures**

1	Apply the parking brake.
2	Move the transmission selector lever to position <b>P.</b>
3	Adjust the temperature control to <b>MAX A/C</b> .
4	Adjust the fan speed to the lowest speed setting.

# **Side Window Defogging in Cold Weather**

1	Adjust the air distribution control to the instrument panel and footwell air vents positions.
2	Press A/C.
3	Adjust the temperature control to the desired setting.
4	Adjust the fan speed to the highest setting.
5	Direct the instrument panel side air vents toward the side windows.
	wildows.
6	Close the instrument panel vents.

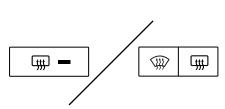
# Maximum Cooling Performance in Instrument Panel or Instrument Panel and Footwell Positions

1	Adjust the temperature control to the lowest setting.
2	Press the A/C and recirculated air buttons.
3	Adjust the fan speed to the highest setting initially and then
	adjust it to suit the desired comfort level.

## **HEATED WINDOWS AND MIRRORS (IF EQUIPPED)**

#### **Heated Rear Window**

**Note:** The ignition must be switched on to use this feature.



Press the button to clear the rear window of thin ice and fog. Press the button again to switch it off. It switches off automatically after a predetermined time, or when you switch the ignition off. If your vehicle is equipped with heated mirrors, this button activates them.

Do not use razor blades or other sharp objects to clean the inside of the rear window or to remove decals from the inside of the rear window. This may cause damage to the heated grid lines. Your warranty does not cover this damage.

#### **Heated Exterior Mirror**

**Note:** Do not remove ice from the mirrors with a scraper or attempt to readjust the mirror glass that has frozen in place. These actions could cause damage to the glass and mirrors.

**Note:** Do not clean the housing or glass of any mirror with harsh abrasives, fuel or other petroleum-based cleaning products.

Both mirrors heat to remove ice, mist and fog when you turn the rear window defroster on.

## **Heated Windshield**

Note: The ignition must be switched on to use this feature.

**Note:** During start-up, the windshield may have a shimmering appearance. This is normal and only lasts for about one minute.



The heated windshield control is located on the instrument panel. To switch it off and on, push the button.

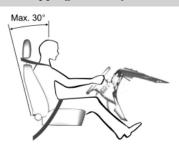
The heated windshield turns off automatically after a predetermined amount of time, if a low battery condition is detected or when the engine is turned off.

#### SITTING IN THE CORRECT POSITION

**WARNING:** Sitting improperly out of position or with the seat back reclined too far can take off weight from the seat cushion and affect the decision of the passenger sensing system, resulting in serious injury or death in a crash. Always sit upright against your seat back, with your feet on the floor.

**WARNING:** Do not recline the seat back as this can cause the occupant to slide under the seat's safety belt, resulting in severe personal injury in the event of a crash.

**WARNING:** Do not place objects higher than the seat backs to reduce the risk of injury in a crash or during heavy braking or when stopping suddenly.



When you use them properly, the seat, head restraint, safety belt and airbags will provide optimum protection in the event of a crash.

We recommend that you follow these guidelines:

- Do not recline the seat back more than 30 degrees from vertical.
- Sit in an upright position with the base of your spine as far back as possible.
- Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible, remaining comfortable.
- Keep sufficient distance between yourself and the steering wheel. We recommend a minimum of 10 inches (250 millimeters) between your breastbone and the airbag cover.
- Hold the steering wheel with your arms slightly bent.

- Bend your legs slightly so that you can press the pedals fully.
- Position the shoulder strap of the safety belt over the center of your shoulder and position the lap strap tightly across your hips.

Make sure that your driving position is comfortable and that you can maintain full control of your vehicle.

## **HEAD RESTRAINTS**

**WARNING:** To minimize the risk of neck injury in the event of a collision, the driver and passenger occupants should not sit in and/or operate the vehicle, until the head restraint is placed in its proper position. The driver should never adjust the head restraint while the vehicle is in motion.

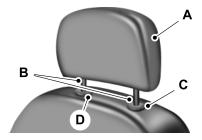
**WARNING:** The adjustable head restraint is a safety device. Whenever possible, it should be installed and properly adjusted when the seat is occupied.



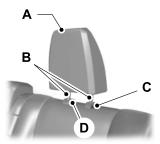
**WARNING:** Install the head restraint properly to minimize the risk of neck injury in the event of a collision.

**Note:** Adjust the seat back to an upright driving position before adjusting any head restraint. Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible, remaining comfortable. For occupants of extremely tall stature, adjust the head restraint to its highest position.

#### **Front Seat Head Restraints**



#### **Rear Seat Outboard Head Restraints**



The head restraints consist of:

- A. An energy absorbing head restraint
- B. Two steel stems
- C. Guide sleeve adjust and release button
- D. Guide sleeve unlock and remove button

#### **Adjusting the Head Restraint**

Raise: Pull up the head restraint.

Lower:

- 1. Press and hold button C.
- 2. Push the head restraint down.

# Remove:

For the front row head restraints, use a push tool, such as a key, to press the unlock and remove button located on the side of the guide sleeve and, at the same time, press the adjust and release button, then pull the head restraint up.

- 1. Pull up the head restraint until it reaches the highest adjustment position.
- 2. Press and hold buttons C and D.
- 3. Pull the head restraint up.

Install: Align the steel stems into the guide sleeves and push the head restraint down until it locks.

# **MANUAL SEATS**



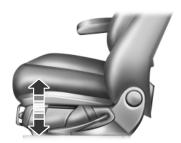
**WARNING:** Never adjust the driver's seat or seat back when the vehicle is moving.



**WARNING:** Rock the seat backward and forward after releasing the lever to make sure that it is fully engaged.



Moving the Seat Backward and Forward



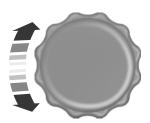
Adjust the Height of the Driver's Seat



**Recline Adjustment** 

**WARNING:** Reclining the seat back can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

#### **Manual Lumbar**



The lumbar control is located on the inboard side of the seat back. Turn the control to adjust your support.

#### **REAR SEATS**

# Folding Down the Rear Seat (if equipped)

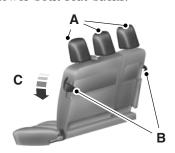
One or both rear seat backs can be folded down to provide additional cargo space.

To lower a single seat back:



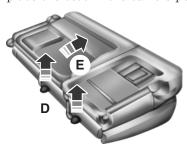
- 1. Remove the head restraint(s). **Note:** Place the head restraint underneath the back of the front seat for storage.
- 2. Pull down the lever on the side of the seat back.
- 3. Push the seat back forward.

To lower both seat backs:



- 1. Remove all head restraints (A).
  - **Note:** Place the head restraint underneath the back of the front seat for storage.
- 2. Pull the levers (B) on the side of the seat back.
- 3. Fold the seat back forward (C).

To place the seat in the tumble position:



- 4. Pull the release straps up (D).
- 5. Fold the seat forwards (E) until the lever is automatically locked and you hear a click.



When raising the seat back(s), make sure the lever is locked and you hear the seat latch into place.

# Returning the seat to the upright position

**WARNING:** Before returning the seat back to its original position, make sure that cargo or any objects are not trapped behind the seat back. After returning the seat back to its original position, pull on the seat back to make sure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden stop or crash.



- 1. Pull down on the locking lever.
- 2. Fold the seat down.
- 3. Raise the seat back.
- 4. Install all head restraints.



5. Make sure that the red indicator is in the locked position (lever down).

#### **AUXILIARY POWER POINTS**

**WARNING:** Do not plug optional electrical accessories into the cigarette lighter socket (if equipped). Improper use of the lighter can cause damage not covered by your warranty, and can result in fire or serious injury.

**Note:** If used when the engine is not running, the battery will discharge. There may be insufficient power to restart your engine.

**Note:** Do not insert objects other than an accessory plug into the power point. This will damage the outlet and blow the fuse.

**Note:** Do not hang any type of accessory or accessory bracket from the plug.

**Note:** Do not use the power point over the vehicle capacity of 12 volts DC 180 watts or a fuse may blow.

**Note:** Do not use the power point for operating a cigarette lighter element.

**Note:** Improper use of the power point can cause damage not covered by your warranty.

**Note:** Always keep the power point caps closed when not in use.

Run the engine for full capacity use of the power point. To prevent the battery from being discharged:

- Do not use the power point longer than necessary when the engine is not running.
- Do not leave devices plugged in overnight or when the vehicle is parked for extended periods.

## Locations

Power points may be found:

- near the transmission shift lever
- on the rear of the center console (if equipped)
- in the rear cargo area (if equipped).

#### **CENTER CONSOLE**

Stow items in the cupholder carefully as items may become loose during hard braking, acceleration or collisions, including hot drinks which may

Available console features include:

- Cupholders
- Storage area
- Power window switches

#### **OVERHEAD CONSOLE**

## **Overhead Storage Shelf**

WARNING: Do not place heavy or hard objects in the overhead storage, which may fall while driving, and could cause serious injury.

Note: Attach the cargo net to the anchors to help secure objects.



The storage shelf above the windshield can be used for storing light objects such as safety jackets, coats, etc.

# 108 Starting and Stopping the Engine

#### **GENERAL INFORMATION**

**WARNING:** Extended idling at high engine speeds can produce very high temperatures in the engine and exhaust system, creating the risk of fire or other damage.

**WARNING:** Do not park, idle, or drive your vehicle on dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, which can start a fire.

**WARNING:** Do not start your vehicle in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine.

**WARNING:** If you smell exhaust fumes inside your vehicle, have your vehicle checked by an authorized dealer immediately. Do not drive if you smell exhaust fumes.

If you disconnect the battery, your vehicle may exhibit some unusual driving characteristics for approximately 5 miles (8 kilometers) after you connect it. This is because the engine management system must realign itself with the engine. You may disregard any unusual driving characteristics during this period.

The powertrain control system meets all Canadian interference-causing equipment standard requirements regulating the impulse electrical field or radio noise.

Do not press the accelerator pedal while starting the engine. If you have difficulty starting the engine, see *Failure to start* later in this section.

## **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

# **IGNITION SWITCH (IF EQUIPPED)**



**0 (Off):** The ignition is off.

**Note:** When you switch the ignition off and leave your vehicle, do not leave your key in the ignition. This could cause your vehicle battery to lose charge.

**I (Accessory):** Allows the electrical accessories, such as the radio, to operate while the engine is not running.

**Note:** Do not leave the ignition key in this position for too long. This could cause your vehicle battery to lose charge.

 ${f II}$  (On): All electrical circuits are operational and the warning lamps and indicators illuminate.

**III (Start):** Cranks the engine.

#### STARTING A GASOLINE ENGINE

When you start your engine, the idle speed increases to warm the engine up. If the engine idle speed does not slow down automatically, have your vehicle checked by an authorized dealer.

Before starting your vehicle, check the following:

- Make sure all occupants have fastened their safety belts.
- Make sure the headlamps and electrical accessories are off.
- Make sure the parking brake is on.
- Move the transmission selector lever to position **P.**
- Switch the ignition on.

**Note:** Do not touch the accelerator pedal.

- 1. Fully press the brake pedal.
- 2. Move the transmission selector lever to position  ${\bf P}$  or  ${\bf N}$ .
- 3. Start the engine. The engine may continue cranking for up to 15 seconds or until it starts.

**Note:** If you cannot start your engine on the first try, wait for a short period of time and try again.

If you have difficulty starting the engine when the temperature is below -13°F (-25°C), press the accelerator pedal slightly and try again.

# 110 Starting and Stopping the Engine

If you cannot start your engine after three attempts, wait 10 seconds, then follow this procedure:

- 1. Fully press the brake pedal.
- 2. Fully press the accelerator pedal and hold it there.
- 3. Move the transmission selector lever to position  $\bf P$  or  $\bf N$ .
- 4. Start the engine.

# **Guarding Against Exhaust Fumes**

**WARNING:** If you smell exhaust fumes inside your vehicle, have this checked immediately. Do not drive your vehicle if you smell exhaust fumes. Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.

# **Important Ventilating Information**

If you stop your vehicle and leave the engine idling for long periods of time, we recommend that you do one of the following:

- Open the windows at least 1 inch (2.5 centimeters).
- Set your climate control to outside air.

# **ENGINE BLOCK HEATER (IF EQUIPPED)**



**WARNING:** Failure to follow engine block heater instructions could result in property damage or physical injury.

**WARNING:** Do not use your heater with ungrounded electrical systems or two-pronged (cheater) adapters. There is a risk of electrical shock.

**Note:** The heater is most effective when outdoor temperatures are below  $0^{\circ}F$  (-18°C).

The heater acts as a starting aid by warming the engine coolant. This allows the climate control system to respond quickly. The equipment includes a heater element (installed in the engine block) and a wire harness. You can connect the system to a grounded 120 volt A/C electrical source.

We recommend that you do the following for safe and correct operation:

- Use a 16-gauge outdoor extension cord that is product certified by Underwriter's Laboratory or Canadian Standards Association. This extension cord must be able to be used outdoors, in cold temperatures, and be clearly marked *Suitable for Use with Outdoor Appliances*. Never use an indoor extension cord outdoors; it could result in an electric shock or become a fire hazard.
- Use as short an extension cord as possible.
- Do not use multiple extension cords.
- Make sure that when in operation, the extension cord plug and the heater cord plug connections are free and clear of water. This could cause an electric shock or fire.
- Make sure your vehicle is parked in a clean area, clear of combustibles.
- Make sure the heater, heater cord and extension cord are firmly connected.
- Check for heat anywhere in the electrical hookup once the system has been operating for approximately 30 minutes.
- Make sure the system is unplugged and properly stowed before driving your vehicle. Make sure the protective cover seals the prongs of the block heater cord plug when not in use.
- Keep plug terminals clean and free of dirt and corrosion.
- Make sure the heater system is checked for proper operation before winter.

# **Using the Engine Block Heater**

Make sure the receptacle terminals are clean and dry prior to use. Clean them with a dry cloth, if necessary.

The heater uses 0.4 to 1.0 kilowatt-hours of energy per hour of use. The system does not have a thermostat. It achieves maximum temperature after approximately three hours of operation. Using the heater longer than three hours does not improve system performance and unnecessarily uses electricity.

#### **SAFETY PRECAUTIONS**



**WARNING:** Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.

**WARNING:** The fuel system may be under pressure. If you hear a hissing sound near the fuel filler inlet, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.



**WARNING:** Automotive fuels can cause serious injury or death if misused or mishandled.

**WARNING:** The flow of fuel through a fuel pump nozzle can produce static electricity, which can cause a fire if fuel is pumped into an ungrounded fuel container.



**WARNING:** Fuel ethanol and gasoline may contain benzene, which is a cancer-causing agent.

**WARNING:** When refueling always shut the engine off and never allow sparks or open flames near the filler neck. Never smoke while refueling. Fuel vapor is extremely hazardous under certain conditions. Care should be taken to avoid inhaling excess fumes.

Observe the following guidelines when handling automotive fuel:

- Extinguish all smoking materials and any open flames before refueling your vehicle.
- Always turn off the vehicle before refueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel, such
  as gasoline, is highly toxic and if swallowed can cause death or
  permanent injury. If fuel is swallowed, call a physician immediately,
  even if no symptoms are immediately apparent. The toxic effects of
  fuel may not be visible for hours.
- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.

- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin or clothing, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking Antabuse or other forms of disulfiram for the treatment of alcoholism. Breathing gasoline vapors, or skin contact could cause an adverse reaction. In sensitive individuals, serious personal injury or sickness may result. If fuel is splashed on the skin, promptly wash skin thoroughly with soap and water. Consult a physician immediately if you experience an adverse reaction.

#### **FUEL QUALITY**

**Note:** Use of any fuel other than those recommended may cause powertrain damage and a loss of vehicle performance; repairs may not be covered under warranty.

# **Choosing the Right Fuel**

Use only UNLEADED fuel or UNLEADED fuel blended with a maximum of 15% ethanol. Do not use fuel ethanol (E85), diesel fuel, fuel-methanol, leaded fuel or any other fuel because it could damage or impair the emission control system.

Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based additives. The use of leaded fuel is prohibited by law.

#### **Octane Recommendations**



Regular unleaded gasoline with a pump (R+M)/2 octane rating of 87 is recommended. Some stations offer fuels posted as Regular with an octane rating below 87, particularly in

high altitude areas. Do not use fuels with a posted octane rating below 87.

Do not be concerned if your engine sometimes knocks lightly. However, if it knocks heavily under most driving conditions while you are using fuel with the recommended octane rating, see your authorized dealer to prevent any engine damage.

#### **RUNNING OUT OF FUEL**

Avoid running out of fuel because this situation may have an adverse effect on powertrain components.

If you have run out of fuel:

- You may need to cycle the ignition from off to on several times after refueling to allow the fuel system to pump the fuel from the tank to the engine. On restarting, crank time will be a few seconds longer than normal. With keyless ignition, just start the engine. Crank time will be longer than usual.
- Normally, adding 1 gallon (3.8 liters) of fuel is enough to restart the engine. If the vehicle is out of fuel and on a steep grade, more than 1 gallon (3.8 liters) may be required.
- The service engine soon indicator may come on. For more information on the service engine soon indicator, see Warning Lamps and *Indicators* in the *Instrument Cluster* chapter.

#### **REFUELING**



WARNING: Fuel vapor burns violently and a fuel fire can cause severe injuries. To help avoid injuries to you and others:

- Read and follow all the instructions on the pump island.
- Turn off your engine when you are refueling.
- Do not smoke if you are near fuel or refueling your vehicle.
- Keep sparks, flames and smoking materials away from fuel.
- Stay outside your vehicle and do not leave the fuel pump unattended when refueling your vehicle - this is against the law in some places.
- Keep children away from the fuel pump; never let children pump fuel.
- Do not use personal electronic devices while refueling.

Use the following guidelines to avoid electrostatic charge build-up when filling an ungrounded fuel container:

- Place approved fuel container on the ground.
- DO NOT fill a fuel container while it is in the vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container while filling.
- DO NOT use a device that would hold the fuel pump handle in the fill position.

# Fuel filler cap

Your fuel tank filler cap has an indexed design with a 1/4 turn on/off feature.

When fueling your vehicle:

- 1. Turn the engine off.
- 2. Unlock the fuel filler door.



- 3. Carefully turn the filler cap counterclockwise until it spins off.
- 4. Pull to remove the cap from the fuel filler pipe.
- 5. To install the cap, align the tabs on the cap with the notches on the filler pipe.
- 6. Tighten the filler cap clockwise until the cap clicks.
- 7. Lock the fuel filler door.

If the check fuel cap light  $\ ^{\bullet }$  comes on, the fuel filler cap may not be properly installed. The light can come on after several driving events after you've refueled your vehicle.

If you must replace the fuel filler cap, replace it with a fuel filler cap that is designed for your vehicle. The customer warranty may be void for any damage to the fuel tank or fuel system if the correct genuine Ford, Motorcraft® or other certified fuel filler cap is not used.

**WARNING:** The fuel system may be under pressure. If the fuel filler cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the fuel filler cap. Otherwise, fuel may spray out and injure you or others.

**WARNING:** If you do not use the proper fuel filler cap, excessive vacuum in the fuel tank may damage the fuel system or cause the fuel cap to disengage in a collision, which may result in personal injury.

# **FUEL CONSUMPTION**

# Filling the Tank

The advertised capacity is the indicated capacity and the empty reserve combined. Indicated capacity is the difference in the amount of fuel in a full tank and a tank when the fuel gauge indicates empty. Empty reserve is the amount of fuel in the tank after the fuel gauge indicates empty.

**Note:** The amount of usable fuel in the empty reserve varies and should not be relied upon to increase driving range. When refueling your vehicle after the fuel gauge indicates empty, you might not be able to refuel the full amount of the advertised capacity of the fuel tank due to the empty reserve still present in the tank.

For consistent results when filling the fuel tank:

- Turn the ignition off before fueling; an inaccurate reading results if the engine is left running.
- Use the same fill rate (low-medium-high) each time the tank is filled.
- Allow no more than two automatic click-offs when filling.

Results are most accurate when the filling method is consistent.

## **Calculating Fuel Economy**

Do not measure fuel economy during the first 1000 miles (1600 kilometers) of driving (this is your engine's break-in period); a more accurate measurement is obtained after 2000 miles—3000 miles (3200 kilometers—4800 kilometers). Also, fuel expense, frequency of fill-ups or fuel gauge readings are not accurate ways to measure fuel economy.

- 1. Fill the fuel tank completely and record the initial odometer reading.
- 2. Each time you fill the tank, record the amount of fuel added.
- 3. After at least three to five tank fill-ups, fill the fuel tank and record the current odometer reading.

- 4. Subtract your initial odometer reading from the current odometer reading.
- 5. Calculate fuel economy as follows:

Standard: Divide miles traveled by gallons used.

Metric: Multiply liters used by 100, then divide by kilometers traveled.

Keep a record for at least one month and record the type of driving (city or highway). This provides an accurate estimate of the vehicle's fuel economy under current driving conditions. Additionally, keeping records during summer and winter show how temperature impacts fuel economy. In general, lower temperatures mean lower fuel economy.

#### **EMISSION CONTROL SYSTEM**

**WARNING:** Do not park, idle, or drive your vehicle in dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, which can start a fire.

**WARNING:** Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If you smell exhaust fumes inside your vehicle, have your dealer inspect your vehicle immediately. Do not drive if you smell exhaust fumes.

Your vehicle is equipped with various emission control components and a catalytic converter which will enable your vehicle to comply with applicable exhaust emission standards. To make sure that the catalytic converter and other emission control components continue to work properly:

- Use only the specified fuel listed.
- Avoid running out of fuel.
- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in *Scheduled Maintenance Information* performed according to the specified schedule.

The scheduled maintenance items listed in *Scheduled Maintenance Information* are essential to the life and performance of your vehicle and to its emissions system.

If other than Ford, Motorcraft® or Ford-authorized parts are used for maintenance replacements or for service of components affecting emission control, such non-Ford parts should be equivalent to genuine Ford Motor Company parts in performance and durability.

Illumination of the service engine soon indicator, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power could indicate that the emission control system is not working properly.

An improperly operating or damaged exhaust system may allow exhaust to enter the vehicle. Have a damaged or improperly operating exhaust system inspected and repaired immediately.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal also lists engine displacement.

Please consult your warranty information for complete emission warranty information.

# **On-board Diagnostics (OBD-II)**

Your vehicle is equipped with a computer that monitors the engine's emission control system. This system is commonly known as the on-board diagnostics system (OBD-II). The OBD-II system protects the environment by ensuring that your vehicle continues to meet government emission standards. The OBD-II system also assists your authorized dealer in properly servicing your vehicle.



When the service engine soon indicator illuminates, the OBD-II system has detected a malfunction. Temporary malfunctions may cause the service engine soon indicator to illuminate.

Examples are:

- 1. The vehicle has run out of fuel—the engine may misfire or run poorly.
- 2. Poor fuel quality or water in the fuel—the engine may misfire or run poorly.
- 3. The fuel fill inlet may not have been properly closed. See *Easy Fuel* No Cap Fuel System in this chapter.
- 4. Driving through deep water—the electrical system may be wet.

These temporary malfunctions can be corrected by filling the fuel tank with good quality fuel, properly closing the fuel fill inlet or letting the electrical system dry out. After three driving cycles without these or any other temporary malfunctions present, the service engine soon indicator should stay off the next time the engine is started. A driving cycle consists of a cold engine start-up followed by mixed city or highway driving. No additional vehicle service is required.

If the service engine soon indicator remains on, have your vehicle serviced at the first available opportunity. Although some malfunctions detected by the OBD-II may not have symptoms that are apparent, continued driving with the service engine soon indicator on can result in increased emissions, lower fuel economy, reduced engine and transmission smoothness, and can lead to more costly repairs.

# Readiness for Inspection/Maintenance (I/M) Testing

Some state, provincial and local governments may have Inspection/Maintenance (I/M) programs to inspect the emission control equipment on your vehicle. Failure to pass this inspection could prevent you from getting a vehicle registration.



If the service engine soon indicator is on or the bulb does not work, the vehicle may need to be serviced. See *On-board Diagnostics (OBD-II)* in this chapter.

Your vehicle may not pass the I/M test if the service engine soon indicator is on or not working properly (bulb is burned out), or if the OBD-II system has determined that some of the emission control systems have not been properly checked. In this case, the vehicle is considered not ready for I/M testing.

# Fuel and Refueling

120

If the vehicle's engine or transmission has just been serviced, or the battery has recently run down or been replaced, the OBD-II system may indicate that the vehicle is not ready for I/M testing. To determine if the vehicle is ready for I/M testing, turn the ignition key to the on position for 15 seconds without cranking the engine. If the service engine soon indicator blinks eight times, it means that the vehicle is not ready for I/M testing; if the service engine soon indicator stays on solid, it means that the vehicle is ready for I/M testing.

The OBD-II system is designed to check the emission control system during normal driving. A complete check may take several days. If the vehicle is not ready for I/M testing, the following driving cycle consisting of mixed city and highway driving may be performed:

15 minutes of steady driving on an expressway or highway followed by 20 minutes of stop-and-go driving with at least four 30-second idle periods.

Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once the engine is started, do not turn off the engine until the above driving cycle is complete. If the vehicle is still not ready for I/M testing, the above driving cycle will have to be repeated.

#### **AUTOMATIC TRANSMISSION**

**WARNING:** Always set the parking brake fully and make sure the gearshift is latched in P (Park). Turn the ignition to the off position and remove the key whenever you leave your vehicle.

Your vehicle has been designed to improve fuel economy by reducing fuel usage while coasting or decelerating. When you take your foot off the accelerator pedal and the vehicle begins to slow down, the torque converter clutch locks up and aggressively shuts off fuel flow to the engine while decelerating. This fuel economy benefit may be perceived as a light to medium braking sensation when removing your foot from the accelerator pedal.

**Note:** The vehicle can potentially roll back in D (Drive) on a grade. To prevent this from occurring, it is recommended that you move the gearshift lever into the 2 (second) position.



#### P (Park)

This position locks the transmission and prevents the front wheels from turning.

To put your vehicle in gear:

- Start the engine
- Press the brake pedal
- Press the shifter button and move the gearshift lever into the desired gear

To put your vehicle in P (Park):

- Come to a complete stop
- Move the gearshift lever and securely latch it in P (Park)

# R (Reverse)

With the gearshift lever in R (Reverse), the vehicle will move backward. Always come to a complete stop before shifting into and out of R (Reverse).

# N (Neutral)

With the gearshift lever in N (Neutral), the vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

# D (Drive) with Overdrive

The normal driving position for the best fuel economy. Transmission operates in gears one through four.

# D (Drive) without Overdrive



Overdrive can be deactivated by pressing the transmission control switch on the side of the gearshift lever.

- This position allows for all forward gears (1–3) except overdrive.
- Provides engine braking.
- Use when driving conditions cause excessive shifting from O/D to other gears. Examples: hilly terrain, heavy loads, and when engine braking is required.

O/D OFF • O/D OFF lamp in the instrument cluster is illuminated.

- To return to O/D (overdrive mode), press the transmission control switch. The O/D OFF lamp in the instrument cluster will not be illuminated.
- O/D (overdrive) is automatically returned each time the key is turned off.

#### 2 (Second)

This position allows for second gear only.

- Provides engine braking.
- Use to start-up on slippery roads.
- To return to D (Overdrive), move the gearshift lever into the D (Overdrive) position.
- Selecting 2 (Second) at higher speeds will cause the transmission to downshift to second gear once the vehicle has slowed down to the appropriate speed.

#### 1 (First)

This position allows for first gear only.

- Provides maximum engine braking.
- Selecting 1 (First) at higher speeds will cause the transmission to downshift to first gear once the vehicle has slowed down to the appropriate speed.

**Note:** 2 (Second) and 1 (First) are not intended for use under extended or normal driving conditions and results in lower fuel economy.

#### **Brake-Shift Interlock**



WARNING: Do not drive your vehicle until you verify that the brake lamps are working.

WARNING: When doing this procedure, you will be taking the vehicle out of park which means the vehicle can roll freely. To avoid unwanted vehicle movement, always fully set the parking brake prior to doing this procedure. Use wheel chocks if appropriate.

**WARNING:** If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. See your authorized dealer.

This vehicle is equipped with a brake-shift interlock feature that prevents the gearshift lever from being moved from P (Park) when the ignition is in the on position unless the brake pedal is pressed.

If you cannot move the gearshift lever out of P (Park) with ignition in the on position and the brake pedal pressed, it is possible that a fuse has blown or the vehicle's brake lamps are not operating properly. Refer to the *Fuses* chapter for more information.

If the fuse is not blown and the brake lamps are working properly, the following procedure will allow you to move the gearshift lever from P (Park):

- 1. Apply the parking brake, turn ignition key to off, then remove the key.
- 2. Using a flat head screwdriver, remove the plastic cover.



- 3. Insert the ignition key and push it straight down to release the interlock.
- 4. Apply the parking brake, then shift to N (Neutral).
- 5. Start the vehicle. **Note:** Starting the vehicle in N (Neutral) still requires following the steps in the Preparing to start your vehicle section.

6. To drive, with the brake pedal still pressed, release the parking brake and shift to D (Drive) or R (Reverse).

See your authorized dealer as soon as possible if this procedure is used.

# **Automatic Transmission Adaptive Learning**

This feature is designed to increase durability and provide consistent shift feel over the life of the vehicle. A new vehicle or transmission may have firm shifts, soft shifts or both. This operation is considered normal and will not affect function or durability of the transmission. Over time, the adaptive learning process will fully update transmission operation. Additionally, whenever the battery is disconnected or a new battery installed, the strategy must be relearned.

#### If Your Vehicle Gets Stuck in Mud or Snow

**Note:** Do not rock the vehicle if the engine is not at normal operating temperature or damage to the transmission may occur.

**Note:** Do not rock the vehicle for more than a minute or damage to the transmission and tires may occur, or the engine may overheat.

If your vehicle gets stuck in mud or snow, it may be rocked out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

Brakes 125

#### **GENERAL INFORMATION**

**Note:** Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings may be worn out and should be inspected by an authorized dealer. If your vehicle has continuous vibration or shudder in the steering wheel while braking, you should take it to an authorized dealer for inspection.

**Note:** Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brakes wear and does not contribute to brake noise. See the *Vehicle Care* chapter for wheel cleaning instructions.



See the *Instrument Cluster* chapter for information on the brake system warning light.

Wet brakes result in reduced braking efficiency. Gently press the brake pedal a few times when driving from a car wash or standing water to dry the brakes.

#### **Brake Over Accelerator**

If the accelerator pedal becomes stuck or entrapped, apply steady and firm pressure to the brake pedal to slow your vehicle and reduce engine power. If you experience this condition, apply the brakes and bring your vehicle to a safe stop. Turn the engine off, shift to position  ${\bf P}$  and apply the parking brake, then inspect the accelerator pedal for any interferences. If none are found and the condition persists, have your vehicle towed to the nearest authorized dealer.

# **Anti-Lock Brake System**

This system helps you maintain steering control during emergency stops by keeping the brakes from locking.



The anti-lock brake system lamp momentarily illuminates when the ignition is turned on. If the light does not illuminate during start-up, remains on or flashes, the anti-lock brake system may

be disabled and may need to be serviced.



If the anti-lock brake system is disabled, normal braking is still effective. If the brake warning lamp illuminates with the parking brake released, have your brake system serviced immediately.

## HINTS ON DRIVING WITH ANTI-LOCK BRAKES

When the system is operating, the brake pedal will pulse and may travel further. Maintain pressure on the brake pedal. You may also hear a noise from the system. This is normal.

The anti-lock braking system will not eliminate the dangers inherent when:

- you drive too closely to the vehicle in front of you.
- your vehicle is hydroplaning.
- you take corners too fast.
- the road surface is poor.

## **PARKING BRAKE**

**WARNING:** If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. See your authorized dealer as soon as possible.

**WARNING:** Always set the parking brake fully and make sure that the transmission selector lever is securely latched in position **P** (automatic transmission) or position **1** (manual transmission).

To set the parking brake, pull the parking brake handle up as far as possible.

To release the parking brake:

- 1. Press and hold the button located at the end of the parking brake handle.
- 2. Pull the handle up slightly, then push the handle down.

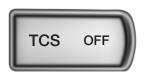
#### PRINCIPLES OF OPERATION

The traction control system helps avoid drive wheel spin and loss of traction.

If your vehicle begins to slide, the system applies the brakes to individual wheels and, when needed, reduces engine power at the same time. If the wheels spin when accelerating on slippery or loose surfaces, the system reduces engine power in order to increase traction.

#### **USING TRACTION CONTROL**

In certain situations (for example, stuck in snow or mud), turning the traction control off may be beneficial as this allows the wheels to spin with full engine power.



Turn the traction control system off by using the TCS OFF button (if equipped) located on the instrument panel next to the hazard warning switch. OFF will illuminate in the switch. During normal operation, TCS will be illuminated in the switch.

## System indicator lights and messages

WARNING: If a failure has been detected within the Traction Control System, the stability control light will illuminate steadily. Verify that the Traction Control System was not manually disabled. If the stability control light still illuminates steadily, have the system serviced by an authorized dealer immediately. Operating your vehicle with Traction Control disabled could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.



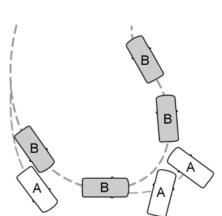
The stability control light temporarily illuminates on engine start-up and stays on when a problem occurs in the system.

## PRINCIPLES OF OPERATION

WARNING: Vehicle modifications involving braking system, aftermarket roof racks, suspension, steering system, tire construction or wheel and tire size may change the handling characteristics of the vehicle and may adversely affect the performance of the AdvanceTrac® system. In addition, installing any stereo loudspeakers may interfere with and adversely affect the AdvanceTrac® system. Install any aftermarket stereo loudspeaker as far as possible from the front center console, the tunnel, and the front seats in order to minimize the risk of interfering with the AdvanceTrac® sensors. Reducing the effectiveness of the AdvanceTrac® system could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

WARNING: Remember that even advanced technology cannot defy the laws of physics. It's always possible to lose control of a vehicle due to inappropriate driver input for the conditions. Aggressive driving on any road condition can cause you to lose control of your vehicle increasing the risk of personal injury or property damage. Activation of the AdvanceTrac® system is an indication that at least some of the tires have exceeded their ability to grip the road; this could reduce the operator's ability to control the vehicle potentially resulting in a loss of vehicle control, vehicle rollover, personal injury and death. If your AdvanceTrac® system activates, SLOW DOWN.

The AdvanceTrac® with Roll Stability Control<sup>TM</sup> system helps you keep control of your vehicle when on a slippery surface. The electronic stability control portion of the system helps avoid skids and lateral slides and roll stability control helps avoid a vehicle rollover. The traction control system helps avoid drive wheel spin and loss of traction. See the  $Traction\ Control\$ chapter for details on traction control system operation.



**A** Vehicle without AdvanceTrac® with RSC® skidding off its intended route.

**B** Vehicle with AdvanceTrac® with RSC® maintaining control on a slippery surface.

## **USING ADVANCETRAC® WITH RSC®**

The system automatically activates when you start your engine. The AdvanceTrac® with RSC® system cannot be completely turned off, but the electronic stability control and roll stability control portions of the system are disabled when the transmission is in position  ${\bf R}$ . You can turn the traction control portion of the system off independently. See the  $Traction\ Control\ chapter$ .

# SENSING SYSTEM (IF EQUIPPED)

**WARNING:** To help avoid personal injury, please read and understand the limitations of the system as contained in this section. Sensing is only an aid for some (generally large and fixed) objects when moving in reverse on a flat surface at parking speeds. Traffic control systems, inclement weather, air brakes, and external motors and fans may also affect the function of the sensing system; this may include reduced performance or a false activation.



**WARNING:** To help avoid personal injury, always use caution when in R (Reverse) and when using the sensing system.

**WARNING:** This system is not designed to prevent contact with small or moving objects. The system is designed to provide a warning to assist the driver in detecting large stationary objects to avoid damaging the vehicle. The system may not detect smaller objects, particularly those close to the ground.

**WARNING:** Certain add-on devices such as large trailer hitches, bike or surfboard racks and any device that may block the normal detection zone of the system, may create false beeps.

**Note:** Keep the sensors (located on the bumper/fascia) free from snow, ice and large accumulations of dirt. If the sensors are covered, the system's accuracy can be affected. Do not clean the sensors with sharp objects.

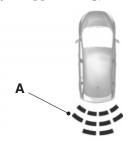
Note: If your vehicle sustains damage to the bumper/fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms.

The sensing system warns the driver of obstacles within a certain range of the bumper area. The system turns on automatically whenever the ignition is switched on.

When receiving a detection warning, the radio volume is reduced to a predetermined level. After the warning goes away, the radio volume returns to the previous level.

# **Using the Rear Sensing System**

The rear sensors are only active when the transmission is in  ${\bf R}$ . As the vehicle moves closer to the obstacle, the rate of the audible warning increases. When the obstacle is fewer than 12 inches (30 centimeters) away, the warning sounds continuously. If a stationary or receding object is detected farther than 12 inches (30 centimeters) from the side of the vehicle, the tone sounds for only three seconds. Once the system detects an object approaching, the warning sounds again.



A. Coverage area of up to 6 feet (2 meters) from the rear bumper (with a decreased coverage area at the outer corners of the bumper).

The system detects certain objects while the transmission is in  ${\bf R}$ :

- and moving toward a stationary object at a speed of 3 mph (5 km/h) or less
- but not moving, and a moving object is approaching the rear of the vehicle at a speed of 3 mph (5 km/h) or less.
- and moving at a speed of less than 3 mph (5 km/h) and a moving object is approaching the rear of the vehicle at a speed of less than 3 mph (5 km/h).

# REAR VIEW CAMERA SYSTEM (IF EQUIPPED)

**WARNING:** The camera system is a reverse aid supplement device that still requires the driver to use it in conjunction with the rear view mirror and the side mirrors for maximum coverage.

**WARNING:** Objects that are close to either corner of the bumper or under the bumper, might not be seen on the screen due to the limited coverage of the camera system.



**WARNING:** Back up as slow as possible since higher speeds might limit your reaction time to stop the vehicle.



**WARNING:** Do not use the camera system with the rear doors open.



The rearview camera is located on the rear doors. The camera system provides a video image which appears in the rear view mirror of the area behind the vehicle. It adds assistance to the driver while reversing or reverse parking the vehicle.

## Using the Rear View Camera System

The rear view camera system displays what is behind your vehicle when you place the transmission in R (Reverse). The system uses fixed guidelines which show the actual path the vehicle is moving in while reversing in a straight line. This can be helpful when backing into a parking space or aligning the vehicle with another object behind the vehicle.

**Note:** Do not use the camera system if the rear door is ajar.

**Note:** If the image comes on while the transmission is not in R (Reverse), have the system inspected by your authorized dealer.

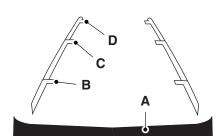
**Note:** When towing, the camera only sees what is being towed behind the vehicle. This might not provide adequate coverage as it usually provides in normal operation and some objects might not be seen. In some vehicles, the guidelines may disappear once the trailer tow connector is engaged.

**Note:** The camera may not operate correctly under the following conditions:

- Nighttime or dark areas if one or both reverse lamps are not operating.
- The camera's view is obstructed by mud, water or debris. Clean the lens with a soft, lint-free cloth and non-abrasive cleaner.
- The rear of the vehicle is hit or damaged, causing the camera to become misaligned.

#### Guidelines

**Note:** The guidelines are only available when the transmission is in R (Reverse).



- A. Rear bumper
- B. Red zone
- C. Yellow zone
- D. Green zone

The fixed guidelines fade in and out depending on the steering wheel position.

Always use caution while reversing. Objects in the red zone are closest to your vehicle and objects in the green zone are further away. Objects are getting closer to your vehicle as they move from the green zone to the yellow or red zones. Use the side view mirrors and rear view mirror to get better coverage on both sides and rear of the vehicle.

Use the side mirrors and rear view mirror to get better coverage on both sides and rear of the vehicle.

## PRINCIPLES OF OPERATION

Cruise control lets you maintain a set speed without keeping your foot on the accelerator pedal.

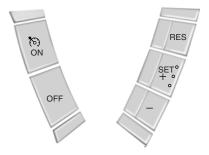
# **USING CRUISE CONTROL (IF EQUIPPED)**



**WARNING:** Do not use cruise control in heavy traffic or on roads that are winding, slippery or unpaved.

**Note:** Vehicle speed may vary momentarily when driving up or down a steep hill. Apply the brakes if your vehicle speed increases above the set speed while driving downhill.

**Note:** Cruise control will disengage if your vehicle speed decreases more than 10 mph (16 km/h) below your set speed while driving uphill.



The cruise controls are located on the steering wheel.

# **Switching Cruise Control On**

Press and release **ON**.

# Setting a Speed

- 1. Accelerate to the desired speed.
- 2. Press and release **SET+**.
- 3. Take your foot off the accelerator pedal.



The indicator will appear in the instrument cluster.

# **Changing the Set Speed**

**Note:** If you accelerate by pressing the accelerator pedal, the set speed will not change. When you release the accelerator pedal, you will return to the speed that you previously set.

- Press and hold **SET+** or **SET-**. Release the control when you reach the desired speed.
- Press and release **SET+** or **SET-**. The set speed will change in approximately 1 mph (2 km/h) increments.
- Press the accelerator pedal or brake pedal until you reach the desired speed. Press and release **SET+**.

# Canceling the Set Speed

Tap the brake pedal. The set speed will not be erased.

# **Resuming the Set Speed**

Press and release **RES**.

# **Switching Cruise Control Off**

Note: You will erase the set speed if you switch the system off.

Press and release **OFF** or switch the ignition off.

#### **STEERING**

To help prevent damage to the power steering system:

- Never hold the steering wheel at its furthest turning points (until it stops) for more than a few seconds when the engine is running.
- Do not operate the vehicle with a low power steering pump fluid level (below the MIN mark on the reservoir).
- Some noise is normal during operation. If the noise is excessive, check for low power steering pump fluid level before seeking service by your authorized dealer.
- Heavy or uneven steering efforts may be caused by low power steering pump fluid level. Check for low power steering pump fluid level before seeking service by your authorized dealer.
- Do not fill the power steering pump reservoir above the MAX mark on the reservoir, as this may result in leaks from the reservoir.

If the power steering system breaks down (or if the engine is turned off), you can steer the vehicle manually, but it takes more effort. If the steering wanders or pulls, check for:

- an improperly inflated tire
- uneven tire wear
- loose or worn suspension components
- loose or worn steering components
- improper steering alignment

A high crown in the road or high crosswinds may also make the steering seem to wander/pull.

If the steering wheel vibrates check for:

• improper wheel balance

## **LOAD LIMIT**

# **Vehicle loading**

This section will guide you in the proper loading of your vehicle to keep your loaded vehicle weight within its design rating capability. Properly loading your vehicle will provide maximum return of vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings from the vehicle's Tire Label or Safety Compliance Certification Label:

**Base Curb Weight** – is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

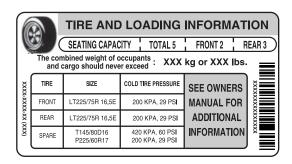
**Vehicle Curb Weight** – is the weight of your new vehicle when you picked it up from your authorized dealer plus any aftermarket equipment.



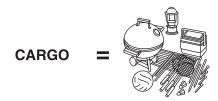
Payload – is the combined weight of cargo and passengers that the vehicle is carrying. The maximum payload for your vehicle can be found on the Tire Label on the B-Pillar or the edge of the driver's door (vehicles exported outside the US and Canada may not have a Tire Label). Look for "THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED XXX kg OR XXX lb." for maximum payload. The payload listed on the Tire Label is the maximum payload for the vehicle as built by the assembly plant. If any aftermarket or authorized-dealer installed equipment has been installed on the vehicle, the weight of the equipment must be subtracted from the payload listed on the Tire Label in order to determine the new payload.

**WARNING:** The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover.

# **Example only:**



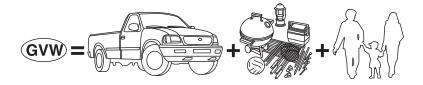
		TIRE AND LOADING INFORMATION RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT			
<b>9</b> .		SEATING CAPACITY NOMBRE DE PLACES	OTAL 5 FRONT	2 REAR 3	
The combined weight of occupants and cargo should never exceed Le poids total des occupants et du chargement na doit jamais dépesser 492 kg or kg ou 1085 lb.					
▼xxxx-xxxx-xx (xxx)	TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PRESSURE PRESSION DES PNEUS A FROID	SEE OWNER'S MANUAL FOR	
	FRONT AVANT	P235/70R16	240 KPA, 35 PSI	MANUAL FOR ADDITIONAL INFORMATION	
	REAR ARRIÈRE	P235/70R16	240 KPA, 35 PSI	VOIR LE MANUEL DE L'USAGER POUR PLUS DE DENISSIONEMENTS	
	SPARE DE SECOURS	T145/90R17	415 KPA, 60 PSI	POUR PLUS DE RENSEIGNEMENTS	



**Cargo Weight** – includes all weight added to the Base Curb Weight, including cargo and optional equipment.

**GAW (Gross Axle Weight)** – is the total weight placed on each axle (front and rear) – including vehicle curb weight and all payload.

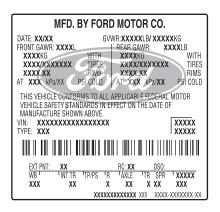
GAWR (Gross Axle Weight Rating) – is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position. The total load on each axle must never exceed its GAWR.

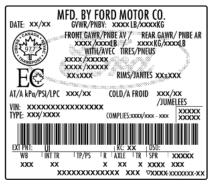


**GVW (Gross Vehicle Weight)** – is the Vehicle Curb Weight + cargo + passengers.

GVWR (Gross Vehicle Weight Rating) – is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position. The GVW must never exceed the GVWR.

• Example only:





**WARNING:** Exceeding the Safety Compliance Certification Label vehicle weight rating limits could result in substandard vehicle handling or performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.



**WARNING:** Do not exceed the GVWR or the GAWR specified on the Safety Compliance Certification Label.

**WARNING:** Do not use replacement tires with lower load carrying capacities than the original tires because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.



**WARNING:** Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle and/or personal injury.

# Steps for determining the 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 the "XXX" amount equals 1,400 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 (5 x 150) = 650 lb.). In metric units (635-340 (5 x 68) = 295 kg.)
- 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.

The following gives you a few examples on how to calculate the available amount of cargo and luggage load capacity:

• Suppose your vehicle has a 1400 lb. (635 kg) cargo and luggage capacity. You decide to go golfing. Is there enough load capacity to carry you, 4 of your friends and all the golf bags? You and four friends average 220 lb. (99 kg) each and the golf bags weigh approximately 30 lb. (13.5 kg) each. The calculation would be: 1400 – (5 x 220) - (5 x 30) = 1400 - 1100 - 150 = 150 lb. Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be: 635 kg - (5 x 99 kg) - (5 x 13.5 kg) = 635 - 495 - 67.5 = 72.5 kg.

• Suppose your vehicle has a 1400 lb. (635 kg) cargo and luggage capacity. You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past 2 years. Measuring the inside of the vehicle with the rear seat folded down, you have room for 12-100 lb. (45 kg) bags of cement. Do you have enough load capacity to transport the cement to your home? If you and your friend each weigh 220 lb. (99 kg), the calculation would be:  $1400 - (2 \times 220) - (12 \times 100) = 1400 - 440 - (12 \times 100) = 1400 - 1400$ 1200 = - 240 lb. No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would be: 635 kg - $(2 \times 99 \text{ kg}) - (12 \times 45 \text{ kg}) = 635 - 198 - 540 = -103 \text{ kg}$ . You will need to reduce the load weight by at least 240 lb. (104 kg). If you remove 3-100 lb. (45 kg) cement bags, then the load calculation would be:  $1400 - (2 \times 220) - (9 \times 100) = 1400 - 440 - 900 = 60$  lb. Now you have the load capacity to transport the cement and your friend home. In metric units, the calculation would be: 635 kg - (2 x 99 kg) - $(9 \times 45 \text{ kg}) = 635 - 198 - 405 = 32 \text{ kg}.$ 

The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the Front or the Rear Gross Axle Weight Rating specified for your vehicle on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position.

# Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles

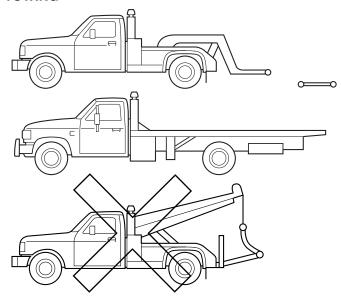
**WARNING:** Loaded vehicles may handle differently than unloaded vehicles. Extra precautions, such as slower speeds and increased stopping distance, should be taken when driving a heavily loaded vehicle.

Your vehicle can haul more cargo and people than most passenger cars. Depending upon the type and placement of the load, hauling cargo and people may raise the center of gravity of the vehicle.

## **TOWING A TRAILER**

**WARNING:** Never tow a trailer with this vehicle. Your vehicle is not equipped to tow. No towing packages are available through an authorized dealer.

## WRECKER TOWING



If you need to have your vehicle towed, contact a professional towing service or, if you are a member of a roadside assistance program, your roadside assistance service provider.

We recommend the use of a wheel lift and dollies or flatbed equipment to tow your vehicle. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. Vehicle damage may occur if towed incorrectly, or by any other means.

Ford Motor Company produces a towing manual for all authorized tow truck operators. Have your tow truck operator refer to this manual for proper hook-up and towing procedures for your vehicle.

Your vehicle must have the front wheels placed on a tow dolly when towing your vehicle from the rear using wheel lift equipment. This prevents damage to the transmission.

### TOWING THE VEHICLE ON FOUR WHEELS

## **Emergency Towing**

If your vehicle becomes inoperable (without access to wheel dollies, car-hauling trailer, or flatbed transport vehicle), it can be flat-towed (all wheels on the ground, regardless of the powertrain and transmission configuration) under the following conditions:

- Your vehicle is facing forward for towing in a forward direction.
- Place the transmission in position **N.** See *Automatic transmission* in the *Transmission* chapter if you cannot move the transmission into **N.**
- Maximum speed is 35 mph (56 km/h).
- Maximum distance is 50 miles (80 kilometers).

## **Recreational Towing**

**Note:** Put your climate control system in recirculated air mode to prevent exhaust fumes from entering your vehicle. See the *Climate Control* chapter.

Follow these guidelines if you have a need for recreational towing, such as towing your vehicle behind a motorhome. We designed these guidelines to prevent damage to your transmission.

Do not tow your vehicle with the front wheels on the ground. It is recommended to tow your vehicle with the front drive wheels on a dolly with the transmission in position  ${\bf N}$  or with all four (4) wheels off the ground, such as when using a car-hauling trailer.

### **BREAKING-IN**

You need to break in new tires for approximately 300 miles (480 kilometers). During this time, your vehicle may exhibit some unique driving characteristics. Avoid driving too fast during the first 1000 miles (1600 kilometers). Vary your speed frequently and change up through the gears early. Do not labor the engine. Do not tow during the first 1000 miles (1600 kilometers).

### **ECONOMICAL DRIVING**

Fuel economy is affected by several things, such as how you drive, the conditions you drive under and how you maintain your vehicle.

There are some things to keep in mind that may improve your fuel economy:

- Accelerate and slow down in a smooth, moderate fashion.
- Drive at steady speeds without stopping.
- Anticipate stops; slowing down may eliminate the need to stop.
- Combine errands and minimize stop-and-go driving.
- Close the windows for high-speed driving.
- Drive at reasonable speeds (traveling at 55 mph [88 km/h] uses 15% less fuel than traveling at 65 mph [105 km/h]).
- Keep the tires properly inflated and use only the recommended size.
- Use the recommended engine oil.
- Perform all regularly scheduled maintenance.

There are also some things you may not want to do because they may reduce your fuel economy:

- Sudden or hard accelerations.
- Rev the engine before turning it off.
- Idle for periods longer than one minute.
- Warm up your vehicle on cold mornings.
- Use the air conditioner or front defroster.

- Use the speed control in hilly terrain.
- Rest your foot on the brake pedal while driving.
- Drive a heavily loaded vehicle or tow a trailer.
- Carry unnecessary weight (approximately 1 mpg [0.4 km/L] is lost for every 400 pounds [180 kilograms] of weight carried).
- Add particular accessories to your vehicle (e.g.; bug deflectors, rollbars or light bars, running boards, ski racks).
- Drive with the wheels out of alignment.

### **DRIVING THROUGH WATER**





If driving through deep or standing water is unavoidable, proceed very slowly. Never drive through water that is higher than the bottom of the wheel rims (for cars) or the bottom of the hubs (for trucks).

When driving through water, traction or brake capability may be limited. Also, water may enter your engine's air intake and severely damage your engine or your vehicle may stall.

**Note:** Driving through deep water where the transmission vent tube is submerged may allow water into the transmission and cause internal transmission damage.

**Note:** Once through the water, always dry the brakes by moving your vehicle slowly while applying light pressure on the brake pedal. Wet brakes do not stop the vehicle as quickly as dry brakes.

### **FLOOR MATS**



**WARNING:** Always use floor mats that are designed to fit the footwell of your vehicle. Only use floor mats that leave the pedal area unobstructed. Only use floor mats that are firmly secured to retention posts so that they cannot slip out of position and interfere with the pedals or impair safe operation of your vehicle in other ways.

- Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal injury.
- Always make sure that the floor mats are properly attached to the retention posts in the carpet that are supplied with your vehicle.
   Floor mats must be properly secured to both retention posts to ensure mats do not shift out of position.
- Never place floor mats or any other covering in the vehicle footwell that cannot be properly secured to prevent them from moving and interfering with the pedals or the ability to control the vehicle.
- Never place floor mats or any other covering on top of already installed floor mats. Floor mats should always rest on top of the vehicle carpeting surface and not another floor mat or other covering. Additional floor mats or any other covering will reduce the pedal clearance and potentially interfere with pedal operation.



# ! WARNING (Continued)

- Check attachment of floor mats on a regular basis. Always properly reinstall and secure floor mats that have been removed for cleaning or replacement.
- Always make sure that objects cannot fall into the driver footwell while the vehicle is moving. Objects that are loose can become trapped under the pedals causing a loss of vehicle control.
- Failure to properly follow floor mat installation or attachment instructions can potentially cause interference with pedal operation causing loss of control of vehicle.
- To install floor mats, position the floor mat so that the eyelet is over the retention post and press down to lock in.
- To remove the floor mat, reverse the installation procedure.

### **ROADSIDE ASSISTANCE**

## Vehicles Sold in the U.S.: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Ford Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty. The service is available:

- 24 hours a day, seven days a week
- for the coverage period listed on the Roadside Assistance Card included in your owner's manual portfolio.

Roadside assistance will cover:

- a flat tire change with a good spare (except vehicles that have been supplied with a tire inflation kit).
- battery jump start.
- lock-out assistance (key replacement cost is the customer's responsibility).
- fuel delivery Independent Service Contractors, if not prohibited by state, local or municipal law, shall deliver up to 2.0 gallons (7.5 liters) of gasoline or 5.0 gallons (18.9 liters) of diesel fuel to a disabled vehicle. Fuel delivery service is limited to two no-charge occurrences within a 12-month period.
- winch out available within 100 feet (30.5 meters) of a paved or county maintained road, no recoveries.
- towing Ford and Lincoln eligible vehicles towed to an authorized dealer within 35 miles (56 kilometers) of the disablement location or to the nearest authorized dealer. If a member requests to be towed to an authorized dealer more than 35 miles (56 kilometers) from the disablement location, the member shall be responsible for any mileage costs in excess of 35 miles (56 kilometers).

Trailers shall be covered up to \$200 if the disabled eligible vehicle requires service at the nearest authorized dealer. If the trailer is disabled, but the towing vehicle is operational, the trailer does not qualify for any roadside services.

## Vehicles Sold in the U.S.: Using Roadside Assistance

Complete the roadside assistance identification card and place it in your wallet for quick reference. This card is found in the owner's manual portfolio in the glove compartment.

U.S. Ford vehicle customers who require Roadside Assistance, call 1-800-241-3673.

If you need to arrange roadside assistance for yourself, Ford Motor Company will reimburse a reasonable amount for towing to the nearest dealership within 35 miles (56 kilometers). To obtain reimbursement information, U.S. Ford vehicle customers call 1-800-241-3673. Customers will be asked to submit their original receipts.

### Vehicles Sold in Canada: Getting Roadside Assistance

Canadian customers who require roadside assistance, call 1–800–665–2006.

## Vehicles Sold in Canada: Using Roadside Assistance

Complete the roadside assistance identification card and place it in your wallet for quick reference. In Canada, the card is found in the warranty information in the glove box.

Canadian roadside coverage and benefits may differ from the U.S. coverage. Please see your warranty information or visit our website at www.ford.ca for information on Canadian services and benefits.

Canadian customers who need to obtain roadside information, call 1-800-665-2006 or visit our website at www.ford.ca.

## HAZARD WARNING FLASHERS



The hazard flasher control is located on the instrument panel by the radio. Use it when your vehicle is disabled and is creating a safety hazard for other motorists.

- Press the flasher control and all front and rear direction signals will flash.
- Press the flasher control again to turn them off.

**Note:** With extended use, the flashers may run down your 12–volt battery.

### **FUEL CUT-OFF SWITCH**

**WARNING:** Failure to inspect and if necessary repair fuel leaks after a collision may increase the risk of fire and serious injury. Ford Motor Company recommends that the fuel system be inspected by an authorized dealer after any collision.

In the event of a moderate to severe collision, this vehicle is equipped with a fuel pump shut-off feature that stops the flow of fuel to the engine. Not every impact will cause a shut-off.

Should your vehicle shut off after a collision, you may restart your vehicle by doing the following:

- 1. Turn the ignition off.
- 2. Turn the ignition on.
- 3. Repeat steps 1 and 2 to re-enable fuel pump.

**Note:** If your vehicle has the push button start system, press the stop/start button twice to reactivate the fuel system.

### JUMP-STARTING THE VEHICLE

**WARNING:** The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in injury or vehicle damage.



**WARNING:** Batteries contain sulfuric acid which can burn skin, eyes and clothing, if contacted.

Do not attempt to push-start your automatic transmission vehicle. Automatic transmissions do not have push-start capability. Attempting to push-start a vehicle with an automatic transmission may cause transmission damage.

When the battery is disconnected or a new battery is installed, the automatic transmission must relearn its shift strategy. As a result, the transmission may exhibit a combination of firm and soft shifts. This operation is considered normal and will not affect function or durability of the transmission. Over time, the adaptive learning process will fully update transmission operation.

# **Roadside Emergencies**

## **Preparing Your Vehicle**

152

**Note:** Use only a 12–volt supply to start your vehicle.

**Note:** Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.

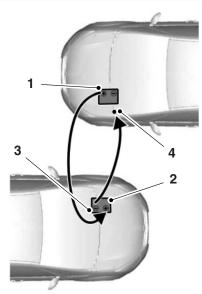
- 1. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles do not touch. Set the parking brake on both vehicles and stay clear of the engine cooling fan and other moving parts.
- 2. Check all battery terminals. Remove the positive terminal cover (if equipped) and any excessive corrosion before you attach the battery cables. Ensure that vent caps are tight and level.
- 3. Turn the heater fan on in both vehicles to protect from any electrical surges. Turn all other accessories off.

## **Connecting the Jumper Cables**

**WARNING:** Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

**Note:** Do not attach the negative (-) cable to fuel lines, engine rocker covers, the intake manifold or electrical components as grounding points.

**Note:** In the illustration, the vehicle on the bottom is used to designate the assisting (boosting) battery.



- 1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.
- 2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.
- 3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.
- 4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the carburetor or fuel injection system.

Ensure that the cables are clear of fan blades, belts, moving parts of both engines, or any fuel delivery system parts.

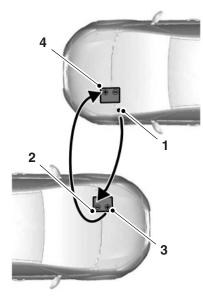
# **Jump Starting**

- 1. Start the engine of the booster vehicle and run the engine at a moderately increased speed.
- 2. Start the engine of the disabled vehicle.
- 3. Once the disabled vehicle has been started, run both engines for an additional three minutes before disconnecting the jumper cables.

## **Removing the Jumper Cables**

**Note:** In the illustration, the vehicle on the bottom is used to designate the assisting (boosting) battery.

Remove the jumper cables in the reverse order that they were connected.



- 1. Remove the jumper cable from the ground metal surface.
- 2. Remove the jumper cable on the negative (-) terminal of the booster vehicle's battery.
- 3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.
- 4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

After the disabled vehicle has been started and the jumper cables removed, allow it to idle for several minutes so the engine computer can relearn its idle conditions.

### **GETTING THE SERVICES YOU NEED**

Warranty repairs to your vehicle must be performed by an authorized dealer. While any authorized dealer handling your vehicle line will provide warranty service, we recommend you return to your selling authorized dealer who wants to ensure your continued satisfaction.

Please note that certain warranty repairs require special training, equipment or both, so not all authorized dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another authorized dealer.

A reasonable time must be allowed to perform a repair after taking your vehicle to the authorized dealer. Repairs will be made using Ford or Motorcraft parts, or remanufactured or other parts that are authorized by Ford.

## Away from Home

If you are away from home when your vehicle needs service, contact the Ford Customer Relationship Center or use the online resources listed below to find the nearest authorized dealer.

In the United States:

### **Mailing Address**

Ford Motor Company Customer Relationship Center P.O. Box 6248 Dearborn, MI 48121

### Telephone

1-800-392-3673 (FORD)

(TDD for the hearing impaired: 1-800-232-5952)

### Online

Additional information and resources are available online at www.fordowner.com.

These are some of the items that can be found online:

- U.S. Dealer Locator by Dealer Name, City/State, or Zip Code
- Owner Manuals
- Maintenance Schedules
- Recalls
- Ford Extended Service Plans

- Ford Genuine Accessories
- Service specials and promotions.

In Canada:

### Mailing address

Customer Relationship Centre Ford Motor Company of Canada, Limited P.O. Box 2000 Oakville, Ontario L6K 0C8

### **Telephone**

1-800-565-3673 (FORD)

### **Online**

www.ford.ca

### Additional Assistance

If you have questions or concerns, or are unsatisfied with the service you are receiving, follow these steps:

- 1. Contact your Sales Representative or Service Advisor at your selling or servicing authorized dealer.
- 2. If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.
- 3. If you require assistance or clarification on Ford Motor Company policies, please contact the Ford Customer Relationship Center.

In order to help serve you better, please have the following information available when contacting a Customer Relationship Center:

- Vehicle Identification Number (VIN)
- Your telephone number (home and business)
- The name of the authorized dealer and city where located
- The vehicle's current odometer reading.

In some states, you must directly notify Ford in writing before pursuing remedies under your state's warranty laws. Ford is also allowed a final repair attempt in some states.

In the United States, a warranty dispute must be submitted to the BBB AUTO LINE before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

## IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 18000 mi (29 000 km), whichever occurs first:

- 1. Two or more repair attempts are made on the same nonconformity likely to cause death or serious bodily injury OR
- 2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR
- 3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time).

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company 16800 Executive Plaza Drive Mail Drop 3NE-B Dearborn, MI 48126

You are required to submit your warranty dispute to BBB AUTO LINE before asserting in court any rights or remedies conferred by California Civil Code Section 1793.22(b). You are also required to use BBB AUTO LINE before exercising rights or seeking remedies created by the Federal Magnuson-Moss Warranty Act, 15 U.S.C. sec. 2301 et seq. If you choose to seek redress by pursuing rights and remedies not created by California Civil Code Section 1793.22(b) or the Magnuson-Moss Warranty Act, resorting to BBB AUTO LINE is not required by those statutes.

# THE BETTER BUSINESS BUREAU (BBB) AUTO LINE PROGRAM (U.S. ONLY)

Your satisfaction is important to Ford Motor Company and to your dealer. If a warranty concern has not been resolved using the three-step procedure outlined earlier in this chapter in the *Getting the Services You Need* section, you may be eligible to participate in the BBB AUTO LINE program.

The BBB AUTO LINE program consists of two parts – mediation and arbitration. During mediation, a representative of the BBB will contact both you and Ford Motor Company to explore options for settlement of the claim. If an agreement is not reached during mediation or you do not want to participate in mediation, and if your claim is eligible, you may participate in the arbitration process. An arbitration hearing will be scheduled so that you can present your case in an informal setting before an impartial person. The arbitrator will consider the testimony provided and make a decision after the hearing.

Disputes submitted to the BBB AUTO LINE program are usually decided within 40 days after you file your claim with the BBB. You are not bound by the decision, and may reject the decision and proceed to court where all findings of the BBB Auto Line dispute, and decision, are admissible in the court action. Should you choose to accept the BBB AUTO LINE decision, Ford is then bound by the decision, and must comply with the decision within 30 days of receipt of your acceptance letter.

BBB AUTO LINE Application: Using the information provided below, please call or write to request a program application. You will be asked for your name and address, general information about your new vehicle, information about your warranty concerns, and any steps you have already taken to try to resolve them. A Customer Claim Form will be mailed that will need to be completed, signed and returned to the BBB along with proof of ownership. Upon receipt, the BBB will review the claim for eligibility under the Program Summary Guidelines.

You can get more information by calling BBB AUTO LINE at 1-800-955-5100, or writing to:

BBB AUTO LINE 3033 Wilson Boulevard, Suite 600 Arlington, Virginia 22201

BBB AUTO LINE applications can also be requested by calling the Ford Motor Company Customer Relationship Center at 1-800-392-3673.

**Note:** Ford Motor Company reserves the right to change eligibility limitations, modify procedures, or to discontinue this process at any time without notice and without obligation.

# UTILIZING THE MEDIATION or ARBITRATION PROGRAM (CANADA ONLY)

This pertains to vehicles delivered to authorized Canadian dealers. In those cases, where you continue to feel that the efforts by Ford of Canada and the authorized dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation or arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straightforward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final as the arbitrator's award is binding on both you and Ford of Canada.

CAMVAP services are available in all Canadian territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685 or visit www.camvap.ca.

### **GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA**

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel.

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact our Customer Relationship Center.

The use of leaded fuel in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company or Ford of Canada is not responsible for any damage caused by use of improper fuel. Using leaded fuel may also result in difficulty importing your vehicle back into the United States.

If your vehicle must be serviced while you are traveling or living in Asia-Pacific Region, Sub-Saharan Africa, U.S. Virgin Islands, Central America, the Caribbean, and Israel, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

# FORD MOTOR COMPANY FORD EXPORT OPERATIONS & GLOBAL INITIATIVES

Customer Relationship Center

1555 Fairlane Drive Fairlane Business Park #3

Allen Park, Michigan 48101

U.S.A.

Telephone: (313) 594-4857

FAX: (313) 390-0804 Email: expcac@ford.com

For customers in Guam, the Commonwealth of the Northern Mariana Islands (CNMI), America Samoa, and the U.S. Virgin Islands, please feel free to call our Toll-Free Number: (800) 841-FORD (3673)

If your vehicle must be serviced while you are traveling or living in Puerto Rico, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

# FORD MOTOR COMPANY FORD EXPORT OPERATIONS & GLOBAL INITIATIVES

Customer Relationship Center 1555 Fairlane Drive Fairlane Business Park #3

Allen Park, Michigan 48101

U.S.A.

Telephone: (313) 594-4857

FAX: (313) 390-0804 Email: www.ford.com.pr

If your vehicle must be serviced while you are traveling or living in the Middle East, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

## Ford Middle East

### **Customer Relationship Center**

P.O. Box 21470 Dubai, United Arab Emirates

Telephone: +971 4 3326084

Toll-Free Number of the Kingdom of Saudi Arabia: 800 8971409

Local Telephone Number of Kuwait: 24810575

FAX: +971 4 3327299 Email: menacac@ford.com

www.me.ford.com

If you buy your vehicle in North America and then relocate to any of the above locations, register your vehicle identification number (VIN) and new address with Ford Motor Company Export Operations & Global Growth Initiatives by emailing expcac@ford.com.

If you are in another foreign country, contact the nearest authorized dealer. In the event your inquiry is unresolved, communicate your concern with the dealership's Sales Manager, Service Manager or Customer Relations Manager. If you require additional assistance or clarification, please contact the respective Customer Relationship Center as previously listed.

Customers in the U.S. should call 1-800-392-3673.

### ORDERING ADDITIONAL OWNER'S LITERATURE

To order the publications in this portfolio, contact Helm, Incorporated at:

HELM, INCORPORATED 47911 Halyard Drive Plymouth, Michigan 48170 Attention: Customer Service

Or to order a free publication catalog, call toll free: 1-800-782-4356

Monday-Friday 8:00 a.m. - 6:00 p.m. EST

Helm, Incorporated can also be reached by their website: www.helminc.com.

(Items in this catalog may be purchased by credit card, check or money order.)

# Obtaining a French Owner's Manual

A French owner's manual can be obtained from your authorized dealer or by contacting Helm, Incorporated using the contact information listed previously in this section.

## REPORTING SAFETY DEFECTS (U.S. ONLY)



If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety

Administration (NHTSA) in addition to notifying Ford Motor Company.

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, your dealer, or Ford Motor Company.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1–888–327–4236 (TTY: 1–800–424–9153); go to http://www.safercar.gov; or write to:

Administrator 1200 New Jersey Avenue, Southeast Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from <a href="http://www.safercar.gov">http://www.safercar.gov</a>.

## REPORTING SAFETY DEFECTS (CANADA ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada, using their toll-free number: 1–800–333–0510, or online at: https://wwwapps.tc.gc.ca/Saf-Sec-Sur/7/PCDB-BDPP/Index.aspx.

### **CHANGING A FUSE**

## **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the  $Azure\ Dynamics\ TC\text{-}E\ Owner's\ Guide\ Supplement.$ 

## **Fuses**

**WARNING:** Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.



If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.

# Standard Fuse Amperage Rating and Color

	COLOR				
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
2A	Grey	Grey		_	_
3A	Violet	Violet		_	
4A	Pink	Pink		_	_
5A	Tan	Tan	_	_	_
7.5A	Brown	Brown		_	_
10A	Red	Red	_	_	_
15A	Blue	Blue	_	_	_
20A	Yellow	Yellow	Yellow	Blue	Blue
25A	Natural	Natural	_	Natural	Natural
30A	Green	Green	Green	Pink	Pink
40A		_	Orange	Green	Green
50A	_	_	Red	Red	Red

COLOR					
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
60A	_	_	Blue	Yellow	Yellow
70A		_	Tan		Brown
80A	_	_	Natural	Black	Black

### **FUSE SPECIFICATION CHART**

## **Power Distribution Box**



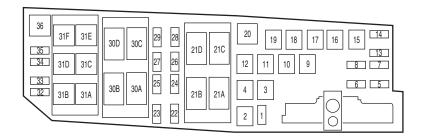
**WARNING:** Always disconnect the battery before servicing high current fuses.

**WARNING:** To reduce risk of electrical shock, always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs.

The power distribution box is located in the engine compartment. It has high-current fuses that protect your vehicle's main electrical systems from overloads.

If the battery has been disconnected and reconnected, see *Changing the Vehicle Battery* in the *Maintenance* chapter.

**Note:** To remove the power distribution box cover, the battery negative cable clip needs to be removed first. Pull up on the clip to detach it from the battery tray.



The high-current fuses are coded as follows:

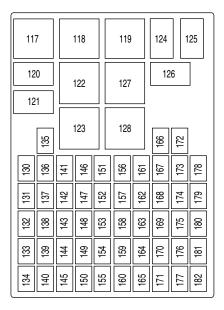
Fuse or relay	Fuse amp	Protected circuits
location	rating	Trotteeted circuits
1	7.5A*	Heated windshield telltale
2	40A**	Right heated windshield, Modified vehicle – Rear heater blower fan, Ignition supply
3	50A**	Left heated windshield, Modified vehicle – Battery supply
4	20A**	Fuel pump
5	10A*	Powertrain control module keep alive power, Canister solenoid
6	15A*	Powertrain control module, Data link connector
7	20A*	Ignition switch
8	15A*	Headlamps
9	40A**	Passenger compartment fuse panel II
10	25A**	Modified vehicle – Rear turn signal, Battery supply
11	40A**	Ignition overload, Passenger compartment fuse panel
12	30A**	Anti-lock brake system / Roll stability control pump motor
13	30A*	Heater blower motor

Fuse or relay	Fuse amp	Protected circuits
location	rating	
14	10A*	Powertrain control module relay
15	20A**	Anti-lock brake system / Roll
		stability control valves
16	30A**	Cooling fan – low
17	50A**	Cooling fan – high
18	25A**	Daytime running lamps, Low
		beam interrupt relay
19	50A**	Passenger compartment fuse
		panel III
20	_	A/C clutch relay
21A	_	Right heated windshield relay,
		Modified vehicle – Rear fan relay
21B		Starter lock relay
21C	_	High beam headlamp relay
21D	_	Powertrain control module relay
22	10A*	Powertrain control module,
		Auxiliary connector, Fuel injectors
23	10A*	Right low beam headlamp
24	10A*	A/C clutch solenoid
25	10A*	Left low beam headlamp
26	10A*	Mass air flow sensor, Brake
		switch, Backup lamps relay,
		Exhaust gas recovery valve
		stepper motor, Electronic vapor
		canister purge valve, Heated
		oxygen sensors, Floor shifter,
		Transmission range sensor
27		Not used

Fuse or relay	Fuse amp	Protected circuits
location	rating	
28	15A*	Powertrain control module vehicle
		power 1
29	15A*	Auxiliary connector, Coil on plugs
30A	70A Relay	Cooling fan high relay
30B		
30C	_	Cooling fan low relay
30D	_	Left heated windshield relay
31A	_	Backup lamp relay
31B	_	Fuel pump relay
31C	_	Daytime running lamps relay
31D	_	Low beam headlamps relay
31E	_	Modified vehicle – Right rear turn
		signal relay
31F	_	Front fog lamps
32	_	Cooling fan diode
33	_	Fuel pump relay diode
34		Gear shifter diode
35	30A*	Start lock relay
36	_	Modified vehicle – Left rear turn
		signal relay
*Mini fuse **Cartr	idge fuse	

## **Passenger Compartment Fuse Panel**

The fuse panel and relay box are located below the instrument panel to the left of the steering wheel.



The fuses are coded as follows:

Fuse or relay location	Fuse amp	Protected circuits
	rating	
117	_	Not used
118	_	Not used
119		Not used
120	_	Headlamps, Low beam interrupt
		relay
121		Front fog lamp interrupt relay
122		Rear window defroster relay
123		Heater blower relay
124		Interior lamps relay
125	_	Windshield wipers relay

Fuse or relay	Fuse amp	Protected circuits
location	rating	
126	_	Rear unlock relay
127	_	Ignition overload relay
128	_	Battery saver relay
		(modified vehicle)
130	15A	Hazard flashers
131	5A	Power mirrors
132	10A	Light switch, Exterior lighting
133	_	Not used
134	_	Not used
135	_	Not used
136	15A	Horn
137	7.5A	Tire pressure monitoring system,
		Radio, Instrument cluster
138	10A	Reverse lamp
139	20A	Ignition supply (modified vehicle)
140		Not used
141	7.5A	Front/rear fog lamps
142	15A	Brake lamps
143	20A	Cigar lighter, Front power point
144	10A	Ignition supply (modified vehicle)
145		Not used
146	20A	Windshield wipers, Wiper switch
147	15A	Front fog lamps
148	7.5A	Recirculation, Instrument cluster
149	10A	Ignition supply/Battery supply
		(modified vehicle)
150		Not used
151	15A	Radio, Bluetooth®/Voice
		command module
152	7.5A	A/C switch, Park aid module
153	7.5A	Interior lamps, Battery saver
154	15A	Roof lamp (modified vehicle)

Fuse or relay	Fuse amp	Protected circuits
location	rating	
155	10A	Battery saver (modified vehicle)
156	7.5A	Right parking lamp/tail lamps
157	7.5A	License plate lamps
158	10A	Light switch
159	20A	Rear heater blower fan
		(modified vehicle)
160		Not used
161	7.5A	Anti-lock brake system/Roll stability control, Steering angle sensor
162	7.5A	Airbag module, Passenger airbag off indicator
163	20A	Locks
164	20A	Tire pressure monitoring system module
165	_	Not used
166	25A	Front power windows
167	7.5A	Rear window defroster/heated mirror switch
168	_	Not used
169	20A	Second power point
170	_	Not used
171	_	Not used
172	10A	Right rear turn signal (modified vehicle)
173	10A	Left rear turn signal (modified vehicle)

Fuse or relay	Fuse amp	Protected circuits
location	rating	
174	20A	Rear power point, Rear center
		console power point
		(modified vehicle)
175	7.5A	Left park lamps/tail lamps
176		Not used
177	_	Not used
178	25A	Rear window defroster
179	7.5A	Instrument cluster, Passive anti-theft system, Accelerator pedal sensor, Tire pressure monitoring system, Rearview camera
180	20A	Front and rear window washer
181	_	Not used
182	_	Not used

### **GENERAL INFORMATION**

Have your vehicle serviced regularly to help maintain its roadworthiness and resale value. There is a large network of Ford authorized dealers who are there to help you with their professional servicing expertise. We believe that their specially trained technicians are best qualified to service your vehicle properly and expertly. They are supported by a wide range of highly specialized tools developed specifically for servicing your vehicle.

To help you service your vehicle, we provide *Scheduled Maintenance Information* which makes tracking routine service easy.

If your vehicle requires professional service, your authorized dealer can provide the necessary parts and service. Check your warranty information to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft® parts are designed and built to provide the best performance in your vehicle.

#### **Precautions**

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning material (such as cigarettes) away from the battery and all fuelrelated parts.

### Working with the Engine Off

- 1. Set the parking brake and shift to **P** (Park).
- 2. Turn off the engine and remove the key (if equipped).
- 3. Block the wheels.

## Working with the Engine On

**WARNING:** To reduce the risk of vehicle damage or personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

- 1. Set the parking brake and shift to position **P**.
- 2. Block the wheels.

### **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

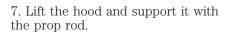
### **OPENING AND CLOSING THE HOOD**

1. Lift and swivel the front badge to the left.



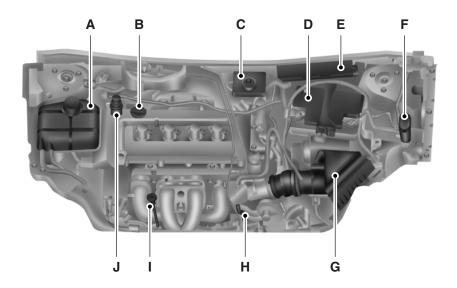


- 2. Insert the key and turn it to the left to release the primary latch.
- 3. Turn they key to the right to release the secondary latch.
- 4. Lift the hood.
- 5. To prevent damage to the key, or loss of the key, remove the key immediately after opening the hood.
- 6. Swivel the front badge back.





## **UNDER HOOD OVERVIEW**



- A. Engine coolant reservoir
- B. Engine oil filler cap
- C. Brake fluid reservoir
- D. Battery
- E. Power distribution box
- F. Windshield washer fluid reservoir
- G. Air filter assembly
- H. Automatic transmission fluid dipstick
- I. Engine oil dipstick
- J. Power steering fluid reservoir

### **ENGINE OIL DIPSTICK**



## **ENGINE OIL CHECK**

Refer to the *Scheduled Maintenance* information for the appropriate intervals for checking the engine oil.

- 1. Make sure the vehicle is on level ground.
- 2. Turn the engine off and wait 15 minutes for the oil to drain into the oil pan.
- 3. Set the parking brake and ensure the gearshift is securely latched in P (Park).
- 4. Open the hood. Protect yourself from engine heat.
- 5. Locate and carefully remove the engine oil level dipstick.
- 6. Wipe the dipstick clean.
- 7. Insert the dipstick fully.
- 8. Remove the engine oil level dipstick.

If the oil level is between the MIN and MAX marks, the oil level is acceptable. DO NOT ADD OIL.

If the oil level is below the MIN mark, add enough engine oil to raise the level within the MIN and MAX range. Refer to *Adding Engine Oil* in this chapter.

9. Put the dipstick back in and ensure it is fully seated.

## **Adding Engine Oil**

Note: Do not remove the filler cap when the engine is running.

**Note:** Do not add engine oil further than the MAX mark. Oil levels above the MAX mark may cause engine damage.



Only use oils certified for gasoline engines by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricants Specification Advisory Council (ILSAC), comprised of U.S. and Japanese automobile manufacturers.

- 1. Remove the filler cap.
- 2. Add engine oil that meets Ford specifications. See Capacities and Specifications for more information.
- 3. Recheck the engine oil level. Make sure the oil level is not above the normal operating range on the engine oil level dipstick.
- 4. Install the dipstick and ensure it is fully seated.
- 5. Fully install the engine oil filler cap by turning the filler cap clockwise until three clicks are heard or until the cap is fully seated.

### **ENGINE COOLANT CHECK**

### **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the  $Azure\ Dynamics\ TC\text{-}E\ Owner's\ Guide\ Supplement.$ 

## **Checking the Engine Coolant**

When the engine is cold, check the concentration and level of the engine coolant at the intervals listed in the *Scheduled Maintenance Information*.

**Note:** Make sure that the level is between the MIN and MAX marks on the coolant reservoir.

**Note:** Coolant expands when it is hot. The level may extend beyond the MAX mark.

**Note:** If the level is at the MIN mark, below the MIN mark, or empty, add coolant immediately. See *Adding Engine Coolant* in this chapter.

The coolant concentration should be maintained within 48% to 50%, which equates to a freeze point between -30°F (-34°C) and -34°F (-37°C).

**Note:** For best results, coolant concentration should be tested with a refractometer such as Rotunda tool 300-ROB75240 available from your dealer. Ford does not recommend the use of hydrometers or coolant test strips for measuring coolant concentrations.

**Note:** Automotive fluids are not interchangeable; do not use engine coolant/antifreeze or windshield washer fluid outside of its specified function and vehicle location.

## Adding Engine Coolant

**WARNING:** Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

**WARNING:** Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

**WARNING:** To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.



**WARNING:** Do not add coolant further than the MAX mark.

**Note:** Do not use stop leak pellets or cooling system sealants/additives as they can cause damage to the engine cooling and/or heating systems. This damage would not be covered under your vehicle's warranty.

**Note:** During normal vehicle operation, the engine coolant may change color from orange to pink or light red. As long as the engine coolant is clear and uncontaminated, this color change does not indicate the engine coolant has degraded nor does it require the engine coolant to be drained, the system to be flushed, or the engine coolant to be replaced.

 DO NOT MIX different colors or types of coolant in your vehicle. Make sure the correct coolant is used. Mixing of engine coolants may harm your engine's cooling system. The use of an improper coolant may harm engine and cooling system components and may void the warranty.

- In case of emergency, a large amount of water without engine coolant may be added in order to reach a vehicle service location. In this instance, the cooling system must be drained, chemically cleaned with Motorcraft Premium Cooling System Flush, and refilled with engine coolant as soon as possible. Water alone (without engine coolant) can cause engine damage from corrosion, overheating or freezing.
- Do not use alcohol, methanol, brine or any engine coolants mixed with alcohol or methanol antifreeze (coolant). Alcohol and other liquids can cause engine damage from overheating or freezing.
- Do not add extra inhibitors or additives to the coolant. These can be harmful and compromise the corrosion protection of the engine coolant.

Unscrew the cap slowly. Any pressure will escape as you unscrew the cap.

Add prediluted engine coolant meeting the Ford specification. See *Capacities and Specifications* for more information.

Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add enough prediluted engine coolant to bring the coolant level to the proper level.

# **Recycled Engine Coolant**

Ford Motor Company does not recommend the use of recycled engine coolant since a Ford-approved recycling process is not yet available.

Always dispose of used automotive fluids in a responsible manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

### **Severe Climates**

If you drive in extremely cold climates:

- It may be necessary to have a Ford authorized dealer increase the coolant concentration above 50%.
- A coolant concentration of 60% will provide improved freeze point protection. Engine coolant concentrations above 60% will decrease the overheat protection characteristics of the engine coolant and may cause engine damage.

If you drive in extremely hot climates:

- It may be necessary to have a Ford authorized dealer decrease the coolant concentration to 40%.
- A coolant concentration of 40% will provide improved overheat protection. Engine coolant concentrations below 40% will decrease the corrosion/freeze protection characteristics of the engine coolant and may cause engine damage.

Vehicles driven year-round in non-extreme climates should use prediluted engine coolant for optimum cooling system and engine protection.

# What you should know about fail-safe cooling (if equipped)

If the engine coolant supply is depleted, this feature allows the vehicle to be driven temporarily before incremental component damage is incurred. The "fail-safe" distance depends on ambient temperatures, vehicle load and terrain.

**WARNING:** If fail-safe cooling activates, pull off the road as soon as safely possible, and turn the engine off, because the engine may automatically shut off while driving without further indication.

#### How fail-safe cooling works

If the engine reaches a preset over-temperature condition, the engine will automatically switch to alternating cylinder operation. Each disabled cylinder acts as an air pump and cools the engine.

When this occurs the vehicle will still operate. However:

- The engine power will be limited.
- The air conditioning system will be disabled.

Continued operation will increase the engine temperature:

- The engine will completely shut down.
- Steering and braking effort will increase.

Once the engine temperature cools, the engine can be re-started. Take your vehicle to an authorized dealer as soon as possible to minimize engine damage.

#### When fail-safe mode is activated

You have limited engine power when in the fail-safe mode, so drive the vehicle with caution. The vehicle will not be able to maintain high speed operation and the engine will run rough. Remember that the engine is capable of completely shutting down automatically to prevent engine damage, therefore:

- 1. Pull off the road as soon as safely possible and turn off the engine.
- 2. Arrange for the vehicle to be taken to an authorized dealer.
- 3. If this is not possible, wait a short period for the engine to cool.
- 4. Check the coolant level and replenish if low.



**WARNING:** Never remove the coolant reservoir cap while the engine is running or hot.

5. Restart the engine and take your vehicle to an authorized dealer.

Driving the vehicle without repairing the engine problem increases the chance of engine damage. Take your vehicle to an authorized dealer as soon as possible.

# TRANSMISSION FLUID CHECK

#### **Checking Automatic Transmission Fluid**

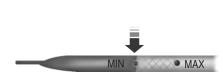
Refer to your *Scheduled Maintenance* information for scheduled intervals for fluid checks and changes. Your transmission does not consume fluid. However, the fluid level should be checked if the transmission is not working properly, i.e., if the transmission slips or shifts slowly or if you notice some sign of fluid leakage.

Automatic transmission fluid expands when warmed. Check the transmission fluid when the fluid is at normal operating temperature (120°F-140°F [50°C-60°C]) on a level surface. The normal operating temperature can be reached after approximately 20 miles (30 km) of driving. If your vehicle has been operated for an extended period at high speeds, in city traffic, or during hot weather, the vehicle should be turned off for about 30 minutes to allow fluid to cool before checking. Under these conditions, the vehicle must be restarted prior to checking the fluid level.

- 1. Drive the vehicle 20 miles (30 km) or until it reaches normal operating temperature.
- 2. Park the vehicle on a level surface and engage the parking brake.

- 3. With the engine running, the parking brake engaged, and your foot on the brake pedal, move the gearshift lever through all of the gear ranges. Allow sufficient time for each gear to engage.
- 4. Place the gearshift lever in P (Park) and leave the engine running.
- 5. Remove the dipstick, wiping it clean with a clean, dry lint free rag. If necessary, refer to *Under Hood Overview* in this chapter for the location of the dipstick.
- 6. Install the dipstick making sure it is fully seated in the filler tube.
- 7. Remove the dipstick and inspect the fluid level. The fluid should be in the designated areas for normal operating temperature.

## Low fluid level



Do not drive the vehicle if the fluid level is at the bottom of the dipstick. If the fluid level is below the MIN mark, add fluid in 1/2 pint (250 ml) increments.

## Correct Fluid Level



The transmission fluid should be in this range when the fluid is at normal operating temperature (120°F-140°F [50°C-60°C]).

# High Fluid Level



Fluid levels above the safe range may result in transmission failure. An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

High fluid levels can be caused by an overheating condition.

# Adjusting Automatic Transmission Fluid Levels

Before adding any fluid, make sure the correct type is used. The type of fluid used is normally indicated on the dipstick and also in the *Capacities and Specifications* chapter.

**Note:** Use of a non-approved automatic transmission fluid may cause internal transmission component damage.

If necessary, add fluid in 1/2 pint (250 ml) increments through the filler tube until the level is correct. After adding fluid, wait 20 minutes before checking the fluid level in order to allow the level to stabilize.



If an overfill occurs, excess fluid should be removed by an authorized dealer. If the fluid level is above the MAX mark, fluid will have to be removed.

**Note:** An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

**Note:** Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

## **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

## **BRAKE FLUID CHECK**

Fluid levels between the MIN and MAX lines are within the normal operating range; there is no need to add fluid. If the fluid levels are outside of the normal operating range, the performance of the system could be compromised; seek service from your authorized dealer immediately.

## **POWER STEERING FLUID CHECK**

Check the power steering fluid at the proper intervals. Refer to Scheduled Maintenance Information.

- 1. Start the engine and let it run until it reaches normal operating temperature.
- 2. Turn the steering wheel left and right several times.
- 3. Turn the engine off.
- 4. Check the fluid level.
- 5. If the fluid is below the MIN line, add fluid in small amounts until it reaches the correct level (between the MIN and MAX lines). Refer to *Capacities and Specifications* for the proper fluid type.

#### **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

#### **FUEL FILTER**

Your vehicle is equipped with a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed.

#### WASHER FLUID CHECK

**WARNING:** If you operate your vehicle in temperatures below 40°F (5°C), use washer fluid with antifreeze protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

Add fluid to fill the reservoir if the level is low. Only use a washer fluid that meets Ford specifications. See the technical specifications chart in the *Capacities and Specifications* chapter.

**Note:** The front and rear washer systems are supplied from the same reservoir.

State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.

## CHANGING THE VEHICLE BATTERY

**WARNING:** Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide proper ventilation.

**WARNING:** When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and/or damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.

**WARNING:** Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.



**WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

Your vehicle is equipped with a Motorcraft® maintenance-free battery which normally does not require additional water during its life of service.

**Note:** If your battery has a cover/shield, make sure it is reinstalled after the battery has been cleaned or replaced.

For longer, trouble-free operation, keep the top of the battery clean and dry. Also, make certain the battery cables are always tightly fastened to the battery terminals.

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

It is recommended that the negative battery cable terminal be disconnected from the battery if you plan to store your vehicle for an extended period of time.

**Note:** Electrical or electronic accessories or components added to the vehicle by the dealer or the owner may adversely affect battery performance and durability and may also affect the performance of other electrical systems in the vehicle.

When a battery replacement is required, the battery should only be replaced with a Ford recommended replacement battery that matches the electrical requirements of the vehicle.

When the battery is disconnected or a new battery installed, the automatic transmission must relearn its adaptive strategy. As a result of this, the transmission may shift firmly when first driven. This operation is considered normal and will fully update transmission operation to its optimum shift feel.

If the battery has been disconnected or a new battery has been installed, the clock and the preset radio stations must be reset once the battery is reconnected.

**Note:** Always dispose of automotive batteries in a responsible manner. Follow your local authorized standards for disposal. Call your local authorized recycling center to find out more about recycling automotive batteries

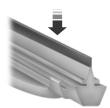
Because your vehicle's engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance. To begin this process:

- 1. With the vehicle at a complete stop, set the parking brake.
- 2. Put the gearshift in P (Park), turn off all accessories and start the engine.
- 3. Run the engine until it reaches normal operating temperature.
- 4. Allow the engine to idle for at least one minute.
- 5. Turn the A/C on and allow the engine to idle for at least one minute.

- 6. Drive the vehicle to complete the relearning process.
- The vehicle may need to be driven 10 miles (16 km) or more to relearn the idle and fuel trim strategy.
- **Note:** If you do not allow the engine to relearn its idle trim, the idle quality of your vehicle may be adversely affected until the idle trim is eventually relearned.

If the battery has been disconnected or a new battery has been installed, the clock and radio settings must be reset once the battery is reconnected.

## **CHECKING THE WIPER BLADES**



Run the tip of your fingers over the edge of the blade to check for roughness.

Clean the wiper blades with washer fluid or water applied with a soft sponge or cloth.

## **CHANGING THE WIPER BLADES**



- 1. Pull the wiper arm away from the vehicle. Turn the blade at an angle from the wiper arm. Press the lock tab to release the blade and pull the wiper blade down toward the windshield to remove it from the arm.
- 2. Attach the new wiper to the wiper arm and press it into place until a click is heard.

Replace wiper blades at least once per year for optimum performance. Poor wiper quality can be improved by cleaning the wiper blades and the windshield.

To prolong the life of the wiper blades, it is highly recommended to scrape off the ice on the windshield before turning on the wipers. The layer of ice has many sharp edges and can damage the micro edge of the wiper rubber element.

# Rear window wiper blades (if equipped)

Refer to *Changing the wiper blades* in this section and follow the same procedure given for checking and changing the wiper blades.

#### AIR FILTER CHECK

**WARNING:** To reduce the risk of vehicle damage and or personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

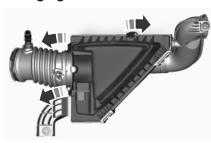
**Note:** Failure to use the correct air filter element may result in severe engine damage. The customer warranty may be void for any damage to the engine if the correct air filter element is not used.

When changing the air filter element, use only the air filter element listed. See *Motorcraft® Part Numbers* in the *Capacities and Specifications* chapter.

See Scheduled Maintenance Information for the appropriate intervals for changing the air filter element.

**Note:** Failure to use the correct air filter element may result in severe engine damage. The customer warranty may be void for any damage to the engine if the correct air filter element is not used.

# **Changing the Air Filter Element**



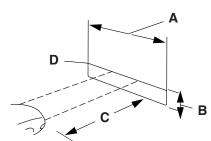
- 1. Release the clamps that secure the air filter housing cover.
- 2. Carefully separate the two halves of the air filter housing.
- 3. Remove the air filter element from the air filter housing.
- 4. Wipe the air filter housing and cover clean to remove any dirt or debris and to ensure good sealing.
- 5. Install a new air filter element. Be careful not to crimp the filter element edges between the air filter housing and cover. This could cause filter damage and allow unfiltered air to enter the engine if not properly seated
- 6. Replace the air filter housing cover and secure the clamps. Be sure that the air cleaner cover tabs are engaged into the slots of the air cleaner housing.

#### **ADJUSTING THE HEADLAMPS**

The headlamps on your vehicle are properly aimed at the assembly plant. If your vehicle has been in an accident, the alignment of your headlamps should be checked by your authorized dealer.

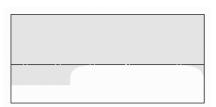
# **Vertical Aim Adjustment**

1. Park the vehicle directly in front of a wall or screen on a level surface, approximately 25 feet (7.6 meters) away.



- (A) 8 feet (2.4 meters)
- (B) Center height of lamp to ground
- (C) 25 feet (7.6 meters)
- (D) Horizontal reference line
- 2. Measure the height of the headlamp bulb center from the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height.
- 3. Turn on the low beam headlamps to illuminate the wall or screen and open the hood.

To see a clearer light pattern for adjusting, you may want to block the light from one headlamp while adjusting the other.



On the wall or screen you will observe a flat zone of high intensity light located at the top of the right hand portion of the beam pattern. If the top edge of the high intensity light zone is not at the horizontal reference line, the headlamp will need to be adjusted.



4. Locate the vertical adjuster on each headlamp. Using a Phillips #2 screwdriver or a 13 millimeter socket on a wrench, turn the adjuster either clockwise or counterclockwise in order to adjust the vertical aim of the headlamp. The horizontal edge of the brighter light should touch the horizontal reference line.

5. Close the hood and turn off the lamps.

HORIZONTAL AIM IS NOT REQUIRED FOR THIS VEHICLE AND IS NOT ADJUSTABLE.

#### **CHANGING A BULB**

# **Lamp Assembly Condensation**

Exterior lamps are vented to accommodate normal changes in pressure. Condensation can be a natural by-product of this design. When moist air enters the lamp assembly through the vents, there is a possibility that condensation can occur when the temperature is cold. When normal condensation occurs, a thin film of mist can form on the interior of the lens. The thin mist eventually clears and exits through the vents during normal operation. Clearing time may take as long as 48 hours under dry weather conditions.

These are examples of acceptable condensation:

- Presence of thin mist (no streaks, drip marks or droplets).
- Fine mist covers less than 50% of the lens.

These are examples of unacceptable moisture (usually caused by a lamp water leak):

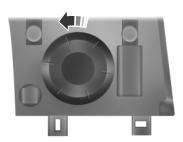
- Water puddle inside the lamp.
- Large water droplets, drip marks or streaks present on the interior of the lens

Take your vehicle to a dealer for service if any of the above conditions of unacceptable moisture are present.

# **Replacing Headlamp Bulbs**

**WARNING:** Handle a halogen headlamp bulb carefully and keep out of children's reach. Grasp the bulb by only its plastic base and do not touch the glass. The oil from your hand could cause the bulb to break the next time the headlamps are operated.

**Note:** If the bulb is accidentally touched, clean it with rubbing alcohol before using it.



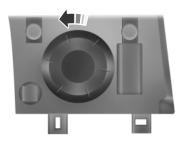
- 1. Make sure the headlamp control is in the off position.
- 2. Open the hood.
- 3. Remove the bulb service cover by turning it counterclockwise.



- 4. Disconnect electrical connector from the bulb.
- 5. Twist off the bulb retainer ring by turning it counterclockwise.

Install in reverse order.

# Replacing Front Parking Lamp Bulbs



- 1. Make sure the headlamp control is in the off position.
- 2. Open the hood.
- 3. Remove the bulb service cover by turning it counterclockwise.



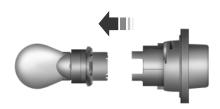
Install in reverse order.

- 4. Remove the bulb and the bulb socket.
- 5. Pull the bulb straight out.

# Replacing Front Turn Signal Bulbs



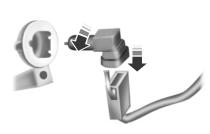
- 1. Make sure the headlamp control is in the off position.
- 2. Open the hood.
- 3. Remove the bulb socket from the lamp assembly by turning it counterclockwise.



4. Pull the bulb straight out of the socket.

Install in reverse order.

# Replacing Front Fog Lamp Bulbs (If Equipped)



- 1. Make sure the headlamp control is in the off position.
- 2. Reach under the front fender and remove the aero shield.
- 3. Remove the harness/bulb assembly from the fog lamp by turning it counterclockwise.
- 4. Disconnect the harness from the bulb by pulling it straight out.

Install in reverse order.

# Replacing Front Side Marker Bulbs



- 1. Make sure the headlamp control is in the off position.
- 2. Remove the side marker lamp assembly by gently prying the lamp assembly away from the vehicle.



3. Remove the bulb socket from the lamp assembly by turning it counterclockwise.



4. Pull the bulb straight out of the socket.



Install in reverse order.

# Replacing side repeater bulbs



- 1. Make sure the headlamp control is in the off position.
- 2. Remove the side repeater by prying it out from the bottom.
- 3. Hold the bulb holder and turn it counterclockwise to remove it.
- 4. Pull the bulb straight out.

Install in reverse order.

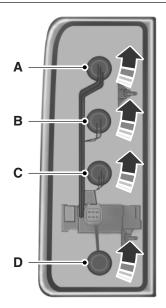
# Replacing Tail/Brake/Rear Fog/Backup Lamps and Turn Signal Bulbs





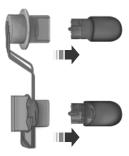


- 1. Make sure the headlamp control is in the off position.
- 2. Open the cargo door.
- 3. Remove the two wing nuts.
- 4. Gently pull the lamp assembly away from the vehicle



- A. Park and brake lamp
- B. Turn signal lamp
- C. Reverse lamp
- D. Fog lamp

 $5.\ \mbox{Remove}$  the bulb socket from the lamp assembly by turning it counterclockwise.



Install in reverse order.

6. Pull the bulb straight out of the socket.

# Replacing Rear Side Marker Bulbs



- 1. Make sure the headlamp control is in the off position.
- 2. Open the cargo door.
- 3. Remove the side marker by gently prying the lamp assembly away from the vehicle.



4. Remove the bulb socket from the lamp assembly by turning it counterclockwise.



5. Pull the bulb straight out of the socket.



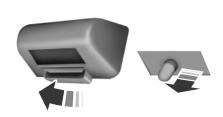
Install in reverse order.

# Replacing High-Mount Brake Lamp Bulbs

See your authorized dealer for replacement.

# Maintenance

# Replacing License Plate Lamp Bulbs



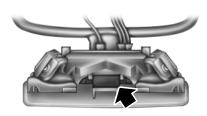
- 1. Make sure the headlamp control is in the off position.
- 2. Remove the lens assembly.
- 3. Pull the bulb straight out.

Install in reverse order.

# **Replacing Front Dome Lamp Bulb**



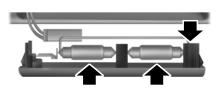
- 1. Make sure the headlamp switch is in the off position.
- 2. Switch off the interior lamps.
- 3. Pry out the light assembly with a flat screwdriver.



4. Remove the front dome lamp bulb.

Install in reverse order.

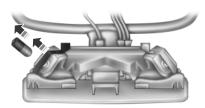
# Replacing Rear Dome Lamp Bulbs



- 1. Make sure the headlamp switch is in the off position.
- 2. Switch off the interior lamps.
- 3. Pry out the light assembly with a flat screwdriver.
- 4. Remove the rear dome lamp bulbs.

Install in reverse order.

# Replacing Reading Lamp Bulbs



- 1. Make sure the headlamp switch is in the off position.
- 2. Switch off the interior lamps.
- 3. Pry out the light assembly with a flat screwdriver.
- 4. Pull the bulb straight out. Install in reverse order.

## **BULB SPECIFICATION CHART**

Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized "D.O.T." for North America to ensure lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb illumination time.

Function	Trade number
Headlamps	H13
Turn lamp indicator (front)	3457NAK
Turn lamp indicator (rear)	WY21W
Side marker lamp	W5W LL
Side repeater lamp	194NA
Front fog lamp	H11
Brake and tail lamps	W21/5W
Backup lamp	W21W
Rear fog lamp	W21W
License plate lamp	W5W LL
High-mount brake lamp	LED
Dome lamps (front and rear)	211
Reading lamps	W5W
To replace all instrument panel lights - see your authorized dealer	

#### **GENERAL INFORMATION**

Your Ford or Lincoln authorized dealer has many quality products available to clean your vehicle and protect its finishes.

#### **CLEANING PRODUCTS**

For best results, use the following products or products of equivalent quality:

Motorcraft® Bug and Tar Remover (ZC-42)

Motorcraft® Custom Bright Metal Cleaner (ZC-15)

Motorcraft® Detail Wash (ZC-3-A)

Motorcraft® Dusting Cloth (ZC-24)

Motorcraft® Engine Shampoo and Degreaser (U.S. only) (ZC-20)

Motorcraft® Engine Shampoo (Canada only) (CXC-66-A)

Motorcraft® Multi-Purpose Cleaner (Canada only) (CXC-101)

Motorcraft® Premium Glass Cleaner (Canada only) (CXC-100)

Motorcraft® Premium Quality Windshield Washer Fluid (Canada only) [CXC-37-(A, B, D or F)]

Motorcraft® Premium Windshield Washer Concentrate (U.S. only) (ZC-32-A)

Motorcraft® Professional Strength Carpet & Upholstery Cleaner (ZC-54)

Motorcraft® Spot and Stain Remover (U.S. only) (ZC-14)

Motorcraft® Ultra-Clear Spray Glass Cleaner (ZC-23)

Motorcraft® Vinyl Cleaner (Canada only) (CXC-93)

Motorcraft® Wheel and Tire Cleaner (ZC-37-A)

#### **CLEANING THE EXTERIOR**

Wash your vehicle regularly with cool or lukewarm water and a neutral pH shampoo, such as Motorcraft® Detail Wash.

- Never use strong household detergents or soap, such as dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash a vehicle that is hot to the touch or during exposure to strong, direct sunlight.
- Dry the vehicle with a chamois or soft terry cloth towel in order to eliminate water spotting.

- Immediately remove items such as gasoline, diesel fuel, bird droppings and insect deposits because they can cause damage to the vehicle's paintwork and trim over time. Use Motorcraft® Bug and Tar Remover.
- **Note:** Suntan lotions and insect repellents can damage any painted surface; if these substances come in contact with your vehicle, wash it off as soon as possible.
- Remove any exterior accessories before entering a car wash.

#### **Exterior Chrome**

**Note:** Never use abrasive materials such as steel wool or plastic pads as they can scratch the chrome surface.

**Note:** Do not use chrome cleaner, metal cleaner or polish on wheels and wheel covers.

- Wash the vehicle first, using cool or lukewarm water and a neutral pH shampoo, such as Motorcraft® Detail Wash.
- Use Motorcraft® Custom Bright Metal Cleaner. Apply the product as you would a wax to clean bumpers and other chrome parts; allow the cleaner to dry for a few minutes, then wipe off the haze with a clean, dry rag.
- Do not apply cleaning product to hot surfaces and do not leave cleaning product on chrome surfaces for a period of time exceeding that which is recommended.
- **Note:** Using other non-recommended cleaners can result in severe and permanent cosmetic damage.

# Underbody

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free from packed dirt.

# **Cleaning Plastic Exterior Parts**

Use only approved products to clean plastic parts.

- For routine cleaning, use Motorcraft® Detail Wash.
- If tar or grease spots are present, use Motorcraft® Bug and Tar Remover.

#### **WAXING**

- Wash the vehicle first.
- Use a quality wax that does not contain abrasives.
- Do not allow paint sealant to come in contact with any non-body (low-gloss black) colored trim, such as grained door handles, roof racks, bumpers, side moldings, mirror housings or the windshield cowl area. The paint sealant will grey or stain the parts over time.

#### REPAIRING MINOR PAINT DAMAGE

Your authorized dealer has touch-up paint to match your vehicle's color. Take your color code (printed on a sticker in the driver's door jamb) to your authorized dealer to make sure you get the correct color.

- Remove particles, such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout, before repairing paint chips.
- Always read the instructions before using the products.

#### **CLEANING THE ENGINE**

Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal.

When washing:

- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft® Engine Shampoo and Degreaser on all parts that require cleaning and pressure rinse clean. In Canada, use Motorcraft® Engine Shampoo.
- Never wash or rinse the engine while it is hot or running; water in the running engine may cause internal damage.
- Never wash or rinse any ignition coil, spark plug wire or spark plug well, or the area in and around these locations.
- Cover the battery, power distribution box, and air filter assembly to prevent water damage when cleaning the engine.

#### **CLEANING THE WINDOWS AND WIPER BLADES**

The windows and wiper blades should be cleaned regularly. If the wipers do not wipe properly, substances on the vehicle's glass or the wiper blades may cause squeaking or chatter noise from the blades, and streaking and smearing of the windshield. To clean these items, follow these tips:

- The windows may be cleaned with a non-abrasive cleaner such as Motorcraft® Ultra-Clear Spray Glass Cleaner.
- The wiper blades can be cleaned with isopropyl (rubbing) alcohol or Motorcraft® Premium Windshield Washer Concentrate in the U.S., or Premium Quality Windshield Washer Fluid in Canada. Be sure to replace wiper blades when they appear worn or do not function properly.
- Do not use abrasives, as they may cause scratches.
- Do not use fuel, kerosene, or paint thinner to clean any parts.

If you cannot remove those streaks after cleaning with the glass cleaner or if the wipers chatter and move in a jerky motion, clean the outer surface of the windshield and the wiper blades using a sponge or soft cloth with a neutral detergent or mild-abrasive cleaning solution. After cleaning, rinse the windshield and wiper blades with clean water. The windshield is clean if beads do not form when you rinse the windshield with water.

**Note:** Do not use sharp objects, such as a razor blade, to clean the inside of the rear window or to remove decals, as it may cause damage to the rear window defroster's heated grid lines.

#### **CLEANING THE INTERIOR**

**WARNING:** Do not use cleaning solvents, bleach or dye on the vehicle's safety belts, as these actions may weaken the belt webbing.

**WARNING:** On vehicles equipped with seat-mounted airbags, do not use chemical solvents or strong detergents. Such products could contaminate the side airbag system and affect performance of the side airbag in a crash.

For fabric, carpets, cloth seats, safety belts and seats equipped with side airbags:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Motorcraft® Professional Strength Carpet & Upholstery Cleaner.

- If grease or tar is present on the material, spot-clean the area first with Motorcraft® Spot and Stain Remover. In Canada, use Motorcraft® Multi-Purpose Cleaner.
- If a ring forms on the fabric after spot cleaning, clean the entire area immediately (but do not oversaturate) or the ring will set.
- Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.

# CLEANING THE INSTRUMENT PANEL AND INSTRUMENT CLUSTER LENS

**WARNING:** Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the airbag system.

Clean the instrument panel and cluster lens with a clean, damp, white, cotton cloth, then use a clean and dry, white, cotton cloth to dry these areas

- Avoid cleaners or polishes that increase the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect the driver from undesirable windshield reflection.
- Be certain to wash or wipe your hands clean if you have been in contact with certain products, such as insect repellent and suntan lotion, in order to avoid possible damage to the interior painted surfaces.
- Do not use household or glass cleaners as these may damage the finish of the instrument panel, interior trim and cluster lens.
- Do not allow air fresheners and hand sanitizers to spill on interior surfaces. If a spill occurs, wipe off immediately. Damage may not be covered by your warranty.

If a staining liquid like coffee or juice has been spilled on the instrument panel or on interior trim surfaces, clean as follows:

- 1. Wipe up spilled liquid using a clean, white, cotton cloth.
- 2. Wipe the surface with a damp, clean, white, cotton cloth. For more thorough cleaning, use a mild soap and water solution. If the spot cannot be completely cleaned by this method, the area may be cleaned using a commercially available cleaning product designed for automotive interiors.
- 3. If necessary, apply more soap and water solution or cleaning product to a clean, white, cotton cloth and press the cloth onto the soiled area; allow this to set at room temperature for 30 minutes.

- 4. Remove the soaked cloth, and if it is not soiled badly, use this cloth to clean the area by using a rubbing motion for 60 seconds.
- 5. Following this, wipe area dry with a clean, white, cotton cloth.

# **CLEANING LEATHER SEATS (IF EQUIPPED)**

- Remove dust and loose dirt with a vacuum cleaner.
- Clean spills and stains as quickly as possible.
- For routine cleaning, wipe the surface with a soft, damp cloth. For more thorough cleaning, wipe the surface with a mild soap and water solution. In Canada, use Motorcraft® Vinyl Cleaner. Dry the area with a soft cloth.
- If the leather cannot be completely cleaned using a mild soap and water solution, the leather may be cleaned using a commercially available leather cleaning product designed for automotive interiors.
- To check for compatibility, first test any cleaner or stain remover on an inconspicuous part of the leather.
- Do not use household cleaning products, alcohol solutions, solvents or cleaners intended for rubber, vinyl and plastics or petroleum-based leather conditioners. These products may cause premature wearing or damage to the leather.

## **CLEANING THE ALLOY WHEELS**

**Note:** Do not use chrome cleaner, metal cleaner or polish on wheels and wheel covers.

Aluminum wheels and wheel covers are coated with a clearcoat paint finish. In order to maintain their shine:

- Clean weekly with Motorcraft® Wheel and Tire Cleaner. Heavy dirt and brake dust accumulation may require agitation with a sponge. Rinse thoroughly with a strong stream of water.
- Never apply any cleaning chemical to hot or warm wheel rims or covers.
- Some automatic car washes may cause damage to the finish on your wheel rims or covers. Industrial-strength (heavy-duty) cleaners, or cleaning chemicals, in combination with brush agitation to remove brake dust and dirt, could wear away the clearcoat finish over time.
- Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergent.
- To remove tar and grease, use Motorcraft® Bug and Tar Remover.

## **VEHICLE STORAGE**

If you plan on storing your vehicle for an extended period of time (30 days or more), read the following maintenance recommendations to make sure your vehicle stays in good operating condition.

All motor vehicles and their components were engineered and tested for reliable, regular driving. Long-term storage under various conditions may lead to component degradation or failure unless specific precautions are taken to preserve the components.

#### General

- Store all vehicles in a dry, ventilated place.
- Protect from sunlight, if possible.
- If vehicles are stored outside, they require regular maintenance to protect against rust and damage.

# Body

- Wash vehicle thoroughly to remove dirt, grease, oil, tar or mud from exterior surfaces, rear-wheel housing and underside of front fenders.
- Periodically wash vehicles stored in exposed locations.
- Touch up raw or primed metal to prevent rust.
- Cover chrome and stainless steel parts with a thick coat of auto wax to prevent discoloration. Re-wax as necessary when the vehicle is washed.
- Lubricate hood latch, all door latches and trunk lid hinges with a light grade oil.
- Cover interior trim to prevent fading.
- Keep all rubber parts free from oil and solvents.

# Engine

- The engine oil and filter should be changed prior to storage, as used engine oil contains contaminates that may cause engine damage.
- Start the engine every 15 days. Run at fast idle until it reaches normal operating temperature.
- With your foot on the brake, shift through all the gears while the engine is running.

#### Fuel system

 Fill the fuel tank with high-quality fuel until the first automatic shutoff of the fuel pump nozzle.

**Note:** During extended periods of vehicle storage (30 days or more), fuel may deteriorate due to oxidation. Add a quality gas stabilizer product to the vehicle fuel system whenever actual or expected storage periods exceed 30 days. Follow the instructions on the additive label. The vehicle should then be operated at idle speed to circulate the additive throughout the fuel system.

### Cooling system

- Protect against freezing temperatures.
- When removing vehicle from storage, check coolant fluid level.
   Confirm there are no cooling system leaks, and fluid is at the recommended level.

# Battery

- Check and recharge as necessary. Keep connections clean.
- If storing your vehicle for more than 30 days without recharging the battery, it may be advisable to disconnect the battery cables to ensure battery charge is maintained for quick starting.

**Note:** If battery cables are disconnected, it will be necessary to reset memory features.

#### Brakes

• Make sure brakes and parking brake are fully released.

#### Tires

• Maintain recommended air pressure.

#### Miscellaneous

- Make sure all linkages, cables, levers and pins under vehicle are covered with grease to prevent rust.
- Move vehicles at least 25 feet (8 meters) every 15 days to lubricate working parts and prevent corrosion.

# **Removing Vehicle from Storage**

When your vehicle is ready to come out of storage, do the following:

- Wash your vehicle to remove any dirt or grease film build-up on window surfaces.
- Check windshield wipers for any deterioration.
- Check under the hood for any foreign material that may have collected during storage (mice/squirrel nests).
- Check the exhaust for any foreign material that may have collected during storage.
- Check tire pressures and set tire inflation per the Tire Label.
- Check brake pedal operation. Drive the vehicle 15 feet (4.5 meters) back and forth to remove rust build-up.
- Check fluid levels (including coolant, oil and gas) to make sure there are no leaks and fluids are at recommended levels.
- If the battery was removed, clean the battery cable ends and inspect. Contact your authorized dealer if you have any concerns or issues.

## **GENERAL INFORMATION**

# Notice to Utility Vehicle, Van and Truck Owners

**WARNING:** Utility vehicles have a significantly higher rollover rate than other types of vehicles. To reduce the risk of serious injury or death from a rollover or other crash you must:

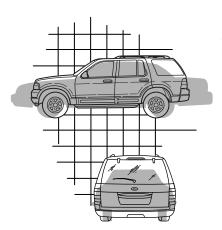
- Avoid sharp turns and abrupt maneuvers;
- Drive at safe speeds for the conditions;
- Keep tires properly inflated;
- Never overload or improperly load your vehicle; and
- Make sure every passenger is properly restrained.

**WARNING:** In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. All occupants must wear seat belts. Children and infants must use appropriate restraints to minimize the risk of injury or ejection.



Utility vehicles, vans and trucks handle differently than passenger cars in the various driving conditions that are encountered on streets, highways and off-road. Utility vehicles, vans and trucks are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.

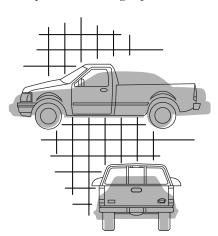
## **How Your Vehicle Differs from Other Vehicles**



Sport-utility vehicles, vans and trucks can differ from some other vehicles in a few noticeable ways. Your vehicle may be:

- Higher to allow higher load carrying capacity and to allow it to travel over rough terrain without getting hung up or damaging underbody components.
- Shorter to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. All other things held equal, a shorter wheelbase may make your vehicle quicker to

respond to steering inputs than a vehicle with a longer wheelbase.



• Narrower – to provide greater maneuverability in tight spaces, particularly in off-road use.

As a result of the above dimensional differences, sport-utility vehicles, vans and trucks often will have a higher center of gravity and a greater difference in center of gravity between the loaded and unloaded condition.

These differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

## **TIRE CARE**

# Information About Uniform Tire Quality Grading



Tire Quality Grades apply to new pneumatic passenger car tires. The Tire Quality Grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

# • Treadwear 200 Traction AA Temperature A

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic passenger car tires. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, light truck or LT type tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104(c)(2).

**U.S. Department of Transportation-Tire quality grades:** The U.S. Department of Transportation requires Ford Motor Company to give you the following information about tire grades exactly as the government has written it.

# **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 1½ 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 AA A B C

**Note:** 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.

The traction grades, from highest to lowest are AA, A, B, and C. The 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.

# Temperature A B C

**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.

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 car tires must meet under the Federal Motor Vehicle Safety Standard No. 139. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

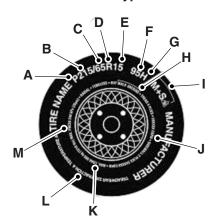
# **Glossary of Tire Terminology**

- **Tire label:** A label showing the OE (Original Equipment) tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.
- **Tire Identification Number (TIN):** A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture. Also referred to as DOT code.
- **Inflation pressure:** A measure of the amount of air in a tire.
- **Standard load:** A class of P-metric or Metric tires designed to carry a maximum load at 35 psi [37 psi (2.5 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tire's load-carrying capability.
- Extra load: A class of P-metric or Metric tires designed to carry a heavier maximum load at 41 psi [43 psi (2.9 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tire's load-carrying capability.
- **kPa:** Kilopascal, a metric unit of air pressure.
- **PSI:** Pounds per square inch, a standard unit of air pressure.
- **Cold tire pressure:** The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mile (1.6 kilometers).
- **Recommended inflation pressure:** The cold inflation pressure found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position) or Tire Label located on the B-Pillar or the edge of the driver's door.
- **B-pillar:** The structural member at the side of the vehicle behind the front door.
- **Bead area of the tire:** Area of the tire next to the rim.
- **Sidewall of the tire:** Area between the bead area and the tread.
- **Tread area of the tire:** Area of the perimeter of the tire that contacts the road when mounted on the vehicle.
- **Rim:** The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

## INFORMATION CONTAINED ON THE TIRE SIDEWALL

Both U.S. and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

# Information on P Type Tires



P215/65R15 95H is an example of a tire size, load index and speed rating. The definitions of these items are listed below. (Note that the tire size, load index and speed rating for your vehicle may be different from this example.)

A. **P:** Indicates a tire, designated by the Tire and Rim Association, that may be used for service on cars, sport utility vehicles, minivans and light trucks.

**Note:** If your tire size does not begin with a letter, this may mean it is designated by either the European Tire and Rim Technical Organization or the Japan Tire Manufacturing Association.

- B. **215:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.
- C.  $\mathbf{65}$ : Indicates the aspect ratio which gives the tire's ratio of height to width.
- D. **R:** Indicates a radial type tire.
- E. 15: Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

F. **95:** Indicates the tire's load index. It is an index that relates to how much weight a tire can carry. You may find this information in your owner's manual. If not, contact a local tire dealer.

**Note:** You may not find this information on all tires because it is not required by federal law.

G. **H:** Indicates the tire's speed rating. The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time under a standard condition of load and inflation pressure. The tires on your vehicle may operate at different conditions for load and inflation pressure. These speed ratings may need to be adjusted for the difference in conditions. The ratings range from 81 mph (130 km/h) to 186 mph (299 km/h). These ratings are listed in the following chart.

**Note:** You may not find this information on all tires because it is not required by federal law.

Letter rating	Speed rating - mph (km/h)
M	81 (130)
N	87 (140)
Q	99 (159)
R	106 (171)
S	112 (180)
Т	118 (190)
U	124 (200)
Н	130 (210)
V	149 (240)
W	168 (270)
Y	186 (299 )

**Note:** For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.

H. **U.S. DOT Tire Identification Number (TIN):** This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

I. M+S or M/S: Mud and Snow, or

**AT:** All Terrain, or **AS:** All Season.

- J. **Tire Ply Composition and Material Used:** Indicates the number of plies or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.
- K. **Maximum Load:** Indicates the maximum load in kilograms and pounds that can be carried by the tire. See the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), for the correct tire pressure for your vehicle.

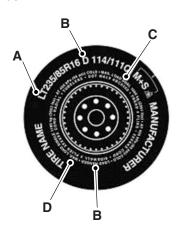
## L. Treadwear, Traction and Temperature Grades

- **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 (1½) times as well on the government course as a tire graded 100.
- **Traction:** The traction grades, from highest to lowest, are AA, A, B, and C. The 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.
- **Temperature:** 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.

M. **Maximum Inflation Pressure:** Indicates the tire manufacturer's maximum permissible pressure or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure, which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

The tire suppliers may have additional markings, notes or warnings, such as standard load, radial tubeless, etc.

# Additional Information Contained on the Tire Sidewall for LT Type Tires



LT type tires have some additional information beyond those of P type tires. These differences are described below.

**Note:** Tire Quality Grades do not apply to this type of tire.

A. **LT:** Indicates a tire, designated by the Tire and Rim Association, that is intended for service on light trucks.

B. **Load Range/Load Inflation Limits:** Indicates the tire's load-carrying capabilities and its inflation limits.

- C. **Maximum Load Dual lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a dual, defined as four tires on the rear axle (a total of six or more tires on the vehicle).
- D. **Maximum Load Single lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a single, defined as two tires (total) on the rear axle.

## Information on T Type Tires



T type tires have some additional information beyond those of P type tires. These differences are described below.

T145/80D16 is an example of a tire size.

**Note:** The temporary tire size for your vehicle may be different from this example. Tire Quality Grades do not apply to this type of tire.

- A. **T:** Indicates a type of tire, designated by the Tire and Rim Association, that is intended for temporary service on cars, sport-utility vehicles, minivans and light trucks.
- B. 145: Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.
- C. **80:** Indicates the aspect ratio, which gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall.
- D. **D:** Indicates a diagonal type tire. **R:** Indicates a radial type tire.
- E. 16: Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

#### **Location of the Tire Label**

You will find a Tire Label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver's door. See the payload description and graphic in the Load Carrying chapter.

#### **INFLATING YOUR TIRES**

Safe operation of your vehicle requires that your tires are properly inflated. Remember that a tire can lose up to half of its air pressure without appearing flat.

Every day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires and adjust if required.

At least once a month and before long trips, inspect each tire and check the tire pressure with a tire gauge (including spare, if equipped). Inflate all tires to the inflation pressure recommended by Ford Motor Company.

**WARNING:** Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat build-up and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate. Ford recommends the use of a digital or dial-type tire pressure gauge rather than a stick-type tire pressure gauge.

Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven treadwear patterns.

Always inflate your tires to the Ford recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. The Ford recommended tire inflation pressure is found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

Maximum Inflation Pressure is the tire manufacturer's maximum permissible pressure or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure, which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the Safety Compliance Certification Label or Tire Label.

When weather temperature changes occur, tire inflation pressures also change. A  $10^{\circ}\text{F}$  ( $6^{\circ}\text{C}$ ) temperature drop can cause a corresponding drop of 1 psi (7 kPa) in inflation pressure. Check your tire pressures frequently and adjust them to the proper pressure which can be found on the Safety Compliance Certification Label or Tire Label.

To check the pressure in your tire(s):

1. Make sure the tires are cool, meaning they are not hot from driving even a mile.

**Note:** If you are checking tire pressure when the tire is hot (for example, driven more than 1 mile [1.6 kilometers]), never bleed or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly under-inflated.

**Note:** If you have to drive a distance to get air for your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump. It is normal for tires to heat up and the air pressure inside to go up as you drive.

- 2. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure.
- 3. Add enough air to reach the recommended air pressure.

**Note:** If you overfill the tire, release air by pressing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.

- 4. Replace the valve cap.
- 5. Repeat this procedure for each tire, including the spare.

**Note:** Some spare tires operate at a higher inflation pressure than the other tires. For T-type mini-spare tires, see the *Dissimilar Spare Tire* and Wheel Assembly Information section. Store and maintain at 60 psi (4.15 bar). For full-size and dissimilar spare tires, see the *Dissimilar Spare Tire* and Wheel Assembly Information section. Store and maintain at the higher of the front and rear inflation pressure as shown on the Tire Label.

- 6. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.
- 7. Check the sidewalls to make sure there are no gouges, cuts or bulges.

#### **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

## **Inspecting Your Tires and Wheel Valve Stems**

Periodically inspect the tire treads for uneven or excessive wear and remove objects such as stones, nails or glass that may be wedged in the tread grooves. Check the tire and valve stems for holes, cracks, or cuts that may permit air leakage and repair or replace the tire and replace the valve stem. Inspect the tire sidewalls for cracking, cuts, bruises and other signs of damage or excessive wear. If internal damage to the tire is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced. For your safety, tires that are damaged or show signs of excessive wear should not be used because they are more likely to blow out or fail.

Improper or inadequate vehicle maintenance can cause tires to wear abnormally. Inspect all your tires, including the spare, frequently, and replace them if one or more of the following conditions exist:

#### **Tire Wear**



When the tread is worn down to 1/16th of an inch (2 millimeters), tires must be replaced to help prevent your vehicle from skidding and hydroplaning. Built-in treadwear indicators, or wear bars, which look like narrow strips of smooth rubber across the tread will appear on the tire when the tread is worn down to 1/16th of an inch (2 millimeters).

When the tire tread wears down to the same height as these wear bars, the tire is worn out and must be replaced.

## **Damage**

Periodically inspect the tire treads and sidewalls for damage (such as bulges in the tread or sidewalls, cracks in the tread groove and separation in the tread or sidewall). If damage is observed or suspected, have the tire inspected by a tire professional. Tires can be damaged during off-road use, so inspection after off-road use is also recommended.

## **WARNING: Age**

Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (such as load, speed, inflation pressure) the tires experience throughout their lives.

In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

#### U.S. DOT Tire Identification Number

Both U.S. and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

## **Tire Replacement Requirements**

**WARNING:** Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or the Tire Label which is located on the B-Pillar or edge of the driver's door. If this information is not found on these labels, then you should contact your authorized dealer as soon as possible. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure. If you have questions regarding tire replacement, contact your authorized dealer as soon as possible.

**WARNING:** To reduce the risk of serious injury, when mounting replacement tires and wheels, you should not exceed the maximum pressure indicated on the sidewall of the tire to set the beads without additional precautions listed below. If the beads do not seat at the maximum pressure indicated, re-lubricate and try again. When inflating the tire for mounting pressures up to 20 psi (1.38 bar) greater than the maximum pressure on the tire sidewall, the following precautions must be taken to protect the person mounting the tire:

- 1. Make sure that you have the correct tire and wheel size.
- 2. Lubricate the tire bead and wheel bead seat area again.
- 3. Stand at a minimum of 12 feet (3.66 meters) away from the tire wheel assembly.
- 4. Use both eye and ear protection.

For a mounting pressure more than 20 psi (1.38 bar) greater than the maximum pressure, a Ford dealer or other tire service professional should do the mounting.

Always inflate steel carcass tires with a remote air fill with the person inflating standing at a minimum of 12 feet (3.66 meters) away from the tire wheel assembly.

Your vehicle is equipped with tires designed to provide a safe ride and handling capability.

**Important:** Remember to replace the wheel valve stems when the road tires are replaced on your vehicle.

The two front tires or two rear tires should generally be replaced as a pair. The tire pressure sensors mounted in the wheels (originally installed on your vehicle) are not designed to be used in aftermarket wheels.

The use of wheels or tires not recommended by Ford Motor Company may affect the operation of your tire pressure monitoring system.

If the tire pressure monitoring system indicator is flashing, the system is malfunctioning. Your replacement tire might be incompatible with your tire pressure monitoring system, or some component of the system may be damaged.

## **Safety Practices**

**WARNING:** If your vehicle is stuck in snow, mud, or sand, do not rapidly spin the tires. Spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.



**WARNING:** Do not spin the wheels at over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

Driving habits have a great deal to do with your tire mileage and safety.

- Observe posted speed limits.
- Avoid fast starts, stops and turns.
- Avoid potholes and objects on the road.
- Do not run over curbs or hit the tire against a curb when parking.

## Highway Hazards

No matter how carefully you drive, there is always the possibility that you may eventually have a flat tire on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but your safety is more important.

If you feel a sudden vibration or ride disturbance while driving, or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage. If a tire is under-inflated or damaged, deflate it, remove the wheel and replace it with your spare tire and wheel. If you cannot detect a cause, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle inspected.

## **Tire and Wheel Alignment**

A bad jolt from hitting a curb or pothole can cause the front end of your vehicle to become misaligned or cause damage to your tires. If your vehicle seems to pull to one side when you are driving, the wheels may be out of alignment. Have an authorized dealer check the wheel alignment periodically.

Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by an authorized dealer. Front-wheel drive vehicles and those with an independent rear suspension may require alignment of all four wheels.

The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

#### **Tire Rotation**

**WARNING:** If the tire label shows different tire pressures for the front and rear tires and the vehicle is equipped with a tire pressure monitoring system, then the settings for the system sensors need to be updated. Always perform the system reset procedure after tire rotation. If the system is not reset, it may not provide a low tire pressure warning when necessary. See the TPMS reset procedure in this chapter.

**Note:** If your tires show uneven wear ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.

**Note:** Your vehicle may be equipped with a dissimilar spare tire and wheel assembly. A dissimilar spare tire and wheel assembly is defined as a spare tire or wheel that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare tire/wheel it is intended for temporary use only and should not be used in a tire rotation.

**Note:** After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.

Rotating your tires at the recommended interval (as indicated in your scheduled maintenance) will help your tires wear more evenly, providing better tire performance and longer tire life.



• Front-wheel drive vehicles (front tires at left of diagram)

Sometimes irregular tire wear can be corrected by rotating the tires.

#### **USING SNOW CHAINS**

**WARNING:** Snow tires must be the same size, load index, speed rating as those originally provided by Ford. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure.

**WARNING:** Do not use snow chains or cables on this vehicle as they may cause damage to your vehicle which may lead to loss of vehicle control.

The original equipment tires on your vehicle have an all-weather tread design to provide traction, handling and braking performance in year-round driving. You may install snow tires for improved traction when driving in areas with sustained periods of snow or icy driving conditions.

If you choose to install snow tires on your vehicle, they must be the same size, construction, and load range as the original tires listed on the tire placard, and they must be installed on all four wheels. Mixing tires of different size or construction on your vehicle can adversely affect your vehicle's handling and braking, and may lead to loss of vehicle control.

#### TIRE PRESSURE MONITORING SYSTEM

**WARNING:** The tire pressure monitoring system is NOT a substitute for manually checking tire pressure. The tire pressure should be checked periodically (at least monthly) using a tire gauge. See *Inflating Your Tires* in this chapter. Failure to properly maintain your tire pressure could increase the risk of tire failure, loss of control, vehicle rollover and personal injury.



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 tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. 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. Under-inflation 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 under-inflation 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.

The tire pressure monitoring system complies with part 15 of the FCC rules and with RSS-210 of Industry Canada. 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.

## **Changing Tires with a Tire Pressure Monitoring System**



**Note:** Each road tire is equipped with a tire pressure sensor located inside the tire and wheel assembly cavity. The pressure sensor is attached to the valve stem. The pressure sensor is covered by the tire and is not visible unless the tire is removed. Take care when changing the tire to avoid damaging the sensor.

You should always have your tires serviced by an authorized dealer. Check the tire pressure periodically (at least monthly) using an accurate tire gauge. See *Inflating Your Tires* in this chapter.

## **Understanding Your Tire Pressure Monitoring System**

The tire pressure monitoring system measures pressure in your four road tires and sends the tire pressure readings to your vehicle. The low tire pressure warning light will turn on if the tire pressure is significantly low. Once the light is illuminated, your tires are under-inflated and need to be inflated to the manufacturer's recommended tire pressure. Even if the light turns on and a short time later turns off, your tire pressure still needs to be checked.

#### When your temporary spare tire is installed

When one of your road tires needs to be replaced with the temporary spare, the tire pressure monitoring system will continue to identify an issue to remind you that the damaged road wheel or tire needs to be repaired and put back on your vehicle.

To restore the full function of the tire pressure monitoring system, have the damaged road wheel or tire repaired and remounted on your vehicle. For additional information, see *Changing Tires with a Tire Pressure Monitoring System* in this section.

# When you believe your system is not operating properly

The main function of the tire pressure monitoring system is to warn you when your tires need air. It can also warn you in the event the system is no longer capable of functioning as intended. See the following chart for information concerning your tire pressure monitoring system:

Low tire pressure warning light	Possible cause	Customer action required
Solid warning light	Tire(s) under-inflated	1. Make sure tires are at the proper pressure. See <i>Inflating your tires</i> in this chapter. 2. After inflating your tires to the manufacturer's recommended pressure as shown on the Tire Label (located on the edge of driver's door or the B-Pillar), the vehicle must be driven for at least two minutes over 20 mph (32 km/h) before the light turns off.
	Spare tire in use	Repair the damaged road wheel and tire and reinstall it on the vehicle to restore system function. For a description on how the system functions, see <i>When your temporary spare tire is installed</i> in this section.
	Tire pressure monitoring system malfunction Tire rotation without sensor training	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible. On vehicles with different front and rear tire pressures, the system must be retrained following every tire rotation. See <i>Tire rotation</i> in this chapter.

Low tire pressure warning light	Possible cause	Customer action required
Flashing warning light	Spare tire in use	Repair the damaged road wheel and tire and reinstall it on the vehicle to restore system function. For a description on how the system functions, see <i>When your temporary spare tire is installed</i> in this section.
	Tire pressure monitoring system malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.

## When inflating your tires

When putting air into your tires (such as at a gas station or in your garage), the tire pressure monitoring system may not respond immediately to the air added to your tires.

It may take up to two minutes of driving over 20 mph (32 km/h) for the light to turn off after you have filled your tires to the recommended inflation pressure.

#### How temperature affects your tire pressure

The tire pressure monitoring system monitors tire pressure in each pneumatic tire. While driving in a normal manner, a typical passenger tire inflation pressure may increase approximately 2 to 4 psi (14 to 28 kPa) from a cold start situation. If the vehicle is stationary overnight with the outside temperature significantly lower than the daytime temperature, the tire pressure may decrease approximately 3 psi (21 kPa) for a drop of 30°F (17°C) in ambient temperature. This lower pressure value may be detected by the system as being significantly lower than the recommended inflation pressure and activate the system warning light for low tire pressure. If the low tire pressure warning light is on, visually check each tire to verify that no tire is flat. If one or more tires are flat, repair as necessary. Check air pressure in the road tires. If any tire is under-inflated, carefully drive the vehicle to the nearest location where air can be added to the tires. Inflate all the tires to the recommended inflation pressure.

## Tire pressure monitoring system reset procedure

**WARNING:** To determine the required pressure for your vehicle, refer to the Safety Compliance Certification Label or Tire Label located on the B-Pillar or the edge of the driver's door. See *Vehicle loading* in this chapter for more information.

**Note:** The system reset procedure needs to be performed after each tire rotation.

#### Overview

To provide the vehicle's load carrying capability, this vehicle requires different recommended tire pressures in the front tires as compared to the rear tires. The tire pressure monitoring system equipped on these vehicles is designed to illuminate the low tire pressure warning light at two different pressures; one for the front tires and one for the rear tires.

Since tires need to be rotated to provide consistent performance and maximum tire life, the tire pressure monitoring system needs to know when the tires are rotated to determine which set of tires are on the front and which are on the rear. With this information, the system can detect and properly warn of low tire pressures.

#### System reset tips:

- To reduce the chances of interference from another vehicle, the system reset procedure should be performed at least three feet (one meter) away from another Ford Motor Company vehicle undergoing the system reset procedure at the same time.
- Do not wait more than two minutes between resetting each tire sensor
  or the system will time-out and the entire procedure will have to be
  repeated on all four wheels.
- A double horn chirp indicates the need to repeat the procedure.

## Performing the system reset procedure

Read the entire procedure before attempting.

- 1. Drive the vehicle above 20 mph (32 km/h) for at least two minutes and then park in a safe location where you can easily get to all four tires and have access to an air pump.
- 2. Place the ignition in the off position and keep the key in the ignition.
- 3. Cycle the ignition to the on position with the engine off.
- 4. Turn the hazard flashers on then off three times. This must be accomplished within 10 seconds.

If the reset mode has been entered successfully, the horn will sound once and the system indicator will flash. If this does not occur, please try again starting at step 2.

If after repeated attempts to enter the reset mode, the horn does not sound and the system indicator does not flash, seek service from your authorized dealer.

- 5. **Note:** Train the system sensors in the tires using the following system reset sequence starting with the left front tire in the following clockwise order:
- Left front (Driver's side front tire)
- Right front (Passenger's side front tire)
- Right rear (Passenger's side rear tire)
- Left rear (Driver's side rear tire)
- 6. Remove the valve cap from the valve stem on the left front tire; decrease the air pressure until the horn sounds.

**Note:** The single horn chirp confirms that the sensor identification code has been learned by the module for this position. If a double horn is heard, the reset procedure was unsuccessful, and must be repeated.

- 7. Remove the valve cap from the valve stem on the right front tire; decrease the air pressure until the horn sounds.
- 8. Remove the valve cap from the valve stem on the right rear tire; decrease the air pressure until the horn sounds.
- 9. Remove the valve cap from the valve stem on the left rear tire; decrease the air pressure until the horn sounds.

Training is complete after the horn sounds for the last tire trained (driver's side rear tire) and the system indicator stops flashing.

10. Turn the ignition off. If two short horn beeps are heard, the reset procedure was unsuccessful and must be repeated.

If after repeating the procedure and two short beeps are heard when the ignition is turned to off, seek assistance from your authorized dealer.

11. Set all four tires to the recommended air pressure as indicated on the Safety Compliance Certification Label or Tire Label located on the B-Pillar or the edge of the driver's door.

#### **CHANGING A ROAD WHEEL**

**WARNING:** The use of tire sealants may damage your tire pressure monitoring system and should not be used. However, if you must use a sealant, the tire pressure monitoring system sensor and valve stem on the wheel must be replaced by an authorized Ford dealer.

**WARNING:** See *Tire Pressure Monitoring System* in this chapter for important information. If the tire pressure monitoring sensor becomes damaged, it will no longer function.

**Note:** The tire pressure monitoring system indicator light will illuminate when the spare tire is in use. To restore the full function of the monitoring system, all road wheels equipped with tire pressure monitoring sensors must be mounted on this vehicle.

If you get a flat tire while driving, do not apply the brake heavily. Instead, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

Have a flat serviced by an authorized dealer in order to prevent damage to the system sensors. See *Tire Pressure Monitoring System* earlier in this chapter. Replace the spare tire with a road tire as soon as possible. During repairing or replacing of the flat tire, have the authorized dealer inspect the tire pressure monitoring system sensor for damage.

## **Dissimilar Spare Tire and Wheel Assembly Information**



**WARNING:** Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

If you have a dissimilar spare tire and wheel assembly, then it is intended for temporary use only. This means that if you need to use it, you should replace it as soon as possible with a road tire and wheel assembly that is the same size and type as the road tires and wheels that were originally provided by Ford. If the dissimilar spare tire or wheel is damaged, it should be replaced rather than repaired.

A dissimilar spare tire and wheel assembly is defined as a spare tire or wheel that is different in brand, size or appearance from the road tires and wheels and can be one of three types:

1. **T-type mini-spare:** This spare tire begins with the letter T for tire size and may have Temporary Use Only molded in the sidewall.

2. **Full-size dissimilar spare with label on wheel:** This spare tire has a label on the wheel that states: THIS TIRE AND WHEEL FOR TEMPORARY USE ONLY

When driving with one of the dissimilar spare tires listed above, do not:

- exceed 50 mph (80 km/h).
- load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label.
- tow a trailer.
- use snow chains on the end of the vehicle with the dissimilar spare tire.
- use more than one dissimilar spare tire at a time.
- use commercial car washing equipment.
- try to repair the dissimilar spare tire.

Use of one of the dissimilar spare tires listed above at any one wheel location can lead to impairment of the following:

- Handling, stability and braking performance
- Comfort and noise
- Ground clearance and parking at curbs
- Winter weather driving capability
- Wet weather driving capability
- All-wheel driving capability

## 3. Full-size dissimilar spare without label on wheel

When driving with the full-size dissimilar spare tire and wheel assembly, do not:

- exceed 70 mph (113 km/h).
- use more than one dissimilar spare tire and wheel at a time.
- · use commercial car washing equipment.
- use snow chains on the end of the vehicle with the dissimilar spare tire and wheel.

The usage of a full-size dissimilar spare tire and wheel assembly can lead to impairment of the following:

- · Handling, stability and braking performance
- · Comfort and noise
- Ground clearance and parking at curbs

- Winter weather driving capability
- Wet weather driving capability
- All-wheel driving capability (if applicable)
- Load leveling adjustment (if applicable)

When driving with the full-size dissimilar spare tire and wheel assembly, additional caution should be given to:

- towing a trailer.
- driving vehicles equipped with a camper body.
- driving vehicles with a load on the cargo rack.

Drive cautiously when using a full-size dissimilar spare tire and wheel, and seek service as soon as possible.

## **Tire Change Procedure**

**WARNING:** When one of the front wheels is off the ground, the transmission alone will not prevent the vehicle from moving or slipping off the jack, even if the transmission selector lever is in position **P.** 

**WARNING:** To help prevent the vehicle from moving when you change a tire, be sure to place the transmission selector lever in position **P**, set the parking brake and block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.

**WARNING:** Never get underneath a vehicle that is supported only by a jack. If the vehicle slips off the jack, you or someone else could be seriously injured.

**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.

**WARNING:** Always use the jack provided as original equipment with your vehicle. If using a jack other than the one provided as original equipment with your vehicle, make sure the jack capacity is adequate for the vehicle weight, including any vehicle cargo or modifications.

**Note:** Passengers should not remain in the vehicle when the vehicle is being jacked.

Park on a level surface, set the parking brake and activate the hazard flashers. Then, place the transmission selector lever in position  ${\bf P}$  and turn the engine off.

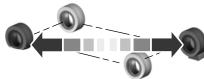
The jack and tools are located behind a cover in the sidewall at the left rear of the cargo area. The retention straps and wing nut need to be removed before removing the jack.



- 1. Open the cap in the rear of the vehicle and insert the end of the lug wrench into the guide hole.
- 2. Turn the handle counterclockwise and lower the spare tire until it rests on the ground and the cable is slack.



- 3. Detach the first cable by pulling the cap up and sliding it away from the wheel. Then turn the end of the cable so it fits through the slot and remove the cable and bracket.
- 4. Detach the second cable by unscrewing the bolt.

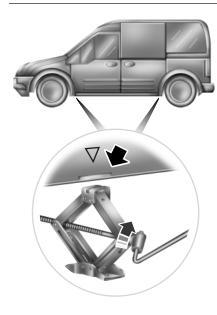


5. Block the diagonally opposite wheel.



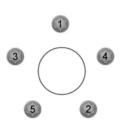
6. Insert the wrench end between the rim and the wheel cover through the gaps and carefully remove the cover.

7. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.



8. Align the slot on top of the jack with the sheet metal flange indicated by the jack locator triangle next to the tire you are changing. Turn the jack handle clockwise until the wheel is completely off the ground.

- 9. Remove the lug nuts with the lug nut wrench.
- 10. Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall the lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.
- 11. Lower the wheel by turning the jack handle counterclockwise.



12. Remove the jack and fully tighten the lug nuts in the order shown. See *Wheel Lug Nut Torque Specifications* in this chapter for the proper lug nut torque specification.

13. Fit the wheel cover onto the rim making sure the valve stem aligns with the indent in the ring on the back of the cover. Tap it with the palm of your hand to lock it into place.

## Stowing the flat/spare tire

**Note:** Failure to follow spare tire stowage instructions may result in failure of cable or loss of spare tire.

- 1. Lay the tire on the ground with the valve stem facing up toward the vehicle.
- 2. Slide the wheel partially under the vehicle and install the retainer through the wheel center. Pull on the cables to align the components at the end of the cables.
- 3. Attach the second cable by screwing the bolt into one of the holes in the wheel.
- 4. Turn the end of the first cable so it fits through the slot and install the cable. Then slide the cap over the retainer.
- 5. Turn the lug wrench clockwise until the tire is raised to its stowed position underneath the vehicle. The effort to turn the jack handle increases significantly and the spare tire carrier ratchets or slips when the tire is raised to the maximum tightness. Tighten to the best of your ability, to the point where the ratchet/slip occurs, if possible. The spare tire carrier will not allow you to overtighten. If the spare tire carrier ratchets or slips with little effort, take the vehicle to your authorized dealer for assistance at your earliest convenience.
- 6. Check that the tire lies flat against the frame and is properly tightened. Try to push or pull, then turn the tire to be sure it will not move. Loosen and retighten, if necessary. Failure to properly stow the spare tire may result in failure of the winch cable and loss of the tire.
- 7. Repeat this tightness check procedure when servicing the spare tire pressure (every six months, per *scheduled maintenance information*), or at any time that the spare tire is disturbed through service of other components.

Return the jack and tools to the storage position in the cargo area.

## **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

## **TECHNICAL SPECIFICATIONS**

## **Wheel Lug Nut Torque Specifications**

**WARNING:** When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while the vehicle is in motion, resulting in loss of control.

Retighten the lug nuts to the specified torque within 100 miles (160 kilometers) after any wheel disturbance (such as tire rotation, changing a flat tire, wheel removal).

Bolt size	Wheel lug 1	nut torque*
	ft-lb	N∙m
M12 x 1.5	100	135

<sup>\*</sup> Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.

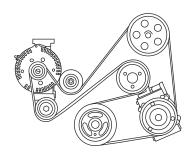


**Note:** Inspect the wheel pilot bore and mounting surface prior to installation. Remove any visible corrosion or loose particles.

# **ENGINE SPECIFICATIONS**

Engine	2.0L I4 engine
Cubic inches	121
Required fuel	Minimum 87 octane
Firing order	1-3-4-2
Ignition system	C.O.P
Compression ratio	10.0:1
Spark plug gap	.051 inch +/002
	(1.3 mm +/05)

# Engine drivebelt routing



TECHNICAL SPECIFICATIONS

Item	Capacity	Ford Part Name or Equivalent	Ford Part Number / Ford Specification
Brake fluid	Between MIN and MAX on reservoir	Motorcraft® Super DOT 4 Motor Vehicle Brake Fluid	YS4Z-19542-AA / ESD-M6C57-A or WSS-M6C57-A2
Door latch, hood latch, auxiliary hood latch, seat tracks.		Multi-Purpose Grease (Lithium grease)	XG-4 or XL-5 or equivalent / ESB-M1C93-B
Lock cylinder		Motorcraft® Penetrating and Lock Lubricant	XL-1 / None
Automatic transmission fluid <sup>1,2</sup>	7.1 quarts (6.7L)	Motorcraft® MERCON® LV ATF	XT-10-QLV / MERCON® LV
Engine oil <sup>3,4</sup>	4.5 quarts (4.3L)	Motorcraft® SAE 5W-20     Premium Synthetic Blend Motor Oil (US)     Motorcraft® SAE 5W-20 Full Synthetic Motor Oil (US)     Motorcraft® SAE 5W-20 Super Premium Motor Oil (Canada)     Motorcraft® SAE 5W-20     Motorcraft® SAE 5W-20 Synthetic Motor Oil (Canada)	• XO-5W20-QSP (US) • XO-5W20-QFS (US) • CXO-5W20-LSP12 (Canada) • CXO-5W20-LFS12 (Canada) / WSS-M2C945-A
Engine coolant <sup>5</sup>	6.1 quarts (5.7L)	Motorcraft® Orange Antifreeze/Coolant	VC-3DIL-B (US) CVC-3DIL-B (Canada) / WSS-M97B44-D2
Power steering fluid	Fill to between MIN and MAX lines on reservoir	Motorcraft® Power Steering Fluid	XL-14 / MERCON® V

Item	Capacity	Ford Part Name or Equivalent	Ford Part Number / Ford Specification
Windshield washer fluid	Fill as required	Motorcraft® Premium Windshield Washer Concentrate (US) Motorcraft® Premium Quality Windshield Washer Fluid (Canada)	ZC-32-A (US) CXC-37-(A, B, D, and F) (Canada) / WSB-M8B16-A2
Fuel tank	15.4 gallons (58.3L)		

will vary based on vehicle application and transmission fluid cooling system (i.e. coolers size, cooling lines, auxiliary cooler capacities). The amount of transmission fluid and fluid level should Approximate dry fill capacity including transmission fluid cooling system, actual refill capacities be set by the indication on the dipstick's normal operating range. <sup>2</sup>Automatic transmissions that require MERCON® LV should only use MERCON® LV fluid. Refer to scheduled maintenance to determine the correct service interval. Use of any fluid other than the <sup>3</sup>Use of synthetic or synthetic blend motor oil is not mandatory. Engine oil need only meet the requirements of Ford specification WSS-M2C945-A, SAE 5W-20, and display the API Certification recommended fluid may cause transmission damage.

benefit while maintaining the durability of your engine. Using oils other than the one specified can result in longer engine cranking periods, reduced engine performance, reduced fuel economy and <sup>4</sup>Your engine has been designed to be used with Ford engine oil, which gives a fuel economy increased emission levels.

<sup>5</sup>Add the coolant type originally equipped in your vehicle.

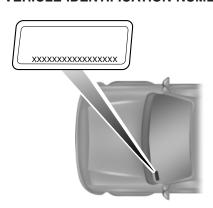
## **MOTORCRAFT PART NUMBERS**

Component	2.0L I4 engine
Engine air filter element	FA-1900
Oil filter	FL-910S <sup>1</sup>
Battery	BXT-96R-590
Spark plugs	2
Cabin air filter	FP38

 $<sup>^{\</sup>rm 1}$  Only use the specified replacement oil filter. The use of a non-specified oil filter can result in engine damage.

**Note:** Replace the spark plugs with ones that meet Ford material and design specifications for your vehicle, such as Motorcraft® or equivalent replacement parts. The customer warranty may be void for any damage to the engine if such spark plugs are not used.

## **VEHICLE IDENTIFICATION NUMBER**

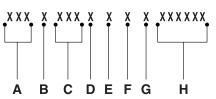


The vehicle identification number is located on the driver's side instrument panel.

Please note that in the graphic, XXXX is representative of your vehicle identification number.

 $<sup>^2</sup>$  For spark plug replacement, see your authorized dealer. Refer to the *Scheduled Maintenance* information for the appropriate intervals for changing the spark plugs.

The Vehicle Identification Number (VIN) contains the following information:



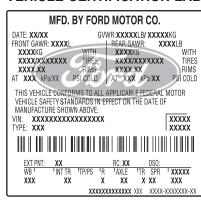
- A. World manufacturer identifier
- B. Brake system / Gross Vehicle Weight Rating (GVWR) / Restraint Devices and their location
- C. Make, vehicle line, series, body type
- D. Engine type
- E. Check digit
- F. Model year

- G. Assembly plant
- H. Production sequence number.

## **Electric vehicles**

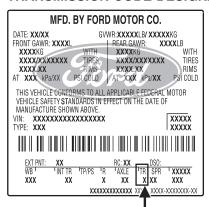
For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

## **VEHICLE CERTIFICATION LABEL**



The National Highway Traffic Safety Administration Regulations require that a Safety Compliance Certification Label be affixed to a vehicle and prescribe where the Safety Compliance Certification Label may be located. The Safety Compliance Certification Label shall be affixed to either the door hinge pillar, the door latch post, or the edge of the door near the door latch, next to the driver's seating position.

## TRANSMISSION CODE DESIGNATION



You can find a transmission code on the Safety Compliance Certification Label. The following table tells you which transmission each code represents.

Description	Code
Four-speed automatic (4F27E)	D2

#### **ACCESSORIES**

For a complete listing of the accessories that are available for your vehicle, please contact your dealer or visit our online store at: **Accessories.Ford.com** (U.S. only).

Ford Custom Accessories are available for your vehicle through your local Ford or Ford of Canada dealer. Ford Motor Company will repair or replace any properly dealer-installed Ford Custom Accessories found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessories. The accessories will be warranted for whichever provides you the greatest benefit:

- 12 months or 12000 miles (20000 kilometers) (whichever occurs first), or
- the remainder of your new vehicle limited warranty.

Contact your dealer for details and a copy of the warranty.

## **Exterior style**

• Bug shields

• Side window deflectors

•Splash guards

• Graphics\*

## Interior style

• All-weather floor mats

• Carpeted floor mats

•Rear window grille

•Portable DVD Entertainment\*

• Electrochromic compass/temperature interior mirrors

#### Lifestyle

•Roof racks and accessories

• Racks and carriers\*

• Cargo organization

#### Peace of mind

•Remote start

Back up alarm\*

• Keyless entry keypad

•Protective seat covers\*

•Bumper mounted parking sensors\*

\*Ford Licensed Accessories (FLA) are warranted by the accessory manufacturer's warranty. Ford Licensed Accessories are fully designed and developed by the accessory manufacturer and have not been designed or tested to Ford Motor Company engineering requirements. Contact your Ford dealer for details regarding the manufacturer's limited warranty and/or a copy of the FLA product limited warranty offered by the accessory manufacturer.

For maximum vehicle performance, keep the following information in mind when adding accessories or equipment to your vehicle:

- When adding accessories, equipment, passengers and luggage to your vehicle, do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Consult your authorized dealer for specific weight information.
- The Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulate the use of mobile communications systems such as two-way radios, telephones and theft alarms that are equipped with radio transmitters. Any such equipment installed in your vehicle should comply with FCC or CRTC regulations and should be installed only by a qualified service technician.
- Mobile communications systems may harm the operation of your vehicle, particularly if they are not properly designed for automotive use.
- To avoid interference with other vehicle functions, such as anti-lock braking systems, amateur radio users who install radios and antennas onto their vehicle should not locate the amateur radio antennas in the area of the driver's side hood.
- Any non-Ford custom electrical or electronic accessories or components that are added to the vehicle by the authorized dealer or the owner may adversely affect battery performance and durability, and may also adversely affect the performance of other electrical systems in the vehicle.

## FORD ESP EXTENDED SERVICE PLANS (U.S. ONLY)

More than 32 million Ford and Lincoln owners have discovered the powerful protection of Ford ESP. It is the only extended service plan backed by Ford Motor Company, and provides "peace of mind" protection beyond the New Vehicle Limited Warranty coverage.

## Up to 500+ Covered Vehicle Components

There are four, new-vehicle Extended Service Plans with different levels of coverage. Ask your dealer for details.

**PremiumCare** – Our most comprehensive coverage. With over 500 covered components, this plan is so complete that we generally only discuss what is not covered!

 ${\bf ExtraCare}$  – Covers 113 components, and includes many high-tech items.

**BaseCare** – Covers 84 components.

**PowertrainCare** – Covers 29 critical components.

**Ford ESP is honored by all Ford and Lincoln Dealers in the U.S. and Canada.** It is the only extended service plan authorized and backed by Ford Motor Company. That means you get:

- Reliable, quality service anywhere you go.
- Factory-trained technicians.
- Ford Authorized Parts used with every covered repair.

#### Rental Car Reimbursement

If your vehicle is kept overnight for covered repairs, you are eligible for rental car coverage, including Bumper-to-Bumper warranty repairs, or manufacturer's recalls.

#### Transferable Coverage

If you sell your vehicle before your Ford ESP coverage expires, you can transfer any remaining coverage to the new owner. Whenever you are ready to sell your car, prospective buyers may feel better about taking a risk on your used vehicle. Ford ESP may add resale value!

#### Plus, exclusive 24/7 roadside assistance, including:

- Towing, flat-tire change and battery jump starts.
- Out-of-fuel and lock-out assistance.
- Travel expense reimbursement for lodging, meals and rental car.
- Destination assistance for taxi, shuttle, rental car coverage and emergency transportation.

### Ford ESP Can Quickly Pay for Itself

One service bill – the cost of parts and labor – can easily exceed the price of your Ford ESP Service Contract. With Ford ESP, you minimize your risk for unexpected repair bills and rising repair costs.

### Avoid the rising cost of properly maintaining your vehicle!

Ford ESP also offers a Premium Maintenance Plan that covers items that **routinely wear out**.

The coverage is prepaid, so you never have to worry about affording your vehicle maintenance. It covers regular checkups, routine inspections, preventive care and replacement of items that require periodic attention for **normal wear**:

• Wiper blades

- Brake pads and linings
- Spark plugs (except California)
- Clutch disc

- Shock absorbers
- · Belts and hoses.

Contact your selling Ford or Lincoln dealership today so they can customize a Ford Extended Service Plan that fits your driving lifestyle and budget.

#### Interest Free Finance Options Available

Take advantage of our installment payment plan, just a 10% down payment will provide you with an affordable no interest, no-fee payment opportunity.

# Protect Yourself from the Rising Cost of Vehicle Repairs with a Ford Extended Service Plan

To learn more, call our Ford ESP specialists at 800–367–3377, and do not forget to ask about our interest free payment program, allowing you all the security and benefits Ford ESP has to offer while paying over time. You're pre-approved with no credit checks, no hassles!

Or, mail your name, address, city, state and zip code to:

Ford ESP P.O. Box 8072 Royal Oak, MI 48068–9933

### FORD ESP EXTENDED SERVICE PLANS (CANADA ONLY)

You can get more protection for your vehicle by purchasing a Ford Extended Service Plan (ESP). Ford ESP is the only service contract backed by Ford Motor Company of Canada, Limited. Depending on the plan you purchase, Ford ESP provides benefits such as:

- rental reimbursement
- coverage for certain maintenance and wear items
- protection against repair costs after your New Vehicle Limited Warranty Coverage expires
- Roadside Assistance benefits.

There are several Ford ESP plans available in various time, distance and deductible combinations. Each plan is tailored to fit your own driving needs, including reimbursement for towing and rental.

When you purchase Ford ESP, you receive added peace of mind protection throughout Canada and the United States, provided by a network of participating Ford Motor Company dealers. The Lincoln Maintenance Protection Plan is honored at authorized Lincoln dealers.

**Note:** Repairs performed outside of Canada and the United States are not eligible for Ford ESP coverage.

This information is subject to change.

For more information, visit your local Ford of Canada dealer or www.ford.ca to find the Ford Extended Service Plan that is right for you.

#### **GENERAL MAINTENANCE INFORMATION**

#### **Electric vehicles**

For specific information on the Transit Connect Electric, refer to the *Azure Dynamics TC-E Owner's Guide* Supplement.

### Why Maintain Your Vehicle?

Carefully following the maintenance schedule helps protect against major repair expenses resulting from neglect or inadequate maintenance and may also help to increase the value of your vehicle when you sell or trade it. Keep all receipts for completed maintenance with the vehicle.

Regular maintenance intervals for your vehicle have been established based upon rigorous testing. It is important that you have your vehicle serviced at the proper times. These intervals serve two purposes; one is to maintain the reliability of your vehicle and the second is to keep your cost of owning the vehicle down.

It is your responsibility to see that all scheduled maintenance is performed and that the materials used meet the specifications identified in the *Capacities and Specifications* chapter. Failure to perform scheduled maintenance invalidates warranty coverage on parts affected by the lack of maintenance.

### Why Maintain Your Vehicle at Your Dealership?

### Factory-Trained Technicians

Service technicians participate in extensive factory-sponsored certification training to help them become experts on the operation of your vehicle. Ask your dealership about the training and certification their technicians have received.

#### Genuine Ford and Motorcraft® Replacement Parts

Dealerships stock Ford, Motorcraft® and Ford-authorized branded remanufactured replacement parts. These parts meet or exceed Ford Motor Company's specifications. Parts installed at your dealership carry a nationwide, 12 month/12000 mile (20000 kilometer) parts and labor limited warranty. If you do not use Ford authorized parts, they may not meet Ford specifications and, depending on the part, it could affect emissions compliance.

#### Convenience

Many dealerships have extended evening and Saturday hours to make your service visit more convenient and they offer one stop shopping. They can perform any services that are required on your vehicle, from general maintenance to collision repairs.

**Note:** Not all dealers have extended hours or bodyshops. Please contact your dealer for details.

### **Protecting Your Investment**

Maintenance is an investment that will pay dividends in the form of improved reliability, durability and resale value. To maintain the proper performance of your vehicle and its emission control systems, it is imperative that scheduled maintenance be completed at the designated intervals.

Your vehicle is very sophisticated and built with multiple, complex, performance systems. Every manufacturer develops these systems using different specifications and performance features. That is why it is important to rely upon your dealership to properly diagnose and repair your vehicle.

Ford Motor Company has recommended maintenance intervals for various parts and component systems based upon engineering testing. Ford Motor Company relies upon this testing to determine the most appropriate mileage for replacement of oils and fluids to protect your vehicle at the lowest overall cost to you and recommends against maintenance schedules that deviate from the scheduled maintenance information.

Ford strongly recommends the use of only genuine Ford, Motorcraft® or Ford-authorized remanufactured replacement parts because they are engineered for your vehicle.

#### Additives and Chemicals

Ford Motor Company recommended additives and chemicals are listed in the owner manual and in the Ford Workshop Manual. Additional chemicals or additives, not approved by Ford Motor Company, are not recommended as part of normal maintenance. Please consult your warranty information.

### Oils, Fluids and Flushing

In many cases, fluid discoloration is a normal operating characteristic and, by itself, does not necessarily indicate a concern or that the fluid needs to be changed. However, discolored fluids that also show signs of overheating and foreign material contamination should be inspected immediately by a qualified expert, such as the factory-trained technicians at your dealership. Your vehicle's oils and fluids should be changed at the specified intervals or in conjunction with a repair. Flushing is a viable way to change fluid for many vehicle sub-systems during scheduled maintenance. It is critical that systems are flushed only with new fluid that is the same as that required to fill and operate the system, or using a Ford-approved flushing chemical.

#### **Owner Checks and Services**

Certain basic maintenance checks and inspections should be performed monthly or at six month intervals.

Check Every Month		
Engine oil level.		
Function of all interior and exterior lights.		
Tires (including spare) for wear and proper pressure.		
Windshield washer fluid level		

Check Every Six Months		
Battery connections; clean if necessary.		
Body and door drain holes for obstructions. Clean if necessary.		
Cooling system fluid level and coolant strength.		
Door weatherstrips for wear. Lubricate if necessary.		

Hinges, latches and outside locks for proper operation. Lubricate if necessary.

Parking brake for proper operation.

Safety belts and seat latches for wear and function.

Safety warning lamps (brake, ABS, airbag, safety belt) for operation.

Washer spray and wiper operation. Clean or replace blades as necessary.

### **Multi-point Inspection**

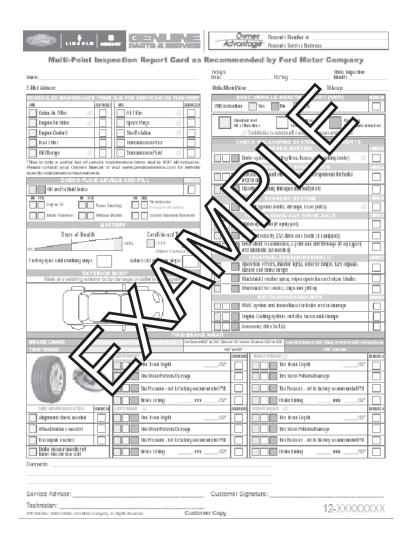
In order to keep your vehicle running right, it is important to have the systems on your vehicle checked regularly. This can help identify potential issues and prevent major problems. Ford Motor Company recommends the following multi-point inspection be performed at every scheduled maintenance interval to help make sure your vehicle keeps running great.

Multi-point Inspection		
Accessory drive belt(s)	Hazard warning system operation	
Battery performance	Horn operation	
Engine air filter	Radiator, cooler, heater and A/C hoses	
Exhaust system	Suspension components for leaks or	
	damage	
Exterior lamps operation	Steering and linkage	
Fluid levels*; fill if necessary	Tires (including spare) for wear and	
	proper pressure**	
For oil and fluid leaks	Windshield for cracks, chips or pits	
Half-shaft dust boots	Washer spray and wiper operation	

<sup>\*</sup>Brake, coolant recovery reservoir, automatic transmission and window washer.

Be sure to ask your dealership service advisor or technician about the multi-point vehicle inspection. It is a comprehensive way to perform a thorough inspection of your vehicle. It is your checklist that gives you immediate feedback on the overall condition of your vehicle. You will know what has been checked, what is okay, as well as those things that may require future or immediate attention. The multi-point vehicle inspection is one more way to keep your vehicle running great!

<sup>\*\*</sup>If your vehicle is equipped with a temporary mobility kit, check the tire sealant expiration Use By date on the canister. Replace as needed.



### NORMAL SCHEDULED MAINTENANCE AND LOG

The following section contains the Normal Maintenance Schedule. This schedule is presented at specific mileage (kilometer) intervals with exceptions as noted.

Normal Scheduled Maintenance		
Every 7500 miles	Change engine oil and filter.	
(12000 km) or	Rotate tires, inspect tire wear and measure	
six months (whichever	tread depth.	
comes first)	Inspect wheels and related components for	
	abnormal noise, wear, looseness or drag.	
	Perform multi-point inspection	
	(recommended).	
Every 15000 miles	Inspect automatic transmission fluid level.	
(24000 km) or	Consult dealer for requirements.	
12 months (whichever	Inspect brake pads, shoes, rotors, drums,	
comes first)	brake linings, hoses and parking brake.	
	Inspect engine cooling system strength and	
	hoses.	
	Inspect exhaust system and heat shields.	
	Inspect half-shaft boots.	
	Inspect steering linkage, ball joints, suspension	
	and tie-rod ends.	
	Torque rear U-bolts.	

## 260 Scheduled Maintenance

Additional Maintenance Items		
Every 30000 miles	Replace engine air filter.	
(48000 km)		
Every 37500 miles	Inspect valve clearances. Adjust as necessary	
(60000 km)	(CNG vehicles).	
Every 97500 miles	Replace spark plugs.	
(156000 km)		
Every 105000 miles	Change engine coolant.*	
(168000 km)	Inspect accessory drive belt(s).**	
Every 150000 miles	Change automatic transmission fluid and filter.	
(240000 km)	Consult dealer for requirements.	
	Replace accessory drive belt(s) if not replaced	
	within the last 100000 miles (160000 km).	

<sup>\*</sup>Initial replacement at six years or 105000 miles (168000 kilometers), then every three years or 45000 miles (72000 kilometers).

<sup>\*\*</sup>If not replaced, inspect every 15000 miles (24000 km).

**Maintenance Schedule Log** 

	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	Mileage:	
	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	MILEAGE:	
	DEALER VALIDATION:		Dealer Validation:	
D0#	P&A Code:	DO#	P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	
	Dealer Validation:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	
	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	MILEAGE:	

# 262 **Scheduled Maintenance**

	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A CODE:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	_
	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	MILEAGE:	_
	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	
DAIE:	DEALER VALIDATION:	DAIE:	DEALER VALIDATION:	$\dashv$
	Dealer Validation.		DEALER VALIDATION.	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	
DAIE.	DEALER VALIDATION:	DAIE.	DEALER VALIDATION:	$\dashv$
	DEALER VALIDATION.		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	

	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	Mileage:	
	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	
	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	Mileage:	
	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	
	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	
DAIE.	WIILEAGE.	DAIE.	WIILEAGE.	

#### **SPECIAL OPERATING CONDITIONS**

If you operate your vehicle **primarily** in one of the more demanding conditions listed below, you need to have some items maintained more frequently. If you only **occasionally** operate your vehicle under these conditions, it is not necessary to perform the additional maintenance. For specific recommendations, see your dealership service advisor or technician.

Using a Car-top Carrier		
Every 5000 miles (8000 km)	Inspect wheels and related components for abnormal noise, wear, looseness or drag.	
	Rotate tires, inspect tire wear and measure tread depth.	
Every 5000 miles (8000 km) or six months	Change engine oil and filter.	
Every 30000 miles (48000 km)	Change automatic transmission fluid.	

Extensive Idling or Low-speed Driving for Long Distances as in Heavy Commercial Use (i.e., Delivery, Taxi, Patrol Car or Livery)		
Inspect frequently, service as required	Replace engine air filter.	
Every 5000 miles	Inspect brake system.	
(8000 km)	Inspect wheels and related components for abnormal noise, wear, looseness or drag.	
	Lubricate control arm and steering ball joints if equipped with grease fittings.	
	Rotate tires, inspect tire wear and measure tread depth.	

Extensive Idling or Low-speed Driving for Long Distances as in Heavy Commercial Use (i.e., Delivery, Taxi, Patrol Car or Livery)		
Every 5000 miles	Change engine oil and filter.	
(8000 km) or six		
months		
Every 30000 miles	Change automatic transmission fluid.	
(48000 km)		
Every 60000 miles	Replace spark plugs.	
(96000 km)		

Operating in Dusty Conditions Such as Unpaved or Dusty Roads		
Inspect frequently,	Replace engine air filter.	
service as required		
Every 5000 miles	Inspect wheels and related components for	
(8000 km)	abnormal noise, wear, looseness or drag.	
	Rotate tires, inspect tire wear and measure	
	tread depth.	
Every 5000 miles	Change engine oil and filter.	
(8000 km) or		
six months		
Every 30000 miles	Change automatic transmission fluid.	
(48000 km)		

# **Special Operating Condition Log**

	DEALER VALIDATION:		Dealer Validation:
	P&A Code:		P&A Code:
RO#:	Hours:	RO#:	Hours:
DATE:	MILEAGE:	DATE:	MILEAGE:
	Dealer Validation:		DEALER VALIDATION:
	P&A Code:		P&A Code:
RO#:	Hours:	RO#:	Hours:
DATE:	Mileage:	DATE:	Mileage:
	Dealer Validation:		DEALER VALIDATION:
	P&A Code:		P&A Code:
RO#:	Hours:	RO#:	Hours:
DATE:	MILEAGE:	DATE:	MILEAGE:
	DEALER VALIDATION:		Dealer Validation:
	P&A Code:		P&A Code:
RO#:	Hours:	RO#:	Hours:
DATE:	Mileage:	DATE:	MILEAGE:
	Dealer Validation:		DEALER VALIDATION:
	P&A Code:		P&A Cope:
RO#:	Hours:	RO#:	Hours:
DATE:	HOURS: MILEAGE:	DATE:	MILEAGE:
DAIE.	WILLEAGE.	DAIC.	IVIILEAGE.

	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	
	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	
	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	
	DEALER VALIDATION:		DEALER VALIDATION:	$\neg$
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	MILEAGE:	DATE:	MILEAGE:	$\dashv$
	DEALER VALIDATION:		DEALER VALIDATION:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	[

#### **EXCEPTIONS**

California fuel filter replacement: If the vehicle is registered in California, the California Air Resources Board has determined that the failure to perform this maintenance item will not nullify the emission warranty or limit recall liability prior to the completion of the vehicle's useful life. Ford Motor Company, however, urges you to have all recommended maintenance services performed at the specified intervals and to record all vehicle service.

Hot climate oil change intervals: Vehicles operating in the Middle East, North Africa, Sub-Saharan Africa or locations with similar climates using an American Petroleum Institute (API) Certified for Gasoline Engines (Certification mark) oil of SM or SN quality, the normal oil change interval is 5000 miles (8000 kilometers). If the available API "SM" or "SN" oils are not available, then the oil change service interval is 3000 miles (4800 kilometers).

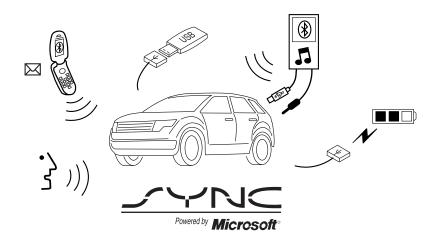
**Engine air filter & cabin air filter replacement:** Engine air filter and cabin air filter life is dependent on exposure to dusty and dirty conditions. Vehicles operated in these conditions require frequent inspection and replacement of the engine air filter and cabin air filter.

#### **ENGINE COOLANT CHANGE RECORD**

- C	Six years or 105000 miles (168000 km) (whichever comes first)
After initial change	Every three years or 45000 miles (72000 km)

# **Engine Coolant Change Log**

	Dealer Validation:		Dealer Validation:	
RO#: Date:	P&A Code: Hours: Mileage:	RO#: Date:	P&A Code: Hours: Mileage:	
	DEALER VALIDATION:		DEALER VALIDATION:	
RO#: Date:	P&A Code: Hours: Mileage:	RO#: Date:	P&A Code: Hours: Mileage:	
	Dealer Validation:		Dealer Validation:	
	P&A Code:		P&A Code:	
RO#:	Hours:	RO#:	Hours:	
DATE:	Mileage:	DATE:	Mileage:	



SYNC is an in-vehicle communications system that works with your Bluetooth-enabled cellular phone and portable media player. This allows you to:

- Make and receive calls.
- Access and play music from your portable music player.
- Access phonebook contacts and music via voice commands.
- Stream music from your connected phone.
- Text message.
- Use the advanced voice recognition system.
- USB device charging (if your device supports this).

**Note:** Your SYNC voice-activated communications system with USB does not include: 911 Assist®, Vehicle Health Report (VHR), SYNC Services (TDI: Traffic, Directions & Information), or SYNC AppLink<sup>TM</sup>.

### **GENERAL INFORMATION**

Make sure you review your device's manual before using it with SYNC.

### Support

The SYNC support team is available to help you with any questions you cannot answer on your own.

Monday-Saturday, 8:30am-8:00pm EST

In the United States, call: 1-888-270-1055

In Canada, call: 1-800-565-3673

Times are subject to change due to holidays.

#### **SYNC Owner Account**

Why do I need a SYNC owner account?

- Required to activate Vehicle Health Report and to view the reports online.
- Required to activate the subscription-based SYNC Services and to personalize your Saved Points and Favorites.
- Essential for keeping up with the latest software downloads available for SYNC.
- Access to customer support for any questions you may have.

### **Driving Restrictions**

For your safety, certain features are speed-dependent and restricted when your vehicle is traveling over 3 mph (5 km/h).

### **Safety Information**

**WARNING:** Driving while distracted can result in loss of vehicle control, accident and injury. Ford strongly recommends that drivers use extreme caution when using any device that may take their focus off the road. Your primary responsibility is the safe operation of the vehicle. We recommend against the use of any handheld device while driving, encourage the use of voice-operated systems when possible and that you become aware of applicable state and local laws that may affect use of electronic devices while driving.

When using SYNC:

- Do not operate playing devices if the power cords or cables are broken, split or damaged. Place cords and cables out of the way, so they do not interfere with the operation of pedals, seats, compartments or safe driving abilities.
- Do not leave playing devices in your vehicle during extreme conditions as it could cause them damage. See your device's manual for further information.
- Do not attempt to service or repair the system. See your authorized dealer.

For your safety, some SYNC functions are speed-dependent. Their use is limited to when your vehicle is traveling at speeds under 3 mph (5 km/h). Make sure that you review your device's manual before using it with SYNC.

### **Privacy Information**

When a cellular phone is connected to SYNC, the system creates a profile within your vehicle that is linked to that cellular phone. This profile is created in order to offer you more cellular features and to operate more efficiently. Among other things, this profile may contain data about your cellular phone book, text messages (read and unread), and call history, including history of calls when your cell phone was not connected to the system. In addition, if you connect a media device, the system creates and retains an index of supported media content. The system also records a short development log of approximately 10 minutes of all recent system activity. The log profile and other system data may be used to improve the system and help diagnose any problems that may occur.

The cellular profile, media device index, and development log remain in the vehicle unless you delete them and are generally accessible only in the vehicle when the cellular phone or media player is connected. If you no longer plan to use the system or the vehicle, we recommend you perform a Master Reset to erase all stored information.

System data cannot be accessed without special equipment and access to the vehicle's SYNC module. Ford Motor Company and Ford of Canada do not access the system data for any purpose other than as described absent consent, a court order, or where required by law enforcement, other government authorities, or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada. For further privacy information, see the sections on 911 Assist®, Vehicle Health Report, and Traffic, Directions and Information.

#### **USING VOICE RECOGNITION**

This system helps you control many features using voice commands. This allows you to keep your hands on the wheel and focus on what is in front of you.

### **Initiating a Voice Session**



Push the voice icon; a tone sounds and Listening appears in the display. Say any of the following:

Say:	If you want to:	
"Phone"	Make calls.	
"USB"	Access the device connected to your USB	
	port.	
"Bluetooth Audio"	Stream audio from your phone.	
"Line in"	Access the device connected to the auxiliary	
	input jack.	
"Cancel"	Cancel the requested action.	
"SYNC"	Return to the main menu.	
"Voice settings"	Adjust the level of voice interaction and	
	feedback.	
"Help"	Hear a list of voice commands available in the	
	current mode.	

### **System Interaction and Feedback**

The system provides feedback through audible tones, prompts, questions and spoken confirmations depending on the situation and the chosen level of interaction (voice settings). You can customize the voice recognition system to provide more or less instruction and feedback.

The default setting is to a higher level of interaction in order to help you learn to use the system. You can change these settings at any time.

### Adjusting the Interaction Level



Push the voice icon; when prompted, say "Voice settings", then any of the following:

When you say:	The system:
"Interaction mode standard"	Provides more detailed interaction and
	guidance.
"Interaction mode advanced"	Provides less audible interaction and
	more tone prompts.

The system defaults to the standard interaction mode.

Confirmation prompts are short questions the system asks when it is not sure of your request or when there are multiple possible responses to your request. (For example, the system may ask "Phone, is that correct?") If turned off, the system simply makes a best guess as to what you requested and you may still occasionally be asked to confirm settings.

"Confirmation prompts on"
"Confirmation prompts off"

The system creates candidate lists when it has the same confidence level of several options based on your voice command. When turned on, you may be prompted with as many as four possibilities for clarification.

For example, "Say 1 after the tone to call John Doe at home. Say 2 after the tone to call Johnny Doe on mobile. Say 3 after the tone to call Jane Doe at home." Or, "Say 1 after the tone to play John Doe, Say 2 after the tone to play Johnny Doe."

"Phone candidate lists on"
"Phone candidate lists off"
"Media candidate lists on"
"Media candidate lists off"

#### Helpful Hints

- Make sure the interior of the vehicle is as quiet as possible. Wind noise from open windows and road vibrations may prevent the system from correctly recognizing spoken commands.
- After pressing the voice icon, wait until after the tone sounds and Listening appears before saying a command. Any command spoken prior to this does not register with the system.

- Speak naturally, without long pauses between words.
- At any time you can interrupt the system while it is speaking by pressing the voice icon.

### **USING SYNC WITH YOUR PHONE**

Hands-free calling is one of the main features of SYNC. While the system supports a variety of features, many are dependent on your cellular phone's functionality. At a minimum, most cellular phones with Bluetooth wireless technology support the following functions:

- Answering an incoming call.
- Ending a call.
- Using privacy mode.
- Dialing a number.
- · Redialing.
- Call waiting notification.
- Caller ID.

Other features, such as text messaging using Bluetooth and automatic phonebook download, are phone-dependent features. To check your phone's compatibility, see your phone's user manual and visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

#### Pairing a Phone for the First Time

**Note:** SYNC can support downloading up to approximately 2000 entries per Bluetooth-enabled cellular phone.

**Note:** Make sure the vehicle ignition and radio are turned on and the transmission is in position  $\mathbf{P}$ .

 ${f Note:}$  To scroll through the menus, press the up and down arrows on your audio system.

Wirelessly pairing your phone with SYNC allows you to make and receive hands-free calls.

- 1. Press the phone button; when the display indicates no phone is paired, press **OK**.
- 2. When **Find SYNC** appears in the display, press **OK**.
- 3. Put your phone into Bluetooth discovery mode. See your phone's user guide if necessary.
- 4. When prompted on your phone's display, enter the six-digit PIN provided by SYNC in the radio display.
- 5. The display indicates when the pairing is successful.

Depending on your phone's capability and your market, the system may prompt you with questions such as setting the current phone as the primary phone (the phone SYNC automatically tries to connect with first upon vehicle start-up), downloading your phone book, etc.

### **Pairing Subsequent Phones**

**Note:** To scroll through the menus, press the up and down arrows on your audio system.

**Note:** Make sure the vehicle ignition and radio are turned on and that the transmission is in position **P.** 

- 1. Press the phone button and scroll until System Settings is selected.
- 2. Press OK and scroll until Bluetooth Devices is selected and press OK.
- 3. Scroll until Add Bluetooth Device is selected and press OK.
- 4. When Find SYNC appears in the display, press OK.
- 5. Put your phone into Bluetooth discovery mode. See your phone's user guide if necessary.
- 6. When prompted on your phone's display, enter the six-digit PIN provided by SYNC in the radio display. The display indicates when the pairing is successful.
- 7. The system then prompts with questions such as if you would like to set the current phone as the primary phone (the phone SYNC automatically tries to connect with first upon vehicle start-up), download your phone book, etc.

#### **Phone Voice Commands**



Press the voice icon and say "Phone". Say any of the following:

"PHONE"
"Call <name>"1</name>
"Call <name> on mobile OR cell"</name>
"Call <name> on other" 1</name>
"Phone book <name> at home"<sup>2</sup></name>
"Phone book <name> on mobile OR cell"<sup>2</sup></name>
"Call history outgoing" <sup>2</sup>
"Phone book <name> on Other"<sup>2</sup></name>
"Call history missed" <sup>2</sup>
"Menu" <sup>2,3</sup>
"Join"

"PHONE"
"Call <name> at home" 1</name>
"Call <name> at work" OR "Call <name> in office" 1</name></name>
"Dial" <sup>1,4</sup>
"Phone book <name>"<sup>2</sup></name>
"Phone book <name> at work" OR "Phone book <name> at office"<sup>2</sup></name></name>
"Call history incoming" <sup>2</sup>
"Connections" <sup>2</sup>
"Go to privacy"
"Hold"

<sup>&</sup>lt;sup>1</sup>These commands do not require you to say "Phone" first.

<sup>&</sup>lt;sup>4</sup>See "DIAL" table below.

"MENU"
"(Phone) connections"*
"(Phone) settings (message) notification off"*
"(Phone) settings (message) notification on"*
"(Phone) settings (set) phone ringer"*
"(Phone) settings (set) ringer 1"*
"(Phone) settings (set) ringer 2"*
"(Phone) settings (set) ringer 3"*
"(Phone) settings (set) ringer off"*
"Battery"
"Phone name"
"Signal"
"Text message inbox"

 $<sup>\</sup>ensuremath{^*}\text{Words}$  in ( ) are optional and do not have to be spoken for the system to understand the command.

 $<sup>^2{\</sup>rm These}$  commands are not available until phone information is completely downloaded using Bluetooth.

<sup>&</sup>lt;sup>3</sup>See "MENU" table below.

**Phone book commands:** When you ask SYNC® to access a phone book name, number, etc., the requested information appears in the display to view. Press the phone button and say "Call" to call the contact.

"DIAL"
"411" (four-one-one), "911" (nine-one-one), etc.
"700 (seven hundred)" (seven hundred)
"800 (eight hundred)" (eight hundred)
"900 (nine hundred)" (nine hundred)
"#" (pound, slash)
" <number> 0-9"</number>
"Asterisk" (*)
"Clear" (deletes all entered digits)
"Delete" (deletes one digit)
"Plus"
"Star"

**Note:** To exit dial mode, press and hold the phone button or press MENU to go to the PHONE menu.

#### **Making Calls**

Press the voice icon and when prompted say:

- 1. Say "Call <name>" or "Dial", then the desired number.
- 2. When the system confirms the number, say "Dial" again to initiate the

To erase the last spoken digit, say "Delete" or press the left arrow button. To erase all spoken digits, say "Clear" or press and hold the left arrow button.

To end the call, press and hold the phone button.

#### **Receiving Calls**

When receiving a call, you can:

- Answer the call by pressing the phone button.
- Reject the call by pressing and holding the phone button.
- Ignore the call by doing nothing.

### Phone Options during an Active Call

During an active call, you have additional menu features which become available such as putting a call on hold, joining calls, etc. Use the arrow buttons to scroll through the menu options.

### To access:

- Press MENU during an active call.
   When Active Call Menu is selected, press OK.
   Scroll to cycle through the following options:

When you select:	You can:
Mute Call?	Mute the call.
Privacy	Switch a call from an active hands-free environment to your cellular phone for a more private conversation.  Press OK when Privacy on/off appears.  (The display indicates In Privacy and the system transfers your call.)
Call Hold	Put an active call on hold. Press OK when Place Call on Hold? appears. To answer another call at this time, press the phone button.
Join Calls	Join two separate calls.  1. Press the phone button.  2. Access the desired contact through SYNC or use voice commands to place the second call. Once actively in the second call, press MENU.  3. Scroll until Join Calls appears and press OK. Press OK again when Join Calls? appears.  Note: SYNC supports a maximum of three callers on a multiparty/conference call.
<b>Enter Tones</b>	Enter "tones" such as numbers for passwords. Scroll until the desired number appears in the display, then press OK; a tone sounds as confirmation. Repeat as necessary.
Phonebook	Access your phonebook contacts.  1. Press OK to select, then scroll through your phonebook contacts.  2. Press OK again when the desired selection appears in the display.  3. Press the phone button.

When you select:	You can:
Call History	Access your call history log.
	1. Press OK to select, then scroll through
	your call history options (incoming, outgoing
	or missed).
	2. Press OK when the desired selection
	appears in the display.
	3. Press the phone button to call the
	selection.
Return	Exit the current menu.

### Accessing Features through the Phone Menu

SYNC's phone menu allows you to redial a number, access your call history and phone book and send text messages as well as access phone and system settings.

1. Press the phone button to enter the Phone Menu.

2. Scroll to cycle through:

When you select:	You can:
Phone Redial	Redial the last number called (if available).
	Press OK to select, then press OK again to
	confirm.
Call History <sup>*</sup>	Allows you to access any previously dialed,
	received or missed calls while your phone has
	been connected to the system.
	1. Press OK to select.
	2. Scroll to select from Call History Incoming,
	Call History Outgoing or Call History Missed.
	Press OK make your selection.
	3. Press OK or the phone button to call the
	desired selection.
	<b>Note:</b> The system attempts to automatically
	re-download your phone book and call history
	each time your phone connects to SYNC
	(if the auto download feature is on and your
	Bluetooth-enabled cellular phone supports this
	feature).

When you select:	You can:
Phonebook**	Allows you to access your downloaded phonebook.  1. Press OK to confirm and enter. If your phonebook has fewer than 255 listings, they appear alphabetically in flat file mode. If there are more, they are organized into alphabetical categories.  2. Scroll until the desired contact appears, then press OK.  3. Press OK or the phone button.
Text Message*	Enables you to send, download and delete text messages.
Phone Settings*	Allows you to view your phone's status, set ring tones, select your message notification, change phone book entries and automatically download your cellular phone among other features.
System Settings	Access Bluetooth Devices menu listings (add, connect, set as primary, on/off, delete) as well as Advanced menu listings (prompts, languages, defaults, master reset, install application and system information).
Exit Phone Menu	Exit the phone menu by pressing OK.

<sup>\*</sup>This is a phone-dependent feature.

### **Text Messaging**

**Note:** This is a phone-dependent feature.

SYNC allows you to receive, send, download and delete text messages. The system can also read incoming text messages to you so that you do not have to take your eyes off the road.

<sup>\*\*</sup>This is a speed-dependent and phone-dependent feature.

### Receiving a Text Message

**Note:** This is a phone-dependent feature. Your phone must support downloading text messages using Bluetooth to receive incoming text messages.

**Note:** Forwarding a text message is a speed-dependent feature and can only be done when the vehicle is traveling at 3 mph (5 km/h) or less.

Note: Only one recipient is allowed per text message.

When a new message arrives, an audible tone sounds and the display indicates you have a new message. You have these options:

- 1. Press the voice button, wait for the prompt and say "Read Message" to have SYNC read the message to you.
- Press OK to receive and open the text message or do nothing and the message goes into your text message inbox. Press OK again and SYNC reads your message aloud as you are not able to view the message. You can then also choose whether you'd like to reply or forward the message.
- 3. Press OK and scroll to choose between:
  - Reply to Text Message: Press OK to access and then scroll through the list of pre-defined messages to send.
  - Forward Text Message: Press OK to forward the message to anyone in your Phonebook or Call History. You can also choose Enter Number.

#### Sending, Downloading and Deleting Your Text Messages

Text messaging is a phone-dependent feature. If your phone is compatible, SYNC allows you to receive, send, download and delete text messages.

- 1. Press the phone button.
- 2. Scroll until Text Message appears and press OK.
- 3. Scroll to select from the following options:

**Send Text Message?** enables you to send a new text message based on a pre-defined set of 15 messages.

**Download Unread Msgs** allows you to download your unread messages (only) to SYNC. To download the messages, press OK to select. The display indicates your messages are being downloaded. When complete, SYNC takes you to your inbox.

**Delete All Messages?** allows you to delete current text messages from SYNC (not your phone). To delete the messages, press OK to select. The display indicates when all your text messages have been deleted and SYNC returns you to the text message menu.

**Note:** SYNC does not automatically download all of your unread text messages at every ignition cycle (as it does with call history and phonebook if automatic download is set to on).

**Return** exits the current menu when you press OK.

### If you select **Send Text Message?**:

- 1. Press OK to select. If the system detects your phone does not support this feature, Unsupported appears in the display and SYNC returns to the main menu.
- 2. Scroll to cycle through the message options in the following chart.
- 3. Press OK when the desired selection is in the display. The system now needs to know who to send the message to.
- 4. Scroll to cycle through Phonebook or Call History entries. You can also select Enter Number to audibly enter a desired number.
- 5. Press OK to enter the desired menu and scroll to select the specific contact.
- 6. Press OK when the contact appears and press OK again to confirm when the system asks if you would like to send the message. Each text message is sent with the following signature: "This message was sent from my <Ford or Lincoln>".

Pre-defined text message options
Can't talk right now
Call me
Call you later
Be there in 10 minutes
Be there in 20 minutes
Yes
No
Why?
Thanks
Where R you?
I need more directions
I love you
Too funny
Can't wait to see you
I'm stuck in traffic

### **Accessing Your Phone Settings**

These are phone-dependent features. Your phone settings allow you to access and adjust features such as your ring tone, text message notification, modify your phone book and also set up automatic download.

- 1. Press the phone button.
- 2. Scroll until Phone Settings appears, then press OK.
- 3. Scroll to select from the following options:

When you select:	You can:
Phone Status	See the provider, name, signal power, battery power and roaming status of your connected phone.  Press OK to select and scroll to view the information. When done, press OK again to return to the phone status menu.
Set Ringer	Select which ring tone sounds during an incoming call (one of the system's or your phone's).  1. Press OK to select and scroll to hear Ringer 1, Ringer 2, Ringer 3 and Phone Ringer.  2. Press OK to select.  Note: If your phone supports in-band ringing, your phone's ringer sounds when Phone Ringer is chosen.
Message Notification	

When you select:	You can:
Modify Phonebook	Modify the contents of your phone book
	(i.e., add, delete, download). Press OK to
	select and scroll between:
	Add Contacts: Press OK to add more contacts
	from your phone book. Push the desired
	contact(s) on your phone. See your phone's
	user guide on how to push contacts.
	Delete Phonebook: Press OK to delete the
	current phone book and call history. When
	Delete Phonebook appears, press OK to
	confirm. SYNC takes you back to the Phone
	Settings menu.
	Download Phonebook: Press OK to select and
	press OK again when Confirm
	Download? appears.
Auto Download	Automatically download your phone book
	each time your phone connects to SYNC.
	Press OK to select. When Auto Download
	On? appears, press OK to have your
	phonebook automatically downloaded each
	time.
	Select Off to NOT download your phonebook
	every time your phone connects to SYNC.
	Your phonebook, call history and text
	messages can only be accessed when your
	specific phone is connected to SYNC.
	<b>Note:</b> Downloading times are phone- and
	quantity-dependent.
	<b>Note:</b> When auto download is on, any
	changes, additions or deletions saved since
	your last download are deleted.
Return	Exit the current menu.

### **System Settings**

System Settings provide access to your Bluetooth Devices and Advanced menu features. Use the arrow buttons to scroll through the menu options.

The Bluetooth Devices menu allows you to add, connect, delete and set a phone as primary as well as turn your Bluetooth feature on and off.

The Advanced menu allows you to access and set prompts, languages, defaults, perform a master reset, install an application and view system information.

### Bluetooth Devices Menu Options

This menu allows you to add, connect, delete, set a phone as primary, and turn Bluetooth on or off.

- 1. Press the phone button to enter the Phone Menu.
- 2. Scroll until System Settings appears and press OK.
- 3. Scroll until Bluetooth Devices appears and select OK.
- 4. Scroll to select from the following options:

If you select:	You can:
Add Bluetooth	See <i>Using SYNC with your phone</i> earlier in
Device*	this chapter for pairing instructions.
<b>Connect Bluetooth</b>	Connect a previously paired
Device	Bluetooth-enabled phone.
	1. Press OK to select and view a list of
	previously paired phones.
	2. Scroll until the desired device is chosen,
	then press OK to connect the phone.
	Note: Only one device can be connected at a
	time. When another phone is connected, the
	previous one is disconnected.
Set Primary Phone	Set a previously paired phone as your primary
	phone.
	Press OK to select and scroll to select the
	desired phone. Press OK to confirm.
	<b>Note:</b> SYNC attempts to connect with the
	primary phone at every ignition cycle. When a
	phone is selected as primary, it appears first
	in the list and is marked with an *.

If you select:	You can:
Set Bluetooth On/Off	Turn the Bluetooth feature on and off.
	Press OK and scroll to toggle between On and
	Off. When the desired selection is chosen,
	press OK.
	Note: Turning Bluetooth off disconnects all
	Bluetooth devices and deactivates all
	Bluetooth features.
<b>Delete Device</b>	Delete a paired phone.
	Press OK and scroll to select the device.
	Press OK to confirm.
Delete All Devices	Delete all previously paired phones (and all
	information originally saved with those
	phones).
	Press OK to select.
Return	Exit the current menu.

<sup>\*</sup>This is a speed-dependent feature.

### **Advanced Menu Options**

This menu allows you to access settings such as prompts, languages, defaults, perform a master reset, install an application and view system information.

- Press the phone button to enter the Phone Menu.
   Scroll until System Settings appears and press OK.
   Scroll until Advanced appears and select OK.

4. Scroll to select from the following options:

If you select:	You can:
Prompts	Get help from SYNC by using questions,
	helpful hints or asking you for a specific
	action. To turn these prompts on or off:
	1. Press OK to select and scroll to select
	between on or off.
	2. Press OK when the desired selection
	appears in the display. SYNC takes you back
	to the Advanced menu.
Languages	Choose between English, Espanol and
	Français. Once selected, all of SYNC's radio
	displays and prompts are in the selected
	language.
	1. Press OK to select and then scroll through
	the languages.
	2. Press OK when the desired selection
	appears in the display. If you change the
	language setting, the display indicates that
	the system is updating. When complete, SYNC
	takes you back to the Advanced menu.
<b>Factory Defaults</b>	Return to the factory default settings.
	This selection does not erase your indexed
	information (phonebook, call history, text
	messages and paired devices).
	1. Press OK to select and then press OK again
	when Restore Defaults? appears in the display.
	2. Press OK to confirm.
Master Reset	Completely erase all information stored on
	SYNC (phonebook, call history, text messages
	and paired devices) and return to the factory
	default settings.
	Press OK to select. The display indicates
	when complete and SYNC takes you back to
	the Advanced menu.

If you select:	You can:
Install Application	Install applications you have downloaded.
	Press OK and scroll to select. Press OK to confirm.
System Info	Access the Auto Version number as well as the FPN number. Press OK to select.
MAP Profile	This is a Bluetooth component which can further help your phone with the exchange of text messages.
Return	Exit the current menu.

## **USING SYNC WITH YOUR MEDIA PLAYER**

You can access and play music from your digital music player over the vehicle's speaker system using the system's media menu or voice commands. You can also sort and play your music by specific categories, such as artists, albums, etc.

SYNC is capable of hosting nearly any digital media player including: iPod®, Zune™, Plays from device players, and most USB drives. SYNC also supports audio formats such as MP3, WMA, WAV and ACC.

## Connecting Your Digital Media Player via the USB Port

**Note:** If your digital media player has a power switch, ensure that the device is turned on.

To connect using voice commands:

- 1. Plug the device into the vehicle's USB port.
- 2. Press the voice icon and when prompted, say "USB".
- 3. You can now play music by saying any of the appropriate voice commands. See the media voice commands.

To connect using the system menu:

- 1. Plug the device into the vehicle's USB port.
- 2. Press AUX and then MENU to enter the Media Menu.
- 3. Scroll until Select Source appears and press OK.
- 4. Scroll to select USB and press OK.
- 5. Depending on how many digital media files are on your connected device, Indexing may appear in the radio display. When indexing is complete, the screen returns to the Play Menu.

- 6. Press OK and scroll through selections of:
  - Play All
  - Artists
  - Albums
  - Genres
  - Playlists
  - Tracks
  - Explore USB
  - Similar Music
  - Return

When the desired selection appears in the display, press OK to build your desired music selection.

# What's Playing?



At any time when a track is playing, you can press the voice icon and ask the system, "What's playing?". The system reads the metadata tags (if populated) of the playing track to you.

## **Media Voice Commands**



Press the voice icon and, when prompted, say "USB" then any of the following:

"USB"	
"Autoplay off"	
"Autoplay on"	
"(Phone) (Media) (Bluetooth) Connections"	
"Pause"	
"Play"	
"Play album <name>"1,3</name>	
"Play all"	
"Play artist <name>"1,3"</name>	
"Play genre <name>"1,3</name>	
"Play next folder" <sup>2</sup>	
"Play next track"	
"Play playlist <name>"1,3"</name>	
"Play previous folder" <sup>2</sup>	
"Play previous track"	
"Play song <name>"1</name>	

"USB"
"Play track <name>"1,3"</name>
"Refine album <name>"1,3"</name>
"Refine artist <name>"<sup>1,3</sup>"</name>
"Refine song <name>"1</name>
"Refine track <name>"<sup>1,3</sup>"</name>
"Repeat off"
"Repeat on"
"Search album <name>"1,3"</name>
"Search artist <name>"<sup>1,3</sup>"</name>
"Search genre <name>"<sup>1,3</sup></name>
"Search song <name>"1</name>
"Search track <name>"1,3"</name>
"Shuffle off"
"Shuffle on"
"Similar music"
"What's playing?"

<sup>1&</sup>quot;<name>" is a dynamic listing, meaning that it could be the name of any desired group, artist, etc.

<sup>&</sup>lt;sup>2</sup>Voice commands which are only available in folder mode.

 $<sup>^3</sup>$ Voice commands which are not available until indexing is complete.

Voice Command Guide	
"Autoplay"	Turn on to listen to music which has already been randomly indexed during the indexing process.  Turn off and the system does not begin to play any of your music until all media has all been indexed. Indexing times can vary from device to device and also with regard to the number of songs being indexed.
"Search/Play Genre"	The system searches all the data from your indexed music and, if available, begins to play the chosen type of music. You can only play genres of music which are present in the GENRE metadata tags that you have on your digital media player.
"Similar Music"	The system compiles a playlist and then plays similar music to what is currently playing from the USB port using indexed metadata information.
"Search/Play Artist/Track/Album"	The system searches for a specific artist/track/album from the music indexed through the USB port.
"Refine"	This allows you to make your previous command more specific. For example, if you asked to search and play all music by a certain artist, you could then say "refine album" and choose a specific album from the list to view. If you then select Play, the system only plays music from that specific album.

Press the voice icon and when prompted say "Bluetooth Audio" and then any of the following:

"BLUETOOTH AUDIO"	
"(Phone) (Media) (Bluetooth) Connections"	
"Pause"	
"Play"	
"Play next track"	
"Play previous track"	

## **Media Menu Features**

The media menu allows you to select your media source, how to play your music (by artist, genre, shuffle, repeat, etc.), and also to add, connect or delete devices.

- 1. Press AUX and then MENU to enter the Media Menu.
- 2. Scroll to cycle through:

When you select:	You can:
Play Menu	Play your music by artist, album, genre,
	playlists, tracks, similar music or to simply,
	play all. You can also choose to Explore USB
	to view the supported digital music files on
	your playing device.
	See Play Menu later in this section for more
	information.

When you select:	You can:
Select Source	SYNC USB: Press OK to access music plugged into your USB port. You can also plug in devices to charge them (if supported by your device). Once connected, the system indexes any readable media files. (The time required to complete this depends on the size of the media content being indexed.) If Autoplay is on, you can access media files randomly as they are indexed. If turned off, indexed media is not available until the indexing process is complete. SYNC is capable of indexing thousands of
	average size media and notifies you if the maximum indexing file size is reached.
	Bluetooth Audio: This is a phone-dependent feature which allows you to stream music playing on your Bluetooth-enabled phone. If supported by your device, you can press SEEK to play the previous or next track.
	SYNC Line In: Press OK to select and play music from your portable music player over the vehicle's speakers.  Note: If you have already connected a device to the USB port, you cannot access the line in feature. Some digital media players require both USB and line in ports to stream data and music separately.

When you select:	You can:
Media Settings	Choose to shuffle or repeat your music and select your Autoplay settings. Once these selections are turned on, they remain on until turned off. Press SEEK to play the previous
	or next track.  Note: Some digital media players require both USB and line in ports to stream data and music separately. Press OK to select and then scroll to choose from:
	<b>Shuffle</b> : Press OK to shuffle available media files in the current playlist. <b>Note:</b> To shuffle all media tracks, you must select Play All in the Play Menu and then select Shuffle.
	Repeat: Press OK to repeat any song.
	<b>Autoplay</b> : Press OK to listen to music which has already been randomly indexed during the indexing process.
Mobile Apps	Interact with SYNC®-capable mobile applications on your smart phone. See $SYNC$ ® $AppLink$ <sup>TM</sup> earlier in this chapter for more information.
System Settings	Access Bluetooth Device menu listings (add, connect, set as primary, on/off, delete) as well as Advanced menu listings (prompts, languages, defaults, master reset, install application and system information).  Note: See System Settings for more information.
Exit Media Menu	Press OK to exit the media menu.

# **Accessing Your Play Menu**

This menu allows you to select and play your media by artist, album, genre, playlist, track, similar music or even to explore what is on your USB device.

- 1. Make sure that your device is plugged into the USB port and is turned on.
- 2. Press AUX and then MENU to enter the Media Menu.
- 3. Scroll to select the Play Menu and press OK.

If there are no media files to access, the display indicates there is no media. If there are media files, you have the following options to scroll through and select from:

When you select:	You can:
Play All	Play all indexed media (tracks) from your playing device in flat file mode, one at a time in numerical order.  Press OK to select. The first track title appears in the display.
Artists	Sort all indexed media by artist. Once selected, the system lists and then play all artists and tracks alphabetically. If there are less than 255 indexed artist, they are listed alphabetically in flat file mode. If there are more, they are categorized in alphabetical categories.  1. Press OK to select. You can select to play All Artists or any indexed artist.  2. Scroll until the desired artist is chosen and press OK.

777	W.
When you select:	You can:
Albums	Sort all indexed media by albums. If there are
	less than 255 indexed albums, they are listed
	alphabetically in flat file mode. If there are
	more, they are organized into alphabetical
	categories.
	1. Press OK to enter the album menu and
	select from playing all albums or from any
	individual indexed album.
	2. Scroll until the desired album is chosen and
	press OK.
Genres	Sort indexed music by genre (category) type.
	SYNC lists the genres alphabetically in flat file
	mode. If there are more than 255, SYNC
	automatically organizes them into alphabetical
	categories.
	Press OK to select and then scroll to select
	the desired genre and press OK.
Playlists	Access your playlists (from formats such as
	ASX, .M3U, .WPL, .MTP.). The system lists
	your playlists alphabetically in flat file mode.
	If there are more than 255, they are organized
	into alphabetical categories.
	Press OK to select. Then scroll to select the
	desired playlist and press OK.
Tracks	Search for and play a specific track which has
	been indexed. SYNC lists your tracks
	alphabetically in flat file mode. If there are
	more than 255, SYNC automatically organizes
	them into alphabetical categories.
	Press OK to select. Then scroll to select the
	desired track and press OK.

When you select:	You can:
Explore USB	Explore all supported digital media on your media device connected to the USB port. You can only view media content which is compatible with SYNC; other files saved are not visible.  Press OK to select. Then scroll to explore indexed media on your flash drive.
Similar Music	Play music similar to what is currently playing from the USB port. The system uses the metadata information of each song to compile a playlist for you.  Press OK to select. The system creates a new list of similar songs and begins playing.  The metadata tags must be populated for this feature to include each track.  Note: With certain playing devices, if your metadata tags are not populated, the tracks won't be available in voice recognition, play menu or similar music. However, if you place these tracks onto your playing device in "Mass Storage Device Mode", they are available in voice recognition, play menu browsing and similar music. Unknowns are placed into any unpopulated metadata tag.
Return	Exit the current menu.

# **System Settings**

System settings provide access to your Bluetooth Devices and Advanced menu features.

The Bluetooth Devices menu allows you to add, connect and delete a device as turn the Bluetooth feature on and off.

Your Advanced menu allows you to access and set prompts, languages, defaults and perform a master reset.

# Bluetooth Devices Menu Options

This menu allows you to add, connect and delete devices as well as turn Bluetooth on and off.

- 1. Press AUX and then MENU to enter the Media Menu.
- Scroll until System Settings appears and select OK.
   Scroll until Bluetooth Devices appears.
   Press OK and then scroll to select from:

When you select:	You can:	
Add Bluetooth	Allows you to pair additional devices to the	
Device*	system.	
	1. Press OK to select and press OK again	
	when Find SYNC appears in the display.	
	2. Follow the directions in your phone's user	
	guide to put your phone into discovery mode.	
	A six-digit PIN appears in the display.	
	3. When prompted on your phone's six-digit	
	display, enter the PIN.	
Connect Bluetooth	Connect a previously paired	
Device	Bluetooth-enabled phone.	
	1. Press OK to select and view a list of	
	devices.	
	2. Scroll until the desired device is chosen	
	and press OK to connect the device.	
Set Bluetooth On/Off	Turn the Bluetooth feature on and off.	
	Press OK and scroll to toggle between On and	
	Off. When the desired selection is chosen,	
	press OK. Turning Bluetooth off disconnects	
	all Bluetooth devices and deactivates	
	Bluetooth features.	
Delete Device	Delete a paired media device.	
	Press OK and scroll to select the device.	
	Press OK to confirm.	
Delete All Devices	Delete all previously paired devices.	
	Press OK to select.	
Return	Exit the current menu.	

<sup>\*</sup>This is a speed-dependent feature

# **Advanced Menu Options**

This menu allows you to access settings such as prompts, language, performing a master reset as well as returning to factory defaults.

- 1. Press AUX and then MENU to access the Media Menu.
- Scroll until System Settings appears and select OK.
   Scroll until Advanced appears.
- 4. Press OK and then scroll to select from the following:

When you select:	You can:
Prompts	Have SYNC guide you via questions, helpful hints or ask you for a specific action.  1. Press OK to select and scroll to select between on or off.  2. Press OK when the desired selection appears in the display. SYNC takes you back to the Advanced menu.
Languages	Choose from English, Francais and Espanol. The displays and prompts are in the selected language.  1. Press OK to select and then scroll through the languages.  2. Press OK when the desired selection appears in the display.  3. If you change the language setting, the display indicates that the system is updating. When complete, SYNC takes you back to the Advanced menu.
Factory Defaults	Return to the factory default settings. This selection does not erase your indexed information (phonebook, call history, text messages and paired devices).  1. Press OK to select and then press OK again when Restore Defaults? appears in the display.  2. Press OK to confirm.

When you select:	You can:	
Master Reset	Completely erase all information stored on	
	SYNC (all phonebook, call history, text	
	messages and all paired devices) and return	
	to the factory default settings.	
Application	Download new software applications	
	(if available) and then load the desired	
	applications through your USB port.	
	See the web site for more information.	
Return	Exit the current menu.	

## **TROUBLESHOOTING**

Your SYNC system is easy to use. However, should questions arise, see the tables below.

Use the website at any time to check your phone's compatibility, register your account and set preferences as well as access a customer representative via an online chat (during certain hours). Visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca for more information.

Phone Issues		
Issue	Possible	Possible Solution(s)
	Cause(s)	
Excessive	The audio control	Review your phone's user guide
background noise	settings on your	regarding audio adjustments.
during a phone	phone may be	
call.	affecting SYNC	
	performance.	
During a call, I	Possible phone	Try turning off the device,
can hear the other	malfunction.	resetting the device, removing
person but they		the device's battery, then trying
cannot hear me.		again.

Phone Issues		
Issue	Possible Cause(s)	Possible Solution(s)
SYNC is not able to download my phonebook.	<ul> <li>This is a phone-dependent feature, OR</li> <li>Possible phone malfunction.</li> </ul>	<ul> <li>Go to the website to review your phone's compatibility.</li> <li>Try turning off the device, resetting the device or removing the device's battery, then trying again.</li> <li>Try pushing your phonebook contacts to SYNC by using the Add Contacts feature.</li> <li>Use the SYNCmyphone feature available on the website.</li> </ul>
The system says Phonebook Downloaded but my phonebook in SYNC is empty or is missing contacts.	Limitations on your phone's capability.	<ul> <li>Try pushing your phonebook contacts to SYNC by using the Add Contacts feature.</li> <li>If the missing contacts are stored on your SIM card, try moving them to the device memory.</li> <li>Remove any pictures or special ring tones associated with the missing contact.</li> </ul>

Phone Issues		
Issue	Possible Cause(s)	Possible Solution(s)
I am having trouble connecting my phone to SYNC.	<ul> <li>This is a phone-dependent feature, OR</li> <li>Possible phone malfunction.</li> </ul>	<ul> <li>Go to the website to review your phone's compatibility.</li> <li>Try turning off the device, resetting the device or removing the device's battery, then trying again.</li> <li>Try deleting your device from SYNC, deleting SYNC from your device and trying again.</li> <li>Check the security and auto accept/prompt always settings relative to the SYNC Bluetooth connection on your phone.</li> <li>Update your device's software firmware.</li> <li>Turn off the Auto phonebook download setting.</li> </ul>
Text messaging is not working on SYNC.	<ul> <li>This is a phone-dependent feature, OR</li> <li>Possible phone malfunction.</li> </ul>	<ul> <li>Go to the website to review your phone's compatibility.</li> <li>Try turning off the device, resetting the device or removing the device's battery, then trying again.</li> </ul>

USB/Media Issues		
Issue	Possible Cause(s)	Possible Solution(s)
I am having trouble connecting my device.	Possible device malfunction.	<ul> <li>Try turning off the device, resetting the device or removing the device's battery, then trying again.</li> <li>Make sure you are using the manufacturer's cable.</li> <li>Make sure the USB cable is properly inserted into the device and the vehicle's USB port.</li> <li>Make sure that the device does not have an auto-install program or active security settings.</li> </ul>
SYNC does not recognize my device when I turn on the car.	This is a device limitation.	Make sure you are not leaving the device in your vehicle during very hot or cold temperatures.
Bluetooth audio does not stream.	<ul> <li>This is a phone-dependent feature, OR</li> <li>The device is not connected.</li> </ul>	Make sure the device is connected to SYNC and that you have pressed play on your device.
SYNC does not recognize music that is on my device.	<ul> <li>Your music files may not contain the proper artist, song title, album or genre information, OR</li> <li>The file may be corrupted, OR</li> <li>The song may have copyright protection which does not allow it to play.</li> </ul>	<ul> <li>Make sure that all song details are populated.</li> <li>Some devices require you to change the USB settings from mass storage to MTP class.</li> </ul>

Voice Command Issues		
Issue	Possible Cause(s)	Possible Solution(s)
SYNC does not understand what I am saying.	<ul> <li>You may be using the wrong voice commands, OR</li> <li>You may be speaking too soon or at the wrong time.</li> </ul>	<ul> <li>Review the Phone voice commands and the Media voice commands at the beginning of their respective sections.</li> <li>Be aware that SYNC's microphone is either in your rear view mirror or in the headliner just above the windshield.</li> </ul>
SYNC does not understand the name of a song or artist.	<ul> <li>You may be using the wrong voice commands, OR</li> <li>You may not be saying the name exactly as it is saved, OR</li> <li>The system may not be reading the name the same way you are saying it.</li> </ul>	<ul> <li>Review the media voice commands at the beginning of the media section.</li> <li>Say the song or artist exactly as listed. If you say, "Play Artist Prince", the system does not play music by Prince and the Revolution or Prince and the New Power Generation.</li> <li>Make sure you are saying the complete title, such as "California remix featuring Jennifer Nettles".</li> <li>If the songs are saved in all CAPS, you have to spell them. LOLA requires you to say, "Play L-O-L-A".</li> <li>Do not use special characters in the title as the system does not recognize them.</li> </ul>

Voice Command Issues		
Issue	Possible	Possible Solution(s)
	Cause(s)	
SYNC does not understand or is calling the wrong contact when I want to make a call.	<ul> <li>You may be using the wrong voice commands, OR</li> <li>You may not be saying the name exactly as it is saved, OR</li> <li>Contacts in your phonebook may be very short and similar, or they may contain special characters, OR</li> <li>Your phonebook contacts may be saved in CAPS.</li> </ul>	<ul> <li>Review the phone voice commands at the beginning of the phone section.</li> <li>Make sure you are saying the contacts exactly as listed. For example, if a contact is saved as Joe Wilson, say "Call Joe Wilson".</li> <li>The system works better if you list full names, such as "Joe Wilson" rather than "Joe".</li> <li>Do not use special characters such as 123 or ICE, as the system does not recognize them.</li> <li>If contacts are saved in CAPS, you have to spell them. JAKE requires you to say, "Call J-A-K-E".</li> </ul>

#### **GENERAL INFORMATION**

## SYNC® End User License Agreement (EULA)

- You have acquired a device ("DEVICE") that includes software licensed by Ford Motor Company and its affiliates ("FORD MOTOR COMPANY") from an affiliate of Microsoft Corporation ("MS"). Those installed software products of MS origin, as well as associated media, printed materials, and "online" or electronic documentation ("MS SOFTWARE") are protected by international intellectual property laws and treaties. The MS SOFTWARE is licensed, not sold. All rights reserved.
- The MS SOFTWARE may interface with and/or communicate with, or may be later upgraded to interface with and/or communicate with additional software and/or systems provided by FORD MOTOR COMPANY. The additional software and systems of FORD MOTOR COMPANY origin, as well as associated media, printed materials, and "online" or electronic documentation ("FORD SOFTWARE") are protected by international intellectual property laws and treaties. The FORD SOFTWARE is licensed, not sold. All rights reserved.
- The MS SOFTWARE and/or FORD SOFTWARE may interface with and/or communicate with, or may be later upgraded to interface with and/or communicate with additional software and/or systems provided by third party software and service suppliers. The additional software and services of third party origin, as well as associated media, printed materials, and "online" or electronic documentation ("THIRD PARTY SOFTWARE") are protected by international intellectual property laws and treaties. The THIRD PARTY SOFTWARE is licensed, not sold. All rights reserved.
- The MS SOFTWARE, FORD SOFTWARE and THIRD PARTY SOFTWARE hereinafter collectively and individually will be referred to as "SOFTWARE."

IF YOU DO NOT AGREE TO THIS END USER LICENSE AGREEMENT ("EULA"), DO NOT USE THE DEVICE OR COPY THE SOFTWARE. ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DEVICE, WILL CONSTITUTE YOUR AGREEMENT TO THIS EULA (OR RATIFICATION OF ANY PREVIOUS CONSENT).

**GRANT OF SOFTWARE LICENSE:** This EULA grants you the following license:

 You may use the SOFTWARE as installed on the DEVICE and as otherwise interfacing with systems and/or services provide by or through FORD MOTOR COMPANY or its third party software and service providers.

## DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS:

- **Speech Recognition:** If the SOFTWARE includes speech recognition component(s), you should understand that speech recognition is an inherently statistical process and that recognition errors are inherent in the process. Neither FORD MOTOR COMPANY nor its suppliers shall be liable for any damages arising out of errors in the speech recognition process.
- Limitations on Reverse Engineering, Decompilation and Disassembly: You may not reverse engineer, decompile, or disassemble nor permit others to reverse engineer, decompile or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation.
- Limitations on Distributing, Copying, Modifying and Creating Derivative Works: You may not distribute, copy, make modifications to or create derivative works based on the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation.
- **Single EULA:** The end user documentation for the DEVICE and related systems and services may contain multiple EULAs, such as multiple translations and/or multiple media versions (e.g., in the user documentation and in the software). Even if you receive multiple EULAs, you are licensed to use only one (1) copy of the SOFTWARE.
- **SOFTWARE Transfer:** You may permanently transfer your rights under this EULA only as part of a sale or transfer of the DEVICE, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media and printed materials, any upgrades, and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this EULA. If the SOFTWARE is an upgrade, any transfer must include all prior versions of the SOFTWARE.
- **Termination:** Without prejudice to any other rights, FORD MOTOR COMPANY or MS may terminate this EULA if you fail to comply with the terms and conditions of this EULA.

- Security Updates/Digital Rights Management: Content owners use the WMDRM technology included in your DEVICE to protect their intellectual property, included copyrighted content. Portions of the SOFTWARE on your DEVICE use WMDRM software to access WMDRM-protected content. If the WMDRM software fails to protect the content, content owners may ask Microsoft to revoke the SOFTWARE's ability to use WMDRM to play or copy protected content. This action does not affect unprotected content. When your DEVICE downloads licenses for protected content, you agree that Microsoft may include a revocation list with the licenses. Content owners may require you to upgrade the SOFTWARE on your DEVICE to access their content. If you decline an upgrade, you will not be able to access content that requires the upgrade.
- Consent to Use of Data: You agree that MS, Microsoft Corporation, FORD MOTOR COMPANY, third party software and systems suppliers, their affiliates and/or their designated agent may collect and use technical information gathered in any manner as part of product support services related to the SOFTWARE or related services. MS, Microsoft Corporation, FORD MOTOR COMPANY, third party software and services suppliers, their affiliates and/or their designated agent may use this information solely to improve their products or to provide customized services or technologies to you. MS, Microsoft Corporation, FORD MOTOR COMPANY, third party software and systems suppliers, their affiliates and/or their designated agent may disclose this information to others, but not in a form that personally identifies you.
- Internet-Based Services Components: The SOFTWARE may contain components that enable and facilitate the use of certain Internet-based services. You acknowledge and agree that MS, Microsoft Corporation, FORD MOTOR COMPANY, third party software and service suppliers, their affiliates and/or their designated agent may automatically check the version of the SOFTWARE and/or its components that you are utilizing and may provide upgrades or supplements to the SOFTWARE that may be automatically downloaded to your DEVICE.
- Additional Software/Services: The SOFTWARE may permit FORD MOTOR COMPANY, third party software and service suppliers, MS, Microsoft Corporation, their affiliates and/or their designated agent to provide or make available to you SOFTWARE updates, supplements, add-on components, or Internet-based services components of the SOFTWARE after the date you obtain your initial copy of the SOFTWARE ("Supplemental Components").

If FORD MOTOR COMPANY or third party software and services suppliers provide or make available to you Supplemental Components and no other EULA terms are provided along with the Supplemental Components, then the terms of this EULA shall apply.

If MS, Microsoft Corporation, their affiliates and/or their designated agent make available Supplemental Components, and no other EULA terms are provided, then the terms of this EULA shall apply, except that the MS, Microsoft Corporation or affiliate entity providing the Supplemental Component(s) shall be the licensor of the Supplemental Component(s).

FORD MOTOR COMPANY, MS, Microsoft Corporation, their affiliates and/or their designated agent reserve the right to discontinue without liability any Internet-based services provided to you or made available to you through the use of the SOFTWARE.

- Links to Third Party Sites: The MS SOFTWARE may provide you with the ability to link to third party sites through the use of the SOFTWARE. The third party sites are not under the control of MS, Microsoft Corporation, their affiliates and/or their designated agent. Neither MS nor Microsoft Corporation nor their affiliates nor their designated agent are responsible for (i) the contents of any third party sites, any links contained in third party sites, or any changes or updates to third party sites, or (ii) webcasting or any other form of transmission received from any third party sites. If the SOFTWARE provides links to third party sites, those links are provided to you only as a convenience, and the inclusion of any link does not imply an endorsement of the third party site by MS, Microsoft Corporation, their affiliates and/or their designated agent.
- **Obligation to Drive Responsibly:** You recognize your obligation to drive responsibly and keep attention on the road. You will read and abide with the DEVICE operating instructions particularly as they pertain to safety and assumes any risk associated with the use of the DEVICE.

**UPGRADES AND RECOVERY MEDIA:** If the SOFTWARE is provided by FORD MOTOR COMPANY separate from the DEVICE on media such as a ROM chip, CD ROM disk(s) or via web download or other means, and is labeled "For Upgrade Purposes Only" or "For Recovery Purposes Only" you may install one (1) copy of such SOFTWARE onto the DEVICE as a replacement copy for the existing SOFTWARE, and use it in accordance with this EULA, including any additional EULA terms accompanying the upgrade SOFTWARE.

INTELLECTUAL PROPERTY RIGHTS: All title and intellectual property rights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and "applets," incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by MS, Microsoft Corporation, FORD MOTOR COMPANY, or their affiliates or suppliers. The SOFTWARE is licensed, not sold. You may not copy the printed materials accompanying the SOFTWARE. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content. All rights not specifically granted under this EULA are reserved by MS, Microsoft Corporation, FORD MOTOR COMPANY, third party software and service providers, their affiliates and suppliers. Use of any on-line services which may be accessed through the SOFTWARE may be governed by the respective terms of use relating to such services. If this SOFTWARE contains documentation that is provided only in electronic form, you may print one copy of such electronic documentation.

**EXPORT RESTRICTIONS:** You acknowledge that the SOFTWARE is subject to U.S. and European Union export jurisdiction. You agree to comply with all applicable international and national laws that apply to the SOFTWARE, including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments. For additional information, see http://www.microsoft.com/exporting/.

**TRADEMARKS:** This EULA does not grant you any rights in connection with any trademarks or service marks of FORD MOTOR COMPANY, MS, Microsoft Corporation, third party software or service providers, their affiliates or suppliers.

**PRODUCT SUPPORT:** Product support for the SOFTWARE is not provided by MS, its parent corporation Microsoft Corporation, or their affiliates or subsidiaries. For product support, please refer to FORD MOTOR COMPANY instructions provided in the documentation for the DEVICE. Should you have any questions concerning this EULA, or if you desire to contact FORD MOTOR COMPANY for any other reason, please refer to the address provided in the documentation for the DEVICE.

No Liability for Certain Damages: EXCEPT AS PROHIBITED BY LAW, FORD MOTOR COMPANY, ANY THIRD PARTY SOFTWARE OR SERVICES SUPPLIERS, MS, MICROSOFT CORPORATION AND THEIR AFFILIATES SHALL HAVE NO LIABILITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE SOFTWARE. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. IN NO EVENT SHALL MS, MICROSOFT CORPORATION AND/OR THEIR AFFILIATES BE LIABLE FOR ANY AMOUNT IN EXCESS OF U.S. TWO HUNDRED FIFTY DOLLARS (U.S.\$250.00).

• THERE ARE NO WARRANTIES OTHER THAN THOSE THAT MAY EXPRESSLY BE PROVIDED FOR YOUR NEW VEHICLE.

#### End user notice

# Microsoft® Windows® Mobile for Automotive Important Safety Information

This system Ford SYNC<sup>TM</sup> contains software that is licensed to Manufacturer FORD MOTOR COMPANY by an affiliate of Microsoft Corporation pursuant to a license agreement. Any removal, reproduction, reverse engineering or other unauthorized use of the software from this system in violation of the license agreement is strictly prohibited and may subject you to legal action.

## Read and follow instructions

Before using your Windows Automotive-based system, read and follow all instructions and safety information provided in this end user manual ("User's Guide"). Not following precautions found in this User's Guide can lead to an accident or other serious consequences.

## Keep User's Guide in Vehicle

When kept in the vehicle, the User's Guide will be a ready reference for you and other users unfamiliar with the Windows Automotive-based system. Please make certain that before using the system for the first time, all persons have access to the User's Guide and read its instructions and safety information carefully.

**WARNING:** Operating certain parts of this system while driving can distract your attention away from the road, and possibly cause an accident or other serious consequences. Do not change system settings or enter data non-verbally (using your hands) while driving. Stop the vehicle in a safe and legal manner before attempting these operations. This is important since while setting up or changing some functions you might be required to distract your attention away from the road and remove your hands from the wheel.

## General operation

#### **Voice Command Control**

Functions within the Windows Automotive-based system may be accomplished using only voice commands. Using voice commands while driving allows you to operate the system without removing your hands from the wheel.

## **Prolonged Views of Screen**

Do not access any function requiring a prolonged view of the screen while you are driving. Pull over in a safe and legal manner before attempting to access a function of the system requiring prolonged attention. Even occasional short scans to the screen may be hazardous if your attention has been diverted away from your driving task at a critical time.

#### **Volume Setting**

Do not raise the volume excessively. Keep the volume at a level where you can still hear outside traffic and emergency signals while driving. Driving while unable to hear these sounds could cause an accident.

# **Use of Speech Recognition Functions**

Speech recognition software is inherently a statistical process which is subject to errors. It is your responsibility to monitor any speech recognition functions included in the system and address any errors.

## **Navigation Features**

Any navigation features included in the system are intended to provide turn by turn instructions to get you to a desired destination. Please make certain all persons using this system carefully read and follow instructions and safety information fully.

#### **Distraction Hazard**

Any navigation features may require manual (non-verbal) setup. Attempting to perform such set-up or insert data while driving can seriously distract your attention and could cause an accident or other serious consequences. Stop the vehicle in a safe and legal manner before attempting these operations.

# Let Your Judgment Prevail

Any navigation features are provided only as an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Any such feature is not a substitute for your personal judgment. Any route suggestions made by this system should never replace any local traffic regulations or your personal judgment or knowledge of safe driving practices.

#### **Route Safety**

Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, if you would be placed in an unsafe situation, or if you would be directed into an area that you consider unsafe. The driver is ultimately responsible for the safe operation of the vehicle and therefore, must evaluate whether it is safe to follow the suggested directions.

#### **Potential Map Inaccuracy**

Maps used by this system may be inaccurate because of changes in roads, traffic controls or driving conditions. Always use good judgment and common sense when following the suggested routes.

#### **Emergency Services**

Do not rely on any navigation features included in the system to route you to emergency services. Ask local authorities or an emergency services operator for these locations. Not all emergency services such as police, fire stations, hospitals and clinics are likely to be contained in the map database for such navigation features.

Index 315

A	Audio system (see Radio)88–89
ABS (see Brakes)	Automatic transaxle fluid, adding
Accessing your media menu features	Automatic transmission driving an automatic overdrive
Airbag supplemental restraint system	Battery
Air conditioning	Brakelamp bulb replacement
Audio system Single CD88–89	shift interlock123 Bulbs191, 198, 200

C	Getting the service you need155
Capacities for refilling fluids244	Ordering additional owner's literature161
CD88–89	Utilizing the
CD player86	Mediation/Arbitration Program159
Cell phone use15	110grant155
Changing a tire235	D
Changing the air filter	Defrost
attaching with tether straps28 automatic locking mode (retractor)	Dipstick automatic transaxle fluid181 automatic transmission
LATCH	fluid
seats	Doors central unlocking58
Cleaning your vehicle201 engine compartment203	lubricant specifications244
instrument panel205	Driving under special
interior204 plastic parts202	conditions
washing201	through water140
waxing203	E
wheels	Electronic stability control129
Climate control (see Air	Emergencies, roadside
conditioning or Heating)94	jump-starting151
Clock88–89	running out of fuel
Console	Emission control system117
	End user license agreement307
Coolant	Engine
refill capacities244	coolant177
specifications244	fail-safe cooling180 lubrication specifications244
Customer Assistance149 Ford Extended Service	refill capacities244
Plan251, 253	service points176
Getting roadside assistance149	Engine block heater110

Engine compartment -	G
opening	Gas cap (see Fuel cap)
Event data recording10	Hazard flashers150
Exhaust fumes110 <b>F</b>	Headlamps
Fail safe cooling	flash to pass
Fluid capacities244	Head restraints100
Fog lamps71–72	Heating94
Fuel cap	Hood
automotive fuels	Jack

Joining two calls (multiparty/conference call)278	Mirrors
Jump-starting your vehicle151	Motorcraft® parts201, 246
K	· · · · · · · · · · · · · · · · · · ·
Keys56 positions of the ignition109	Octane rating113
L	P
Lamps	Pairing other phones
LATCH anchors26	turning on/off)286
Liftgate59 Lights, warning and indicator79	Phone redial
Loading instructions142  Load limits137  Locks	Power distribution box (see Fuses)
childproof32	Powerpoint
Lubricant specifications244 Lug nuts242  M	Power steering
<del></del>	Power Windows74
Media Bluetooth menu options (adding, connecting, deleting, turning on/off)299	Privacy information272 Putting a call on/off hold278

R	Safety restraints -
	LATCH anchors26
Radio	Safety seats for children18, 23
Radio reception86	Safety Compliance
Rear-view camera system132	Certification Label247
Rear window defroster94	Scheduled Maintenance Guide
Receiving a text message282	Normal Scheduled Maintenance and Log259
Recommendations for	ŭ.
attaching safety restraints for children23	Seat belts (see Safety restraints)35
Refill capacities for fluids244	Seats
Relays	child safety seats18, 23
Remote entry system	SecuriLock passive anti-theft
illuminated entry59	system62
locking/unlocking doors58	Selecting your media source
opening the trunk58 replacing the batteries56–57	(USB, Line in, BT audio)293
Reverse sensing system131	Setting the clock88–89
Roadside assistance	Snowplowing14
Roll stability control129	SOS Post Crash Alert45
Roll Stability Control129	Spark plugs,
S	specifications243, 246
Safety Belt Maintenance42	Special notice
Safety belts (see Safety	ambulance conversions14 utility-type vehicles14
restraints)35, 38	Specification chart,
Safety defects, reporting162	lubricants244
Safety information271	Stability system129
Safety restraints35–36, 38	Starting your vehicle109
Belt-Minder®39	jump starting151
extension assembly38 for adults35–36	Steering wheel
for children18, 23	tilting
safety belt maintenance42	Supplemental Restraint System (SRS) (see airbags)46
seat belt maintenance	SYNC® customer support271
	The second secon

320 Index

Т	fluid, checking and adding (automatic)181
Tail lamps bulb replacement195	fluid, refill capacities244 lubricant specifications244
Temperature control (see Climate control)94 Text messaging281	Trunk remote release58 Turn signal72
Text messaging (sending, downloading, deleting)282, 284 Tilt steering wheel	U USB port
changing	Vehicle Identification Number (VIN)
Towing       143–144         recreational towing       144         trailer towing       143         wrecker       143         Traction control       127	Warning lights (see Lights)79 Washer fluid184–185 Water, Driving through146 Windows power
Transaxle fluid, checking and adding (automatic)	rear wiper/washer
Transmission brake-shift interlock (BSI)123	replacing wiper blades187 Wrecker towing143