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## Introduction

The following warning may be required by California law:

### **CALIFORNIA Proposition 65 Warning**



**WARNING:** Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### **CONGRATULATIONS**

Congratulations on acquiring your new Ford. Please take the time to get well acquainted with your vehicle by reading this handbook. The more you know and understand about your vehicle the greater the safety and pleasure you will derive from driving it.

For more information on Ford Motor Company and its products visit the following website:

- In the United States: [www.ford.com](http://www.ford.com)
- In Canada: [www.ford.ca](http://www.ford.ca)
- In Australia: [www.ford.com.au](http://www.ford.com.au)
- In Mexico: [www.ford.com.mx](http://www.ford.com.mx)

Additional owner information is given in separate publications.

## Introduction

This Owner's Guide describes every option and model variant available and therefore some of the items covered may not apply to your particular vehicle. Furthermore, due to printing cycles it may describe options before they are generally available.

Remember to pass on the Owner's Guide when reselling the vehicle. It is an integral part of the vehicle.



**Fuel pump shut-off switch** In the event of an accident the safety switch will automatically cut off the fuel supply to the engine. The switch can also be activated through sudden vibration (e.g. collision when parking). To reset the switch, refer to the *Fuel pump shut-off switch* in the *Roadside emergencies* chapter.

## SAFETY AND ENVIRONMENT PROTECTION



### Warning symbols in this guide

How can you reduce the risk of personal injury and prevent possible damage to others, your vehicle and its equipment? In this guide, answers to such questions are contained in comments highlighted by the warning triangle symbol. These comments should be read and observed.

## Introduction

### **Warning symbols on your vehicle**

When you see this symbol, it is imperative that you consult the relevant section of this guide before touching or attempting adjustment of any kind.



### **Protecting the environment**

We must all play our part in protecting the environment. Correct vehicle usage and the authorized disposal of waste cleaning and lubrication materials are significant steps towards this aim. Information in this respect is highlighted in this guide with the tree symbol.



### **BREAKING-IN YOUR VEHICLE**

There are no particular guidelines for breaking-in your vehicle. During the first 1,600 km (1,000 miles) of driving, vary speeds frequently. This is recommended to give the moving parts a chance to break in.

## Introduction

### SPECIAL NOTICES

#### Emission warranty

The New Vehicle Limited Warranty includes Bumper-to-Bumper Coverage, Safety Restraint Coverage, Corrosion Coverage, and 7.3L Power Stroke Diesel Engine Coverage. In addition, your vehicle is eligible for Emissions Defect and Emissions Performance Warranties. For a detailed description of what is covered and what is not covered, refer to the *Warranty Guide* that is provided to you along with your Owner's Guide.

#### Special instructions

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



By operating other electronic equipment (e.g. mobile telephone without exterior aerial) electromagnetic fields can occur which can cause malfunctions of the vehicle electronics. Therefore you should observe the instructions of the equipment manufacturers.



Please read the section *Air bag* in the *Seating and safety restraints* chapter. Failure to follow the specific warnings and instructions could result in personal injury.



Front seat mounted rear-facing child or infant seats should **NEVER** be used in front of a passenger side air bag.

## Introduction

### **Notice to owners of Cobra vehicles**

Before you drive your vehicle, be sure to read the "SVT Cobra Owner's Guide Supplement." This book contains important operation and maintenance information.

### **MIDDLE EAST/NORTH AFRICA VEHICLE SPECIFIC INFORMATION**

For your particular global region, your vehicle may be equipped with features and options that are different from the ones that are described in this Owner Guide; therefore, a supplement has been supplied that complements this book. By referring to the pages in the provided supplement, you can properly identify those features, recommendations and specifications that are unique to your vehicle.

**Refer to this Owner Guide for all other required information and warnings.**

## Introduction

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

### Vehicle Symbol Glossary

Safety Alert		See Owner's Guide	
Fasten Safety Belt		Air Bag-Front	
Air Bag-Side		Child Seat	
Child Seat Installation Warning		Child Seat Tether Anchorage	
Brake System		Anti-Lock Brake System	
Brake Fluid - Non-Petroleum Based		Traction Control	
AdvanceTrac		Master Lighting Switch	
Hazard Warning Flasher		Fog Lamps-Front	
Fuse Compartment		Fuel Pump Reset	
Windshield Wash/Wipe		Windshield Defrost/Demist	
Rear Window Defrost/Demist		Power Windows Front/Rear	
Power Window Lockout		Child Safety Door Lock/Unlock	

## Introduction

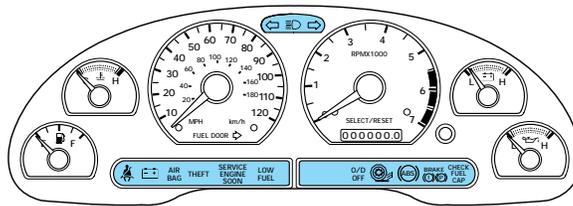
### Vehicle Symbol Glossary

Interior Luggage Compartment Release Symbol		Panic Alarm	
Engine Oil		Engine Coolant	
Engine Coolant Temperature		Do Not Open When Hot	
Battery		Avoid Smoking, Flames, or Sparks	
Battery Acid		Explosive Gas	
Fan Warning		Power Steering Fluid	
Maintain Correct Fluid Level		Emission System	
Engine Air Filter		Passenger Compartment Air Filter	
Jack		Check fuel cap	
Low tire warning			

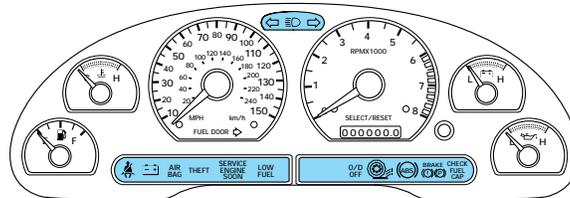
## Instrument Cluster

### WARNING LIGHTS AND CHIMES

#### Base instrument cluster



#### Optional instrument cluster



#### Turn signals

Illuminates when the turn signals or the hazard lights are turned on. If the lights stay on continuously or flash faster, check for a burned-out bulb.



#### High beams

Illuminates when the high beam headlamps are turned on.



#### Safety belt

Illuminates to remind you to fasten your safety belts. For more information, refer to the *Seating and safety restraints* chapter.



## Instrument Cluster

### Charging system

Illuminates when the battery is not charging properly.



### Air bag readiness

Illuminates to confirm that the air bags (front or side) are operational. If the light fails to illuminate, continues to flash or remains on, have the system serviced immediately.

AIR  
BAG

### Anti-theft system

Illuminates when the SecuriLock™ Passive Anti-theft System is armed. If the light fails to illuminate, continues to flash or remains on, have the system serviced.

THEFT

### Service engine soon

Illuminates briefly to ensure the system is functional. If it comes on after the engine is started, one of the engine's emission control systems may be malfunctioning. The light may illuminate without a driveability concern being noted. The vehicle will usually be drivable and will not require towing.

SERVICE  
ENGINE  
SOON

### Light turns on solid:

Temporary malfunctions may cause the light to illuminate. Examples are:

1. The vehicle has run out of fuel.
2. Poor fuel quality or water in the fuel.
3. The fuel cap may not have been properly installed and securely tightened.

These temporary malfunctions can be corrected by filling the fuel tank with high quality fuel of the

## Instrument Cluster

recommended octane and/or properly installing and securely tightening the fuel cap. After three driving cycles without these or any other temporary malfunctions present, the light should turn off. (A driving cycle consists of a cold engine startup followed by mixed city/highway driving.) No additional vehicle service is required.

If the light remains on, have your vehicle serviced at the first available opportunity.

### **Light is blinking:**

Engine misfire is occurring which could damage your catalytic converter. You should drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle serviced at the first available opportunity.



Under engine misfire conditions, excessive exhaust temperatures could damage the catalytic converter, the fuel system, interior floor coverings or other vehicle components, possibly causing a fire.

### **Check fuel cap**

Illuminates when the fuel cap is not installed correctly. Check the fuel cap for proper installation. When the fuel filler cap is properly re-installed, the light(s) will turn off after a period of normal driving. Continuing to operate the vehicle with the check fuel cap light on, or a mis-installed fuel cap can activate the *Service Engine Soon/Check Engine* warning light.

**CHECK  
FUEL  
CAP**

**It may take a long period of time for the system to detect an improperly installed fuel filler cap.**

For more information, refer to *Fuel filler cap* in the *Maintenance and specifications* chapter.

## Instrument Cluster

### Low fuel

Illuminates when the fuel level in the fuel tank is at, or near, empty (refer to *Fuel gauge* in this chapter for more information).

**LOW  
FUEL**

### O/D off (if equipped)

Illuminates when the overdrive function has been turned OFF using the transmission control switch (TCS) on the gearshift. If the light does not come on or the light flashes steadily, have your vehicle serviced as soon as possible, damage to the transmission could occur.

**O/D  
OFF**

### Traction Control™ active

Illuminates when the Traction Control™ system is active. It will be lit for a minimum of four seconds or for the duration of the Traction Control™ event.



For more information, refer to the *Driving* chapter.

### Anti-lock brake system (ABS)

To confirm the anti-lock brake system (ABS) warning light is functional it will momentarily illuminate when the ignition is turned to the ON position (alternatively for some vehicles when the ignition is moved from the ON position to the START position, the light will momentarily illuminate just prior to reaching the START position). If the light remains on, continues to flash or fails to illuminate, have the ABS serviced immediately. If the ABS light remains on, it means the anti-lock brake system has malfunctioned and is disabled, however, the normal brake system will still function unless the brake warning light also remains



## Instrument Cluster

illuminated and parking brake is off. Refer to *Brakes* in the *Driving* chapter for more information.

### Brake system warning

To confirm the brake system warning light is functional, it will momentarily illuminate



when the ignition is turned to the ON position (alternatively for some vehicles when the ignition is moved from the ON position to START position, the light will momentarily illuminate prior to reaching the START position). It also illuminates if the parking brake is engaged. If the brake system warning light does not illuminate as described, seek service immediately. Illumination after the parking brake is released indicates low brake fluid level or a brake system malfunction and the brake system should be serviced immediately by a qualified technician. Refer to *Brakes* in the *Driving* chapter for more information.

### Safety belt warning chime

Sounds to remind you to fasten your safety belts.

### BeltMinder™ chime

Sounds intermittently to remind you to fasten your safety belts.

### Supplemental restraint system (SRS) warning chime

Sounds when a malfunction in the supplemental restraint system (front or side airbags) has been detected. Have the supplemental restraint system inspected immediately.

### Key-in-ignition warning chime

Sounds when the key is left in the ignition and the driver's door is opened.

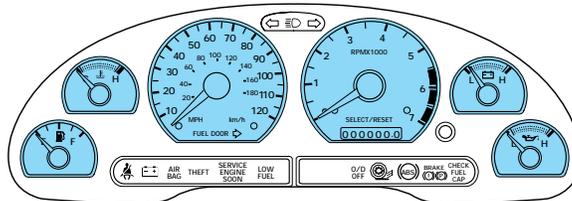
## Instrument Cluster

### Headlamps on warning chime

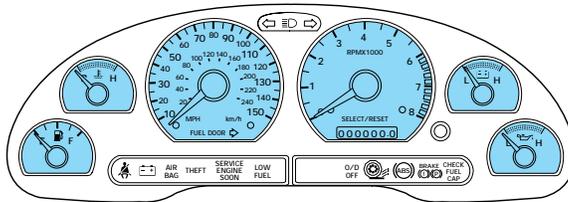
Sounds when the headlamps or parking lamps are on, the key is removed from the ignition and the driver's door is opened.

### GAUGES

#### Base instrument cluster gauges

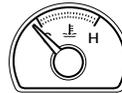


#### Optional instrument cluster gauges



### Engine coolant temperature gauge

Indicates the temperature of the engine coolant. At normal operating temperature, the needle remains within the normal area (the area between the “H” and “C”). If it enters the red section, the engine is overheating. Stop the vehicle as soon as safely possible, switch off the engine immediately and let the engine cool. Refer to *Engine coolant* in the *Maintenance and specifications* chapter.



## Instrument Cluster



Never remove the coolant reservoir cap while the engine is running or hot. Steam and scalding liquid from a hot cooling system can burn you badly.

This gauge indicates the temperature of the engine coolant, not the coolant level. If the coolant is not at its proper level the gauge indication will not be accurate.

### Engine oil pressure gauge

Indicates engine oil pressure. At normal operating temperature, the needle will be in



the normal range (the area between the “L” and “H”); if the needle goes below the normal range, stop the vehicle as soon as safely possible and switch off the engine immediately. Check the oil level. Add oil if needed (refer to *Engine oil* in the *Maintenance and specifications* chapter). If the oil level is correct, have your vehicle checked at your dealership or by a qualified technician.

### Battery voltage gauge

Indicates battery voltage. If the pointer moves and stays outside the normal



operating range, have the vehicle’s electrical system checked as soon as possible.

### Fuel gauge

Displays approximately how much fuel is in the fuel tank. The fuel gauge may vary slightly when the vehicle is in motion or on a grade.



## Instrument Cluster

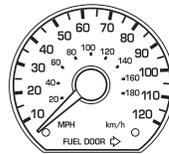
When refueling the vehicle from empty indication, the amount of fuel that can be added will be less than the advertised capacity due to the reserve fuel.

The FUEL DOOR icon and arrow indicates which side of the vehicle the fuel filler door is located.

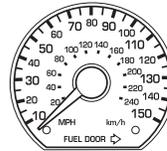
### Speedometer

Indicates the current vehicle speed.

- Base instrument cluster gauge

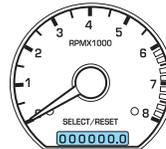


- Optional instrument cluster gauge



### Odometer

Registers the total kilometers (miles) of the vehicle.



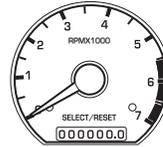
### Tachometer

Indicates the engine speed in revolutions per minute.

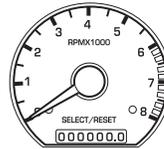
Driving with your tachometer pointer at the top of the scale or in the red zone may damage the engine.

## Instrument Cluster

- Base instrument cluster gauge

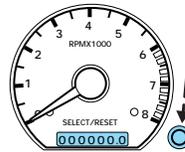


- Optional instrument cluster gauge



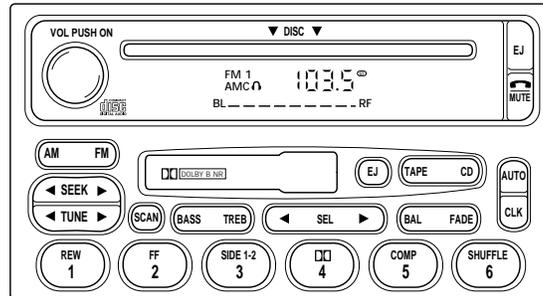
### Trip odometer

Registers the kilometers (miles) of individual journeys. Press and release the reset button until a 'T' appears in the display (this represents the trip mode). Press and hold the button for three seconds to reset.



## Entertainment Systems

### PREMIUM AM/FM STEREO/CASSETTE/SINGLE CD



#### Volume/power control

Press the control to turn the audio system on or off.

Audio power can also be turned on by pressing the AM/FM select control or the TAPE/CD select control.

Turn control to raise or lower volume.



If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a "nominal" listening level when the ignition switch is turned back on.

#### Bass adjust

The bass adjust control allows you to increase or decrease the audio system's bass output.



## Entertainment Systems

Press the BASS control then press:

- ◀ to decrease the bass output and
- ▶ to increase the bass output.



### Treble adjust

The treble adjust control allows you to increase or decrease the audio system's treble output.



Press the TREB control then press:

- ◀ to decrease the treble output and
- ▶ to increase the treble output.



### Speaker balance adjust

Speaker sound distribution can be adjusted between the right and left speakers.



Press the BAL control then press:

- ◀ to shift sound to the left and
- ▶ to shift sound to the right.



### Speaker fade adjust

Speaker sound can be adjusted between the front and rear speakers.



## Entertainment Systems

Press the FADE control then press:

-  to shift the sound to the front and  

-  to shift the sound to the rear.

### Seek function

The seek function control works in radio, tape or CD mode.

#### **Seek function in radio mode**

- Press  to find the next listenable station down the frequency band.  

- Press  to find the next listenable station up the frequency band.

#### **Seek function in tape mode**

- Press  to listen to the previous selection on the tape.
- Press  to listen to the next selection on the tape.

#### **Seek function for CD or CD changer (if equipped)**

- Press  to seek to the previous track of the current disc. If a selection has been playing for three seconds or more and you press , the CD changer will replay that selection from the beginning.  

- Press  to seek forward to the next track of the current disc. After the last track has been completed, the first track of the current disc will automatically replay.

## Entertainment Systems

### Scan function

The scan function works in radio, tape or CD mode.



#### **Scan function in radio mode**

Press the SCAN control to hear a brief sampling of all listenable stations on the frequency band. Press the control again to stop the scan mode.

#### **Scan function in tape mode**

Press the SCAN control to hear a short sampling of all selections on the tape. (The tape scans in a forward direction. At the end of the tape's first side, direction automatically reverses to the opposite side of the tape.) To stop on a particular selection, press the control again.

#### **Scan function in CD or CD changer mode (if equipped)**

Press the SCAN control to hear a short sampling of all selections on the CD. (The CD scans in a forward direction, wrapping back to the first track at the end of the CD.) To stop on a particular selection, press the control again.

### AM/FM select

The AM/FM select control works in radio, tape and CD modes.



#### **AM/FM select in radio mode**

This control allows you to select AM or FM frequency bands. Press the control to switch between AM, FM1 or FM2 memory preset stations.

#### **AM/FM select in tape mode**

Press this control to stop tape play and begin radio play.

#### **AM/FM select in CD or CD changer mode (if equipped)**

Press this control to stop CD play and begin radio play.

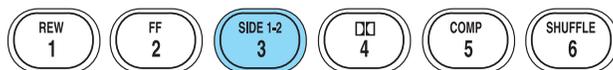
## Entertainment Systems

### Radio station memory preset

The radio is equipped with six station memory preset controls. These controls can be used to select up to six preset AM stations and twelve FM stations (six in FM1 and six in FM2).

#### Setting memory preset stations

1. Select the frequency band with the AM/FM select control. 
2. Select a station. Refer to *Tune adjust* or *Seek function* for more information on selecting a station.
3. Press and hold a memory preset control until the sound returns, indicating the station is held in memory of the control you selected.

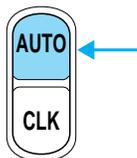


### Autoset memory preset

Autoset allows you to set strong radio stations without losing your original manually set preset stations. This feature is helpful on trips when you travel between cities with different radio stations.

#### Starting autoset memory preset

1. Select a frequency using the AM/FM select controls.
2. Press the control.
3. When the first six strong stations are filled, the station stored in memory preset control 1 will start playing.



If there are less than six strong stations available on the frequency band, the remaining memory preset controls will all store the last strong station available.

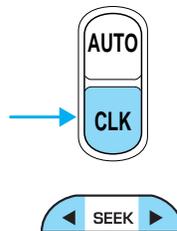
## Entertainment Systems

These stations are temporarily stored in the memory preset controls (until deactivated) and are accessed in the same manner as your original presets.

To deactivate autoset and return to your audio system's manually set memory stations, press the AUTO control again.

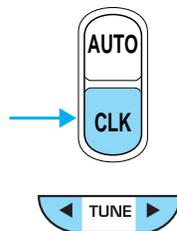
### Setting the clock

To set the hour, press and hold the CLK control and press SEEK:



- ◀ to decrease hours and
- ▶ to increase hours.

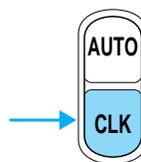
To set the minute, press and hold the CLK control and press TUNE:



- ◀ to decrease minutes and
- ▶ to increase minutes.

If your vehicle has a separate clock, (other than the digital radio display), the CLK control will not function in the above manner.

The CLK control will allow you to switch between media display mode (radio station, stereo information, etc.) and clock display mode (time). When in



## Entertainment Systems

clock mode, the media information will display for 10 seconds, when the radio is turned on, and then revert to clock information. Any time that the media is changed, (new radio station, etc.), the media information will again display for 10 seconds before reverting back to the clock. In media mode, the media information will always be displayed.

### Tune adjust

The tune control works in radio mode.

#### *Tune adjust in radio mode*

- Press ◀ to move to the next frequency down the band (whether or not a listenable station is located there). Hold the control to move through the frequencies quickly. 
- Press ▶ to move to the next frequency up the band (whether or not a listenable station is located there). Hold for quick movement.

### Tape/CD select

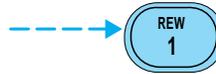
- To begin tape play (with a tape loaded into the audio system) while in the radio or CD mode, press the TAPE control. Press again during rewind or fast forward to stop the rewind or fast forward function. 
- To begin CD play (if CD(s) are loaded), press the CD control. The first track of the disc will begin playing. If returning from radio or tape mode, CD play will begin where it stopped last. 

Press the CD control to toggle between single CD and CD changer (if equipped).

## Entertainment Systems

### Rewind

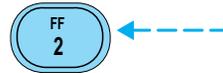
The rewind control works in tape and CD modes.



- In tape mode, radio play will continue until rewind is stopped (with the TAPE control) or the beginning of the tape is reached.
- In CD mode, pressing the REW control rewinds the CD within the current track.

### Fast forward

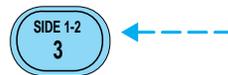
The fast forward control works in tape and CD modes.



- In the tape mode, tape direction will automatically reverse when the end of the tape is reached.
- In CD mode, pressing the FF control fast forwards the CD within the current track.

### Tape direction select

Press to play the alternate side of the tape.

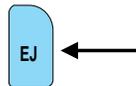


### Eject function

Press the EJ control to stop and eject a tape.



Press the EJ control to stop and eject a CD.



## Entertainment Systems

### Dolby® noise reduction

Dolby® noise reduction operates in tape mode.  Dolby® noise reduction reduces the amount of hiss and static during tape playback.

Press the  control to activate (and deactivate) the Dolby® noise reduction.

Dolby® noise reduction is manufactured under license from Dolby® Laboratories Licensing Corporation. “Dolby®” and the double-D symbol  are registered trademarks of Dolby® Laboratories Licensing Corporation.

### Compression adjust

Compression adjust brings soft and loud CD passages together for a more consistent listening level. 

Press the COMP control to activate and deactivate compression adjust.

### Shuffle feature

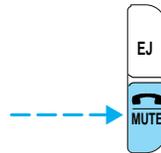
The shuffle feature operates in CD mode and plays all tracks on the current disc in random order. If equipped with the CD changer, the shuffle feature continues to the next disc after all tracks on the current disc are played. 

Press to start this feature. Random order play will continue until the control is pressed again.

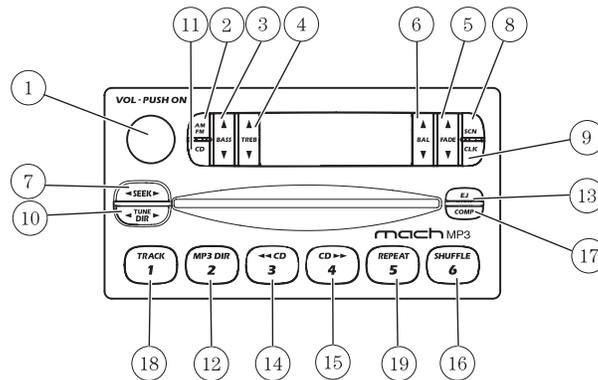
## Entertainment Systems

### Mute mode

Press the MUTE control to mute the playing media. Press the MUTE control again to return to the playing media.



### MACH® MP3 MUSIC SYSTEM

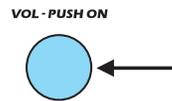


- |                              |                             |
|------------------------------|-----------------------------|
| 1. ON/OFF and volume control | 11. CD control              |
| 2. AM/FM control             | 12. MP3 directory control   |
| 3. Bass control              | 13. Eject control           |
| 4. Treble control            | 14. CD rewind control       |
| 5. Fade control              | 15. CD fast forward control |
| 6. Balance control           | 16. Shuffle control         |
| 7. Seek control              | 17. Compression control     |
| 8. Scan control              | 18. Track control           |
| 9. Clock control             | 19. Repeat control          |
| 10. Tune/Directory control   |                             |

## Entertainment Systems

### Volume/power control

Press the control to turn the audio system on or off.



Turn the control to raise or lower the volume.



If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a "nominal" listening level when the ignition switch is turned back on.

### AM/FM select

The AM/FM select control works in radio mode.

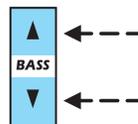
#### *AM/FM select in radio mode*

This control allows you to select AM or FM frequency bands. Press the control to switch between AM, FM1 or FM2 memory preset stations.



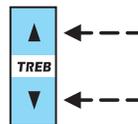
### Bass adjust

The bass adjust control allows you to increase or decrease the audio system's bass output.



### Treble adjust

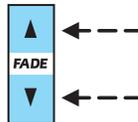
The treble adjust control allows you to increase or decrease the audio system's treble output.



## Entertainment Systems

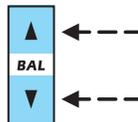
### Speaker fade adjust

Speaker sound can be adjusted between the front and rear speakers.



### Speaker balance adjust

Speaker sound distribution can be adjusted between the right and left speakers.



### MP3 functions

Your audio system is equipped with MP3 capability which allows you to listen to songs in MP3 flat file mode and MP3 directory mode.

To engage MP3 flat file mode, insert an MP3 disc. If an MP3 disc is already present in the player, press the CD control. The MP3 icon will display while the player is in MP3 mode.

While in MP3 flat file mode, press the MP3 DIR control to enter into MP3 directory mode. The MP3 icon and the DIR icon will display while the player is in directory mode.



Your MACH® MP3 player is also equipped with an anti-shock buffer for MP3 discs.

### MP3 file directory structure

The MACH® MP3 music system recognizes MP3 disc file and directory (folder) structure as follows:

- There are two different modes for MP3 disc playback: MP3 flat file mode (default) and MP3 directory mode.
- MP3 flat file mode ignores any directory structure present on the MP3 disc. The player sequentially

## Entertainment Systems

numbers each MP3 track on the disc (denoted by the .mp3 file extension) from T001 to T255.

- MP3 directory mode represents a directory structure consisting of one level of directories (folders). The CD player sequentially numbers all MP3 tracks on the disc (denoted by .mp3 extension) and all directories containing MP3 files, from 01-01 to 99-99. The first two digits denote the directory number and the last two digits denote the track number within that directory.
- Creating discs with only one level of subdirectories will help with navigation through the disc files.

### Seek function

The seek function control works in radio, CD, MP3 flat file mode and MP3 directory modes.

#### *Seek function in radio mode*

- Press ◀ to find the next listenable station down the frequency band.
- Press ▶ to find the next listenable station up the frequency band.



#### *Seek function in CD, MP3 flat file and MP3 directory modes*

- Press ◀ to select and play the previous track on the disc. If the current track is the first track on the disc, pressing ◀ will select the last track on the disc.
- Press ▶ to select and play the next track on the disc. If the current track is the last track on the disc, pressing ▶ will select the first track on the disc.



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Press and hold the SEEK control to quickly seek through all tracks in MP3 flat file mode or all tracks in the current MP3 directory.

**Note:** If a track has been playing for three seconds or more and you press ◀ on the SEEK control, the player will replay that track from the beginning.

### Scan function

The scan function works in radio, CD, MP3 flat file and MP3 directory modes.

#### **Scan function in radio mode**

Press SCN to engage scan mode and to hear a brief sampling of all listenable stations on the frequency band. When the top of the band is reached, the tuner will continue to scan from the lowest frequency upward.



Press SCN again to disengage scan mode.

#### **Scan function in CD mode**

Press SCN to engage scan mode and to hear a brief sampling of all tracks on the disc. The track number in the display will blink while the scan function is enabled. When the end of the disc is reached, the player will continue to scan from the first track forward.



Press SCN again to disengage scan mode.

#### **Scan function in MP3 flat file mode**

The scan function in MP3 flat file mode allows you to briefly audition all tracks on the MP3 disc.

Press SCN to engage scan mode and to hear a brief sampling of all tracks on the MP3 disc. The track number in the display will blink while the



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scan function is enabled. When the end of the disc is reached, the player will continue to scan from the first track forward.

Press SCN again to disengage scan mode.

### **Scan function in MP3 directory mode**

The scan function in MP3 directory mode allows you to briefly audition all tracks within the current directory on the MP3 disc.

Press SCN to engage scan mode and to hear a brief sampling of all tracks in the current directory. The track number in the display will blink while the scan function is enabled. When the last track is reached, the player will continue to scan from the first track in the current directory forward.



Press SCN again to disengage scan mode.

To scan tracks in another directory, press ◀ or ▶ on the TUNE DIR control to select the desired directory. The scan function will be disabled when you change directories.

Press the SCN control again to enable the scan function for the selected directory.

### **Radio station memory preset**



The radio is equipped with six station memory preset controls. These controls can be used to select up to six preset AM stations and twelve FM stations (six in FM1 and six in FM2).

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### Setting memory preset stations

1. Select the frequency band with the AM/FM select control.



2. Select a station. Refer to *Tune adjust* or *Seek function* for more information on selecting a station.



3. Press and hold a memory preset control until the sound returns, indicating the station is held in memory on the control you selected.

### Accessing memory preset stations

1. Select the desired frequency band with the AM/FM select control.



2. Press the preset control which contains the desired station frequency. The desired station will begin to play.

### Setting the clock

To set the hour, press and hold the CLK control while performing the following functions:



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- Press ◀ on the SEEK control to decrease the hours.
- Press ▶ on the SEEK control to increase the hours.



To set the minutes, press and hold the CLK control while performing the following functions:

- Press ◀ on the TUNE DIR control to decrease the minutes.
- Press ▶ on the TUNE DIR control to increase the minutes.



Release the CLK control to save the clock settings. Press the CLK control again to return the display to radio mode.

### Tune adjust

The tune adjust control works in radio mode.

#### *Tune adjust in radio mode*

- Press ◀ to move to the next frequency down the band. Hold for quick movement through the frequencies.
- Press ▶ to move to the next frequency up the band. Hold for quick movement through the frequencies. When the top of the band is reached, the tuner will continue to select from the lowest frequency upward.



When a radio frequency is in tune, the ST icon will appear in the display for stereo broadcasts.

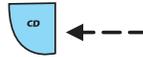
### CD select

The CD select function allows you to play CDs.

## Entertainment Systems

### Playing a CD

- If a CD is already loaded, press the CD control. CD play will begin where it stopped last.
- If a CD is not already loaded, insert the CD into the system. CD will briefly appear in the display and then the first track on the disc will begin playing.



### Playing an MP3 disc in MP3 flat file mode and MP3 directory mode

- Insert an MP3 disc into the player. CD and LOAD will appear in the display. Initialization may take up to two minutes for discs containing complex file directories.
- The display will briefly show the total number of tracks on the disc as TXXX (XXX= number of tracks).
- If an MP3 disc is already present in the player, press the CD control to begin play.
- Press the MP3 DIR control to engage MP3 directory mode, if desired. The track number format on the display will change from TXXX (XXX=current track number) to XX-XX (directory —track number).



**Note:** If the car's ignition is turned off and on again, play will begin at the beginning of the last song played. If the radio was powered off by the VOL control, play will start where it last left off.

- To stop MP3 disc play, eject the disc or press the AM/FM control. The player will return to radio mode.



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### **Selecting a directory in MP3 directory mode**

The TUNE DIR control allows you to select a different directory to play on the MP3 disc.

- Press  on the   to advance to the next directory on the MP3 disc. If the current directory is the last directory on the disc, pressing  will select the first directory on the disc. Press and hold for fast selection.
- Press  on TUNE DIR to revert to the previous directory on the MP3 disc. If the current directory is the first directory on the disc, pressing  will select the last directory on the disc. Press and hold for fast selection.

### **Eject function**

Press the control to stop and eject a disc.

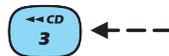


If a disc is ejected and not removed from the player, the player will automatically reload the disc and return to radio mode. This feature will operate when the ignition is on or off.

### **Rewind**

The rewind control works in CD mode. It is not enabled in MP3 flat file mode or MP3 directory mode.

Press and hold the  until the desired selection point is reached. The display will show the elapsed time for each track as you reverse through it. When the beginning of the disc is reached, the first track on the disc will begin to play. Release the rewind control again to disengage rewind mode.

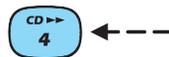


## Entertainment Systems

### Fast forward

The fast forward control works in CD mode. It is not enabled in MP3 flat file mode or MP3 directory mode.

Press and hold the control until the desired selection point



is reached. The display will show the elapsed time for each track as you fast-forward through it. When the end of the disc is reached, the player will continue fast-forwarding from the first track forward.

Release the control to disengage fast-forwarding.

### Shuffle feature

The shuffle feature works in CD mode, MP3 flat file mode and MP3 directory mode.

#### Shuffle feature in CD mode

The shuffle feature plays all tracks on the current disc in random order.

- Press the SHUFFLE control to engage random play. SHF and then ON will briefly appear in the display. The player will then begin random play.  

- To select another random track on the disc, press ◀ or ▶ on the SEEK control.  

- Press the SCN control to scan through random tracks. The track number will flash in the display. The shuffle feature will remain enabled.  


Press the SHUFFLE control again to disable the shuffle function. SHF and then OFF will briefly appear in the display.

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### **Shuffle feature in MP3 flat file mode**

The shuffle feature in MP3 flat file mode allows you to play all the tracks on the MP3 disc in random order.

- Press the SHUFFLE control to engage random play. SHF and then ON will briefly appear in the display. The player will then begin random play. 
- To select another random track on the disc, press ◀ or ▶ on the SEEK control. 
- Press SCN to scan through random tracks. The track number will flash in the display. The shuffle function will remain enabled. 
- Press SHUFFLE again to disengage the shuffle feature. SHF and then OFF will briefly display and the current track will continue to play. 

### **Shuffle feature in MP3 directory mode**

The shuffle feature in MP3 directory mode allows you to play all the tracks in the current directory in random order.

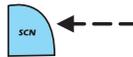
- Press the SHUFFLE control to engage random play in the current directory. SHF and then ON will briefly appear in the display. The player will then begin random play. 

## Entertainment Systems

- To select another random track in the current directory, press ◀ or ▶ on the SEEK control.



- Press the SCN control to scan through random tracks in the current directory. The track number will flash in the display. The shuffle feature will remain enabled.



To shuffle tracks in another directory, press ◀ or ▶ on the



TUNE DIR control to select the desired directory. The shuffle function still remains enabled.

Press the SHUFFLE control again to disengage the SHUFFLE feature. SHUF and OFF will briefly display and the current track will continue to play.

### Compression feature

The compression feature works in CD, MP3 flat file mode and MP3 directory mode.

Compression adjust brings soft and loud CD passages together for a more consistent listening level.



Press the COMP control to activate compression adjust. The compression icon (c) will illuminate in the display while the compression function is enabled.

Press the COMP control again to disengage the feature.

### MACH® Track function

The MACH® track function allows you to quickly search through a large number of tracks or directories on the MP3 disc. The function works in MP3 flat file mode and MP3 directory mode.

## Entertainment Systems

### **Track function in MP3 flat file mode and MP3 directory mode**

- Press the TRACK control. TRAC will appear in the display.
- Rotate the volume control to advance or reverse through the tracks.



The MP3 icon will blink in the display while the MACH® track function is enabled.

When the desired track is reached, the selected track will begin play after a two second delay.

To disengage the MACH® track function, press the TRACK control again.

### **Repeat track function**

This function works in MP3 flat file mode or MP3 directory mode and allows you repeat the current track on the MP3 disc.

### **Repeat track function in MP3 flat file mode and MP3 directory mode.**

Press the REPEAT control to repeat the current track. The repeat icon will display and the current track will continue to repeat until the repeat function is disengaged.



Press the REPEAT control again to disengage the feature.

## Entertainment Systems

### Error messages

You may experience an error message for the following situations:

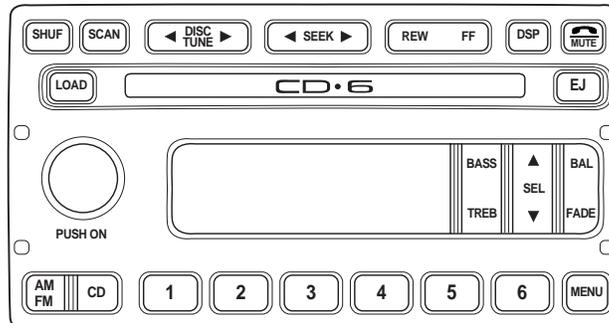
- NO DISC when the CD control is pressed and there is not a CD present.
- DISC ERR when there is a damaged or unreadable disc. Such as, data discs containing no .mp3 files, or for data discs containing more than 255 files or directories.
- CD ERR for any other disc malfunction.

### Saving and naming MP3 files

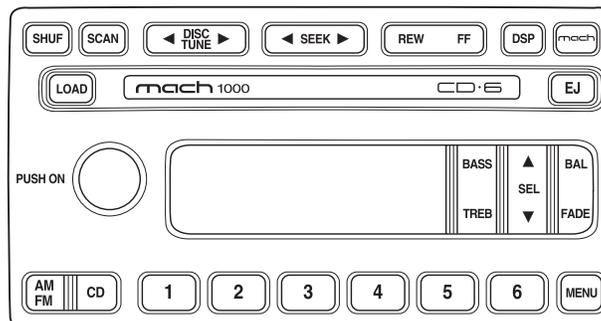
- Your MACH® MP3 music system supports discs containing up to 255 files in 255 directories. Discs containing more than 255 files will not play.
- Always save MP3 files with the .mp3 extension. The player recognizes an MP3 file by the .mp3 extension, so MP3 files saved with different extensions will not be played. **Never save a non-MP3 file with the .mp3 extension as the file will not play properly and damage may occur to the player or your sound system.**
- The player supports multi session discs. However, be sure to import the previous session of the disc before you add new files. If you do not import the previous session, only the last session will be played.
- When burning a disc, ensure that you close/finalize the disc before playback, or the disc may not play properly or an error message may appear.
- The player supports DAM (Digital Automatic Music) discs.

## Entertainment Systems

### MACH® 460 SOUND SYSTEM RADIO (CD CHANGER COMPATIBLE)



### MACH® 1000 SOUND SYSTEM RADIO (CD CHANGER COMPATIBLE)



### MACH 1000® AUDIO SYSTEM

Your vehicle may be equipped with the **MACH 1000®** audio system. This system is equipped with a rack of amplifiers in the trunk of the vehicle. Do not store or rest items on the amplifier rack, as this could cause damage to the amplifiers and void your warranty.

The **MACH 1000®** audio system is capable of producing very high sound pressure levels. For your

## Entertainment Systems

listening comfort and protection, it is not recommended to listen to the **MACH 1000**<sup>®</sup> audio system at high volume levels for extended periods of time.

### Volume/power control

Press the control to turn the audio system on or off. Turn the control to raise or lower volume.



If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a “nominal” listening level when the ignition switch is turned back on.

### Speed sensitive volume

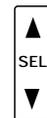
With this feature, radio volume changes automatically and slightly with vehicle speed to compensate for road and wind noise.

The recommended level for speed sensitive volume is from level 1 through level 3. Level 0 turns the speed sensitive volume off and level 7 is the maximum setting.

To engage the speed sensitive volume feature, press and hold the volume control for five seconds (with the radio on), then press:



- ▲ to increase volume compensation.
- ▼ to decrease or shut off the volume compensation.



The selected level will appear in the display.

## Entertainment Systems

### Bass adjust

The bass adjust control allows you to increase or decrease the audio system's bass output.



Press the BASS control. Use the SEL control to increase or decrease the amount of bass.

### Treble adjust

The treble adjust control allows you to increase or decrease the audio system's treble output.



Press the TREB control. Use the SEL control to increase or decrease the amount of treble.

### Speaker balance adjust

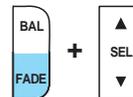
Speaker sound distribution can be adjusted between the right and left speakers.



Press the BAL control. Use the SEL control to adjust the sound between the left and right speakers.

### Speaker fade adjust

Speaker sound can be adjusted between the front and rear speakers.



Press the FADE control. Use the SEL control to adjust the sound between the front and rear speakers.

### MACH mode (if equipped)

MACH mode is available with the MACH 1000 Sound System. This mode allows you to toggle between occupancy modes (DRIVER SEAT, ALL SEATS) and MACH 1000 mode. MACH 1000 mode engages the extra speakers and amplifiers that are included in this package.

## Entertainment Systems

Press the MACH control to toggle between occupancy modes.



### Seek function

The seek function works in radio or CD mode.

#### Seek function in radio mode

- Press ◀ to find the next listenable station down the frequency band. SEEK DOWN will display.
- Press ▶ to find the next listenable station up the frequency band. SEEK UP will display.



#### Seek function in CD mode

- Press ◀ to seek to the previous track of the current disc. If the beginning of the disc is reached, the CD player seeks to the beginning of the last track on the current disc and begins playing.
- Press ▶ to seek forward to the next track of the current disc. After the last track has been completed, the first track of the current disc will automatically replay.



### Scan function

The scan function works in radio or CD mode.



#### Scan function in radio mode

Press the SCAN control to hear a brief sampling of all listenable stations on the frequency band. Press the SCAN control again to stop the scan mode.

#### Scan function in CD mode

Press the SCAN control to hear a short sampling of all selections on the CD. (The CD scans in a forward direction, wrapping back to the first track at the end of the CD.) To stop on a particular selection, press the control again.

## Entertainment Systems

### AM/FM select

The AM/FM select control works in radio and CD modes.



### AM/FM select in radio mode

This control allows you to select AM or FM frequency bands. Press the control to switch between AM, FM1 or FM2 memory preset stations.

### AM/FM select in CD mode

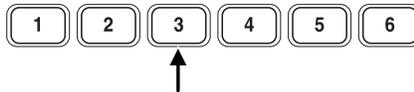
Press this control to stop CD play and begin radio play.

### Radio station memory preset

The radio is equipped with six station memory preset controls. These controls can be used to select up to six preset AM stations and twelve FM stations (six in FM1 and six in FM2).

### Setting memory preset stations

1. Select the frequency band with the AM/FM select control. Press the AM/FM control to toggle between AM, FM1, or FM2.
2. Press the SEEK control to access the next listenable station up or down the frequency band. Press the TUNE control to go up or down the listening band in individual increments.
3. Select a station. Refer to *Seek function* for more information on selecting a station.
4. Press and hold a memory preset control. The playing media will mute momentarily. When the sound returns, the station is held in memory on the control you selected. The display will read **SAVED**.



### Autostore

Autostore allows you to set the strongest local radio stations without losing your original manually set

## Entertainment Systems

preset stations. This feature is helpful on trips when you travel between cities with different radio stations.

### Starting autostore

1. Press and momentarily hold the AM/FM control.

2. AUTOSSET will flash in the display as the frequency band is scrolled through.



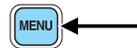
3. When the six strongest stations are filled, the station stored in memory preset control 1 will start playing.

If there are fewer than six strong stations available on the frequency band, the remaining memory preset controls will all store the last strong station available.

To deactivate autostore and return to your audio system's manually set memory stations, press the AM/FM control again.

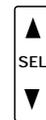
### Setting the clock

Press the MENU control until SELECT HOUR or SELECT MINUTE is displayed. (The menu mode must be engaged to enable clock mode).



Use the SEL control to manually set the time.

- Press ▲ to increase hours/minutes.



- Press ▼ to decrease hours/minutes.

Press the MENU control again to disengage the clock mode.

### Tune/disc adjust

The tune control works in radio or CD mode.

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### **Tune adjust in radio mode**

- Press ◀ to move to the next frequency down the band (whether or not a listenable station is located there). Hold the control to move through the frequencies quickly. 
- Press ▶ to move to the next frequency up the band (whether or not a listenable station is located there). Hold for quick movement.

### **Disc adjust for CD mode**

- Press ◀ to select the previous disc. (Play will begin on the first track of the disc unless shuffle mode is engaged.) Refer to *Shuffle feature* for more information. Hold the control to continue reversing through the discs. 
- Press ▶ to select the next disc. Hold the control to fast-forward through the remaining discs.

### **CD select**

CD mode may be entered by pressing the CD control and the



LOAD control. Load the CD into the audio system. The first track of the disc will begin playing. After that, CD play will begin where it stopped last.

If an alternative CD is desired, press the corresponding preset control (1–6) of a loaded CD, or press the TUNE control to access the other loaded CDs.

NO CD will display if the CD control is activated when there is not a CD present in the audio system.

NO CD will illuminate in the display if the CD control and a present number (that is currently empty) are pressed. The system will play the next available disc.

## Entertainment Systems

If your vehicle is equipped with a CD changer, pressing the CD control again will allow you to toggle between accessing the multi disc system and the CD changer. The display will read CD or CDDJ.

### **Display description**

Six circles are always lit in the digital display. These signify the six CD slots in the audio system. When a disc is loaded into a particular slot (1-6), the number inside that specific circle lights. If the circle is empty, there is no CD in that particular slot.

### **Rewind**

The rewind control works in CD modes.



Press and hold the REW control until the desired selection is reached. If the beginning of the disc is reached, the CD will begin play at the first track. Release the control to disengage rewind mode.

When in rewind mode, your audio system will automatically lower the volume level of the playing media.

### **Fast forward**

The fast forward control works in CD modes.



Press and hold the FF control until the desired selection is reached. If the end of the disc is reached, the CD will return to the first track. Release the control to disengage fast forward mode.

When in fast forward mode, your audio system will automatically lower the volume level of the playing media.

## Entertainment Systems

### Load

The load feature allows you to load single CDs into the player internal to the radio.



**This six disc CD player is equipped with a CD door. Compact discs should only be inserted into the player after the CD door has been opened by the player. Do not attempt to force the door open. Compact discs should only be loaded by pressing the LOAD control.**

Press the LOAD control. (You can choose which slot will be loaded by pressing the desired preset number. If you do not choose a slot, the system will choose the next available one.) Wait until the CD door opens. Load the CD into the player. LOADING CD# is displayed. When the CD has been loaded, the door will close and the CD will begin to play. For example, to load a CD into slot 2, press the LOAD control and then press preset 2.

### Auto load

This feature allows you to autoloading up to 6 discs into the multi disc CD player internal to the radio.



Press and hold the LOAD control until AUTOLOAD # is displayed. The CD door will open. Load the desired discs, one at a time. The CD is loaded into position and the audio system will display CD#. Each time the CD door opens, INSERT CD# is displayed. The door will close and the player will move to the next slot after each disc has been loaded. The process is repeated until all 6 slots are full. The audio system plays the last CD loaded and the display is updated. If some slots are already full and autoloading is activated, the system will fill all empty slots.

## Entertainment Systems

### Eject

Press the EJ control to stop and eject a CD.



You can choose which

CD will be ejected by pressing the EJ control and the desired preset number (1–6). For example, to eject CD 2, press the EJ control and then press the preset 2 control. If you do not choose a specific CD, the player will eject the current CD.

If a CD is ejected and not removed from the door of the CD player, the player will automatically reload the CD. This feature may be used when the ignition is ON or OFF.

### Auto eject

Press and momentarily hold the EJ control to engage auto eject. All



CDs which are present in the player will be ejected one at a time. If a CD is ejected and not removed from the door of the CD player, the player will automatically reload the CD. This feature may be used when the ignition is ON or OFF.

### Shuffle feature

Press the SHUF control until the desired shuffle mode is displayed. The audio system will then engage the desired shuffle mode.



When engaged, the shuffle feature has two different modes: SHUFFLE DISC and SHUFFLE TRK.

SHUFFLE DISC randomly plays tracks from all the discs presently in the audio system.

SHUFFLE TRK plays all the tracks on the current disc in random order.

## Entertainment Systems

### Compression feature (if equipped)

The compression feature operates in CD mode and brings soft and loud CD passages together for a more consistent listening level.



On Audiophile audios, press the MENU control until compression status is displayed. Press the SEL control to enable the compression feature when COMP OFF is displayed. Press the SEL control again to disable the feature when COMP ON is displayed.

On Premium audios, press the COMP control until COMP ON is displayed.



### Menu mode

The MENU control allows you to access many different features within your audio system. There are three sets of menus available depending upon which mode or feature is activated.



While in FM mode, two menus are available. **If RDS is turned OFF**, you can access the following:

- SELECT HOURS — Refer to *Setting the clock*.
- SELECT MINUTES — Refer to *Setting the clock*.
- RDS OFF — Refer to *Radio data system feature*.

**If RDS is turned ON**, you can access the following:

- TRAFFIC ON/OFF-Refer to *Traffic announcements*.
- FIND type-Refer to *Program type*.
- SHOW (NAME, TYPE, NONE)- Refer to *Radio data system feature*.
- RDS ON— Refer to *Radio data system feature*.

## Entertainment Systems

- SELECT HOURS — Refer to *Setting the clock*.
- SELECT MINUTES —Refer to *Setting the clock*.

When in CD mode, you can access: SELECT HOURS, SELECT MINUTES or COMP ON/OFF.

SELECT HOURS, SELECT MINUTES— Allows you to adjust the hours and minutes. Refer to *Setting the clock*.

TRAFFIC ON/OFF— Traffic announcements can be programmed as local or distant. Refer to *Traffic announcements*.

RDS ON/OFF— This feature allows your audio system to receive text information from RDS-equipped FM radio stations. Refer to *Radio Data System feature*.

FIND type — Allows you to select your desired FM program type and search for that selection.

SHOW — Allows you to select from NAME (displays the name of the radio station), TYPE (displays the RDS program type: rock, jazz, etc.), or NONE (deactivates the RDS display).

### Radio data system (RDS) feature

This feature allows your audio system to receive text information from RDS-equipped FM radio stations.



#### To activate RDS:

- When in FM mode, press the MENU control until RDS OFF displays.
- Press the SEL control to engage this feature (RDS ON).

## Entertainment Systems

### **RDS features:**

Once the RDS feature is on, press the MENU control to scroll through the following selections:

#### ***Traffic announcements***

This feature allows you to hear traffic announcements while in CD mode. These announcements are broadcast by traffic capable RDS stations.

When in this mode, traffic announcements will interrupt radio and CD play.

- Press the MENU control until TRAFFIC is displayed.
- Press the SEL control to engage the feature. The display will read TRAFFIC ON.

This feature also allows you to control the volume of traffic announcements. With the display reading TRAFFIC ON, adjust the volume using the volume control to the desired level. The volume level will show at the bottom of the display. Interrupting traffic announcements will be at the selected volume level.

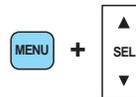
To disengage the feature, press the MENU control until TRAFFIC ON displays. Press the SEL control. The display will read TRAFFIC OFF.

**Traffic announcements are not available in most U.S. markets.**

#### ***Program type***

This feature allows you to search for RDS stations selectively by their program type.

Press the MENU control until FIND program type is displayed.



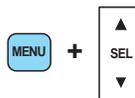
## Entertainment Systems

Use the SEL control to select the program type. With the feature on, use the SEEK or SCAN control to find the desired program type from the following selections:

- Classic
- Country
- Info
- Jazz
- Oldies
- R & B
- Religious
- Rock
- Soft
- Top 40

### Show

This feature allows you to select the type of RDS broadcast information the radio will regularly show in the display.



With RDS activated, press the MENU control until SHOW is displayed.



Use the SEL control to select TYPE (displays the RDS program type: rock, jazz, etc), NAME (displays the name of the radio station) or NONE (deactivates the RDS display).

### Digital signal processing

The digital signal processing (DSP) feature allows you to change the signal mode to suit your listening tastes.

Press the DSP control to access the DSP menu.



## Entertainment Systems

Use the SEL control to select the desired signal mode (the selected mode will appear in the display). The following can be selected:

- DSP  
OFF—disengages the feature
- STADIUM—outdoor stadium with a capacity of about 30 000
- CHURCH—church with a high vault
- HALL—rectangular concert hall capacity of about 2 000
- JAZZ CLUB—jazz club with clearly reflected sounds
- NEWS—“voice-only” type of sound with a limited audio band



Press the DSP control again to access the occupancy modes. Use the SEL control to optimize the sound based upon the occupants in the vehicle.

The following occupancy modes can be selected for the MACH 460 Sound System:

- ALL SEATS
- DRIVER SEAT
- REAR SEATS

The following occupancy modes can be selected for the MACH 1000 Sound System:

- ALL SEATS
- DRIVER SEAT
- MACH 1000

MACH 1000 mode raises the bass response of the trunk mounted subwoofers.

### **Mute mode**

Press the control to mute the playing media. Press the control again to return to the playing media.



## Entertainment Systems

### CD CARE

**CD units are designed to play commercially pressed 12cm 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. Irregular shaped CDs, CDs with a scratch protection film attached, and CDs with homemade paper (adhesive) labels should not be inserted into the CD player. The label may peel and cause the CD to become jammed. It is recommended that homemade CDs be identified with permanent marker rather than adhesive labels. Please contact your dealer for further information.**

### TROUBLESHOOTING THE CD PLAYER (IF EQUIPPED)



The laser beam used in the compact disc player is harmful to the eyes. Do not attempt to disassemble the case.

If sound skips:

- You may be traveling on a rough road, playing badly scratched discs or the disc may be dirty. Skipping will not scratch the discs or damage the player.

If your changer does not work, it may be that:

- A disc is already loaded where you want to insert a disc.
- The disc is inserted with the label surface downward.
- The disc is dusty or defective.
- The player's internal temperature is above 60°C (140°F). Allow the player to cool down before operating.
- A disc with format and dimensions not within industry standards is inserted.

## Entertainment Systems

### MP3 DISC QUALITY FACTORS

The MACH® MP3 music system is designed for use with CD-DA (regular audio discs), CD-R and CD-RW discs. Discs must comply with ISO 9660 and Joliet standards.

Several factors can effect disc playback quality:

- Disc capacity — Each disc contains about 650 MB of storage capacity. We do not recommend using high capacity discs containing 700MB of storage.
- Disc type — Some CD-RW discs may operate inconsistently and may cause an error message to appear. We recommend burning MP3 files onto CD-R discs.
- Disc finalization — The disc may be left open for the purpose of adding sessions to it at a later time, but be sure to close each session or the disc will not play.
- Bit rate — The player supports bit rates from 56–320 kbps, as well as variable bit rate MP3 files, but lower bit rates will have a noticeable effect on sound quality and are recommended only for speech or low fidelity music material. We recommend that you encode MP3 files using a high quality encoder.
- PC configuration — Encoding MP3 files requires intensive use of your computer's resources. Follow the PC configuration recommendations of the encoder software vendor. We recommend that you avoid running other software applications on your PC during MP3 encoding to avoid undesirable noise and distortion.

### CLEANING COMPACT DISCS

Inspect all discs for contamination before playing. If necessary, clean discs only with an approved CD cleaner and wipe from the center out to the edge. Do not use circular motion.

## Entertainment Systems

### **CD, MP3 AND CD PLAYER CARE**

- Handle discs by their edges only. Never touch the playing surface.
- Do not expose discs to direct sunlight or heat sources for extended periods of time.
- Do not insert more than one disc into the slot of the CD player (if equipped).
- Always store discs out of direct sunlight. Excessive heat may damage or warp discs.
- Use care when handling and playing CD-R and CD-RW discs, which are more susceptible to damage from heat, light and stress than are regular CDs.
- Always insert and remove a disc by holding the disc flat, with the playing surface facing down, in order to prevent damage to the disc or the player.
- Never insert any object other than a compact disc into the player, as doing so may damage the player and may cause injury to you.
- Do not disassemble the player. The laser used in disc playback is extremely harmful to the eyes.

### **CLEANING CASSETTE PLAYER (IF EQUIPPED)**

Clean the tape player head with a cassette cleaning cartridge after 10 to 12 hours of play in order to maintain the best sound and operation.

## Entertainment Systems

### **CASSETTE AND CASSETTE PLAYER CARE**

- Use only cassettes that are 90 minutes long or less.
- Do not expose tapes to direct sunlight, high humidity, extreme heat or extreme cold. Allow tapes that may have been exposed to extreme temperatures to reach a moderate temperature before playing.
- Tighten very loose tapes by inserting a finger or pencil into the hole and turning the hub.
- Remove loose labels before inserting tapes.
- Do not leave tapes in the cassette player for a long time when not being played.

### **RADIO FREQUENCY INFORMATION**

The Federal Communications Commission (FCC) and the Canadian Radio and Telecommunications Commission (CRTC) establish the frequencies AM and FM stations may use for their broadcasts. Allowable frequencies are:

AM 530, 540–1600, 1610 kHz

FM 87.7, 87.9–107.7, 107.9 MHz

Not all frequencies are used in a given area.

## Entertainment Systems

### RADIO RECEPTION FACTORS

Three factors can affect radio reception:

- **Distance/strength.** The further an FM signal travels, the weaker it is. The listenable range of the average FM station is approximately 40 km (24 miles). This range can be affected by “signal modulation.” Signal modulation is a process radio stations use to increase their strength/volume relative to other stations.
- **Terrain.** Hills, mountains and tall buildings between your vehicle’s antenna and the radio station signal can cause FM reception problems. Static can be caused on AM stations by power lines, electric fences, traffic lights and thunderstorms. Moving away from an interfering structure (out of its “shadow”) returns your reception to normal.
- **Station overload.** Weak signals are sometimes captured by stronger signals when you pass a broadcast tower. A stronger signal may temporarily overtake a weaker signal and play while the weak station frequency is displayed.

The audio system automatically switches to single channel reception if it will improve the reception of a station normally received in stereo.

### AUDIO SYSTEM WARRANTIES AND SERVICE

Refer to the *Warranty Guide* for audio system warranty information.

If service is necessary, see your dealer or a qualified technician.

## Climate Controls

### MANUAL HEATING AND AIR CONDITIONING SYSTEM



#### Fan speed control

Controls the volume of air circulated in the vehicle.



#### Temperature control knob

Controls the temperature of the airflow inside the vehicle.



#### Mode selector control

Controls the direction of the airflow to the inside of the vehicle.



- MAX A/C – Distributes recirculated air through the instrument panel registers. The A/C compressor will only function if the outside temperature is above approximately 6°C (43°F). MAX A/C is noisier than A/C, but more economical and efficient. This mode may prevent undesirable odors from entering the vehicle.
- A/C – Distributes outside air through the instrument panel registers. The A/C compressor will only function if the outside temperature is above approximately 6°C (43°F) .

## Climate Controls

-  (Panel) – Distributes outside air through the instrument panel registers. The air can not be cooled below the outside temperature.
- O (Off) – Outside air is shut out and the fan will not operate. This mode may reduce undesirable odors from entering the vehicle but may increase the possibility of interior window fogging.
-  (Floor) – Distributes outside air through the floor ducts. The air cannot be cooled below the outside temperature.
-  (Floor and defrost) – Distributes outside air through the windshield defroster ducts and the floor duct and the side window demisters. The A/C compressor will operate automatically if the outside temperature is above approximately 6°C (43°F) . The air distributed through the floor ducts will be slightly warmer than the air sent to the windshield defrost ducts and the side window demisters.
-  (Defrost) – Distributes outside air through the windshield defroster ducts and the side window demisters. The A/C compressor will operate automatically if the outside temperature is above approximately 6°C (43°F). This mode will clear ice and fog from the windshield.

**Since the air conditioner removes moisture from the air, it is considered normal operation if water drips on the ground under the air conditioner drain.**

## Climate Controls

### Operating tips

- To reduce fogging in humid weather, place the climate control system in Defrost and Rear Defrost mode (if equipped) before driving.
- To reduce humidity buildup inside the vehicle under warm weather conditions, do not drive with the climate control system in the Off mode.
- To reduce humidity buildup inside the vehicle under cold weather conditions, do not drive with the climate control system in Max A/C (if equipped), recirculation mode (if equipped) or Off mode.
- Under normal weather conditions, do not leave your vehicle in the Max A/C (if equipped), recirculation mode (if equipped) or Off mode when turning off the vehicle.
- Under snowy or dirty weather conditions, leave your vehicle in the Max A/C (if equipped), recirculation mode (if equipped) or Off mode when turning off the ignition.
- Remove any snow, ice or leaves from the exterior base of the windshield.
- To increase the efficiency of the A/C (if equipped), drive with the windows slightly open for two to three minutes, or until the vehicle has been “aired out”.
- Do not place objects under the front seat or over the defroster ducts. They may reduce visibility, fall into the ducts, or degrade the performance of your climate control system.



Do not place objects on top of the instrument panel, as these objects may become projectiles in a collision or sudden stop.

## Climate Controls

### REAR WINDOW DEFROSTER (IF EQUIPPED)

The rear defroster control is located on the instrument panel.

Press the rear defroster control to clear the rear window of thin ice and fog.



- A small LED will illuminate when the rear defroster is activated.

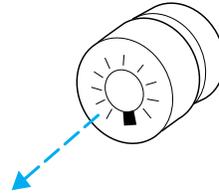
The ignition must be in the ON position to operate the rear window defroster.

The defroster turns off automatically after 10 minutes or when the ignition is turned to the OFF position. To manually turn off the defroster before 10 minutes have passed, push the control again.

## Lights

### HEADLAMP CONTROL ☀

- Pull the headlamp control toward you to the first position to turn on the parking lamps, tail lamps, license plate lamps and marker lamps.
- Pull the headlamp control toward you to the outer position to turn on the headlamps (in addition to the previous lamps).



### Foglamp control (if equipped) ⌘

The foglamps can be turned on when the headlamp control is in either of the following positions:



- Parking lamps
- Low beams

Press the foglamp control to activate the foglamps.

Press the foglamp control again to deactivate the foglamps.

When the highbeams are activated, the foglamps will not operate.

### Daytime running lamps (DRL) (if equipped)

Turns the headlamps on with a reduced output. To activate:

- the ignition must be turned on
- the headlamp control is in the OFF or Parking lamps position
- the high beam headlamps must be turned off
- the parking brake is released

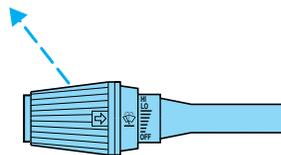
## Lights



Always remember to turn on your headlamps at dusk or during inclement weather. The Daytime Running Light (DRL) System does not activate your 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.

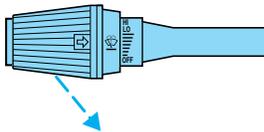
### High beams

Push the lever toward the instrument panel to activate. Pull the lever towards you to deactivate.



### Flash to pass

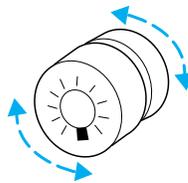
Pull toward you slightly to activate and release to deactivate.



### PANEL DIMMER CONTROL

To adjust the brightness of the instrument panel:

- Rotate clockwise/ counterclockwise when the headlamp control is in the parking lamp or low-beam position.



To turn on the courtesy lamps:

- Rotate fully counterclockwise.

### AIMING THE HEADLAMPS

The headlamps on your vehicle are properly aimed at the assembly plant.

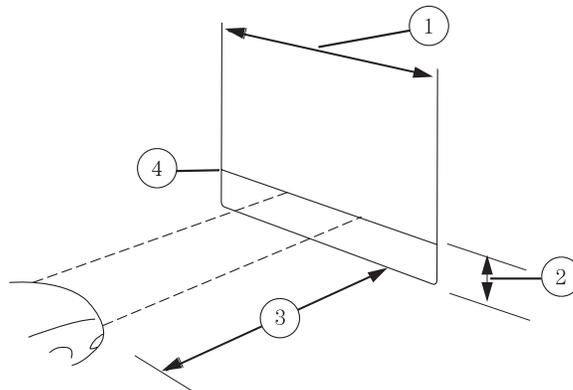
## Lights

If your vehicle has been in an accident the alignment of your headlamps should be checked by a qualified service technician.

### Headlamp vertical aim adjustment

1. Park the vehicle on a level surface approximately 7.6 meters (25 feet) from a vertical wall or screen directly in front of it.

- (1) Eight feet
- (2) Center height of lamp to ground
- (3) Twenty five feet
- (4) Horizontal reference line

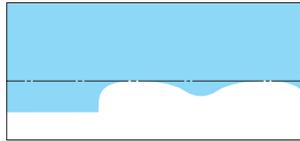


2. Measure the height from the center of your headlamp to the ground and mark a 2.4 meter (8 foot) horizontal reference line on the vertical wall or screen at this height (a piece of masking tape works well). The center of the lamp is marked by a 3.0 mm circle on the headlamp lens.

3. Turn on the low beam headlamps to illuminate the wall or screen and open the hood.

## Lights

4. On the wall or screen you will observe a light pattern with flat edges at the top of the beam pattern. If the flat edges are not at the horizontal reference line, the beam will need to be adjusted.



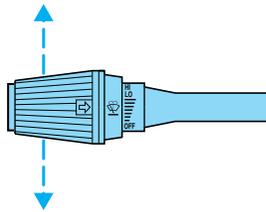
5. Locate the vertical adjuster on each headlamp, then use a 6 mm allen wrench or screwdriver to adjust the headlamp up or down.

6. HORIZONTAL AIM IS NOT REQUIRED FOR THIS VEHICLE AND IS NON-ADJUSTABLE.

7. Close the hood and turn off the lamps.

### TURN SIGNAL CONTROL ↵↻

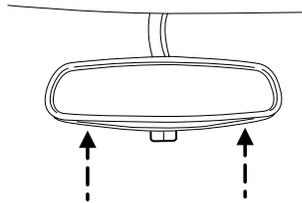
- Push down to activate the left turn signal.
- Push up to activate the right turn signal.



### INTERIOR LAMPS

#### Map lamps (if equipped)

If equipped with a convertible top the map lamps and controls are located on the rearview mirror. Press the controls on the bottom of the mirror to activate the lamps.



## Lights

### BULBS

#### Replacing exterior bulbs

Check the operation of the following lamps frequently:

- Headlamps
- Tail lamps
- Brakelamps
- High-mount brakelamp
- Turn signal lamps
- Backup lamps
- License plate lamp

Do not remove lamp bulbs unless they will be replaced immediately. If a bulb is removed for an extended period of time, contaminants may enter the lamp housings and affect performance.

#### Using the right bulbs

Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized "D.O.T." for North America and an "E" for Europe to assure 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 burn time.

Function	Trade Number
Tail lamp, brakelamp, turn lamp	3157K
Park lamp, turn lamp, side marker (front)	3157 AK (amber)
Backup lamp	3156K
License plate lamp	168
High-mount brakelamp	906
Headlamps	9007
Luggage compartment lamp	906
Dome lamp	575
Map lamp	575
Visor vanity lamp	74
Glove compartment	194
Rearview mirror map lamps	192
Fog lamp	899
All replacement bulbs are clear in color except where noted.	
To replace all instrument panel lights - see your dealer.	

## Lights

### Interior bulbs

Check the operation of the following interior bulbs frequently:

- interior overhead lamp
- map lamp

For bulb replacement, see a dealer or qualified technician.

### Map lamps

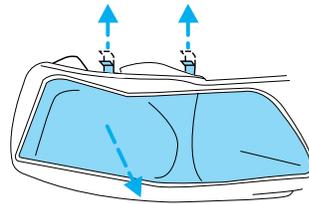
For bulb replacement, see a qualified service technician or your dealer.

### Replacing headlamp bulbs

To remove the headlamp bulb:

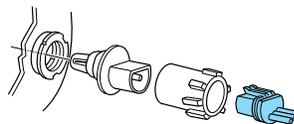
1. Make sure headlamp switch is in OFF position, then open the hood.

2. At the back of the headlamp, pull two retainer pins up to release the headlamp assembly.

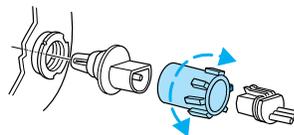


3. Pull headlamp assembly forward disengaging the lamp from the rear hidden snap retainers to expose the back of the bulb.

4. Disconnect the electrical connector from the bulb by pulling rearward.

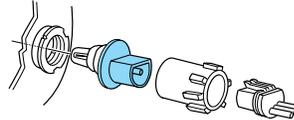


5. Remove the bulb retaining ring by rotating it counterclockwise (when viewed from the rear) to free it from the bulb socket, and slide the ring off the plastic base. Keep the ring to retain the new bulb.



## Lights

6. Without turning, remove the old bulb from the lamp assembly by gently pulling it straight out of the lamp assembly.



To install the new bulb:



Handle a halogen headlamp bulb carefully and keep out of children's reach. Grasp the bulb only by 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.

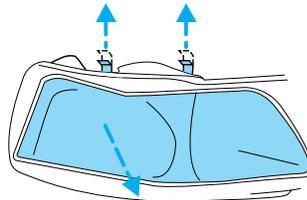
1. With the flat side of the new bulb's plastic base facing upward, insert the glass end of the bulb into the lamp assembly. You may need to turn the bulb left or right to align the grooves in the plastic base with the tabs in the lamp assembly. When the grooves are aligned, push the bulb into the lamp assembly until the plastic base contacts the rear of the lamp assembly.
2. Install the bulb retaining ring over the plastic base until it contacts the rear of the socket by rotating clockwise until you feel a "stop."
3. Connect the electrical connector into the plastic base until it snaps, locking it into position.
4. Install the headlamp on vehicle by aligning the lamp with the rear snap retainers, push to seat and secure with two retainer pins.
5. Turn the headlamps on and make sure they work properly. If the headlamp was correctly aligned before you changed the bulb, you should not need to align it again.

### ***Replacing front parking lamp/turn signal bulbs***

1. Make sure the headlamp control is in the OFF position.
2. Open the hood.

## Lights

3. At the back of the headlamp, pull two retainer pins up to release the headlamp assembly.



4. Pull headlamp assembly forward disengaging the lamp from the rear snap retainers to expose the back of the bulb.

5. Rotate the bulb socket counterclockwise and remove from lamp assembly.



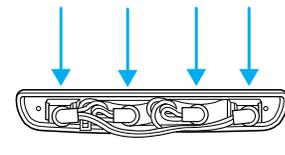
6. Carefully pull the bulb straight out from the socket and push in the new bulb.

7. To complete installation, follow the removal procedure in reverse order.

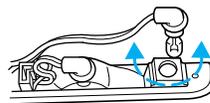
### **Replacing high-mount brakelamp bulbs**

1. Open trunk.

2. Inside trunk, locate access hole under the rear decklid.



3. Remove the bulb socket by rotating it 45 degrees and pulling it out of the lamp assembly.



4. Carefully pull bulb straight out of socket and push in new bulb.

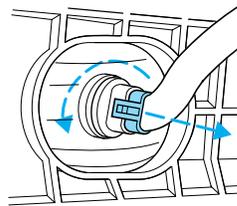
5. To complete installation, follow the removal procedure in reverse order.

## Lights

### ***Replacing foglamp bulbs***

**The halogen bulb contains gas under pressure. The bulb may shatter if the glass envelope is scratched or if the bulb is dropped. Handle the bulb carefully. Grasp the bulb only by its base. Avoid touching the glass envelope.**

1. Rotate the foglamp bulb counterclockwise and remove from foglamp (the rear side of the foglamp is shown).



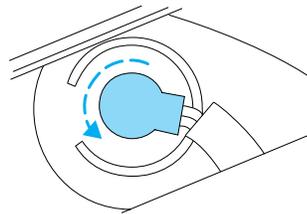
2. Disconnect the electrical connector from the foglamp bulb.

3. Connect the electrical connector to the new foglamp bulb.

4. Install the foglamp bulb in foglamp by rotating clockwise.

### ***Replacing license plate lamp bulbs***

1. Open trunk and remove bulb socket from the trunk lid by turning counterclockwise.



2. Pull the bulb straight out of the socket.

Install the new bulb in reverse order.

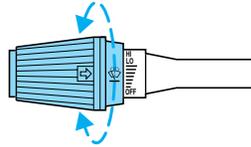
### ***Replacing tail lamp/backup bulbs***

For bulb replacement, see a dealer or qualified technician.

## Driver Controls

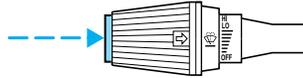
### WINDSHIELD WIPER/WASHER CONTROLS

Rotate the windshield wiper control to the desired interval, low or high speed position.



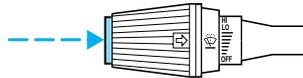
The bars of varying length are for intermittent wipers. When in this position rotate the control upward for fast intervals and downward for slow intervals.

Push the control on the end of the stalk to activate washer. Push and hold for a longer wash cycle. The washer will automatically shut off after ten seconds of continuous use.



### Mist Function

To operate the Mist function of the windshield wipers, push and release the windshield washer control quickly. The wipers will cycle one or two times.



### Windshield wiper blades

Check the wiper blades for wear at least twice a year or when they seem less effective. Substances such as tree sap and some hot wax treatments used by commercial car washes reduce the effectiveness of wiper blades.

### Checking the wiper blades

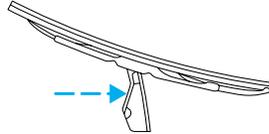
If the wiper blades do not wipe properly, clean both the windshield and wiper blades using undiluted windshield wiper solution or a mild detergent. Rinse thoroughly with clean water. To avoid damaging the blades, do not use fuel, kerosene, paint thinner or other solvents.

## Driver Controls

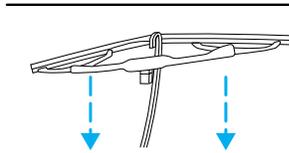
### ***Changing the wiper blades***

To replace the wiper blades:

1. Pull the wiper arm away from the windshield and lock into the service position.



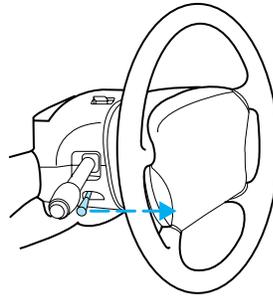
2. Turn the blade at an angle from the wiper arm. Push the lock pin manually to release the blade and pull the wiper blade down toward the windshield to remove it from the arm.



3. Attach the new wiper to the wiper arm and press it into place until a click is heard.

### **TILT STEERING WHEEL (IF EQUIPPED)**

Pull the tilt steering control toward you to move the steering wheel up or down. Hold the control while adjusting the wheel to the desired position, then release the control to lock the steering wheel in position.

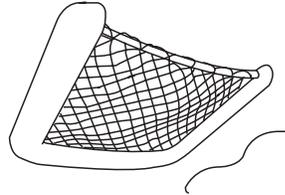


Never adjust the steering wheel when the vehicle is moving.

## Driver Controls

### OVERHEAD STORAGE NET (IF EQUIPPED)

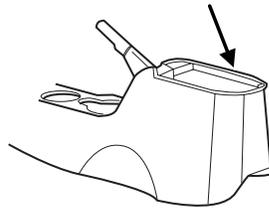
 Be sure to secure objects when placed in the storage net in order to help reduce the risk that they become projectiles in the event of a collision.



### AUXILIARY POWER POINT 12V

The power point is an additional power source for electrical accessories.

**Power outlets are designed for accessory plugs only. Do not hang any type of accessory or accessory bracket from the plug. Improper use of the power outlet can cause damage not covered by your warranty.**

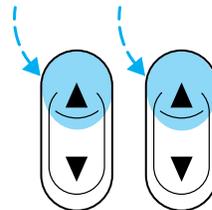


A power point is located inside the center console storage bin.

### POWER WINDOWS

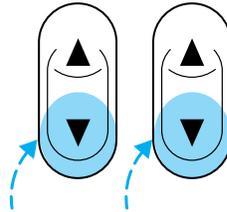
Press and hold the rocker switches to open and close windows.

- Press the top portion of the rocker switch to close.



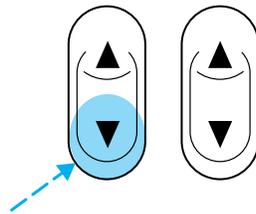
## Driver Controls

- Press the bottom portion of the rocker switch to open.



### Express down

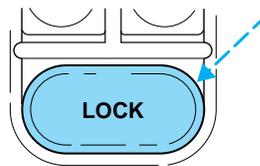
To make the driver window open fully without holding the window control, press the bottom portion of the driver window control completely down and release quickly. Depress again to stop window operation.



### Window lock (if equipped)

The window lock feature allows only the driver to operate the power windows.

To lock out all the window controls except for the driver's press the control. Press the control again to restore the window controls.

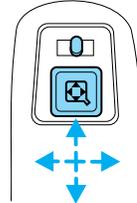


## Driver Controls

### POWER SIDE VIEW MIRRORS (IF EQUIPPED)

To adjust your mirrors:

1. Move the mirror selector control all the way to the left to adjust the left mirror or all the way to the right to adjust the right mirror.



2. Move the control in the direction you wish to tilt the mirror.

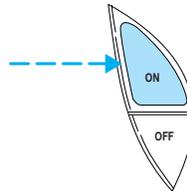
3. Return the control to the center position.

### SPEED CONTROL

#### To turn speed control on

- Press ON.

Vehicle speed cannot be controlled until the vehicle is traveling at or above 48 km/h (30 mph).



**Do not shift the gearshift lever into N (Neutral) with the speed control on.**



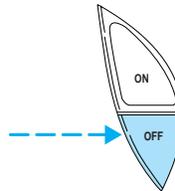
Do not use the speed control in heavy traffic or on roads that are winding, slippery, or unpaved.

## Driver Controls

### To turn speed control off

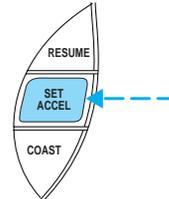
- Press OFF or
- Turn off the vehicle ignition.

Once speed control is switched off, the previously programmed set speed will be erased.



### To set a speed

- Press SET ACCEL.  
For speed control to operate, the speed control must be ON and the vehicle speed must be greater than 48 km/h (30 mph).



If you drive up or down a steep hill, your vehicle speed may vary momentarily slower or faster than the set speed. This is normal.

Speed control cannot reduce the vehicle speed if it increases above the set speed on a downhill. If your vehicle speed is faster than the set speed while driving on a downhill, you may want to shift to the next lower gear or apply the brakes to reduce your vehicle speed.

If your vehicle slows down more than 16 km/h (10 mph) below your set speed on an uphill, your speed control will disengage. This is normal. Pressing RESUME will re-engage it.

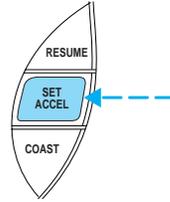


Do not use the speed control in heavy traffic or on roads that are winding, slippery, or unpaved.

## Driver Controls

### To set a higher set speed

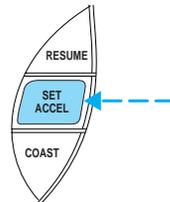
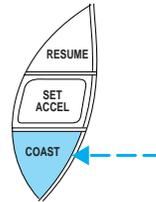
- Press and hold SET ACCEL. Release the control when the desired vehicle speed is reached or
- Press and release SET ACCEL to operate the Tap-Up function. Each press will increase the set speed by 1.6 km/h (1 mph) or
- Accelerate with your accelerator pedal. When the desired vehicle speed is reached, press and release SET ACCEL.



You can accelerate with the accelerator pedal at any time during speed control usage. Releasing the accelerator pedal will return your vehicle to the previously programmed set speed.

### To set a lower set speed

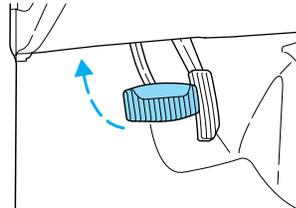
- Press and hold COAST. Release the control when the desired speed is reached or
- Press and release COAST to operate the Tap-Down function. Each press will decrease the set speed by 1.6 km/h (1 mph) or
- Depress the brake pedal. When the desired vehicle speed is reached, press SET ACCEL.



## Driver Controls

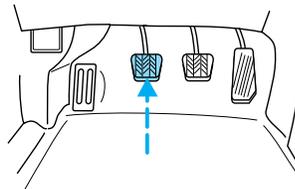
### To disengage speed control

- Depress the brake pedal or

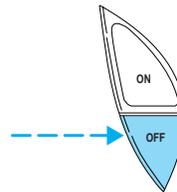


- Depress the clutch pedal (if equipped).

Disengaging the speed control will not erase the previously programmed set speed.

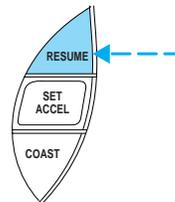


Pressing OFF will erase the previously programmed set speed.



### To return to a previously set speed

- Press RESUME. For RESUME to operate, the vehicle speed must be faster than 48 km/h (30 mph).



## Driver Controls

### OVERDRIVE CONTROL (IF EQUIPPED)

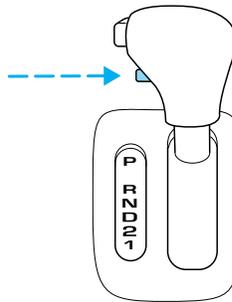
#### Activating overdrive

**D** (Overdrive) is the normal drive position for the best fuel economy.

The overdrive function allows automatic upshifts and downshifts through all available gears.

#### Deactivating overdrive

Press the Transmission Control Switch (TCS) located on the gearshift. The O/D OFF indicator light will illuminate on the instrument cluster. The transmission will operate in all gears except overdrive.



To return to normal overdrive mode, press the Transmission Control Switch again. The O/D OFF indicator light will no longer be illuminated.

When you shut off and re-start your vehicle, the transmission will automatically return to normal **D** (Overdrive) mode.

For additional information about the gearshift and the transmission control switch operation refer to the *Automatic Transmission Operation* section of the *Driving* chapter.

### CENTER CONSOLE

Your vehicle may be equipped with a variety of console features. These include:

- Dual cupholders
- Auxiliary power point
- Coin holder slots (if equipped)
- Convertible top control (if equipped)

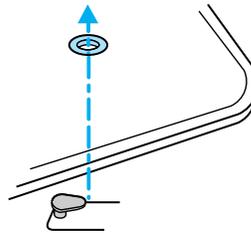
## Driver Controls



Use only soft cups in the cupholder. Hard objects can injure you in a collision.

### POSITIVE RETENTION FLOOR MAT (IF EQUIPPED)

Position the floor mat so that the eyelet is over the pointed end of the retention post and rotate forward to lock in. Make sure that the mat does not interfere with the operation of the accelerator or the brake pedal. To remove the floor mat, reverse the installation procedure.



### TRUNK REMOTE CONTROL

The remote trunk release control is located in the glove compartment. Press to open trunk.

### CONVERTIBLE (IF EQUIPPED)

Do not store articles behind rear seat. Articles stored in the convertible top stowage compartment may break the rear glass window when the top is lowered.

#### Lowering the convertible top

The convertible top can be lowered with the side windows either up or down.

The convertible top **will not operate** unless the parking brake is engaged. Do not lower the top while the vehicle is moving because the top may be severely damaged. Also, do not lower the top when the top material is wet.

To lower the convertible top:

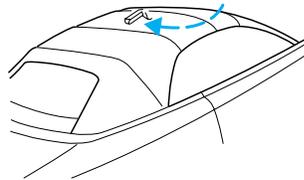
1. Bring vehicle to a complete stop. Engage the parking brake. Key must be in the ON position.
2. Check the convertible top stowage compartment behind the rear seat to be sure it is empty and ready to receive the top.

## Driver Controls

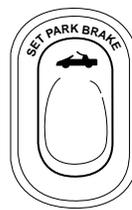
3. Unclamp the top from the windshield header at both the right and left sides by pulling each clamp rearward until the hook in the windshield header is free. The clamps are flush with the header when in the closed position.

4. Close the windshield header clamps immediately after disengagement, to avoid cutting the top material and to permit installation of the vinyl boot.

5. If the top has not been lowered for some time and sticks to the windshield header, push the front of the top up slightly with your hand to loosen it.



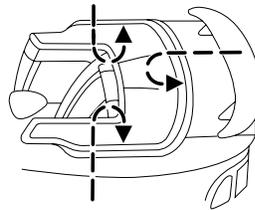
6. Push the convertible top switch on the console in front of the armrest and hold until the top is completely stored.



7. Disengage the parking brake.

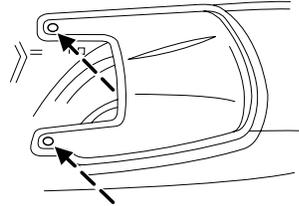
### Installation of the boot

1. Push boot rearward and engage boot under the body molding at the rear and sides.

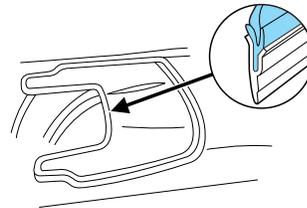


## Driver Controls

2. Fasten snap on boot to quarter trim panel on both sides of the vehicle.

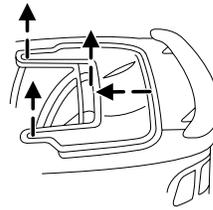


3. Insert boot tongue into groove located on rear of seat.



4. To remove, unfasten the snaps and the boot tongue.

5. Pull forward and lift off.



### Raising the convertible top

The convertible top **will not operate** unless the parking brake is engaged. Do not raise the top while the vehicle is moving because the top may be severely damaged.

To raise the convertible top:

1. Bring the vehicle to a complete stop. Engage the parking brake. Key must be in the ON position.
2. Remove the boot cover and store it in the luggage compartment.
3. Lower the front and rear side windows.
4. Push the convertible top button, holding it until the top unfolds and moves forward toward the windshield header.

## Driver Controls

5. Open both top clamps before the top meets the windshield header
6. Continue to use the top motor to raise the top until it has reached the fully closed position flush to the header.
7. The two pins under the forward edge of the top should seat themselves in the matching holes in the header.
8. To fasten both clamps securely, push the clamp handles into the header on the top until they are flush with the header. Pulling down on the header at the center grip while closing the latches may assist in fastening the clamps.
9. Raise the front and rear side windows.
10. Disengage the parking brake.

## Locks and Security

### KEYS

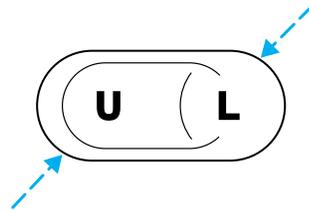
The key operates all locks on your vehicle. In case of loss, replacement keys are available from your dealer.

You should always carry a second key with you in a safe place in case you require it in an emergency.

Refer to *SecuriLock<sup>SM</sup> Passive Anti-Theft System* for more information.

### POWER DOOR LOCKS

Press U to unlock all doors and L to lock all doors.



### INTERIOR LUGGAGE COMPARTMENT RELEASE

Your vehicle is equipped with a mechanical interior luggage compartment release handle that provides a means of escape for children and adults in the event they become locked inside the luggage compartment.

Adults are advised to familiarize themselves with the operation and location of the release handle.

## Locks and Security

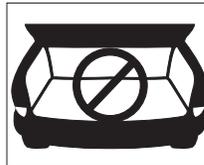
To open the luggage compartment door (lid) from within the luggage compartment, pull the illuminated “T” shaped handle and push up on the trunk lid. The handle is composed of a material that will glow for hours in darkness following brief exposure to ambient light.



The “T” shaped handle will be located either on the luggage compartment door (lid) or inside the luggage compartment near the tail lamps.



Keep vehicle doors and luggage compartment locked and keep keys and remote transmitters out of a child's reach. Unsupervised children could lock themselves in an open trunk and risk injury. Children should be taught not to play in vehicles.



## Locks and Security



On hot days, the temperature in the trunk or vehicle interior can rise very quickly. Exposure of people or animals to these high temperatures for even a short time can cause death or serious heat-related injuries, including brain damage. Small children are particularly at risk.

### REMOTE ENTRY SYSTEM

This device complies with part 15 of the FCC rules and with RS-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.

**Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

The remote entry system allows you to:

- lock or unlock all vehicle doors without a key
- open the trunk
- activate the panic alarm
- confirms that the vehicle is locked with a short "beep" from the horn.

The remote entry features only operate with the ignition in the LOCK position.

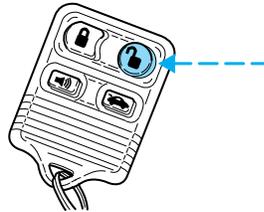
If there is any potential remote keyless entry problem with your vehicle, ensure **ALL remote entry transmitters** are brought to the dealership, to aid in troubleshooting.

## Locks and Security

### Unlocking the doors

Press this control to unlock the driver's door. The interior lamps will illuminate.

With the all-door remote entry system, press the control a second time within three seconds to unlock the passenger door.



### Locking the doors

Press this control to lock all doors.

To confirm all doors are closed and locked, press the control a second time within three seconds. The doors will lock again, the horn will chirp and the lamps will flash.

If any of the doors are ajar, the horn will make two quick chirps and the chime may sound, reminding you to properly close all doors.

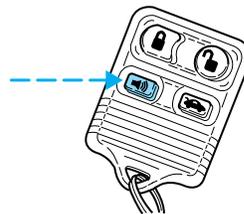


### Sounding a panic alarm

Press this control to activate the alarm.

To deactivate the alarm, press the control again or turn the ignition to ACC or ON.

Panic alarm will only operate with the ignition in the OFF position.

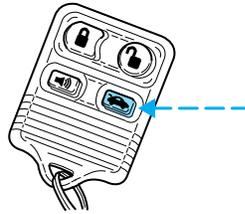


## Locks and Security

### Opening the trunk

Press the control once to open the trunk.

Ensure that the trunk is closed and latched before driving your vehicle. Failure to latch the trunk may cause objects to fall out of the trunk or block the rear view. This feature will not work with the transmission out of P (Park) or N (Neutral) if the ignition is in either the ACC or ON position.



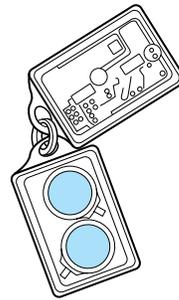
### Replacing the batteries

The transmitter is powered by two coin type three-volt lithium batteries. Typical operating range will allow you to be up to 10 meters (33 feet) away from your vehicle. A decrease in operating range can be caused by:

- Weather conditions
- Nearby radio towers
- Structures around the vehicle
- Other vehicles parked next to the vehicle

To replace the batteries:

1. Twist a thin coin between the two halves of the transmitter near the key ring. DO NOT TAKE THE FRONT PART OF THE TRANSMITTER APART.



2. Place the positive (+) side of new batteries down. Refer to the diagram inside the transmitter unit.

3. Snap the two halves back together.

## Locks and Security

Replacement of the battery will **not** cause the remote transmitter to become deprogrammed from your vehicle. The remote transmitter should operate normally after battery replacement.

### Replacing lost transmitters

- Take all your vehicle's transmitters to your dealer if service is required.
- If you purchase additional transmitters (up to four may be programmed into memory), perform the following procedure.



To reprogram the transmitters yourself, place the key in the ignition and turn from LOCK to OFF and cycle between OFF and ON eight times in rapid succession (within 10 seconds) ending in ON. After doors lock/unlock, press any control on all transmitters (up to four). With each control press of the transmitters, the door should cycle (lock/unlock) to confirm programming. When completed, turn the ignition to OFF. The door locks should cycle (lock/unlock) one last time to confirm completion of programming.

All transmitters **must** be programmed at the same time.

### Illuminated entry

The interior lamps illuminate when the remote entry system is used to unlock the door(s) or sound the personal alarm.

The system automatically turns off after 25 seconds or when the ignition is turned to the START/RUN or ACC position. The dome lamp control (if equipped) must **not** be set to the OFF position for the illuminated entry system to operate.

## Locks and Security

The inside lights will not turn off if:

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

The battery saver will shut off the interior lamps 30 minutes after the ignition has been turned to the OFF position, 10 minutes after if the door is left open, and 30 minutes after if the trunk is left open or the dome lamp control is left on.

### **SECURILOCK™ PASSIVE ANTI-THEFT SYSTEM**

SecuriLock™ passive anti-theft system is an engine immobilization system. This system is designed to prevent the engine from being started unless a **coded key programmed to your vehicle** is used.

The SecuriLock™ passive anti-theft 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.

### **THEFT INDICATOR**

The theft indicator is the flashing red indicator located on top of the instrument panel.

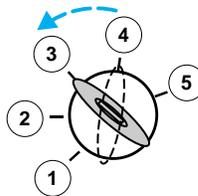
- When the ignition is in the OFF position, the indicator will flash once every 2 seconds to indicate the SecuriLock™ system is functioning as a theft deterrent.
- When the ignition is in the ON position, the indicator will glow for 3 seconds to indicate normal system functionality.

If a problem occurs with the SecuriLock™ system, the indicator will flash rapidly or glow steadily when the ignition is in the ON position. If this occurs, the vehicle should be taken to an authorized dealer for service.

## Locks and Security

### Automatic arming

The vehicle is armed immediately after switching the ignition to the 3 (OFF) position. The **THEFT** indicator in the instrument cluster will flash every two seconds when the vehicle is armed.



### Automatic disarming

Switching the ignition to the 4 (ON) position with a **coded key** disarms the vehicle. The **THEFT** indicator will illuminate for three seconds and then go out. If the **THEFT** indicator stays on for an extended period of time or flashes rapidly, have the system serviced by your dealership or a qualified technician.

### Key information

Your vehicle is supplied with **two coded keys**. Only a **coded key** will start your vehicle. Spare coded keys can be purchased from your dealership. Your dealership can program your key or you can “do it yourself.” Refer to *Programming spare keys*.

The following items may prevent the vehicle from starting:

- Large metallic objects
- Electronic devices on the key chain that can be used to purchase gasoline or similar items
- A second key on the same key ring as the **coded key**

If any of these items are present, you need to keep these objects from touching the **coded key** while starting the engine. These objects and devices cannot damage the **coded key**, but can cause a momentary “no start” condition if they are too close to the key during engine start. If a problem occurs,

## Locks and Security

turn ignition OFF and restart the engine with all other objects on the key ring held away from the ignition key. Check to make sure the **coded key** is an approved Ford **coded key**.

If your keys are lost or stolen you will need to do the following:

- Use your spare key to start the vehicle, or
- Have your vehicle towed to a dealership or a locksmith. The key codes will need to be erased from your vehicle and new key codes will need to be re-coded.

Replacing coded keys can be very costly and you may want to store an extra programmed key away from the vehicle in a safe place to prevent an unforeseen inconvenience.

The correct **coded key** must be used for your vehicle. The use of the wrong type of **coded key** may lead to a “no start” condition.

**If an unprogrammed key is used in the ignition it will cause a “no start” condition.**

### Programming spare keys

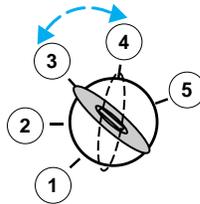
A maximum of eight keys can be coded to your vehicle. Only SecuriLock<sup>®</sup> keys can be used. To program a **coded key** yourself, you will need two previously programmed **coded keys** (keys that already operate your vehicle's engine) and the new unprogrammed key(s) readily accessible for timely implementation of each step in the procedure.

If two previously programmed coded keys are not available, you must bring your vehicle to your dealership to have the spare coded key(s) programmed.

Please read and understand the entire procedure before you begin.

## Locks and Security

1. Insert the first previously programmed **coded key** into the ignition and turn the ignition from 3 (OFF) to 4 (ON) (maintain ignition in 4 (ON) for at least one second).



2. Turn ignition to 3 (OFF) then 2 (LOCK) and remove the first **coded key** from the ignition.

3. Within ten seconds of removing the first **coded key**, insert the second previously programmed **coded key** into the ignition and turn the ignition from 3 (OFF) to 4 (ON) (maintain ignition in 4 (ON) for at least one second but no more than ten seconds).

4. Turn the ignition to 3 (OFF) then 2 (LOCK) and remove the second **coded key** from the ignition.

5. Within 20 seconds of removing the second **coded key**, insert the new unprogrammed key (new key/valet key) into the ignition and turn the ignition from 3 (OFF) to 4 (ON) (maintain ignition in 4 (ON) for at least one second). This step will program your new key to a coded key.

6. To program additional new unprogrammed key(s), repeat this procedure from step 1.

If successful, the new coded key(s) will start the vehicle's engine and the theft indicator will illuminate for three seconds and then go out.

If not successful, the new coded key(s) will not start the vehicle's engine and the theft indicator will flash on and off and you may repeat steps 1 through 6. If failure repeats, bring your vehicle to your dealership to have the new spare key(s) programmed.

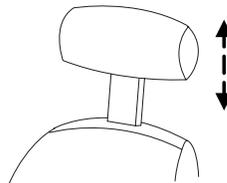
## Seating and Safety Restraints

### SEATING

#### Adjustable head restraints (if equipped)

Your vehicle's seats may be equipped with head restraints which are vertically adjustable. The purpose of these head restraints is to help limit head motion in the event of a rear collision. To properly adjust your head restraints, lift the head restraint so that it is located directly behind your head or as close to that position as possible. Refer to the following to raise and lower the head restraints.

The head restraints can be moved up and down.



#### Adjusting the front manual seat



Never adjust the driver's seat or seatback when the vehicle is moving.



Do not pile cargo higher than the seatbacks to reduce the risk of injuring people in a collision or sudden stop.



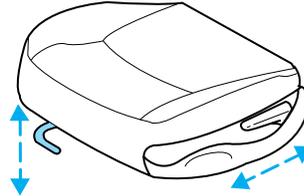
Always drive and ride with your seatback upright and the lap belt snug and low across the hips.



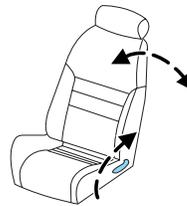
Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

## Seating and Safety Restraints

Lift handle to move seat forward or backward.

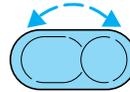


Pull lever up to adjust seatback.



### Using the power lumbar support (if equipped)

The power lumbar control is located on the outboard side of the seat.



Press one side of the control to adjust firmness.

Press the other side of the control to adjust softness.

### Adjusting the front power seat (if equipped)



Never adjust the driver's seat or seatback when the vehicle is moving.



Do not pile cargo higher than the seatbacks to avoid injuring people in a collision or sudden stop.



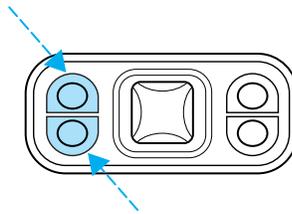
Always drive and ride with your seatback upright and the lap belt snug and low across the hips.

## Seating and Safety Restraints

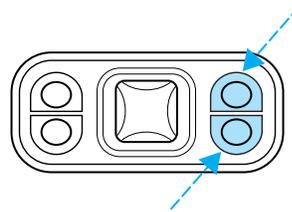
 Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

The control is located on the front outboard corner of the driver's seat.

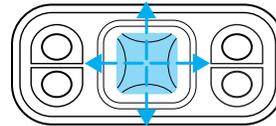
Press front to raise or lower the front portion of the seat cushion.



Press rear to raise or lower the rear portion of the seat cushion.

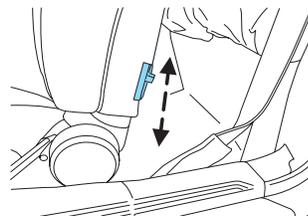


Press the control to move the seat forward, backward, up or down.



### REAR SEATS

Use the seatback release to fold the back of the front seat forward for rear seat passenger entry or exit. This release handle is located on the lower

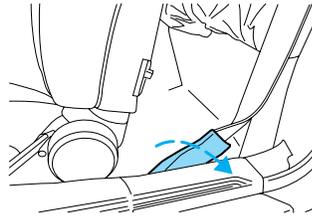


## Seating and Safety Restraints

outboard back of the seat. The seatback locks automatically when returned to the normal position.

The rotating boot on the front seat belt is designed to allow rear seat entry/exit. To enter the rear seat:

1. Remove safety belt from safety belt guide on top of front seat.
2. Rotate the safety belt boot rearward.



3. Enter the rear seat in front of the safety belt.
4. Rotate the safety belt boot forward and place the belt in the belt guide on the seat back to allow use by the front driver/passenger.

### 2nd seat/split-folding rear seat (if equipped)

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

To lower the seatback(s) from inside the vehicle, pull tab to release seat back and then fold seatback down.



When raising the seatback(s), make sure you hear the seat latch into place.

## SAFETY RESTRAINTS

### Safety restraints precautions



Always drive and ride with your seatback upright and the lap belt snug and low across the hips.

## Seating and Safety Restraints

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

 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 collision.

 All occupants of the vehicle, including the driver, should always properly wear their safety belts, even when an air bag (SRS) is provided.

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

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

 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.

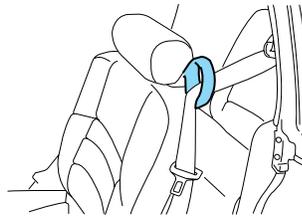
## Seating and Safety Restraints

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

 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.

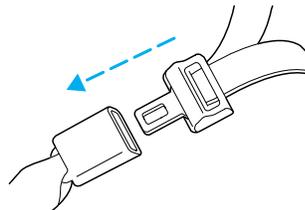
### Combination lap and shoulder belts

Before fastening the safety belt, make sure the shoulder belt passes through the belt guide on the top of the seatback.



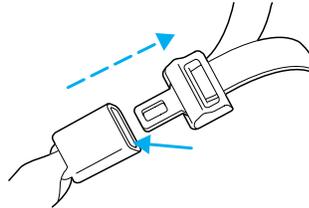
Coupe shown, convertible is similar and safety belt must also pass through the belt guide.

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.



## Seating and Safety Restraints

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



The front and rear outboard safety restraints in the vehicle are combination lap and shoulder belts. The front passenger and rear seat outboard safety belts have two types of locking modes described below:

### Energy Management Feature

- This vehicle has a safety belt system with an energy management feature at the front seating positions to help further reduce the risk of injury in the event of a head-on collision.
- This safety belt system has a retractor assembly that is designed to pay out webbing in a controlled manner. This feature is designed to help reduce the belt force acting on the occupant's chest.

 After any vehicle collision, the safety belt system at all outboard seating positions (except driver, which has no “automatic locking retractor” feature) must be checked by a qualified technician 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.

 **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 according to the procedures in Workshop Manual.

## Seating and Safety Restraints



Failure to replace the Belt and Retractor assembly could increase the risk of injury in collisions.

### Vehicle sensitive mode

The vehicle sensitive mode is the normal retractor mode, allowing 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 approximately 8 km/h (5 mph) or more, the combination safety belts will lock to help reduce forward movement of the driver and passengers.

The safety belt system can also be made to lock manually by quickly pulling on the shoulder belt.

### 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.

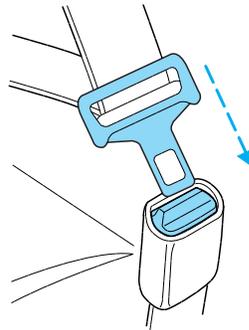
### ***When to use the automatic locking mode***

- **Any time** a child safety seat is installed in a passenger front or outboard rear seating position (if equipped). Children 12 years old and under should be properly restrained in the rear seat whenever possible. Refer to *Safety Restraints for Children* or *Safety Seats for Children* later in this chapter.

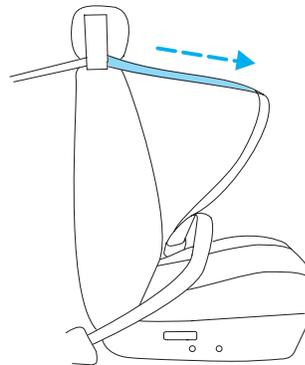
## Seating and Safety Restraints

### ***How to use the automatic locking mode***

- Buckle the combination lap and shoulder belt.



- Grasp the shoulder portion and pull downward until the entire belt is extracted.



- 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***

 Ford Motor Company recommends that all safety belt assemblies and attaching hardware should be inspected by a qualified technician after any collision. Safety belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

## Seating and Safety Restraints

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

 After any vehicle collision, the front passenger and rear outboard seat belt systems must be checked by a qualified technician to verify that the “automatic locking retractor” feature for child seats is still functioning properly. In addition, all seat belts should be checked for proper function.

 **BELT AND RETRACTOR ASSEMBLY MUST BE REPLACED** if the seat belt assembly “automatic locking retractor” feature or any other seat belt function is not operating properly when checked according to the procedures in Workshop Manual.

 Failure to replace the Belt and Retractor assembly could increase the risk of injury in collisions.

### **Safety belt warning light and indicator chime**

The seat belt warning light illuminates in the instrument cluster and a chime sounds to remind the occupants to fasten their safety belts.

## Seating and Safety Restraints

### Conditions of operation

If...	Then...
The driver's safety belt is not buckled before the ignition switch is turned to the ON position...	The safety belt warning light illuminates 1-2 minutes and the warning chime sounds 4-8 seconds.
The driver's safety belt is buckled while the indicator light is illuminated and the warning chime is sounding...	The safety belt warning light and warning chime turn off.
The driver's safety belt is buckled before the ignition switch is turned to the ON position...	The safety belt warning light will turn on for 3 seconds and then turn off. The indicator chime will remain off.

### BeltMinder

The BeltMinder feature is a supplemental warning to the safety belt warning function. This feature provides additional reminders to the driver that the driver's safety belt is unbuckled by intermittently sounding a chime and illuminating the safety belt warning lamp in the instrument cluster.

If...	Then...
The driver's safety belt is not buckled approximately 5 seconds after the safety belt warning light has turned off...	The BeltMinder feature is activated - the safety belt warning light illuminates and the warning chime sounds for 6 seconds every 30 seconds, repeating for approximately 5 minutes or until safety belt is buckled.
The driver's safety belt is buckled while the safety belt indicator light is illuminated and the safety belt warning chime is sounding...	The BeltMinder feature will not activate.

## Seating and Safety Restraints

If...	Then...
The driver's safety belt is buckled before the ignition switch is turned to the ON position...	The BeltMinder feature will not activate.

The purpose of the BeltMinder is to remind occasional wearers to wear safety belts all of the time.

The following are reasons most often given for not wearing safety belts: (All statistics based on U.S. data)

Reasons given...	Consider...
"Crashes are rare events"	<b>36700 crashes occur every day.</b> The more we drive, the more we are exposed to "rare" events, even for good drivers. <i>1 in 4 of us will be seriously injured in a crash during our lifetime.</i>
"I'm not going far"	<b>3 of 4</b> fatal crashes occur within <b>25</b> miles of home.
"Belts are uncomfortable"	We design our safety belts to enhance comfort. If you are uncomfortable - try different positions for the safety belt upper anchorage and seatback which should be as upright as possible; this can improve comfort.
"I was in a hurry"	<b>Prime time for an accident.</b> BeltMinder reminds us to take a few seconds to buckle up.
"Seat belts don't work"	<b>Safety belts</b> , when used properly, <b>reduce risk of death</b> to front seat occupants by <b>45% in cars</b> , and by <b>60% in light trucks</b> .
"Traffic is light"	<b>Nearly 1 of 2 deaths occur in single-vehicle crashes</b> , many when no other vehicles are around.
"Belts wrinkle my clothes"	Possibly, but a serious crash can do much more than wrinkle your clothes, particularly if you are unbelted.

## Seating and Safety Restraints

Reasons given...	Consider...
“The people I’m with don’t wear belts”	Set the example, teen deaths occur 4 times more often in vehicles with TWO or MORE people. Children and younger brothers/sisters imitate behavior they see.
“I have an air bag”	Air bags offer greater protection when used with safety belts. Frontal airbags are not designed to inflate in rear and side crashes or rollovers.
“I’d rather be thrown clear”	Not a good idea. <b>People</b> who are <b>ejected are 40 times more likely to DIE</b> . Safety belts help prevent ejection, WE CAN’T “PICK OUR CRASH”.



Do not sit on top of a buckled safety belt to avoid the Belt Minder chime. Sitting on the safety belt will increase the risk of injury in an accident. To disable (one-time) or deactivate the Belt Minder feature please follow the directions stated below.

### **One time disable**

Any time the safety belt is buckled and then unbuckled during an ignition ON cycle, BeltMinder will be disabled for that ignition cycle only.

### **Deactivating/activating the BeltMinder feature**

*Read steps 1 - 9 thoroughly before proceeding with the deactivation/activation programming procedure.*

The BeltMinder feature can be deactivated/activated by performing the following procedure:

Before following the procedure, make sure that:

- The parking brake is set.
- The gearshift is in P (Park) (automatic transmission) or the neutral position (manual transmission).
- The ignition switch is in the OFF position.
- All vehicle doors are closed.

## Seating and Safety Restraints

- The driver's safety belt is unbuckled.
- The parklamps/headlamps are in OFF position (If vehicle is equipped with Autolamps, this will not affect the procedure).



To reduce the risk of injury, do not deactivate/activate the Belt Minder feature while driving the vehicle.

### **BeltMinder activation and deactivation procedure**

1. Turn the ignition switch to the RUN (or ON) position. (DO NOT START THE ENGINE.)
2. Wait until the safety belt warning light turns off. (Approximately 1-2 minutes.)
  - Steps 3-5 must be completed within 60 seconds or the procedure will have to be repeated.
3. Buckle then unbuckle the safety belt three times, ending with the safety belt unbuckled. This can be done before or during BeltMinder warning activation.
4. Turn on the parklamps/headlamps, turn off the parklamps/headlamps.
5. Buckle then unbuckle the safety belt three times, ending with the safety belt unbuckled.
  - After step 5 the safety belt warning light will be turned on for three seconds.
6. Within seven seconds of the safety belt warning light turning off, buckle then unbuckle the safety belt.
  - This will disable BeltMinder if it is currently enabled, or enable BeltMinder if it is currently disabled.
7. Confirmation of disabling BeltMinder is provided by the safety belt warning light flashing four times per second for three seconds.
8. Confirmation of enabling BeltMinder is provided by:
  - The safety belt warning light flashing four times per second for three seconds.

## Seating and Safety Restraints

- Followed by three seconds with the safety belt warning light off.
- Once again, the safety belt warning light will flash four times per second for three seconds.

9. After receiving confirmation, the deactivation/activation procedure is complete.

### **Safety belt extension assembly**

If the safety belt is too short when fully extended, there is a 20 cm (8 inch) safety belt extension assembly that can be added (part number 611C22). This assembly can be obtained from your dealer at no cost.

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.

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

### **Safety belt maintenance**

Inspect the safety belt systems periodically to make sure they work properly and are not damaged. Inspect the safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All safety belt assemblies, including retractors, buckles, front seat belt buckle assemblies, buckle support assemblies (slide bar-if equipped), shoulder belt height adjusters (if equipped), shoulder belt guide on seatback (if equipped), child safety seat tether bracket assemblies (if equipped), LATCH child seat tether anchors and lower anchors (if equipped), and attaching hardware, should be inspected after a collision. Ford Motor Company recommends that all safety belt assemblies used in vehicles involved in a collision be replaced. However, if the collision was minor and a qualified technician finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety

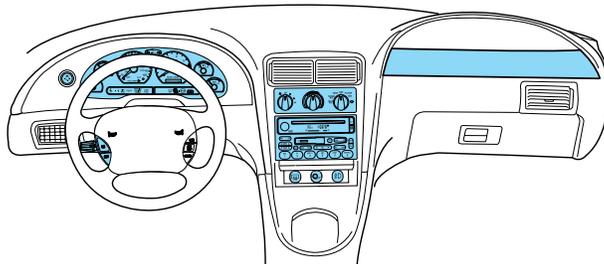
## Seating and Safety Restraints

belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

 Failure to inspect and if necessary replace the safety belt assembly under the above conditions could result in severe personal injuries in the event of a collision.

Refer to *Cleaning and maintaining the safety belts* in the *Cleaning* chapter.

### AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



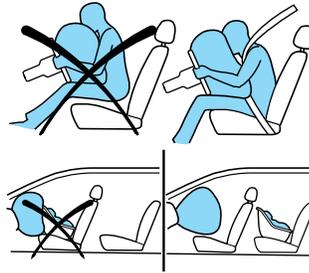
Your vehicle is equipped with a crash sensing and diagnostic module which records information about the air bag and sensor systems. In the event of a collision this module may save information related to the collision including information about the air bag system and impact severity. This information will assist Ford Motor Company in servicing the vehicle and in helping to better understand real world collisions and further improve the safety of future vehicles.

## Seating and Safety Restraints

### Important supplemental restraint system (SRS) precautions

The supplemental restraint system is designed to work with the safety belt to help protect the driver and right front passenger from certain upper body injuries.

Air bags DO NOT inflate slowly or gently and the risk of injury from a deploying air bag is greatest close to the trim covering the air bag module.



 All occupants of the vehicle, including the driver, should always properly wear their safety belts, even when an air bag (SRS) is provided.

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

 National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of at least 25 cm (10 inches) between an occupant's chest and the driver air bag module.

 Never place your arm over the air bag module as a deploying air bag can result in serious arm fractures or other injuries.

Steps you can take to properly position yourself away from the air bag:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.

## Seating and Safety Restraints

- Recline the seat slightly (one or two degrees) from the upright position.

 Do not put anything on or over the air bag module. Placing objects on or over the air bag inflation area may cause those objects to be propelled by the air bag into your face and torso causing serious injury.

 Do not attempt to service, repair, or modify the air bag supplemental restraint systems or its fuses. See your Ford or Lincoln Mercury dealer.

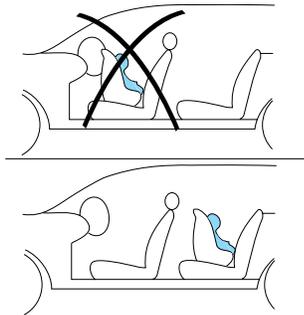
 Modifications to the front end of the vehicle, including frame, bumper, front end body structure and tow hooks may affect the performance of the air bag sensors increasing the risk of injury. Do not modify the front end of the vehicle.

### Children and air bags

For additional important safety information, read all information on safety restraints in this guide.

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 collision.

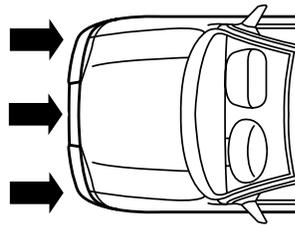


## Seating and Safety Restraints

 Air bags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active air bag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

### How does the air bag supplemental restraint system work?

The air bag SRS is designed to activate when the vehicle sustains longitudinal deceleration sufficient to cause the sensors to close an electrical circuit that initiates air bag inflation.



The fact that the air bags did not inflate in a collision does not mean that something is wrong with the system. Rather, it means the forces were not of the type sufficient to cause activation. Air bags are designed to inflate in frontal and near-frontal collisions, not rollover, side-impact, or rear-impacts unless the collision causes sufficient longitudinal deceleration.

The air bags inflate and deflate rapidly upon activation. After air bag 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 (e.g., baking soda) that result from the combustion process that inflates the air bag. Small



## Seating and Safety Restraints

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 air bag may also cause abrasions, swelling or temporary hearing loss. Because air bags 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 air bag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the air bag module as possible while maintaining vehicle control.

The SRS consists of:

- driver and passenger air bag modules (which include the inflators and air bags)
- one or more impact and safing sensors
- a readiness light and tone
- a diagnostic module
- and the electrical wiring which connects the components

The diagnostic module monitors its own internal circuits and the supplemental air bag electrical system warning (including the impact sensors), the system wiring, the air bag system readiness light, the air bag back up power and the air bag ignitors.



Several air bag system components get hot after inflation. Do not touch them after inflation.



If the air bag has deployed, **the air bag will not function again and must be replaced immediately.** If the air bag is not replaced, the unrepaired area will increase the risk of injury in a collision.

## Seating and Safety Restraints

### Determining if the system is operational

The SRS uses a readiness light in the instrument cluster or a tone to indicate the condition of the system. Refer to *Air bag readiness* section in the *Instrument cluster* chapter. Routine maintenance of the air bag 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. **AIR BAG**
- The readiness light will not illuminate immediately after ignition is turned on.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem and/or light are repaired.

If any of these things happen, even intermittently, have the SRS serviced at your dealership or by a qualified technician immediately. Unless serviced, the system may not function properly in the event of a collision.

### Disposal of air bags and air bag equipped vehicles (including pretensioners)

For disposal of air bags or air bag equipped vehicles, see your local dealership or qualified technician. Air bags **MUST BE** disposed of by qualified personnel.

### SAFETY RESTRAINTS FOR CHILDREN

See the following sections for directions on how to properly use safety restraints for children. Also see *Air bag supplemental restraint system (SRS)* in this chapter for special instructions about using air bags.

### Important child restraint precautions

You are required by law to use safety restraints for children in the U.S. and Canada. If small children ride in your vehicle (generally children who are four

## Seating and Safety Restraints

years old or younger and who weigh 18 kg [40 lbs] or less), you must put them in safety seats made especially for children. Check your local and state or provincial laws for specific requirements regarding the safety of children in your vehicle.



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 collision.

Always follow the instructions and warnings that come with any infant or child restraint you might use.

**When possible, always place children under age 12 in the rear seat of your vehicle.** Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating positions.

### Children and safety belts

If the child is the proper size, restrain the child in a safety seat. Children who are too large for child safety seats (as specified by your child safety seat manufacturer) should always wear safety belts.

Follow all the important safety restraint and air bag precautions that apply to adult passengers in your vehicle.

If the shoulder belt portion of a combination lap and shoulder belt can be positioned so it does not cross or rest in front of the child's face or neck, the child should wear the lap and shoulder belt. Moving the child closer to the center of the vehicle may help provide a good shoulder belt fit.



Do not leave children, unreliable adults, or pets unattended in your vehicle.

### Child booster seats

Children outgrow a typical convertible or toddler seat when they weigh 40 pounds and are around 4

## Seating and Safety Restraints

years of age. Although the lap/shoulder belt will provide some protection, these children are still too small for lap/shoulder belts to fit properly, which could increase the risk of serious injury.

To improve the fit of both the lap and shoulder belt on children who have outgrown child safety seats, Ford Motor Company recommends use of a belt-positioning booster.

Booster seats position a child so that safety belts fit better. They lift the child up so that the lap belt rests low across the hips and the knees bend comfortably. Booster seats also make the shoulder belt fit better and more comfortably for growing children.

### When children should use booster seats

Children need to use booster seats from the time they outgrow the toddler seat until they are big enough for the vehicle seat and lap/shoulder belt to fit properly. Generally this is when they weigh about 80 lbs (about 8 to 12 years old).

Booster seats should be used until you can answer YES to ALL of these questions:

- Can the child sit all the way back against the vehicle seat back with knees bent comfortably at the edge of the seat 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?



## Seating and Safety Restraints

### **Types of booster seats**

There are two types of belt-positioning booster seats:

- Those that are backless.

If your backless booster seat has a removable shield, remove the shield and use the lap/shoulder belt. If a seating position has a low seat back and no head restraint, a backless booster seat may place your child's head (top of ear level) above the top of the seat. In this case, move the backless booster to another seating position with a higher seat back and lap/shoulder belts.



- Those with a high back.

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.



Both can be used in any vehicle in a seating position equipped with lap/shoulder belts if your child is over 40 lbs.

The shoulder belt should cross the chest, resting snugly on the center of the shoulder. The lap belt should rest low and snug across the hips, never up high across the stomach.

If the booster seat slides on the vehicle seat, placing a rubberized mesh sold as shelf or carpet liner under the booster seat may improve this condition.

### **The importance of shoulder belts**

Using a booster without a shoulder belt increases the risk of a child's head hitting a hard surface in a

## Seating and Safety Restraints

collision. For this reason, you should never use a booster seat with a lap belt only. It is best to use a booster seat with lap/shoulder belts in the back seat—the safest place for children to ride.

 Follow all instructions provided by the manufacturer of the booster seat.

 Never put the shoulder belt under a child's arm or behind the back because it eliminates the protection for the upper part of the body and may increase the risk of injury or death in a collision.

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

### SAFETY SEATS FOR CHILDREN



#### Child and infant or child safety seats

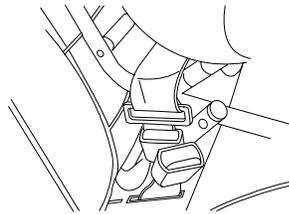
Use a safety seat that is recommended for the size and weight of the child. Carefully follow all of the manufacturer's instructions with the safety seat you

## Seating and Safety Restraints

put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

When installing a child safety seat:

- Review and follow the information presented in the *Air bag supplemental restraint system* (SRS) section in this chapter.
- Use the correct safety belt buckle for that seating position (the buckle closest to the direction the tongue is coming from).
- 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 seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode* (passenger side front and outboard rear seating positions) (if equipped) section in this chapter.



Ford recommends the use of a child safety seat having a top tether strap. Install the child safety seat in a seating position which is capable of providing a tether anchorage. For more information on top tether straps, refer to *Attaching child safety seats with tether straps*. in this chapter.

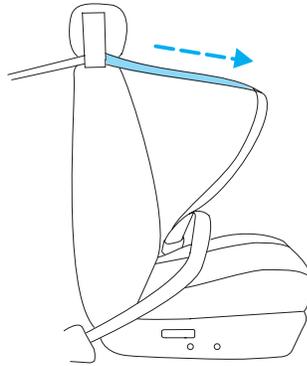


Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

## Seating and Safety Restraints

### Installing child safety seats in combination lap and shoulder belt seating positions

If you must use a forward facing child seat in the front seat (reminder - children 12 years old and under should always be properly restrained in the rear seat) **the shoulder belt must be routed through the belt guide at the top of the seatback**, refer to *Safety Restraints* earlier in this chapter for routing through the belt holder.



 Air bags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active air bag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

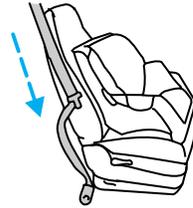
1. Position the child safety seat in a seat with a combination lap and shoulder belt.



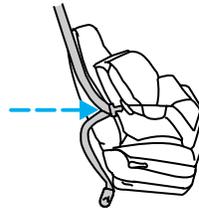
 Children 12 and under should be properly restrained in the rear seat whenever possible.

## Seating and Safety Restraints

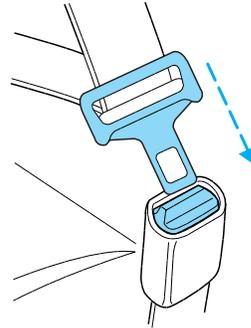
2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



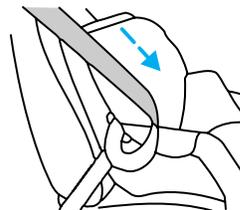
3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



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 extracted and a click is heard.



## Seating and Safety Restraints

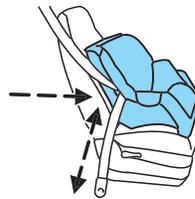
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

7. Pull the lap belt portion across the child seat toward the buckle and pull up on the shoulder belt while pushing down with your knee on the child seat.



8. Allow the safety belt to retract to remove any slack in the belt.

9. 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. There should be no more than one inch of movement for proper installation.



10. 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 two through nine.

Check to make sure the child seat is properly secured before each use.

### Attaching child safety seats with tether straps in addition to the safety belt

Most new forward-facing child safety seats include a tether strap which goes over the back of the seat and hooks to an anchoring point. 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.

## Seating and Safety Restraints

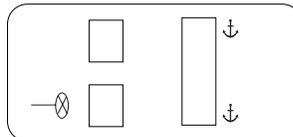
The rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats on the package tray behind the speakers (coupe) or on the lower backside of the seatback (convertible).

The tether anchors in your vehicle are either located under a cover marked with the child tether anchor symbol (shown with title) or are under a flap in the convertible top boot.

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



Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.



1. Position the child safety seat on the seat cushion.
2. Route the child safety seat tether strap over the back of the seat.

For vehicles with adjustable head restraints, route the tether strap under the head restraint and between the head restraint posts, otherwise route the tether strap over the top of the seatback.

3. Locate the correct anchor for the selected seating position as shown previously.



## Seating and Safety Restraints

### ***For Coupe only:***

4. Open the tether anchor covers.

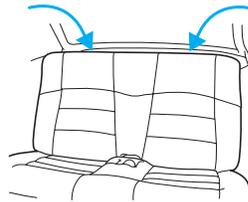


5. Clip the tether strap to the anchor as shown.

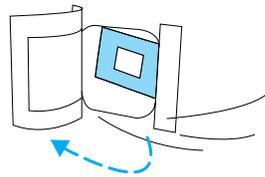


### ***For Convertible only:***

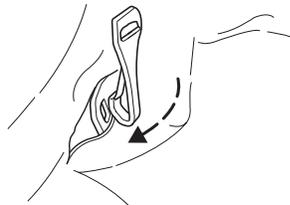
The tether anchors on the convertible are located on the lower backside of the seatback.



4. Access tether anchors located behind the seatback and pull away vinyl flap to expose anchors.



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



## Seating and Safety Restraints



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

6. Refer to the *Installing child safety seats in combination lap and shoulder belt seating positions* section of this chapter for further instructions to secure the child safety seat.

7. 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.

### **Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments (if equipped)**

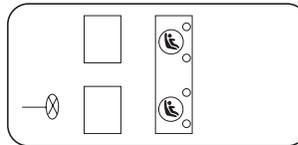
Some child safety seats have two rigid or webbing mounted attachments that connect to two anchors at certain seating positions in your vehicle. This type of child seat eliminates the need to use safety belts to attach the child seat. For forward-facing child seats, the tether strap must also be attached to the proper tether anchor. See *Attaching safety seats with tether straps* in this chapter.

## Seating and Safety Restraints

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



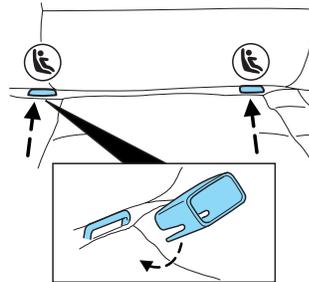
The center of the rear seat is **NOT** designed as a seating position. The LATCH anchors were not designed to be used with a child seat in the center position and there is no tether anchor available at the center. Putting a child seat in the center would also block access to the safety restraint buckles. Use as a seating position, with or without a child restraint, may increase the risk of injury or death.



Never attach two LATCH 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.

## Seating and Safety Restraints

The lower anchors for child seat installation are located at the rear section of the rear seat between the cushion and seat back. The LATCH anchors are below the locator symbols on the seat back. One pair of anchors are provided for each rear designated seating position.



Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments. Two plastic LATCH guides can be obtained at no charge from any Ford or Lincoln-Mercury Dealer. They snap onto the LATCH lower anchors in the seat to help attach a child seat with rigid attachments. The guides hold the seat trim away to expose the anchor and make it easier to attach some child seats.



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

If you install a child seat with rigid LATCH attachments, 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.

Each time you use the safety seat, check that the seat is properly attached to the lower anchors and tether anchor. Try to tilt the child seat from side to side. Also try to tug the seat forward. Check to see if the anchors hold the seat in place.



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

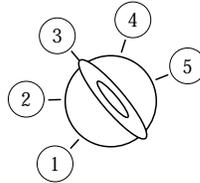
### STARTING

#### Positions of the ignition

1. ACCESSORY, allows the electrical accessories such as the radio to operate while the engine is not running.

2. LOCK, locks the steering wheel, automatic transmission gearshift lever and allows key removal. For vehicle equipped with a manual transmission, you must depress the ignition release lever to release the key.

3. OFF, shuts off the engine and all accessories without locking the steering wheel. This position also allows the automatic transmission shift lever to be moved from the P (Park) position without the brake pedal being depressed.



In the ignition OFF position, the automatic transmission shift lever can be moved from the P (Park) position without the brake pedal depressed. To avoid unwanted vehicle movement, always set the parking brake.

4. ON, all electrical circuits operational. Warning lights illuminated. Key position when driving.

5. START, cranks the engine. Release the key as soon as the engine starts.

#### Preparing to start your vehicle

Engine starting is controlled by the powertrain control system. This system meets all Canadian Interference-Causing Equipment standard requirements regulating the impulse electrical field strength of radio noise.

When starting a fuel-injected engine, avoid pressing the accelerator before or during starting. Only use

## Driving

the accelerator when you have difficulty starting the engine. For more information on starting the vehicle, refer to *Starting the engine* in this chapter.

 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.

 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.

 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. See *Guarding against exhaust fumes* in this chapter for more instructions.

 If you smell exhaust fumes inside your vehicle, have your dealer inspect your vehicle immediately. Do not drive if you smell exhaust fumes.

### **Important safety precautions**

A computer system controls the engine's idle revolutions per minute (RPM). When the engine starts, the idle RPM runs higher than normal in order to warm the engine. If the engine idle speed does not slow down automatically, have the vehicle checked. Do not allow the vehicle to idle for more than 10 minutes at high engine RPM.

Before starting the vehicle:

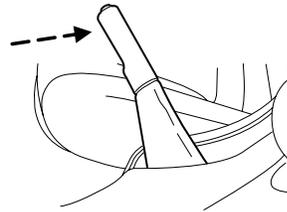
1. Make sure all vehicle occupants have buckled their safety belts. For more information on safety belts and their proper usage, refer to the *Seating and safety restraints* chapter.

## Driving

2. Make sure the headlamps and vehicle accessories are off.

If starting a vehicle with an automatic transmission:

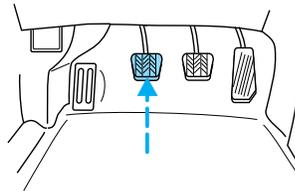
- Make sure the parking brake is set.



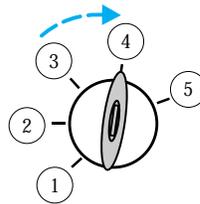
- Make sure the gearshift is in P (Park).

If starting a vehicle with a manual transmission:

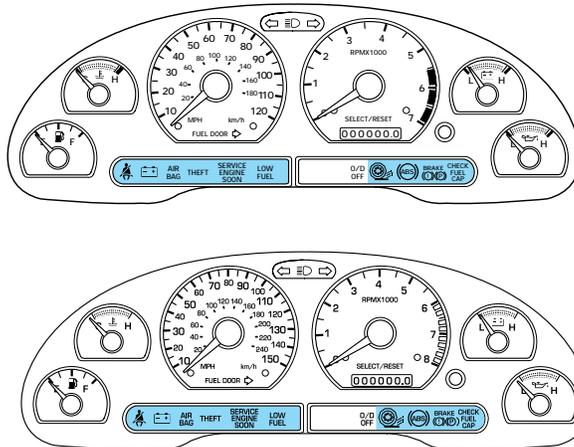
- Make sure the parking brake is set.
- Push the clutch pedal to the floor.



3. Turn the key to 4 (ON) without turning the key to 5 (START).



## Driving



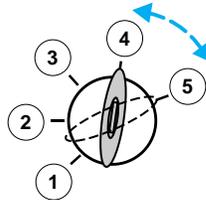
Make sure the corresponding lights illuminate or illuminate briefly. If a light fails to illuminate, have the vehicle serviced.

- If the driver's safety belt is fastened, the  light may not illuminate.

### Starting the engine

**Note:** Whenever you start your vehicle, release the key as soon as the engine starts. Excessive cranking could damage the starter.

1. Turn the key to 5 (START) without pressing the accelerator pedal and release as soon as the engine starts. The key will return to 4 (ON).



2. If the temperature is above  $-12^{\circ}\text{C}$  ( $10^{\circ}\text{F}$ ) and the engine does not start within five seconds on the first try, turn the key to OFF, wait 10 seconds and try again. If the engine does not start in two attempts, press the accelerator all the way to the floor and hold. Turn the key to the START position.

## Driving

3. If the temperature is below  $-12^{\circ}\text{C}$  ( $10^{\circ}\text{F}$ ) and the engine does not start in 15 seconds on the first try, turn the key OFF and wait 10 seconds and try again. If the engine does not start in two attempts, press the accelerator pedal all the way to floor and hold. Turn the key to START position.

4. When the engine starts, release the key, then release the accelerator pedal gradually as the engine speeds up.

5. After idling for a few seconds, apply the brake, shift into gear and drive.

### Using the engine block heater (if equipped)

An engine block heater warms the engine coolant, which improves starting, warms up the engine faster and allows the heater-defroster system to respond quickly. Use of an engine block heater is strongly recommended if you live in a region where temperatures reach  $-23^{\circ}\text{C}$  ( $-10^{\circ}\text{F}$ ) or below.

For best results, plug the heater in at least three hours before starting the vehicle. Using the heater for longer than three hours will not harm the engine, so the heater can be plugged in the night before starting the vehicle.



To prevent electrical shock, do not use your heater with ungrounded electrical systems or two-pronged (cheater) adapters.

### Guarding against exhaust fumes

Although odorless and colorless, carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.



If you ever smell exhaust fumes of any kind inside your vehicle, have your dealer inspect and fix your vehicle immediately. Do not drive if you smell exhaust fumes. These fumes are harmful and could kill you.

## Driving

Have the exhaust and body ventilation systems checked whenever:

- the vehicle is raised for service.
- the sound of the exhaust system changes.
- the vehicle has been damaged in a collision.



**WARNING:** Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### Important ventilating information

If the engine is idling while the vehicle is stopped in an open area for long periods of time, open the windows at least 2.5 cm (one inch).

Adjust the heating or air conditioning (if equipped) to bring in fresh air.

Improve vehicle ventilation by keeping all air inlet vents clear of snow, leaves and other debris.

### BRAKES

Your service brakes are self-adjusting. Refer to the scheduled maintenance guide for scheduled maintenance.

Occasional brake noise is normal and often does not indicate a performance concern with the vehicle's brake system. In normal operation, automotive brake systems may emit occasional or intermittent squeal or groan noises when the brakes are applied. Such noises are usually heard during the first few brake applications in the morning; however, they may be heard at any time while braking and can be aggravated by environmental conditions such as

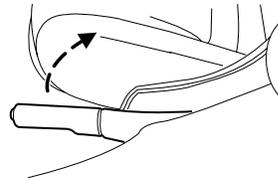
## Driving

cold, heat, moisture, road dust, salt or mud. If a “metal-to-metal,” “continuous grinding” or “continuous squeal” sound is present while braking, the brake linings may be worn-out and should be inspected by a qualified service technician.

 If you are driving down a long or steep hill, shift to a lower gear. Do not apply your brakes continuously, as they may overheat and become less effective.

### Parking brake (P)

Apply the parking brake whenever the vehicle is parked. To set the parking brake, apply the brake pedal and pull the parking brake handle up as far as possible.



The BRAKE warning lamp in the instrument cluster illuminates and remains illuminated (when the ignition is turned ON) until the parking brake is released.

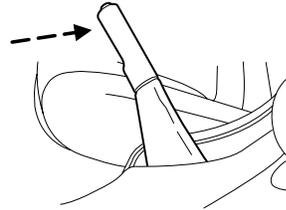


 Always set the parking brake fully and make sure that the gearshift is securely latched in P (Park) (automatic transmission) or in 1 (First Gear) (manual transmission).

The parking brake is not recommended to stop a moving vehicle. However, if the normal brakes fail, the parking brake can be used to stop your vehicle in an emergency. Since the parking brake applies only the rear brakes, the vehicle's stopping distance will increase greatly and the handling of your vehicle will be adversely affected.

## Driving

To release the parking brake, the brake handle may need to be pulled up slightly to release pressure before pushing in the button.

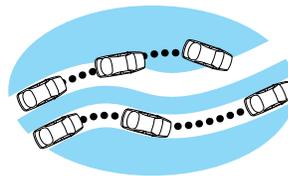


Push the button on the end of the parking brake handle and push the handle down as far as possible. Driving with the parking brake applied will cause the brakes to wear out quickly and reduce fuel economy.

### Anti-lock brake system (ABS)

On vehicles equipped with an anti-lock braking system (ABS), a noise from the hydraulic pump motor and pulsation in the pedal may be observed during ABS braking events. Pedal pulsation coupled with noise while braking under panic conditions or on loose gravel, bumps, wet or snowy roads is normal and indicates proper functioning of the vehicle's anti-lock brake system. The ABS performs a self-check after you start the engine and begin to drive away. A brief mechanical noise may be heard during this test. This is normal. If a malfunction is found, the ABS warning light will come on. If the vehicle has continuous vibration or shudder in the steering wheel while braking, the vehicle should be inspected by a qualified service technician.

The ABS operates by detecting the onset of wheel lockup during brake applications and compensates for this tendency. The wheels are prevented from locking even when the brakes are firmly applied. The accompanying illustration depicts the advantage of an ABS equipped vehicle (on bottom) to a non-ABS equipped vehicle (on top) during hard braking with loss of front braking traction.



### ABS warning lamp

The  warning lamp in the instrument cluster momentarily illuminates when the ignition is turned to the ON position. If the light does not illuminate momentarily at start up, remains on or continues to flash, the ABS needs to be serviced.

With the ABS light on, the anti-lock brake system is disabled and normal braking is still effective unless the brake warning light also remains illuminated with parking brake released. (If your brake warning lamp illuminates, have your vehicle serviced immediately.)



### Using ABS

- In an emergency or when maximum efficiency from the four-wheel ABS is required, apply continuous force on the brake. The four wheel ABS will be activated immediately, thus allowing you to retain full steering control of your vehicle and, providing there is sufficient space, will enable you to avoid obstacles and bring the vehicle to a controlled stop.
- The anti-lock system does not reduce stopping distance. Always leave enough room between your vehicle and the vehicle in front of you to stop.
- We recommend that you familiarize yourself with this braking technique. However, avoid taking any unnecessary risks.

### ***Hydraulic brake booster system (Hydroboost)***

The Hydroboost system receives fluid pressure from the power steering pump to provide power assist during braking.

The sound of the pump operating may be heard by the driver, but this is a normal characteristic of the system.

For Hydroboost-equipped vehicles operating under normal conditions, the noise of the fluid flowing

## Driving

through the booster may be heard whenever the brake is applied. This condition is normal. Vehicle service is not required.

If braking performance or pedal response becomes very poor, even when the pedal is strongly depressed, it may indicate the presence of air in the hydraulic system or leakage of fluid. Stop the vehicle safely as soon as possible and seek service immediately.

### STEERING

Your vehicle is equipped with power steering. Power steering uses energy from the engine to decrease the driver's effort in steering the vehicle.

To prevent damage to the power steering pump:

- Never hold the steering wheel to the extreme right or the extreme left for more than a few seconds when the engine is running.
- Do not operate the vehicle with the power steering pump fluid level below the MIN mark on 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, the condition could be caused by any of the following:

- Underinflated tire(s) on any wheel(s)
- Uneven vehicle loading
- High crown in center of road
- High crosswinds
- Wheels out of alignment
- Loose or worn suspension components

### TRACTION CONTROL™

Your vehicle may be equipped with the optional Traction Control™ system. This system helps you maintain the stability and steerability of your vehicle. It is especially useful on slippery road

## Driving

surfaces. The system operates by detecting and controlling wheel spin. The system borrows many of the electronic and mechanical elements already present in the anti-lock braking system (ABS).

Wheel-speed sensors allow excess rear wheel spin to be detected by the Traction Control<sup>™</sup> portion of the ABS computer. Any excessive wheel spin is controlled by automatically applying and releasing the rear brakes in conjunction with engine torque reductions. Engine torque reduction is realized via the fully electronic spark and fuel injection systems. This process is very sensitive to driving conditions and very fast acting. The rear wheels “search” for optimum traction several times a second and adjustments are made accordingly.

The Traction Control<sup>™</sup> system will allow your vehicle to make better use of available traction on slippery surfaces. The system is a driver aid which makes your vehicle easier to handle primarily on snow, ice covered and gravel roads.

During Traction Control<sup>™</sup> operation, the traction control active light will



illuminate, you may hear an electric motor type of sound coming from the engine compartment and the engine will not “rev-up” when you push further on the accelerator. This is normal system behavior.

The Traction Control<sup>™</sup> on/off switch, located below the radio, illuminates when the system is OFF. The



Traction Control<sup>™</sup> system will revert to the ON position every time the ignition is turned OFF and ON.

If you should become stuck in snow or ice or on a very slippery road surface, try switching the Traction Control<sup>™</sup> system off. This may allow excess wheel spin to “dig” the vehicle out and enable a successful “rocking” maneuver.

## Driving

If a system fault is detected the OFF indicator lamp on the traction control switch will be illuminated and your vehicle should be serviced.

### TRACTION-LOK AXLE (IF EQUIPPED)

This axle provides added traction on slippery surfaces, particularly when one wheel is on a poor traction surface. Under normal conditions, the Traction-Lok axle functions like a standard rear axle.

Extended use of other than the manufacturer's specified size tires on a Traction-Lok rear axle could result in a permanent reduction in effectiveness. This loss of effectiveness does not affect normal driving and should not be noticeable to the driver.



To reduce the risk of injury, never run the engine with one wheel off the ground, such as when changing a tire.

### AUTOMATIC TRANSMISSION OPERATION (IF EQUIPPED)

#### Brake-shift interlock

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 brake pedal is depressed.

If you cannot move the gearshift lever out of P (Park) with ignition in the ON position and the brake pedal depressed:

1. Apply the parking brake, turn ignition key to LOCK, then remove the key.
2. Insert the key and turn it to OFF. **Apply the brake pedal and shift to N (Neutral).**



In the ignition OFF position, the automatic transmission shift lever can be moved from the P (Park) position without the brake pedal depressed. To avoid unwanted vehicle movement, always set the parking brake.

## Driving

### 3. Start the vehicle.

If it is necessary to use the above procedure to move the gearshift lever, it is possible that a fuse has blown or the vehicle's brakelamps are not operating properly. Refer to *Fuses and relays* in the *Roadside emergencies* chapter.



Do not drive your vehicle until you verify that the brakelamps are working.

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

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

**Do not rock the vehicle for more than a few minutes or damage to the transmission and tires may occur or the engine may overheat.**



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

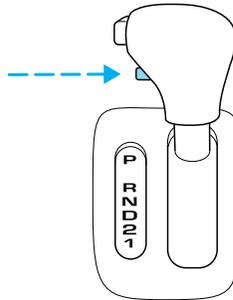


If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. See your dealer or a qualified service technician.

## Driving

### Driving with an automatic overdrive transmission with console gearshift and O/D off switch

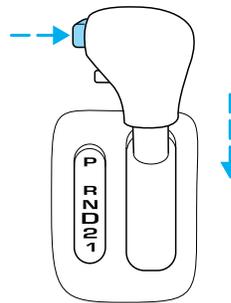
Your automatic overdrive transmission provides fully automatic operation in either D (Overdrive) or with the O/D OFF switch depressed. Driving with the gearshift lever in D (Overdrive) gives the best fuel economy for normal driving conditions. For manual control, start in 1 (First) and then shift manually.



### Driving with a 4-speed automatic transmission (if equipped)

Use the following procedure to put your vehicle in gear.

1. Start the engine.
2. Depress and hold the brake pedal.
3. Push and hold the thumb button.
4. Move gearshift lever out of P (Park).



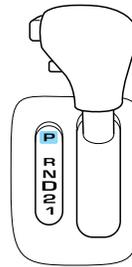
Hold the brake pedal down while you move the gearshift lever from P (Park) to another position. If you do not hold the brake pedal down, your vehicle may move unexpectedly and injure someone.

## Driving

### Understanding gearshift positions

#### **P (Park)**

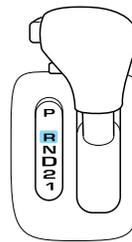
Always come to a complete stop before shifting into P (Park). Make sure the gearshift lever is securely latched in P (Park). This position locks the transmission and prevents the rear wheels from turning.



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

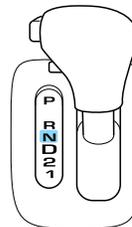
#### **R (Reverse)**

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)**

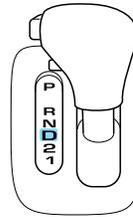
With the gearshift lever in N (Neutral), the vehicle can be started and is free to roll. Hold the brake pedal down while in this gear.



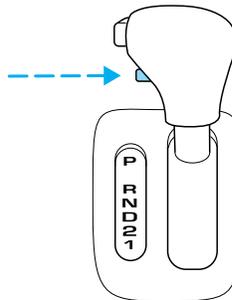
## Driving

### **D** (Overdrive)

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



**D** (Overdrive) can be deactivated by pressing the transmission control switch on the gearshift lever.



The transmission control indicator light (TCIL) will illuminate on the instrument cluster.

O/D  
OFF

**Drive** – Not shown on the display. Activate by pressing the transmission control switch on the gearshift lever with the gearshift in the **D** position. The O/D OFF indicator will illuminate on the instrument cluster. Transmission operates in gears one through three. **D** (Drive) provides more engine braking than **D** (Overdrive) and is useful when:

- driving with a heavy load.
- towing a trailer up or down steep hills.
- additional engine braking is desired. If towing a trailer, refer to *Driving while you tow* in this chapter.

## Driving

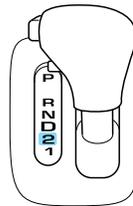
To return to **D** (Overdrive) mode, press the transmission control switch. The O/D OFF indicator will no longer be illuminated.

Each time the vehicle is started, the transmission will automatically return to normal overdrive mode.

Every time the vehicle is shut off and restarted, you must press the transmission control switch to cancel overdrive operation if driving in overdrive is not desired.

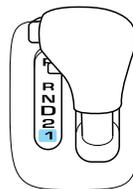
### **2 (Second)**

Use 2 (Second) to start-up on slippery roads or to provide additional engine braking on downgrades. Transmission operates only in Second gear.



### **1 (First)**

Use 1 (Low) to provide maximum engine braking on steep downgrades. Upshifts can be made by shifting to 2 (Second) or to **D** (Overdrive). Selecting 1 (Low) at higher speeds causes the transmission to shift to a lower gear, and will shift to 1 (Low) after vehicle decelerates to the proper speed.



### **Forced Downshifts**

To gain acceleration in **D** (Overdrive) or Drive (O/D OFF) when passing another vehicle, push the accelerator to the floor. The transmission will downshift to the appropriate gear: third, second or first gear.

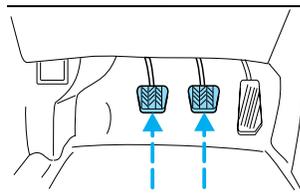
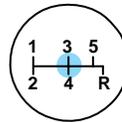
## Driving

### MANUAL TRANSMISSION OPERATION (IF EQUIPPED)

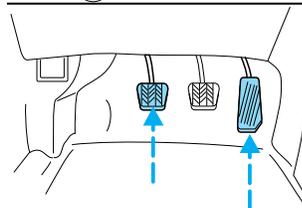
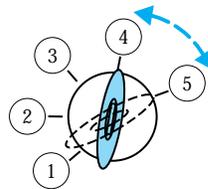
#### Using the clutch

Vehicles equipped with a manual transmission have a starter interlock that prevents cranking of the engine unless the clutch pedal is fully depressed. When starting a vehicle with a manual transmission, you must:

1. Make sure the parking brake is fully set.
2. Depress the clutch pedal fully.
3. Put the gearshift lever in neutral.



4. Start the engine and let it idle for a few seconds.
5. Depress the brake pedal.
6. Release the parking brake.
7. Move the gearshift lever to the desired gear.
8. Release the brake pedal.



9. Slowly release the clutch pedal while slowly pressing down on the accelerator pedal.
- Do not drive with your foot resting on the clutch pedal and do not use the clutch to hold your vehicle at a standstill while waiting on a hill. These actions will greatly reduce clutch life.

## Driving

### Recommended shift speeds

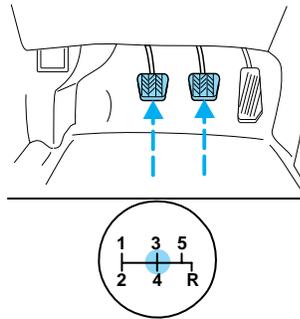
**Do not downshift into 1 (First) when your vehicle is moving faster than 24 km/h (15 mph). This will damage the clutch.**

Upshift according to the following chart:

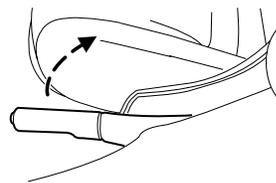
Upshifts when accelerating (recommended for best fuel economy)	
Shift from:	
1 - 2	18 km/h (11 mph)
2 - 3	31 km/h (19 mph)
3 - 4	48 km/h (30 mph)
4 - 5	64 km/h (40 mph)

### Parking your vehicle

1. Disengage the clutch, apply brake and shift into Neutral.

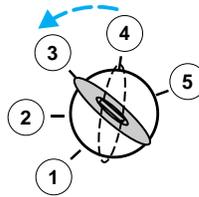


2. Set parking brake.
3. Shift into 1 (First).



## Driving

4. Turn the ignition key to position 3 (OFF).



Do not park your vehicle in Neutral, it may move unexpectedly and injure someone. Use 1 (First) gear and set the parking brake fully.

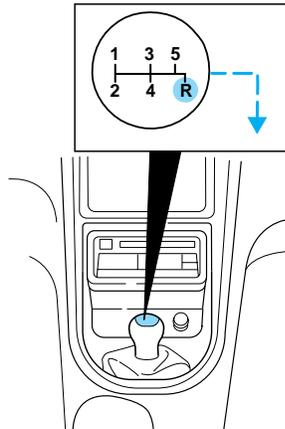
### Reverse

You must be at a complete stop to shift into R (Reverse). You can shift into R (Reverse) only by moving the gearshift lever through the neutral plane. R (Reverse) can not be engaged directly from 5 (5th gear). This is a feature that protects the transmission from accidentally shifting into R (Reverse) when you downshift from 5 (Fifth).

**Make sure that your vehicle is at a complete stop before you shift into R (Reverse). Failure to do so may damage the transmission.**

To shift into R (Reverse):

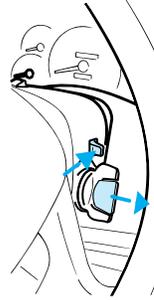
1. Bring your vehicle to a complete stop.
2. Hold the brake pedal down.
3. Hold the clutch pedal down.
4. Move the gearshift lever all the way to the right and pull it back into R (Reverse).
5. Release the brake pedal.
6. Slowly release the clutch pedal.



## Driving

### **Removing key from ignition**

- Turn the ignition key to position 3 (OFF).
- Push the release lever forward and rotate the key towards you and remove.



### **DRIVING THROUGH WATER**

Do not drive quickly through standing water, especially if the depth is unknown. Traction or brake capability may be limited and if the ignition system gets wet, your engine may stall. Water may also enter your engine's air intake and severely damage your engine.

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

Once through the water, always try the brakes. Wet brakes do not stop the vehicle as effectively as dry brakes. Drying can be improved by moving your vehicle slowly while applying light pressure on the brake pedal.

**Driving through deep water where the transmission vent tube is submerged may allow water into the transmission and cause internal transmission damage. Have the fluid checked and, if water is found, replace the fluid.**

## Driving

### VEHICLE LOADING

Before loading a vehicle, familiarize yourself with the following terms:

- **Base Curb Weight:** Weight of the vehicle including any standard equipment, fluids, lubricants, etc. It does not include occupants or aftermarket equipment.
- **Payload:** Combined maximum allowable weight of cargo, occupants and optional equipment. The payload equals the gross vehicle weight rating minus base curb weight.
- **GVW (Gross Vehicle Weight):** Base curb weight plus payload weight. The GVW is not a limit or a specification.
- **GVWR (Gross Vehicle Weight Rating):** Maximum permissible total weight of the base vehicle, occupants, optional equipment and cargo. The GVWR is specific to each vehicle and is listed on the Safety Certification Label on the driver's door pillar.
- **GAWR (Gross Axle Weight Rating):** Carrying capacity for each axle system. The GAWR is specific to each vehicle and is listed on the Safety Certification Label on the driver's door pillar.
- **GCW (Gross Combined Weight):** The combined weight of the towing vehicle (including occupants and cargo) and the loaded trailer.
- **GCWR (Gross Combined Weight Rating):** Maximum permissible combined weight of towing vehicle (including occupants and cargo) and the loaded trailer
- **Maximum Trailer Weight Rating:** Maximum weight of a trailer the vehicle is permitted to tow. The maximum trailer weight rating is determined by subtracting the vehicle curb weight for each engine/transmission combination, any required option weight for trailer towing and the weight of the driver from the GCWR for the towing vehicle.
- **Maximum Trailer Weight:** Maximum weight of a trailer the loaded vehicle (including occupants

## Driving

and cargo) is permitted to tow. It is determined by subtracting the weight of the loaded trailer towing vehicle from the GCWR for the towing vehicle.

- **Trailer Weight Range:** Specified weight range that the trailer must fall within that ranges from zero to the maximum trailer weight rating.

Remember to figure in the tongue load of your loaded trailer when figuring the total weight.



Do not exceed the GVWR or the GAWR specified on the certification label.

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

The Safety Certification Label, found on the driver's door pillar, lists several important vehicle weight rating limitations. Before adding any additional equipment, refer to these limitations. If you are adding weight to the front of your vehicle, (potentially including weight added to the cab), the weight added should not exceed the front axle reserve capacity (FARC). Additional frontal weight may be added to the front axle reserve capacity provided you limit your payload in other ways (i.e. restrict the number of occupants or amount of cargo carried).

Always ensure that the weight of occupants, cargo and equipment being carried is within the weight limitations that have been established for your vehicle including both gross vehicle weight and front and rear gross axle weight rating limits. Under no circumstance should these limitations be exceeded.



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

## Driving

### TRAILER TOWING

Your vehicle is not equipped to tow. No towing packages are available through Ford or Lincoln/Mercury dealers.

### RECREATIONAL TOWING (ALL WHEELS ON THE GROUND)

Follow these guidelines for your specific powertrain combination to tow your vehicle with all four wheels on the ground (such as behind a recreational vehicle).

These guidelines are designed to ensure that your transmission is not damaged due to insufficient lubrication.

#### **All Rear Wheel Drive (RWD) vehicles:**

This applies to all cars and 4x2 trucks/sport utilities with rear wheel drive capability.

An example of recreational towing is towing your vehicle behind a motorhome. The following recreational towing guidelines are designed to ensure that your transmission is not damaged.

- Place the transmission in N (Neutral)
- Maximum speed is 56 km/h (35 mph)
- Maximum distance is 80 km (50 miles)

If a distance of 80 km (50 miles) or a speed of 56 km/h (35 mph) must be exceeded, you must disconnect the driveshaft. Ford recommends the driveshaft be removed/installed only by a qualified technician. See your local dealer for driveshaft removal/installation.

**Improper removal/installation of the driveshaft can cause transmission fluid loss, damage to the driveshaft and internal transmission components.**

## Roadside Emergencies

### 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, seven days a week
- for the New Vehicle Limited Warranty period of three years or 60,000 km (36,000 miles), whichever occurs first on Ford and Mercury vehicles, and four years or 80,000 km (50,000 miles) on Lincoln vehicles.

Roadside assistance will cover:

- changing a flat tire
- jump-starts
- lock-out assistance
- limited fuel delivery
- towing of your disabled vehicle to the nearest Ford Motor Company dealership, or your selling dealer if within 56.3 km (35 miles) of the nearest Ford Motor Company dealership (one tow per disablement). Even non-warranty related tows, like accidents or getting stuck in the mud or snow, are covered (some exclusions apply, such as impound towing or repossession).

### Canadian customers refer to your Owner Information Guide for information on:

- Coverage period
- Exact fuel amounts
- Towing of your disabled vehicle
- Emergency travel expense reimbursement
- Travel planning benefits

### USING ROADSIDE ASSISTANCE

Complete the roadside assistance identification card and place it in your wallet for quick reference. In the United States, this card is found in the Owner Guide

## Roadside Emergencies

portfolio in the glove compartment in Ford vehicles and is mailed to you if you own a Mercury or Lincoln. In Canada, the card is found in the Owner Information Guide in the glove compartment.

U.S. Ford or Mercury vehicle customers who require roadside assistance, call 1-800-241-3673; Lincoln vehicle customers call 1-800-521-4140.

Canadian customers who require roadside assistance, call 1-800-665-2006.

If you need to arrange roadside assistance for yourself, Ford Motor Company will reimburse a reasonable amount. To obtain reimbursement information, U.S. Ford or Mercury vehicles customers call 1-800-241-3673; Lincoln vehicle customers call 1-800-521-4140.

Canadian customers who need to obtain reimbursement information, call 1-800-665-2006.

### **ROADSIDE COVERAGE BEYOND BASIC WARRANTY**

In the United States, you may purchase additional roadside assistance coverage beyond this period through the Ford Auto Club by contacting your Ford or Lincoln Mercury dealer.

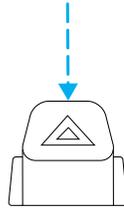
Similarly in Canada, for uninterrupted Roadside Assistance coverage, you may purchase extended coverage prior to your Basic Warranty's Roadside Assistance expiring. For more information and enrollment, contact 1-877-294-2582 or visit our website at [www.ford.ca](http://www.ford.ca).

### **HAZARD FLASHER**

Use only in an emergency to warn traffic of vehicle breakdown, approaching danger, etc. The hazard flashers can be operated when the ignition is off.

## Roadside Emergencies

- The hazard lights control is located on top of the steering column.
- Depress hazard lights control to activate all hazard flashers simultaneously.
- Depress control again to turn the flashers off.

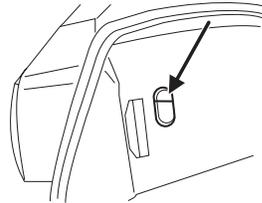


### FUEL PUMP SHUT-OFF SWITCH FUEL RESET

The fuel pump shut-off switch is a device intended to stop the electric fuel pump when your vehicle has been involved in a substantial jolt.

After a collision, if the engine cranks but does not start, the fuel pump shut-off switch may have been activated.

The fuel pump shut-off switch is located on the left side of the trunk between the left rear tail light and the trunk liner, and to the left of the hole in the trunk liner. If you are unable to access the switch



through the hole, loosen the trunk liner near the switch by removing the cargo net hook and pulling the liner forward to expose the switch.

Use the following procedure to reset the fuel pump shut-off switch.

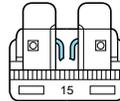
1. Turn the ignition to the OFF position.
2. Check the fuel system for leaks.
3. If no fuel leak is apparent, reset the fuel pump shut-off switch by pushing in on the reset button.
4. Turn the ignition to the ON position. Pause for a few seconds and return the key to the OFF position.
5. Make a further check for leaks in the fuel system.

## Roadside Emergencies

### FUSES AND RELAYS

#### Fuses

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.

**Note:** 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.

#### **Standard fuse amperage rating and color**

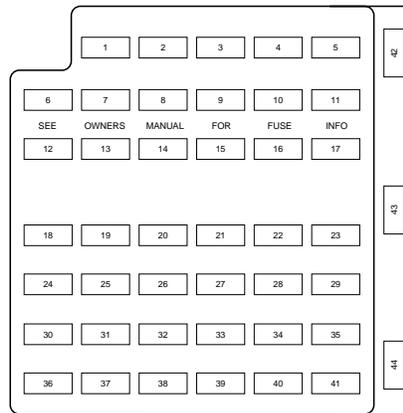
COLOR					
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
2A	Grey	Grey	—	—	—
3A	Violet	Violet	—	—	—
4A	Pink	Pink	—	—	—
5A	Tan	Tan	—	—	—
7.5A	Brown	Brown	—	—	—
10A	Red	Red	—	—	—
15A	Blue	Blue	—	—	—
20A	Yellow	Yellow	Yellow	Blue	Blue
25A	Natural	Natural	—	—	—
30A	Green	Green	Green	Pink	Pink
40A	—	—	Orange	Green	Green
50A	—	—	Red	Red	Red
60A	—	—	Blue	—	Yellow
70A	—	—	Tan	—	Brown
80A	—	—	Natural	—	Black

#### **Passenger compartment fuse panel**

The fuse panel is located below and to the left of the steering wheel by the brake pedal. Remove the panel cover to access the fuses.

## Roadside Emergencies

To remove a fuse use the fuse puller tool provided on the fuse panel cover.



The fuses are coded as follows:

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
1	20A	Cigar lighter
2	20A	Engine controls
3	—	Not used
4	10A	Right-hand low beam headlamp
5	15A	Instrument cluster, Traction control switch
6	20A	Starter motor relay
7	15A	GEM, Interior lamps
8	20A	Engine controls
9	30A	Mach 460 subwoofers
10	10A	Left—hand low beam headlamp
11	15A	Back-up lamps
12	—	Not used
13	15A	Electronic flasher
14	—	Not used
15	15A	Power lumbar

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
16	—	Not used
17	15A	Speed control servo, Shift lock actuator
18	15A	Electronic flasher
19	15A	Power mirror switch, GEM, Anti-theft relay, Power door locks, Door ajar switches
20	15A	Convertible top switch
21	5A	Instrument cluster and engine control memory
22	—	Not used
23	15A	A/C clutch, Defogger switch
24	30A	Climate control blower motor
25	25A	Luggage compartment lid release
26	30A	Wiper/Washer motor, Wiper relays
27	20A	Radio
28	15A	GEM, Overdrive cancel switch
29	15A	Anti-lock Brake System (ABS) module
30	15A	Daytime Running Lamps (DRL) module
31	10A	Data link connector
32	15A	Radio, GEM
33	15A	Stop lamp switch, Speed control deactivation switch
34	20A	Instrument Cluster, CCRM, Data link connector, Securilock transceiver module
35	15A	Shift lock actuator, Powertrain Control Module (PCM), Speed control servo, ABS module
36	15A	Air bag control module
37	5A	Adjustable illumination
38	20A	High beams
39	5A	GEM
40	—	Not used

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
41	15A	Brake lamp
42	—	Not used
43	20A CB	Power windows
44	—	Not used

### Power distribution box

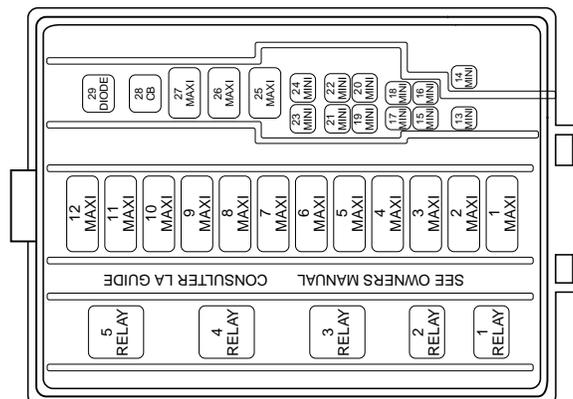
The power distribution box is located in the engine compartment. The power distribution box contains high-current fuses that protect your vehicle's main electrical systems from overloads.



Always disconnect the battery before servicing high current fuses.

### Always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs

If the battery has been disconnected and reconnected, refer to the *Battery* section of the *Maintenance and specifications* chapter.



## Roadside Emergencies

The high-current fuses are coded as follows.

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
Relay 1	—	Fog lamp interrupt
Relay 2	—	Interval wiper
Relay 3	—	Wiper HI/LO
Relay 4	—	Starter
Relay 5	—	Fog lamps
1	50A** (4.6L), 30A CB (3.8L)	Electric cooling fan motor
2	30A**	Headlamps
3	40A**	Starter motor relay, Ignition switch
4	40A**	Ignition switch
5	40A**	Ignition switch
6	40A**	Instrument cluster, Powertrain Control Module (PCM)
7	30A**	Secondary air injection (3.8L only)
8	50A**	Anti-lock Brake System (ABS) module
9	20A**	Auxiliary power point
10	30A**	Parklamps
11	30A**	Rear window defrost control
12	40A**	Power windows, Power locks
13	30A*	MACH 1000 left amplifiers
14	20A*	Fuel pump
15	30A*	MACH 1000 right amplifiers
16	20A*	Horn
17	20A*	ABS
18	30A*	Power seats
19	10A*	Intercooler pump (Cobra only)
20	20A*	Alternator
21	—	Not used

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
22	—	Not used
23	—	Not used
24	20A*	A/C pressure
25	—	Not used
26	30A**	PCM
27	20A**	Daytime Running Lamps (DRL) module, Foglamp relay
28	25A CB	Convertible top
29	Diode	Convertible top circuit breaker
* Mini Fuses ** Maxi Fuses		

### CHANGING THE TIRES

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.

The use of tire sealants is not recommended and may compromise the integrity of your tires. The use of tire sealants may also affect your tire pressure monitoring system (if equipped).

### Temporary spare tire information

Your vehicle may have a temporary spare tire. The temporary spare tire for your vehicle is labeled as such. It is smaller than a regular tire and is designed for emergency use only. Replace this tire with a full-size tire as soon as possible.

## Roadside Emergencies



If you use the temporary spare tire continuously or do not follow these precautions, the tire could fail, causing you to lose control of the vehicle, possibly injuring yourself or others.

When driving with the temporary spare tire **do not:**

- use more than one temporary spare tire at a time
- exceed 80 km/h (50 mph) or drive further than 3 200 km (2 000 miles) total under any circumstances
- load the vehicle beyond maximum vehicle load rating listed on the tire pressure label on the inside of the glove compartment door
- tow a trailer
- use tire chains
- drive through an automatic car wash, because of the vehicle's reduced ground clearance
- try to repair the temporary spare tire or remove it from its wheel
- use the wheel for any other type of vehicle

Use of a temporary spare tire 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 driving capability

### Tire change procedure



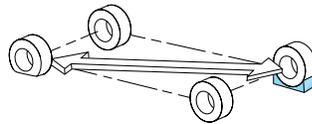
To prevent the vehicle from moving when you change a tire, be sure the parking brake is set, then block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.

## Roadside Emergencies



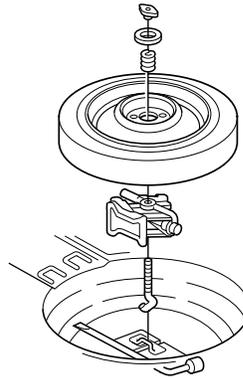
If the vehicle slips off the jack, you or someone else could be seriously injured.

1. Park on a level surface, activate hazard flashers and set parking brake.

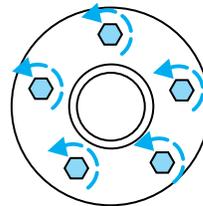


2. Place gearshift lever in P (Park) or R (manual transmission), turn engine OFF, and block the diagonally opposite wheel.

3. Remove the spare tire, jack and lug wrench.

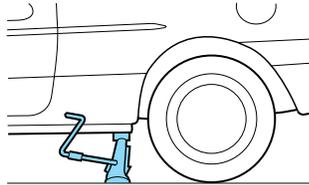


4. Remove the center ornament (if equipped) from the wheel. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.



## Roadside Emergencies

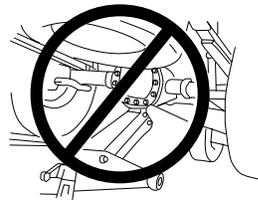
5. Put the jack in the jack notch next to the tire you are changing. Turn the jack handle clockwise until the wheel is completely off the ground.



**Never use the rear differential as a jacking point.**



To lessen the risk of personal injury, do not put any part of your body under the vehicle while changing a tire. Do not start the engine when your vehicle is on the jack. The jack is only meant for changing the tire.



6. Remove the lug nuts with the lug wrench.

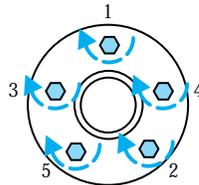
7. Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.

If you are using the temporary tire, the lug nut washers will not appear to be flush with the rim. This is normal only when using the temporary spare tire.

8. Lower the wheel by turning the jack handle counterclockwise.

## Roadside Emergencies

9. Remove the jack and fully tighten the lug nuts in the order shown.



10. Put flat tire, wheel ornament (if equipped), jack and lug wrench away. Make sure jack is fastened so it does not rattle when you drive.

11. Unblock the wheels.

### Anti-theft lug nuts (if equipped)

If your vehicle is equipped with this feature, one of the lug nuts on each wheel must be removed and replaced with a special key. The key and registration card are attached to the lug wrench and stored with the spare tire. If you lose the key, send the registration card to the manufacturer (not the dealer) to get a replacement key. If the lug wrench/lug nut key assembly is lost, see your nearest Ford or Lincoln Mercury dealer who has access to the master set of keys. **Do not use an impact wrench with the anti-theft key.**

To remove the anti-theft lug nut:



1. Insert the key over the locking lug nut.

Make sure you hold the key square to the lug nut. If you hold the key at an angle, you could damage the key and the lug nut.

2. Place the lug nut wrench over the lug nut key and apply pressure on the key with the wrench.

3. Turn the wrench in a counterclockwise direction to remove the lug nut.

To install the anti-theft lug nut:

1. Insert the key over the locking lug nut.

2. Place the lug nut wrench over the lug nut key and apply pressure on the key with the wrench.

## Roadside Emergencies

3. Install the lug nut by turning the wrench clockwise.

### JUMP STARTING YOUR VEHICLE



The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in injury or vehicle damage.



Batteries contain sulfuric acid which can burn skin, eyes and clothing, if contacted.

**Do not attempt to push-start your vehicle. Automatic transmissions do not have push-start capability; also, the catalytic converter may become damaged.**

### Preparing your vehicle

When the battery is disconnected or a new battery is installed, the transmission must relearn its shift strategy. As a result, the transmission may have firm and/or 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.

**1. Use only a 12-volt supply to start your vehicle.**

2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.

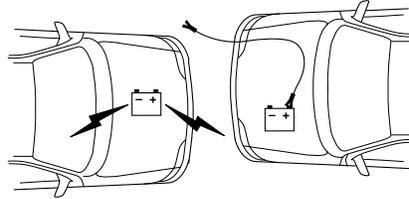
3. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles **do not** touch. Set the parking brake on both vehicles and stay clear of the engine cooling fan and other moving parts.

4. Check all battery terminals and remove any excessive corrosion before you attach the battery cables. Ensure the vent caps are tight and level.

5. Turn the heater fan on in both vehicles to protect any electrical surges. Turn all other accessories off.

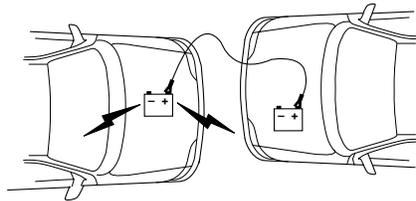
## Roadside Emergencies

### Connecting the jumper cables

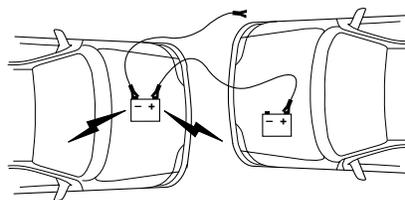


1. Connect the positive (+) booster cable to the positive (+) terminal of the discharged battery.

**Note:** In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.

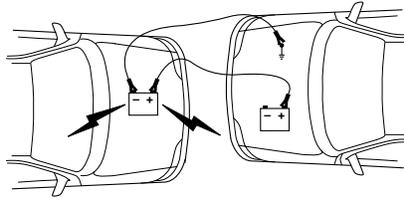


2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.



3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.

## Roadside Emergencies



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/fuel injection system. **Do not** use fuel lines, engine rocker covers or the intake manifold as *grounding* points.



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.

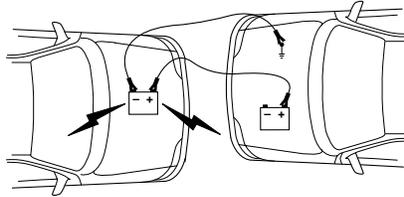
5. Ensure that the cables are clear of fan blades, belts, moving parts of both engines, or any fuel delivery system parts.

### Jump starting

1. Start the engine of the booster vehicle and run the engine at 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.

## Roadside Emergencies

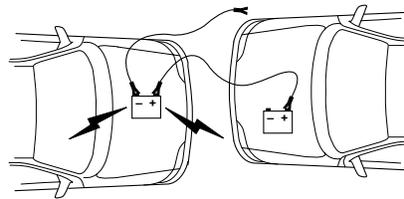
### Removing the jumper cables



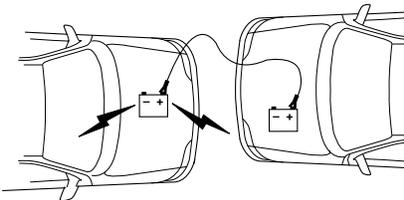
**Remove the jumper cables in the reverse order that they were connected.**

1. Remove the jumper cable from the *ground* metal surface.

**Note:** In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.

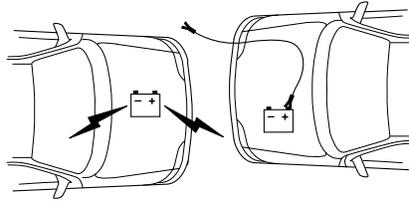


2. Remove the jumper cable on the negative (-) connection of the booster vehicle's battery.



3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.

## Roadside Emergencies

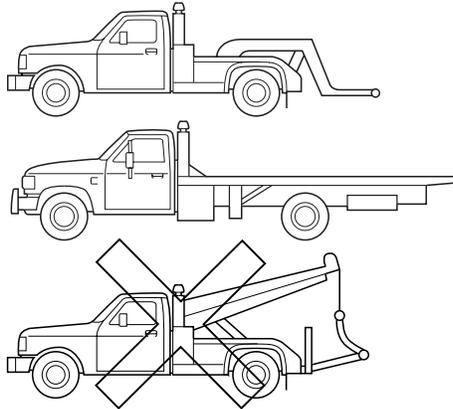


4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

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.

## Roadside Emergencies

### WRECKER TOWING



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

It is recommended that your vehicle be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

If your vehicle is to be towed from the rear using wheel lift equipment, the front wheels must be placed on a dolly to prevent damage to the front fascia (bumper).

**If the vehicle is towed by other means or incorrectly, vehicle damage may occur.**

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.

## Customer Assistance

### GETTING THE SERVICES YOU NEED

#### At home

Ford Motor Company and Ford of Canada have authorized dealerships to service your vehicle. It is preferred that you return to the authorized dealer where your vehicle was purchased when warranty repairs are needed. However, you may also take your vehicle to another Ford Motor Company or Ford of Canada dealership authorized for warranty repairs. Certain warranty repairs require special training though, so not all dealers are authorized to perform all warranty repairs. That means that depending on the warranty repair needed, the vehicle may need to be taken to another dealer. If a particular dealership cannot assist you, then contact the Customer Relationship Center.

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/servicing dealership.
2. If your inquiry or concern remains unresolved, contact the Sales Manager or Service Manager at the dealership.
3. If the inquiry or concern cannot be resolved at the dealership level, please contact the Ford Customer Relationship Center.

#### Away from home

If you own a Ford or Mercury vehicle and are away from home when your vehicle needs service, or if you need more help than the dealership could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealership to help you.

## Customer Assistance

In the United States:

Ford Motor Company  
Customer Relationship Center  
16800 Executive Plaza Drive  
P.O. Box 6248  
Dearborn, Michigan 48121  
1-800-392-3673 (FORD)  
(TDD for the hearing impaired: 1-800-232-5952)  
[www.ford.com](http://www.ford.com)

In Canada:

Customer Relationship Centre  
Ford Motor Company of Canada, Limited  
P.O. Box 2000  
Oakville, Ontario L6J 5E4  
1-800-565-3673 (FORD)  
[www.ford.ca](http://www.ford.ca)

If you own a Lincoln vehicle and are away from home when your vehicle needs service, or if you need more help than the dealership could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealership to help you.

In the United States:

Ford Motor Company  
Customer Relationship Center  
16800 Executive Plaza Drive  
P.O. Box 6248  
Dearborn, Michigan 48121  
1-800-521-4140  
(TDD for the hearing impaired: 1-800-232-5952)  
[www.ford.com](http://www.ford.com)

In Canada:

Customer Relationship Centre  
Ford Motor Company of Canada, Limited  
P.O. Box 2000  
Oakville, Ontario L6J 5E4  
1-800-565-3673 (FORD)  
[www.ford.ca](http://www.ford.ca)

## Customer Assistance

In order to help you service your Ford or Lincoln Mercury vehicle, please have the following information available when contacting a Customer Relationship Center:

- Your telephone number (home and business)
- The name of the dealer and the city where the dealership is located
- The year and make of your vehicle
- The date of vehicle purchase
- The current odometer reading
- The vehicle identification number (VIN)

If you still have a complaint involving a warranty dispute, you may wish to contact the Dispute Settlement Board (U.S.).

In some states (in the U.S.) 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 Dispute Settlement Board 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.

### **FORD EXTENDED SERVICE PLAN**

You can get more protection for your new car or light truck by purchasing Ford Extended Service Plan (Ford ESP) coverage. Ford ESP is an optional service contract which is backed by Ford Motor Company or Ford Motor Service Company (in the U.S.) and Ford of Canada (in Canada). It provides the following:

- Benefits during the warranty period depending on the plan you purchase (such as: reimbursement for rentals; coverage for certain maintenance and wear items).

## Customer Assistance

- Protection against covered repair costs after your Bumper-to-Bumper Warranty expires.

You may purchase Ford ESP from any participating Ford and Lincoln Mercury and Ford of Canada dealer. There are several plans available in various time, distance and deductible combinations which can be tailored to fit your own driving needs. Ford ESP also offers reimbursement benefits for towing and rental coverage.

When you buy Ford ESP, you receive Peace-of-Mind protection throughout the United States and Canada, provided by a network of more than 5,000 participating Ford or Lincoln Mercury and Ford of Canada dealers.

If you did not take advantage of the Ford Extended Service Plan at the time of purchasing your vehicle, you may still be eligible. Please contact your dealer for further information. Since this information is subject to change, please ask your dealer for complete details about Ford Extended Service Plan coverage options, or visit the Ford ESP website at [www.ford-esp.com](http://www.ford-esp.com).

### **THE DISPUTE SETTLEMENT BOARD (U.S. ONLY)**

The Dispute Settlement Board is:

- an independent, third-party arbitration program for warranty disputes.
- available free to owners and lessees of qualifying Ford Motor Company vehicles.

The Dispute Settlement Board may not be available in all states. Ford Motor Company reserves the right to change eligibility limitations, modify procedures and/or to discontinue this service without notice and without incurring obligations per applicable state law.

### **What kinds of cases does the Board review?**

Unresolved warranty repair concerns or vehicle performance concerns as on Ford and Lincoln Mercury cars and Ford and Lincoln Mercury light

## Customer Assistance

trucks which are within the terms of any applicable written new vehicle warranty are eligible for review, except those involving:

- a non-Ford product
- a non-Ford dealership
- sales disputes between customer and dealer except those associated with warranty repairs or concerns with the vehicle's performance as designed
- a request for reimbursement of consequential expenses unless a service or product concern is being reviewed
- items not covered by the New Vehicle Limited Warranty (including maintenance and wear items)
- alleged personal injury/property damage claims
- cases currently in litigation
- vehicles not used primarily for family, personal or household purposes (except in states where the Dispute Settlement Board is required to review commercial vehicles)
- vehicles with non-U.S. warranties

Concerns are ineligible for review if the New Vehicle Limited Warranty has expired at receipt of your application and, in certain states eligibility is dependent upon the customer's possession of the vehicle.

Eligibility may differ according to state law. For example, see the unique brochures for California, West Virginia, Georgia and Wisconsin purchasers/lessees.

### **Board membership**

The Board consists of:

- Three consumer representatives
- A Ford or Lincoln Mercury dealership representative

Consumer candidates for Board membership are recruited and trained by an independent consulting

## Customer Assistance

firm. The dealership Board member is chosen from Ford and Lincoln Mercury dealership management, recognized for their business leadership qualities.

### ***What the Board needs***

To have your case reviewed you must complete the application in the DSB brochure and mail it to the address provided on the application form. Some states will require you to use certified mail, with return receipt requested.

Your application is reviewed and, if it is determined to be eligible, you will receive an acknowledgment indicating:

- The file number assigned to your application.
- The toll-free phone number of the DSB's independent administrator.

Your dealership and a Ford Motor Company representative will then be asked to submit statements.

To properly review your case, the Board needs the following information:

- Legible copies of all documents and maintenance or repair orders relevant to the case.
- The year, make, model, and Vehicle Identification Number (VIN) listed on your vehicle ownership license.
- The date of repair(s) and mileage at the time of occurrence(s).
- The current mileage.
- The name of the dealer(s) who sold or serviced the vehicle.
- A brief description of your unresolved concern.
- A brief summary of the action taken by the dealer(s) and Ford Motor Company.
- The names (if known) of all the people you contacted at the dealership(s).
- A description of the action you expect to resolve your concern.

## Customer Assistance

You will receive a letter of explanation if your application does not qualify for Board review.

### ***Oral presentations***

If you would like to make an oral presentation, indicate YES to question 6 on the application. While it is your right to make an oral presentation before the Board, this is not a requirement and the Board will decide the case whether or not an oral presentation is made. An oral presentation may be requested by the Board as well.

### ***Making a decision***

Board members review all available information related to each complaint, including oral presentations, and arrive at a fair and impartial decision. Board review may be terminated at any time by either party.

Every effort is made to decide the case within 40 days of the date that all requested information is received by the Board. Since the Board generally meets once a month, it may take longer for the Board to consider some cases.

After a case is reviewed, the Board mails you a decision letter and a form on which to accept or reject the Board's decision. The decisions of the Board are binding on Ford (and, in some cases, on the dealer) but not on consumers who are free to pursue other remedies available to them under state or federal law.

### **To request a DSB Brochure/Application**

For a brochure/application, speak to your dealer or write/call to the Board at the following address/phone number:

Dispute Settlement Board  
P.O. Box 5120  
Southfield, MI 48086-5120  
1-800-428-3718

You may also contact the North American Customer Relationship Center at 1-800-392-3673 (Ford), TDD

## Customer Assistance

for the hearing impaired: 1-800-232-5952 or by writing to the Center at the following address:

Ford Motor Company  
Customer Relationship Center  
16800 Executive Plaza Drive  
P.O. Box 6248  
Dearborn, Michigan 48121

### **UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)**

In those cases where you continue to feel that the efforts by Ford and the dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight-forward 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; the arbitrator's award is binding both to you and Ford of Canada.

CAMVAP services are available in all territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685.

### **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.

## Customer Assistance

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact a district or owner relations/customer relationship office.

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/Ford of Canada is not responsible for any damage caused by use of improper fuel.

In the United States, using leaded fuel may also result in difficulty importing your vehicle back into the U.S.

If your vehicle must be serviced while you are traveling or living in Central or South America, the Caribbean, or the Middle East, contact the nearest Ford dealership. If the dealership cannot help you, write or call:

FORD MOTOR COMPANY  
WORLDWIDE DIRECT MARKET OPERATIONS  
1555 Fairlane Drive  
Fairlane Business Park #3  
Allen Park, Michigan 48101  
U.S.A.  
Telephone: (313) 594-4857  
FAX: (313) 390-0804

If you are in another foreign country, contact the nearest Ford dealership. If the dealership employees cannot help you, they can direct you to the nearest Ford affiliate office.

If you buy your vehicle in North America and then relocate outside of the U.S. or Canada, register your vehicle identification number (VIN) and new address with Ford Motor Company Worldwide Direct Market Operations.

### **ORDERING ADDITIONAL OWNER'S LITERATURE**

To order the publications in this portfolio, contact Helm, Incorporated at:

## Customer Assistance

HELM, INCORPORATED  
P.O. Box 07150  
Detroit, Michigan 48207

Or call:

**For a free publication catalog, order 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](http://www.helminc.com).

*(Items in this catalog may be purchased by credit  
card, check or money order.)*

### **Obtaining a French owner's guide**

French Owner's Guides can be obtained from your  
dealer or by writing to Ford Motor Company of  
Canada, Limited, Service Publications, P.O. Box  
1580, Station B, Mississauga, Ontario L4Y 4G3.

### **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 29,000 km  
(18,000 miles), whichever occurs first:

1. Two or more repair attempts are made on the  
same nonconformity likely to cause death or serious  
bodily injury OR

## Customer Assistance

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

### 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. *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 either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in the Washington D.C. area) or write to:

NHTSA  
U.S. Department of Transportation  
Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from the Hotline.

## Cleaning

### WASHING THE EXTERIOR

Wash your vehicle regularly with cool or lukewarm water and a neutral Ph shampoo, such as Detail Wash (ZC-3-A), which is available from your dealer.

- 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.
- Always use a clean sponge or carwash mitt with plenty of water for best results.
- Dry the vehicle with a chamois or soft terry cloth towel in order to eliminate water spotting.
- It is especially important to wash the vehicle regularly during the winter months, as dirt and road salt are difficult to remove and cause damage to the vehicle.
- 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.
- Remove any exterior accessories, such as antennas, before entering a car wash.
- **Suntan lotions and insect repellents can damage any painted surface; if these substances come in contact with your vehicle, wash off as soon as possible.**

### WAXING

Applying a polymer paint sealant to your vehicle every six months will assist in reducing minor scratches and paint damage.

- Wash the vehicle first.
- Do not use waxes that 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 “gray” or stain the parts over time.

## Cleaning

### PAINT CHIPS

Your dealer has touch-up paint and sprays to match your vehicle's color. Take your color code (printed on a sticker in the driver's door jam) to your dealer to ensure 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.

### ALUMINUM WHEELS AND COVERS

Aluminum wheel rims or covers are coated with a clearcoat paint finish. In order to maintain their shine:

- Clean with Motorcraft Wheel and Tire Cleaner (ZC-37-A), which is available from your dealer.
- 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. Chemical-strength 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 Ford Extra Strength Tar and Road Oil Removal (B7A-19520-AA), available from your dealer.

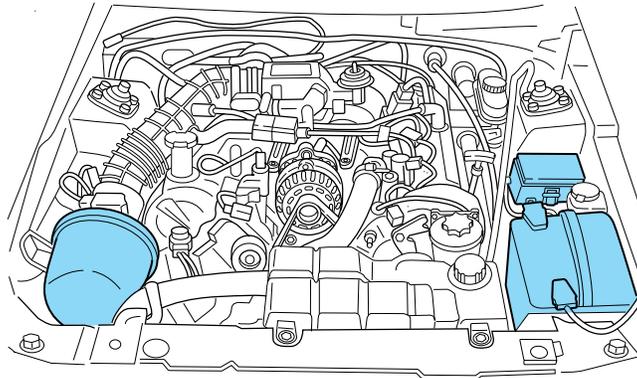
### ENGINE

Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal. When washing:

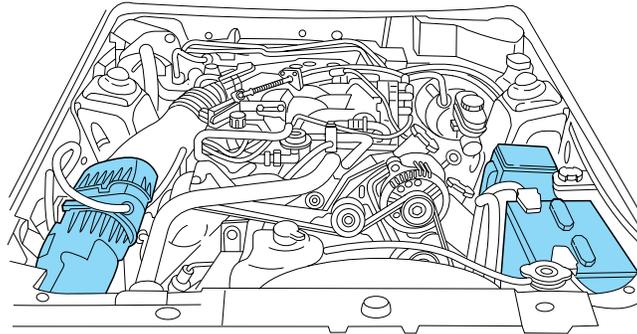
- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.

## Cleaning

- 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 (ZC-20) on all parts that require cleaning and pressure rinse clean.
- Cover the highlighted areas to prevent water damage when cleaning the engine.



- **3.8L OHV V6 engine**



- **4.6L SOHC V8 engine**

- Never wash or rinse the engine while it is running; water in the running engine may cause internal damage.

## Cleaning

### **PLASTIC (NON-PAINTED) EXTERIOR PARTS**

Use only approved products to clean plastic parts. These products are available from your dealer.

- For routine cleaning, use Detail Wash (ZC-3-A).
- If tar or grease spots are present, use Ford Extra Strength Tar and Road Oil Removal (B7A-19520-AA).

### **WINDOWS AND WIPER BLADES**

The windshield, rear window and wiper blades should be cleaned regularly. If the wiper does not wipe properly, substances on the windshield, rear window or the wiper blades may be the cause. These may include hot wax treatments used by commercial car washes, tree sap, or other organic contamination. To clean these items, please follow these tips:

- The windshield or rear window may be cleaned with a non-abrasive cleaner such as Motorcraft Ultra Clear Spray Glass Cleaner (ZC-23), available from your dealer.
- Do not use abrasives, as they may cause scratches.
- Do not use fuel, kerosene, or paint thinner to clean any parts.
- Wiper blades can be cleaned with isopropyl (rubbing) alcohol or windshield washer solution. Be sure to replace wiper blades when they appear worn or do not function properly.

### **INSTRUMENT PANEL AND CLUSTER LENS**

Clean the instrument panel with a damp cloth, then dry with a dry cloth.

- Avoid cleaners or polish 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.

## Cleaning

 Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the air bag system.

- 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 painted surfaces.

### INTERIOR

For fabric, carpets, cloth seats, safety belts and seats equipped with side air bags:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Ford Extra Strength Upholstery Cleaner (E8AZ-19523-AA).
- If grease or tar is present on the material, spot-clean the area first with Motorcraft Spot and Stain Remover (ZC-14).
- Never saturate the seat covers with cleaning solution.
- 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.

 Do not use cleaning solvents, bleach or dye on the vehicle's safety belts, as these actions may weaken the belt webbing.

 Do not use chemical solvents or strong detergents when cleaning the seat where the side air bag is mounted. Such products may contaminate the side air bag system and affect performance of the side air bag in a collision. The air bag may not function correctly and not provide any injury reduction benefits.

## Cleaning

### LEATHER SEATS (IF EQUIPPED)

Your leather seating surfaces have a clear, protective coating over the leather.

- To clean, use a soft cloth with Motorcraft Deluxe Leather and Vinyl Cleaner (ZC-11-A). Dry the area with a soft cloth.
- To help maintain its resiliency and color, use the Motorcraft Deluxe Leather Care Kit (ZC-11-D), available from your authorized dealer.
- Do not use household cleaning products, alcohol solutions, solvents or cleaners intended for rubber, vinyl and plastics, or oil/petroleum-based leather conditioners. These products may cause premature wearing of the clear, protective coating.

### CONVERTIBLE TOP AND PADDED MOLDING

Wash with Motorcraft Triple Clean (ZC-13), which is available from your dealer.

- Do not use stiff bristle brushes or abrasive materials or cleaners.
- Hot waxes applied by commercial car washes can affect the cleanability of vinyl material.
- Using high water pressure or wand-type car washes against the convertible top and windows may cause water leaks and possible seal damage.

### UNDERBODY

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free from packed dirt.

### FORD, LINCOLN AND MERCURY CAR CARE PRODUCTS

Your Ford, Lincoln or Mercury dealer has many quality products available to clean your vehicle and protect its finishes. These quality products have been specifically engineered to fulfill your automotive needs; they are custom designed to

## Cleaning

complement the style and appearance of your vehicle. Each product is made from high quality materials that meet or exceed rigid specifications. For best results, use the following products or products of equivalent quality:

Motorcraft Custom Clearcoat Polish (ZC-8-A)

Ford Custom Vinyl Protectant\* (not available in Canada) (F2AZ-19530-A)

Motorcraft Vinyl Cleaner (Canada only) (CXC-93)

Motorcraft Vinyl Conditioner (Canada only) (CXC-94)

Motorcraft Deluxe Leather and Vinyl Cleaner (not available in Canada) (ZC-11-A)

Ford Extra Strength Tar and Road Oil Remover\* (not available in Canada) (B7A-19520-AA)

Ford Extra Strength Upholstery Cleaner (not available in Canada) (E8AZ-19523-AA)

Motorcraft Custom Bright Metal Cleaner (ZC-15)

Motorcraft Wheel and Tire Cleaner (ZC-37-A)

Motorcraft Dash and Vinyl Cleaner (ZC-38-A)

Motorcraft Car Care Kit (ZC-26)

Ford Premium Car Wash Concentrate (F2SZ-19523-WC)

Motorcraft Carlite Glass Cleaner (Canada only) (CXC-100)

Motorcraft Spot and Stain Remover (ZC-14)

Motorcraft Tire Detailer (ZC-28)

Motorcraft Triple Clean (ZC-13)

Motorcraft Ultra-Clear Spray Glass Cleaner (not available in Canada) (ZC-23)

Motorcraft Engine Shampoo and Degreaser (ZC-20)

\* May be sold with the Motorcraft name

## Maintenance and Specifications

### SERVICE RECOMMENDATIONS

To help you service your vehicle:

- We highlight do-it-yourself items in the engine compartment for easy location.
- We provide a scheduled maintenance guide which makes tracking routine service easy.

If your vehicle requires professional service, your dealership can provide the necessary parts and service. Check your *Warranty Guide/Owner Information Guide* 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 WHEN SERVICING YOUR VEHICLE

Be especially careful when inspecting or servicing your vehicle.

- Do not work on a hot engine.
- When the engine is running, keep loose clothing, jewelry or long hair away from 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 lit cigarettes, open flames and other lit material away from the battery and all fuel related parts.

If you disconnect the battery, the engine must “relearn” its idle conditions before your vehicle will drive properly, as explained in the *Battery* section in this chapter.

#### Working with the engine off

- Automatic transmission:
  1. Set the parking brake and ensure the gearshift is securely latched in P (Park).

## Maintenance and Specifications

2. Turn off the engine and remove the key.
3. Block the wheels to prevent the vehicle from moving unexpectedly.
  - Manual transmission:
    1. Set the parking brake.
    2. Depress the clutch and place the gearshift in 1 (First).
    3. Turn off the engine and remove the key.
    4. Block the wheels to prevent the vehicle from moving unexpectedly.

### Working with the engine on

- Automatic transmission:
  1. Set the parking brake and ensure the gearshift is securely latched in P (Park).
  2. Block the wheels to prevent the vehicle from moving unexpectedly.

**Note:** Do not start your engine with the air cleaner removed and do not remove it while the engine is running.

- Manual transmission:
  1. Set the parking brake, depress the clutch and place the gearshift in neutral.
  2. Block the wheels to prevent the vehicle from moving unexpectedly.

**Note:** Do not start your engine with the air cleaner removed and do not remove it while the engine is running.

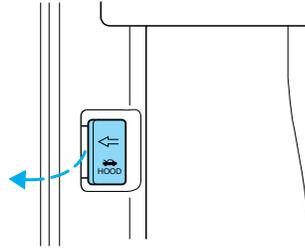


The cooling fan is automatic and may come on at any time. Always disconnect the negative terminal of the battery before working near the fan.

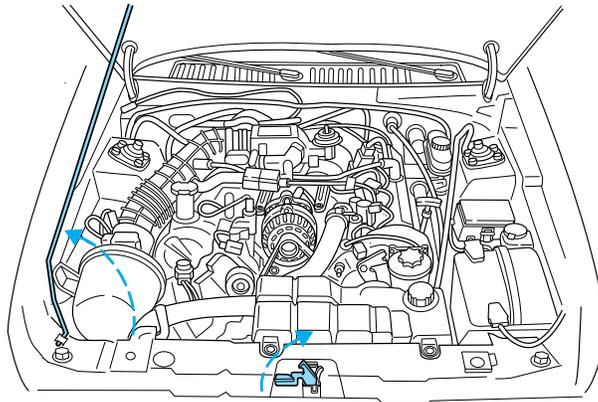
## Maintenance and Specifications

### OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the bottom left corner of the instrument panel.



2. Go to the front of the vehicle and release the auxiliary latch that is located under the front center of the hood.

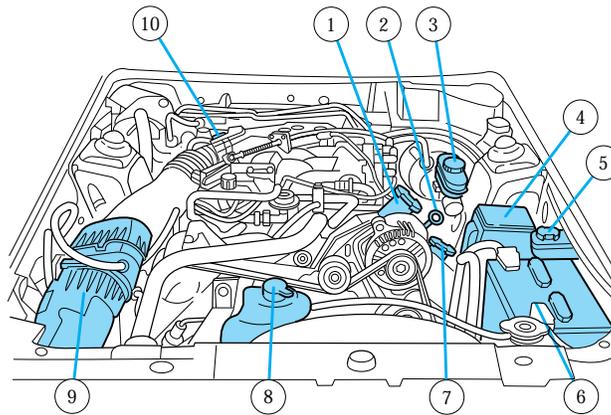


3. Lift the hood and secure it with the prop rod.

## Maintenance and Specifications

### IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

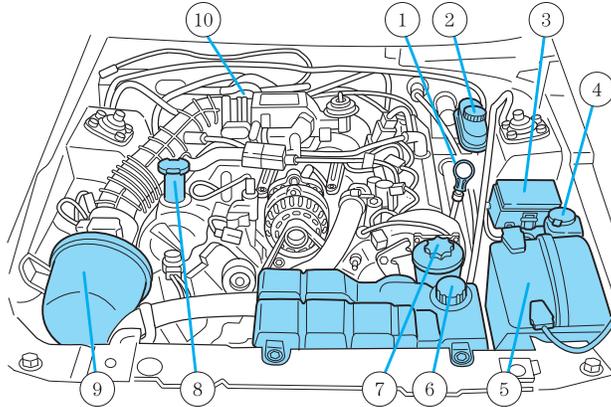
#### 3.8L OHV V6 engine



1. Engine oil filler cap
2. Engine oil dipstick
3. Brake fluid reservoir
4. Power distribution box
5. Windshield washer fluid reservoir
6. Battery
7. Power steering fluid reservoir
8. Engine coolant reservoir
9. Air filter assembly
10. Automatic transmission fluid dipstick (if equipped)

## Maintenance and Specifications

### 4.6L SOHC V8 engine



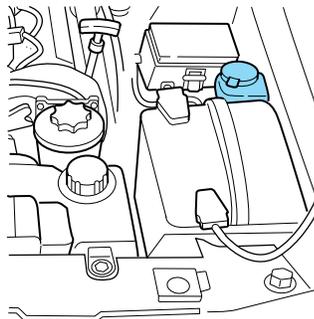
1. Engine oil dipstick
2. Brake fluid reservoir
3. Power distribution box
4. Windshield washer fluid reservoir
5. Battery
6. Engine coolant reservoir
7. Power steering fluid reservoir
8. Engine oil filler cap
9. Air filter assembly
10. Automatic transmission fluid dipstick (if equipped)

## Maintenance and Specifications

### WINDSHIELD WASHER FLUID

Check the washer fluid whenever you stop for fuel. The reservoir is highlighted with a  symbol.

Add fluid to fill the reservoir if the level is low. In very cold weather, do not fill the reservoir completely.



Only use a washer fluid that meets Ford specification ESR-M17P5-A . Refer to *Lubricant specifications* in this chapter.

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.

**Note:** Do not put washer fluid in the engine coolant reservoir. Washer fluid placed in the cooling system may harm engine and cooling system components.

### ENGINE OIL

#### Checking the engine oil

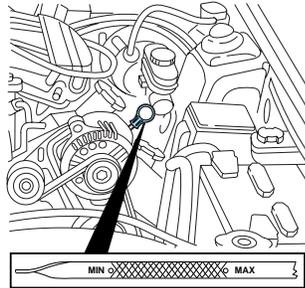
Refer to the scheduled maintenance guide for the appropriate intervals for checking the engine oil.

1. Make sure the vehicle is on level ground.
2. Turn the engine off and wait 5 to 10 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) (automatic transmissions) or 1 (First) (manual transmissions).
4. Open the hood. Protect yourself from engine heat.

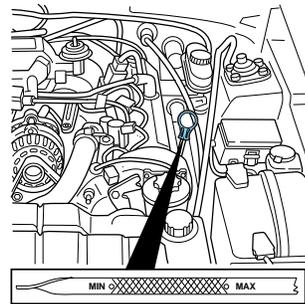
## Maintenance and Specifications

5. Locate and carefully remove the engine oil level indicator (dipstick).

- 3.8L V6 engine

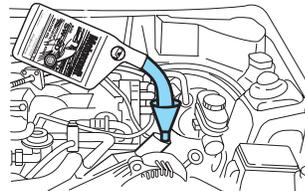


- 4.6L SOHC V8 engine



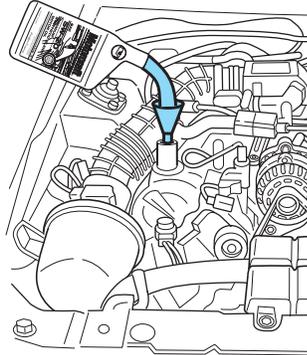
6. Wipe the indicator clean. Insert the indicator fully, then remove it again.

- If the oil level is **between the MIN—MAX marks**, the oil level is acceptable. **DO NOT ADD OIL.**
- If the oil level is below the MIN mark, add enough oil to raise the level within the MIN—MAX range.
- 3.8L V6 engine



## Maintenance and Specifications

- 4.6L SOHC V8 engine



- Oil levels above the MAX mark may cause engine damage. Some oil must be removed from the engine by a service technician.
7. Put the indicator back in and ensure it is fully seated.

### Adding engine oil

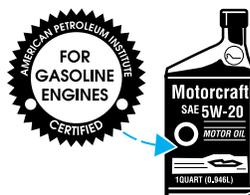
1. Check the engine oil. For instructions, refer to *Checking the engine oil* in this chapter.
2. If the engine oil level is not within the normal range, add only certified engine oil of the recommended viscosity. Remove the engine oil filler cap and use a funnel to pour the engine oil into the opening.
3. Recheck the engine oil level. Make sure the oil level is not above the MAX mark on the engine oil level indicator (dipstick).
4. Install the indicator and ensure it is fully seated.
5. Fully install the engine oil filler cap by turning the filler cap clockwise 1/4 of a turn until three clicks are heard or until the cap is fully seated.

**To avoid possible oil loss, DO NOT operate the vehicle with the engine oil level indicator and/or the engine oil filler cap removed.**

## Maintenance and Specifications

### Engine oil and filter recommendations

Look for this certification trademark.



### ***SAE 5W-20 engine oil is recommended.***

Only use oils “Certified For Gasoline Engines” by the American Petroleum Institute (API). Use Motorcraft or an equivalent oil meeting Ford specification WSS-M2C153-H. **SAE 5W-20 oil provides optimum fuel economy and durability performance meeting all requirements for your vehicle’s engine.**

Do not use supplemental engine oil additives, oil treatments or engine treatments. They are unnecessary and could, under certain conditions, lead to engine damage which is not covered by your warranty.

Change your engine oil and filter according to the appropriate schedule listed in the scheduled maintenance guide.

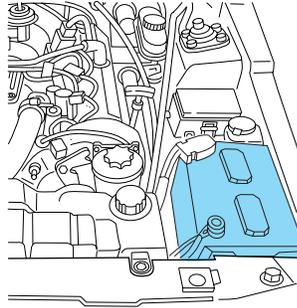
Ford production and aftermarket (Motorcraft) oil filters are designed for added engine protection and long life. If a replacement oil filter is used that does not meet Ford material and design specifications, start-up engine noises or knock may be experienced.

It is recommended you use the appropriate Motorcraft oil filter (or another brand meeting Ford specifications) for your engine application.

## Maintenance and Specifications

### BATTERY

Your vehicle is equipped with a Motorcraft maintenance-free battery which normally does not require additional water during its life of service.



However, for severe usage or in high temperature climates, check the battery electrolyte level. Refer to the scheduled maintenance guide for the service interval schedules.

**Keep the electrolyte level in each cell up to the “level indicator”. Do not overfill the battery cells.**

If the electrolyte level in the battery is low, you can add plain tap water to the battery, as long as you do not use hard water (water with a high mineral or alkali content). If possible, however, try to only fill the battery cells with distilled water. If the battery needs water often, have the charging system checked.

**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.

## Maintenance and Specifications

 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.

 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.

 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.

 Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.**

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) (automatic transmission) or the neutral position (manual transmission), turn off all accessories and start the engine.

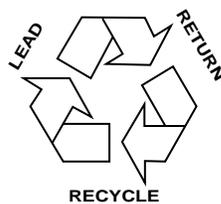
## Maintenance and Specifications

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 16 km (10 miles) or more to relearn the idle and fuel trim strategy.
  - **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.**

When the battery is disconnected or a new battery installed, the transmission must relearn its adaptive strategy. As a result of this, the transmission may shift firmly. 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 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.

- 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.



## Maintenance and Specifications

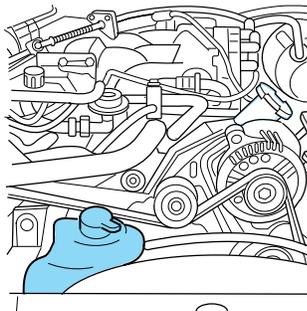
### ENGINE COOLANT

#### Checking engine coolant

The concentration and level of engine coolant should be checked at the mileage intervals in the scheduled maintenance guide. The coolant concentration should be maintained at 50/50 coolant and water, which equates to a freeze point of  $-36^{\circ}\text{C}$  ( $-34^{\circ}\text{F}$ ). Coolant concentration testing is possible with a hydrometer or antifreeze tester (such as the Rotunda Battery and Antifreeze Tester, 014-R1060). The level of coolant should be maintained at the “cold full” or “cold fill range” level in the coolant reservoir. If the level falls below, add coolant per the instructions in the *Adding Engine Coolant* section.

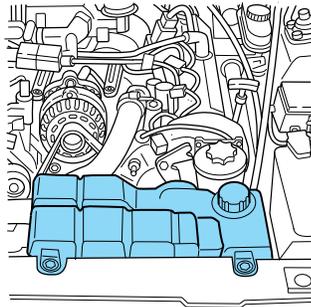
Your vehicle was factory-filled with a 50/50 engine coolant and water concentration. If the concentration of coolant falls below 40% or above 60%, the engine parts could become damaged or not work properly. **A 50-50 mixture of coolant and water provides the following:**

- **freeze protection down to  $-36^{\circ}\text{C}$  ( $-34^{\circ}\text{F}$ )**
- **boiling protection up to  $129^{\circ}\text{C}$  ( $265^{\circ}\text{F}$ )**
- **protection against rust and other forms of corrosion**
- **enables calibrated gages to function properly**
- 3.8L OHV V6 engine



## Maintenance and Specifications

- 4.6L SOHC V8 engine



When the engine is cold, check the level of the engine coolant in the reservoir.

- The engine coolant should be at the “cold fill level” as listed on the engine coolant reservoir.
- Refer to the scheduled maintenance guide for service interval schedules.
- Be sure to read and understand *Precautions when servicing your vehicle* in this chapter.

If the engine coolant has not been checked at the recommended interval, the engine coolant reservoir may become low or empty. If the reservoir is low or empty, add engine coolant to the reservoir. Refer to *Adding engine coolant* in this chapter.

**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

When adding coolant, make sure it is a 50/50 mixture of engine coolant and distilled water. Add the mixture to the coolant reservoir, **when the engine is cool**, until the appropriate fill level is obtained.



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.

## Maintenance and Specifications



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.

The cooling system in your vehicle is filled with either green-colored Motorcraft Premium Engine Coolant meeting Ford specification ESE-M97B44-A or yellow-colored Motorcraft Premium Gold Engine Coolant meeting Ford Specification WSS-M97B51-A1. To determine your vehicle's coolant type (color), check your coolant reservoir.

- **Add Motorcraft Premium Engine Coolant (green-colored), VC-4-A (U.S.) or CXC-10 (Canada) or Motorcraft Premium Gold Engine Coolant (yellow-colored), VC-7-A (VC-7-B in Oregon), depending on the type of coolant originally equipped in your vehicle.** If you are unsure which type of coolant your vehicle requires, check your coolant reservoir or contact your local dealer.

**Note:** Use of Motorcraft Cooling System Stop Leak Pellets, VC-6, darkens the color of Motorcraft Premium Gold Engine Coolant from yellow to golden tan.

- **Do not add/mix an orange-colored, extended life coolant such as Motorcraft Speciality Orange Engine Coolant, VC-2 (US) or CXC-209 (Canada), meeting Ford specification WSS-M97B44-D with the factory-filled coolant.** Mixing Motorcraft Speciality Orange Engine Coolant or any orange-colored extended life product with your factory filled coolant can result in degraded corrosion protection.
- A large amount of water without engine coolant may be added, in case of emergency, to reach a vehicle service location. In this instance, the cooling system must be drained and refilled with a 50/50 mixture of engine coolant and distilled

## Maintenance and Specifications

water as soon as possible. Water alone (without engine coolant) can cause engine damage from corrosion, overheating or freezing.

- **Do not use alcohol, methanol or 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.
- **Do not mix with recycled coolant unless from a Ford-approved recycling process (see *Use of Recycled Engine Coolant* section).**



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.

If you must remove the pressure relief cap or radiator cap (depending upon engine application), follow these steps to avoid personal injury:

1. Before you remove the cap, turn the engine off and let it cool.
2. When the engine is cool, wrap a thick cloth around the cap. Slowly turn cap counterclockwise until pressure begins to release.
3. Step back while the pressure releases.
4. When you are sure that all the pressure has been released, use the cloth to turn it counterclockwise and remove the cap.

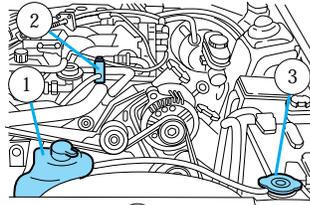
### ***Engine coolant refill procedure-3.8L V6 engine***

**Note:** Use the following procedure when refilling the cooling system of a vehicle equipped with a 3.8L V6 engine. Failure to follow this warning may result in damage to the engine and engine cooling system.

## Maintenance and Specifications

The following procedure should be used when refilling the cooling system of a 3.8L V6 engine after it has been drained or become extremely low.

1. Remove the cap from the engine coolant reservoir.
2. Open the cooling system vent plug.
3. Remove the radiator cap as previously outlined.



4. Add a **50/50 mixture** of engine coolant and distilled water to the radiator until full.
  5. Add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the “cold fill level” as listed on the reservoir.
  6. Close the cooling system vent plug.
  7. Reinstall the engine coolant reservoir cap.
  8. Reinstall the radiator cap.
  9. Start and idle the engine until the upper radiator hose is warm (this indicates the thermostat is open and coolant is flowing through the entire system).
  10. Immediately shut the engine off.
  11. Wrap a thick cloth around the radiator cap and cautiously remove the radiator cap.
  12. Add a **50/50 mixture** of engine coolant and distilled water to the radiator until full.
  13. Reinstall the radiator cap.
  14. Check the coolant level in the reservoir before you drive your vehicle the next few times (with the engine cool).
  15. If necessary, add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the “cold fill level” as listed on the reservoir.
- If you are unsure of how to operate the cooling system vent plug when adding engine coolant to the 3.8L V6 engine, contact your dealer.

## Maintenance and Specifications

### ***Engine coolant refill procedure-4.6L V8 engine***

The following procedure should be used when refilling the cooling system of a 4.6L V8 engine after it has been drained or become extremely low.

1. Remove the pressure relief cap from the engine coolant reservoir as previously outlined.
2. Slowly add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the “cold fill level” as listed on the reservoir.
3. Reinstall the pressure relief cap.
4. Start and idle the engine until the upper radiator hose is warm (this indicates the thermostat is open and coolant is flowing through the entire system).
5. Shut the engine off and let it cool.
6. Remove the pressure relief cap from the engine coolant reservoir as previously outlined.
7. Add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the “cold fill level” as listed on the reservoir.
8. Reinstall the pressure relief cap.
9. Check the coolant level in the reservoir before you drive your vehicle the next few times (with the engine cool).
10. If necessary, add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the “cold fill level” as listed on the reservoir.

After any coolant has been added, check the coolant concentration (see Checking Engine Coolant section). If the concentration is not 50/50 (protection to -34° F/-36° C), drain some coolant and adjust the concentration. It may take several drains and additions to obtain a 50/50 coolant concentration.

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

## Maintenance and Specifications

enough 50/50 concentration of engine coolant and distilled water to bring the liquid level to the proper level.

If you have to add more than 1.0 liter (1.0 quart) of engine coolant per month, have your dealer check the engine cooling system. Your cooling system may have a leak. Operating an engine with a low level of coolant can result in engine overheating and possible engine damage.

### Recycled engine coolant

Ford Motor Company recommends the use of a recycled engine coolant produced by Ford-approved processes in vehicles originally equipped with Motorcraft Premium Engine Coolant (green-colored). However, not all coolant recycling processes produce coolant that meets Ford specification ESE-M97B44-A. Use of such coolant may harm the engine and cooling system components.

Ford Motor Company does NOT recommend the use of recycled engine coolant in vehicles originally equipped with Motorcraft Premium Gold Engine Coolant since a Ford-approved recycling process is not yet available.



Used engine coolant should be disposed of in an appropriate manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

### Coolant refill capacity

To find out how much fluid your vehicle's cooling system can hold, refer to *Refill capacities* in this chapter.

Fill your engine coolant reservoir as outlined in *Adding engine coolant* in this chapter.

### Severe climates

If you drive in extremely cold climates (less than  $-36^{\circ}\text{C}$  [ $-34^{\circ}\text{F}$ ):

- **It may be necessary to increase the coolant concentration above 50%.**

## Maintenance and Specifications

- **NEVER increase the coolant concentration above 60%.**
- **Increased engine coolant concentrations above 60% will decrease the overheat protection characteristics of the engine coolant and may cause engine damage.**
- **Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate freeze protection at the temperatures in which you drive in the winter months.**

If you drive in extremely hot climates:

- **It is still necessary to maintain the coolant concentration above 40%.**
- **NEVER decrease the coolant concentration below 40%.**
- **Decreased engine coolant concentrations below 40% will decrease the corrosion protection characteristics of the engine coolant and may cause engine damage.**
- **Decreased engine coolant concentrations below 40% will decrease the freeze protection characteristics of the engine coolant and may cause engine damage.**
- **Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate protection at the temperatures in which you drive.**

Vehicles driven year-round in non-extreme climates should use a 50/50 mixture of engine coolant and distilled water for optimum cooling system and engine protection.

## Maintenance and Specifications

### WHAT YOU SHOULD KNOW ABOUT AUTOMOTIVE FUELS

#### Important safety precautions



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



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.



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



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



Gasoline may contain benzene, which is a cancer-causing agent.

Observe the following guidelines when handling automotive fuel:

- Extinguish all smoking materials and any open flames before fueling your vehicle.
- Always turn off the vehicle before fueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent



## Maintenance and Specifications

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 and/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.



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.



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.

## Maintenance and Specifications

Use the following guidelines to avoid static 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 1/8 turn on/off feature.

When fueling your vehicle:

1. Turn the engine off.
2. Carefully turn the filler cap counterclockwise 1/8 of a turn until it stops.
3. Pull to remove the cap from the fuel filler pipe.
4. To install the cap, align the tabs on the cap with the notches on the filler pipe.
5. Turn the filler cap clockwise 1/8 of a turn until it stops.

“Check Fuel Cap” illuminates when the ignition is turned to the ON position to ensure your bulb is working. When this light turns on, check the fuel filler cap. Continuing to operate the vehicle with the Check Fuel Cap light on, can activate the Service Engine Soon warning. When the fuel filler cap is properly re-installed, the light(s) will turn off after a period of normal driving. **It may take a long period of time for the system to detect an improperly installed fuel filler cap.**

**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 or Motorcraft fuel filler cap is not used.**

## Maintenance and Specifications



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.



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

### Choosing the right fuel

Use only UNLEADED FUEL. The use of leaded fuel is prohibited by law and could damage your vehicle.

Do not use fuel containing methanol. It can damage critical fuel system components.

Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based compounds containing MMT.

Repairs to correct the effects of using a fuel for which your vehicle was not designed may not be covered by your warranty.

### Octane recommendations

Your vehicle is designed to use "Regular" unleaded gasoline with pump



(R+M)/2 octane rating of 87. We do not recommend the use of gasolines labeled as "Regular" that are sold with octane ratings of 86 or lower in high altitude areas.

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 dealer or a qualified service technician to prevent any engine damage.

## Maintenance and Specifications

### Fuel quality

If you are experiencing starting, rough idle or hesitation driveability problems during a cold start, try a different brand of “Regular” unleaded gasoline. “Premium” unleaded gasoline is not recommended (particularly in the United States) because it may cause these problems to become more pronounced. If the problems persist, see your dealer or a qualified service technician.

It should not be necessary to add any aftermarket products to your fuel tank if you continue to use high quality fuel of the recommended octane rating. Aftermarket products could cause damage to the fuel system. Repairs to correct the effects of using an aftermarket product in your fuel may not be covered by your warranty.

Many of the world’s automakers issued the World-wide Fuel Charter that recommends gasoline specifications to provide improved performance and emission control



system protection for your vehicle. Gasolines that meet the World-wide Fuel Charter should be used when available. Ask your fuel supplier about gasolines that meet the World-wide Fuel Charter. In Canada, look for fuels that display the **Auto Makers’ Choice**<sup>™</sup> logo.

### Cleaner air

Ford endorses the use of reformulated “cleaner-burning” gasolines to improve air quality.

### Running out of fuel

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

If you have run out of fuel:

## Maintenance and Specifications

- 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.
- Your “Service Engine Soon” indicator may come on. For more information on the “Service Engine Soon” indicator, refer to the *Instrument cluster* chapter.

### Fuel Filter

For fuel filter replacement, see your dealer or a qualified service technician. Refer to the scheduled maintenance guide for the appropriate intervals for changing the fuel filter.

**Replace the fuel filter with an authorized Motorcraft part. The customer warranty may be void for any damage to the fuel system if an authorized Motorcraft fuel filter is not used.**

## ESSENTIALS OF GOOD FUEL ECONOMY

### Measuring techniques

Your best source of information about actual fuel economy is you, the driver. You must gather information as accurately and consistently as possible. Fuel expense, frequency of fill-ups or fuel gauge readings are NOT accurate as a measure of fuel economy. We do not recommend taking fuel economy measurements during the first 1,600 km (1,000 miles) of driving (engine break-in period). You will get a more accurate measurement after 3,000 km–5,000 km (2,000 miles–3,000 miles).

### Filling the tank

The advertised fuel capacity of the fuel tank on your vehicle is equal to the rated refill capacity of the fuel tank as listed in the *Refill capacities* section of this chapter.

The advertised capacity is the amount of the indicated capacity and the empty reserve combined. Indicated capacity is the difference in the amount of

## Maintenance and Specifications

fuel in a full tank and a tank when the fuel gauge indicates empty. Empty reserve is the small amount of fuel remaining in the fuel tank after the fuel gauge indicates empty.

**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 engine/ignition switch to the off position prior to refueling, an error in the reading will result if the engine is left running.
- Use the same filling rate setting (low — medium — high) each time the tank is filled.
- Allow no more than 2 automatic click-offs when filling.
- Always use fuel with the recommended octane rating.
- Use a known quality gasoline, preferably a national brand.
- Use the same side of the same pump and have the vehicle facing the same direction each time you fill up.
- Have the vehicle loading and distribution the same every time.

Your results will be most accurate if your filling method is consistent.

### Calculating fuel economy

1. Fill the fuel tank completely and record the initial odometer reading (in kilometers or miles).
2. Each time you fill the tank, record the amount of fuel added (in liters or gallons).
3. After at least three to five tank fill-ups, fill the fuel tank and record the current odometer reading.

## Maintenance and Specifications

4. Subtract your initial odometer reading from the current odometer reading.
5. Follow one of the simple calculations in order to determine fuel economy:

**Multiply liters used by 100, then divide by total kilometers traveled.**

**Divide total miles traveled by total gallons used.**

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

### **Driving style — good driving and fuel economy habits**

Give consideration to the lists that follow and you may be able to change a number of variables and improve your fuel economy.

#### ***Habits***

- Smooth, moderate operation can yield up to 10% savings in fuel.
- Steady speeds without stopping will usually give the best fuel economy.
- Idling for long periods of time (greater than one minute) may waste fuel.
- Anticipate stopping; slowing down may eliminate the need to stop.
- Sudden or hard accelerations may reduce fuel economy.
- Slow down gradually.
- Driving at reasonable speeds (traveling at 88 km/h [55 mph] uses 15% less fuel than traveling at 105 km/h [65 mph]).
- Revving the engine before turning it off may reduce fuel economy.

## Maintenance and Specifications

- Using the air conditioner or defroster may reduce fuel economy.
- You may want to turn off the speed control in hilly terrain if unnecessary shifting between third and fourth gear occurs. Unnecessary shifting of this type could result in reduced fuel economy.
- Warming up a vehicle on cold mornings is not required and may reduce fuel economy.
- Resting your foot on the brake pedal while driving may reduce fuel economy.
- Combine errands and minimize stop-and-go driving.

### **Maintenance**

- Keep tires properly inflated and use only recommended size.
- Operating a vehicle with the wheels out of alignment will reduce fuel economy.
- Use recommended engine oil. Refer to *Lubricant specifications* in this chapter.
- Perform all regularly scheduled maintenance items. Follow the recommended maintenance schedule and owner maintenance checks found in your vehicle scheduled maintenance guide.

### **Conditions**

- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Carrying unnecessary weight may reduce fuel economy (approximately 0.4 km/L [1 mpg] is lost for every 180 kg [400 lb] of weight carried).
- Adding certain accessories to your vehicle (for example bug deflectors, rollbars/light bars, running boards, ski/luggage racks) may reduce fuel economy.
- Using fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures during the first 12–16 km (8–10 miles) of driving.

## Maintenance and Specifications

- Driving on flat terrain offers improved fuel economy as compared to driving on hilly terrain.
- Transmissions give their best fuel economy when operated in the top cruise gear and with steady pressure on the gas pedal.
- Close windows for high speed driving.

### EPA window sticker

Every new vehicle should have the EPA window sticker. Contact your dealer if the window sticker is not supplied with your vehicle. The EPA window sticker should be your guide for the fuel economy comparisons with other vehicles.

It is important to note the box in the lower left corner of the window sticker. These numbers represent the Range of L/100 km (MPG) expected on the vehicle under optimum conditions. Your fuel economy may vary depending upon the method of operation and conditions.

### EMISSION CONTROL SYSTEM

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 your scheduled maintenance guide performed according to the specified schedule.

The scheduled maintenance items listed in the scheduled maintenance guide 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

## Maintenance and Specifications

service of components affecting emission control, such non-Ford parts should be equivalent to genuine Ford Motor Company parts in performance and durability.



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.

Illumination of the “Service Engine Soon” light, 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.



Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment.

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 identifies engine displacement and gives some tune up specifications.

Please consult your *Warranty Guide* for complete emission warranty information.

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

In some localities, it may be a legal requirement to pass an I/M test of the on-board diagnostics system. If your “Check Engine/Service Engine Soon” light is on, refer to the description in the *Warning lights and chimes* section of the *Instrument cluster* chapter. Your vehicle may not pass the I/M test with the “Check Engine/Service Engine Soon” light on.

## Maintenance and Specifications

If the vehicle's powertrain system or its battery has just been serviced, the on-board diagnostics system is reset to a "not ready for I/M test" condition. To ready the on-board diagnostics system for I/M testing, a minimum of 30 minutes of city and highway driving is necessary as described below:

- First, at least 10 minutes of driving on an expressway or highway.
- Next, at least 20 minutes driving in stop-and-go, city-type traffic with at least four idle periods.

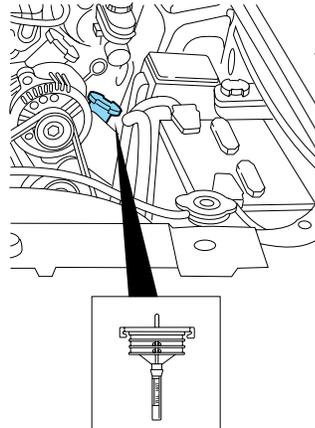
Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once started, do not turn off the engine until the above driving cycle is complete.

### CHECKING AND ADDING POWER STEERING FLUID

Check the power steering fluid. Refer to the scheduled maintenance guide for the service interval schedules. If adding fluid is necessary, use only MERCON® ATF.

**If your vehicle is equipped with the 3.8L V6 engine,** check the power steering fluid level with the engine at normal operating temperature.

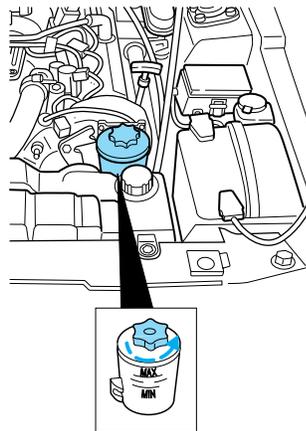
1. Start the engine and let it run until it reaches normal operating temperature (the engine coolant temperature gauge indicator will be near the center of the normal area between H and C).



## Maintenance and Specifications

2. While the engine idles, turn the steering wheel left and right several times.
3. Turn the engine off.
4. Check the fluid level on the dipstick. It should be within the FULL HOT range. Do not add fluid if the level is within this range.
5. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the correct operating range. Be sure to put the cap back on the reservoir.

**If your vehicle is equipped with a 4.6L V8 engine**, check the power steering fluid level with the engine at ambient temperature. Allow at least one-half hour after driving for the power steering fluid to cool.



1. Start the engine and allow the engine to idle.
2. Turn the steering wheel left and right several times.
3. Turn the engine off.
4. Check the fluid level in the reservoir. It should be between the MIN and MAX lines. Do not add fluid if the level is within this range.
5. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the correct operating range. Be sure to put the cap back on the reservoir.

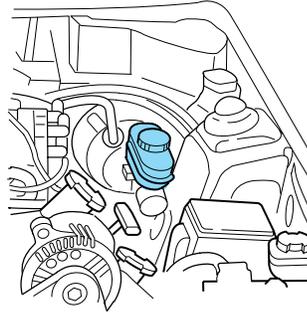
### **BRAKE FLUID**

#### **Checking and adding brake fluid**

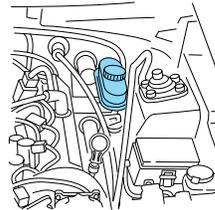
Brake fluid should be checked and refilled as needed. Refer to the scheduled maintenance guide for the service interval schedules.

## Maintenance and Specifications

- 3.8L OHV V6 engine



- 4.6L SOHC V8 engine



1. Clean the reservoir cap before removal to prevent dirt or water from entering the reservoir.
2. Visually inspect the fluid level.
3. If necessary, add brake fluid from a clean un-opened container until the level reaches MAX. Do not fill above this line.
4. Use only a DOT 3 brake fluid certified to meet Ford specification ESA-M6C25-A. Refer to *Lubricant specifications* in this chapter.



 Brake fluid is toxic. If brake fluid contacts the eyes, flush eyes with running water for 15 minutes. Seek medical attention if irritation persists. If taken internally, drink water and induce vomiting. Seek medical attention immediately.

## Maintenance and Specifications



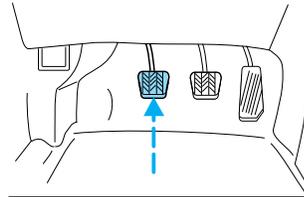
If you use a brake fluid that is not DOT 3, you will cause permanent damage to your brakes.



Do not let the reservoir for the master cylinder run dry. This may cause the brakes to fail.

### CLUTCH ADJUSTMENT (IF EQUIPPED)

Check the clutch adjustment. Refer to the scheduled maintenance guide for the service interval schedules.



The clutch on your vehicle is operated by a cable. As necessary, adjust the clutch as described below.

1. Turn the engine off and shift into 1 (First).
2. Put your foot under the clutch pedal and gently pull it up until the pedal stops.
3. Push the clutch pedal down slowly. You will hear a click as the clutch adjusts itself.

### TRANSMISSION FLUID

#### Checking automatic transmission fluid (if equipped)

Refer to your scheduled maintenance guide 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. To obtain an accurate fluid check, drive the vehicle

## Maintenance and Specifications

until it is at normal operating temperature (approximately 30 km [20 miles]). If your vehicle has been operated for an extended period at high speeds, in city traffic during hot weather or pulling a trailer, the vehicle should be turned off for about 30 minutes to allow fluid to cool before checking.

1. Drive the vehicle 30 km (20 miles) or until it reaches normal operating temperature.
2. Park the vehicle on a level surface and engage the parking brake.
3. With the parking brake engaged and your foot on the brake pedal, start the engine and move the gearshift lever through all of the gear ranges. Allow sufficient time for each gear to engage.
4. Latch 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 *Identifying components in the engine compartment* 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 area for normal operating temperature or ambient temperature.

### **Low fluid level**

Do not drive the vehicle if the fluid level is at the bottom of the dipstick and the ambient temperature is above 10°C (50°F).



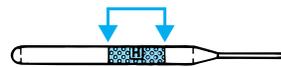
### **Correct fluid level**

The transmission fluid should be checked at normal operating temperature 66°C-77°C (150°F-170°F) on a level surface. The normal operating temperature can be reached after approximately 30 km (20 miles) of driving.

## Maintenance and Specifications

You can check the fluid without driving if the ambient temperature is above 10°C (50°F). However, if fluid is added at this time, an overfill condition could result when the vehicle reaches normal operating temperature.

The transmission fluid should be in this range if at normal operating temperature (66°C-77°C [150°F-170°F]).

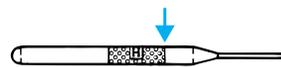


The transmission fluid should be in this range if at ambient temperature (10°C-35°C [50°F-95°F]).



### **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.

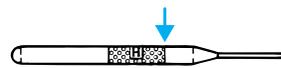
### **Adjusting automatic transmission fluid levels**

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 *Lubricant specifications* section in this chapter.

**Use of a non-approved automatic transmission fluid may cause internal transmission component damage.**

If necessary, add fluid in 250 ml (1/2 pint) increments through the filler tube until the level is correct.

If an overfill occurs, excess fluid should be removed by a qualified technician.



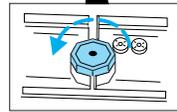
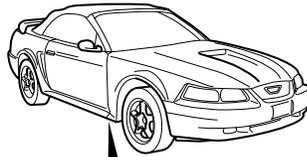
## Maintenance and Specifications

**An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.**

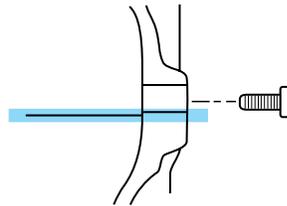
Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

### Checking and adding manual transmission fluid (if equipped)

1. Clean the filler plug.
2. Remove the filler plug and inspect the fluid level.



3. Fluid level should be at bottom of the opening.
4. Add enough fluid through the filler opening so that the fluid level is at the bottom of the opening.



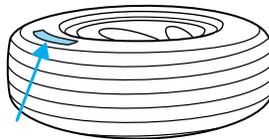
5. Install and tighten the fill plug securely.

Use only fluid that meets Ford specifications. Refer to *Lubricant Specifications* in this chapter.

## Maintenance and Specifications

### INFORMATION ABOUT UNIFORM TIRE QUALITY GRADING

New vehicles are fitted with tires that have a rating on them called Tire Quality Grades. The 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 tires for use on passenger cars. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare 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 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 one and one-half (1 1/2) 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 climates.

## Maintenance and Specifications

### Traction AA A B C

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.



The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

### Temperature A B C

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. 109. Grades A and B represent higher levels of performance on the laboratory test wheel than the minimum required by law.



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.

## Maintenance and Specifications

### SERVICING YOUR TIRES

#### Checking the tire pressure

- Use an accurate tire pressure gauge.
- Check the tire pressure when tires are cold, after the vehicle has been parked for at least one hour or has been driven less than 5 km (3 miles).
- Adjust tire pressure to recommended specifications found on the certification label on the driver side door latch pillar.

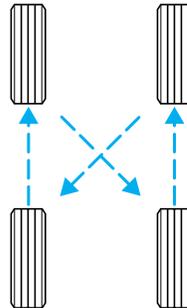


Improperly inflated tires can affect vehicle handling and can fail suddenly, possibly resulting in loss of vehicle control.

#### Tire rotation

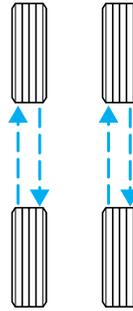
Because your vehicle's tires perform different jobs, they often wear differently. To make sure your tires wear evenly and last longer, rotate them as indicated in the scheduled maintenance guide. If you notice that the tires wear unevenly, have them checked.

- 15 or 16 inch four tire rotation



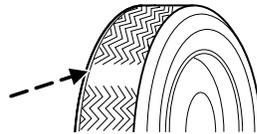
## Maintenance and Specifications

- 17 inch four tire rotation



### Replacing the tires

Replace the tires when the wear band is visible through the tire treads.



 When replacing full size tires, never mix radial bias-belted, or bias-type tires. Use only the tire sizes that are listed on the tire pressure decal. Make sure that all tires are the same size, speed rating, and load-carrying capacity. Use only the tire combinations recommended on the label. If you do not follow these precautions, your vehicle may not drive properly and safely.

 Make sure that all replacement tires are of the same size, type, load-carrying capacity and tread design (e.g., "All Terrain", etc.), as originally offered by Ford.

 Make sure that all replacement tires are of the same size, type, load-carrying capacity and tread design (e.g., "All Terrain", "Touring", etc.), as originally offered by Ford.

## Maintenance and Specifications

 Failure to follow these precautions may adversely affect the handling of the vehicle and make it easier for the driver to lose control and roll over.

Tires that are larger or smaller than your vehicle's original tires may also affect the accuracy of your speedometer.

### SNOW TIRES AND CHAINS

 Driving too fast for conditions creates the possibility of loss of vehicle control. Driving at very high speeds for extended periods of time may result in damage to vehicle components.

 Snow tires must be the same size and grade as the tires you currently have on your vehicle.

The tires on your vehicle have all weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and chains. Use chains on the tires only in an emergency or if the law requires them.

Follow these guidelines when using snow tires and chains:

- Chains may damage aluminum wheels.
- Use only Cable Type chains with size P225/55R16 or 245/45ZR17 tires. Use of SAE Class S chains may damage your vehicle.
- SAE Class S chains may be used on P205/65R15 tires.
- Install chains securely, verifying that the chains do not touch any wiring, brake lines or fuel lines.
- Drive cautiously. If you hear the chains rub or bang against your vehicle, stop and re-tighten the chains. If this does not work, remove the chains to prevent damage to your vehicle.

## Maintenance and Specifications

- If possible, avoid fully loading your vehicle.
- Remove the tire chains when they are no longer needed. Do not use tire chains on dry roads.
- The suspension insulation and bumpers will help prevent vehicle damage. Do not remove these components from your vehicle when using snow tires and chains.

### MOTORCRAFT PART NUMBERS

Component	3.8L OHV V6 engine	4.6L SOHC V8 engine
Air filter element	FA-1611	FA-1634
Fuel filter	FG-986	FG-986B
Battery	BXT-59	BXT-59
Oil filter	FL-400S	FL-820S
PCV valve	EV-152	EV-98
Spark plugs*	AWSF-42EE**	AWSF-32P

\* Refer to Vehicle Emissions Control Information (VECI) decal for spark plug gap information.

\*\*If a spark plug is removed for inspection, it must be reinstalled in the same cylinder. If a spark plug needs to be replaced, use only spark plugs with the same service part number suffix letter as shown on the engine decal.

## Maintenance and Specifications

### REFILL CAPACITIES

Fluid	Ford Part Name	Application	Capacity
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	All	Fill to line on reservoir
Engine oil (includes filter change)	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil	3.8L OHV V6 engine	4.7 L (5.0 quarts)
		4.6L SOHC V8 engine	5.7L (6.0 quarts)
Engine coolant <sup>1</sup>	Motorcraft Premium Engine Coolant (green-colored) <b>or</b>	3.8L OHV V6 engine	11.2L (11.8 quarts)
	Motorcraft Premium Gold Engine Coolant (yellow-colored)	4.6L SOHC V8 engine	13.3L (14.1 quarts)
Power steering fluid	Motorcraft MERCON® ATF	3.8L OHV V6 engine	Keep in FULL HOT range on dispstick
		4.6L SOHC V8 engine	Fill to between MIN and MAX lines on reservoir

## Maintenance and Specifications

Fluid	Ford Part Name	Application	Capacity
Rear axle lubricant <sup>2</sup>	Motorcraft SAE 80W-90 Premium Rear Axle Lubricant	7.5 inch axle	1.5L (3.25 pints)
	Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant	8.8 inch axle	2.0L (4.25 pints)
Fuel tank	N/A	All	59.4L (15.7 gallons)
Transmission fluid <sup>3</sup>	Motorcraft MERCON <sup>®</sup> V ATF	Automatic with 3.8L OHV V6 engine	13.1L (13.9 quarts) <sup>4</sup>
		Automatic with 4.6L SOHC V8 engine	12.0L (12.8 quarts) <sup>4</sup>
	Motorcraft MERCON <sup>®</sup> ATF	Manual with 3.8L OHV V6 engine	2.6L (5.6 pints) <sup>5</sup>
	Synthetic MERCON <sup>®</sup> ATF	Manual with 4.6L SOHC V8 engine	3.8L (8.0 pints) <sup>5</sup>
Windshield washer fluid	Ultra-Clear Windshield Washer Concentrate	All	3.8L (4.0 quarts)

<sup>1</sup>Add the coolant type originally equipped in your vehicle.

<sup>2</sup>Rear axle lubricants do not need to be checked or changed unless a leak is suspected, service is required or the axle assembly has been submerged in water. The axle lubricant should be changed any time the rear axle has been submerged in water. Fill 6 mm to 14 mm (1/4 inch to 9/16 inch) below bottom of fill hole. Add 118 ml (4 oz.) of Additive Friction Modifier C8AZ-19B546-A or equivalent

## Maintenance and Specifications

meeting Ford specification EST-M2C118-A for complete refill of Traction-Lok axles.

<sup>3</sup>Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. MERCON® and MERCON® V are not interchangeable. DO NOT mix MERCON® and MERCON® V. Refer to your scheduled maintenance guide to determine the correct service interval.

<sup>4</sup>Indicates only approximate dry-fill capacity. Some applications may vary based on cooler size and if equipped with an in-tank cooler. The amount of transmission fluid and fluid level should be set by the indication on the dipstick's normal operating range.

<sup>5</sup>Service refill capacity is determined by filling the transmission to the bottom of the filler hole with the vehicle on a level surface.

### LUBRICANT SPECIFICATIONS

Item	Ford part name	Ford part number	Ford specification
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	PM-1	ESA-M6C25-A and DOT 3
Door weatherstrips	Silicone Lubricant	F7AZ-19G208-BA and F5AZ-19553-AA	ESR-M13P4-A
Door latch, hood latch, auxiliary hood latch, door hinges, striker plates, seat tracks and fuel filler door hinge	Multi-Purpose Grease	XG-4or F5AZ-19G209-AA	ESR-M1C159-A

## Maintenance and Specifications

Item	Ford part name	Ford part number	Ford specification
Engine coolant	Motorcraft Premium Engine Coolant (green-colored)	VC-4-A (US) or CXC-10 (Canada)	ESE-M97B44-A
	Motorcraft Premium Gold Engine Coolant (yellow-colored)	VC-7-A	WSS-M97B51-A1
Engine oil	Motorcraft SAE 5W-20 Super Premium Motor Oil	XO-5W20-QSP	WSS-M2C153-H with API Certification Mark
Lock cylinders	Penetrating and Lock Lubricant	Motorcraft XL-1	none
Power steering fluid and convertible top fluid (if equipped)	Motorcraft MERCON® ATF	XT-2-QM	MERCON®
Rear Axle Lubricant	Motorcraft SAE 80W-90 Premium Rear Axle Lubricant <sup>1</sup>	XY-80W90-QL	WSP-M2C197-A
	Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant	XY-75W140-QL	WSP-M2C192-A
Automatic transmission fluid	Motorcraft MERCON®V ATF <sup>2</sup>	XT-5-QM	MERCON®V
3.8L Manual transmission fluid	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
4.6L Manual transmission fluid	Motorcraft Synthetic MERCON® ATF	XT-2-QSM	MERCON® and ESR-M2C163-A2
Disc brake caliper rails	Motorcraft Silicone Brake Caliper Grease and Dielectric Compound	XG-3	ESE-M1C171-A
Windshield washer fluid	Ultra-clear Windshield Washer Concentrate	C9AZ-19550-AC	ESR-M17P5-A

## Maintenance and Specifications

<sup>1</sup>Add 118 ml (4 oz.) of Additive Friction Modifier C8AZ-19B546-A or equivalent meeting Ford specification EST-M2C118-A for complete refill of Traction-Lok axles.

Ford design rear axles contain a synthetic lubricant that does not require changing unless the axle has been submerged in water.

<sup>2</sup>Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. MERCON® and MERCON® V are not interchangeable. DO NOT mix MERCON® and MERCON® V. Refer to your scheduled maintenance guide to determine the correct service interval.

### ENGINE DATA

Engine	3.8L OHV V6 engine	4.6L SOHC V8 engine
Cubic inches	232	281
Required fuel	87 octane	87 octane
Firing order	1-4-2-5-3-6	1-3-7-2-6-5-4-8
Spark plug gap	1.3-1.4 mm (0.052-00.056 inch)	1.3-1.4 mm (0.052-00.056 inch)
Ignition system	EDIS	Coil on plug
Compression ratio	9.4:1	9.4:1

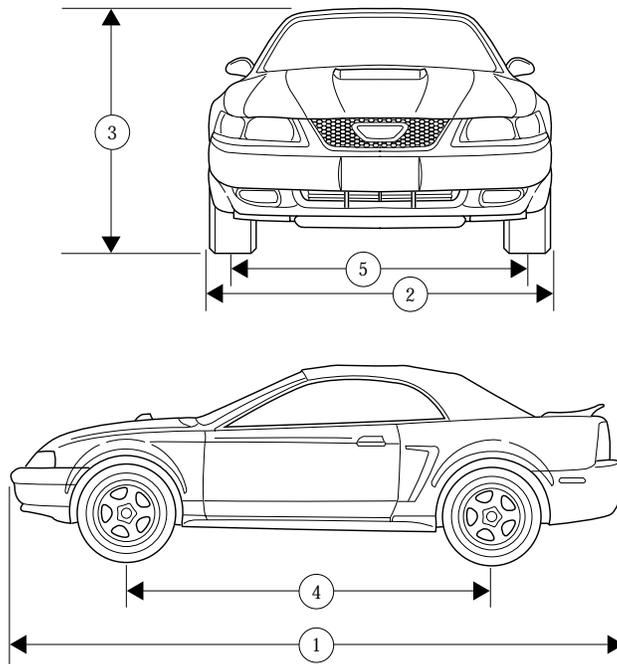
### VEHICLE DIMENSIONS

Vehicle dimensions	Coupe mm (in)	Convertible mm (in)
(1) Overall length	4653.3 (183.2)	4653.3 (183.2)
(2) Overall width	1856.7 (73.1)	1856.7 (73.1)
(3) Overall height	1348.7 (53.1)	1351.3 (53.2)
(4) Wheelbase	2573.0 (101.3)	2573.0 (101.3)
(5) Track - Front	1534.2 (60.4) <sup>1</sup>	1534.2 (60.4) <sup>1</sup>
(5) Track - Rear	1539.2 (60.6) <sup>2</sup>	1539.2 (60.6) <sup>2</sup>

<sup>1</sup> 1521.5 mm (59.9 in) for Mustang GT

<sup>2</sup> 1526.5 mm (60.1 in) for Mustang GT

## Maintenance and Specifications



### IDENTIFYING YOUR VEHICLE

#### Certification label

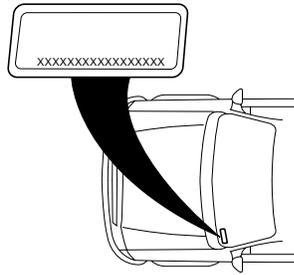
The National Highway Traffic Safety Administration Regulations require that a Certification label be affixed to a vehicle and prescribe where the Certification label may be located. The Certification label is located on the front door latch pillar on the driver's side.

<b>MFD. BY FORD MOTOR CO. IN U.S.A.</b>			
DATE: XXXXX	GVWR:XXXXXXXXXX		
FRONT GAWR:XXXXXXXXXX			
REAR GAWR:XXXXXXXXXX			
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER, AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.			
VIN:XXXXXXXXXXXXXXXXXX	XXXXX		
TYPE:XXXXXXXXXXXXXXXXXX	XXXXX		
EXT PNT:XXXXXXXXXXXX	JRC:XX	IDSO:XXXX	
BAR   INT   TR   T   PPS   R   AXLE   TR   SPR			
X XX XXX X XX X XXXX			
UPC VF85B-1520472-AB			

## Maintenance and Specifications

### Vehicle identification number (VIN)

The vehicle identification number is attached to a metal tag and is located on the driver side instrument panel. (Please note that in the graphic XXXX is representative of your vehicle identification number.)



### Engine number

The engine number (the last eight numbers of the vehicle identification number) is stamped on the engine block and transmission.

## Accessories

### FORD ACCESSORIES FOR YOUR VEHICLE

A wide selection of genuine Ford accessories are available for your vehicle through your local authorized Ford, Lincoln, Mercury or Ford of Canada dealer. These quality accessories have been specifically engineered to fulfill your automotive needs; they are custom designed to complement the style and aerodynamic appearance of your vehicle. In addition, each accessory is made from high quality materials and meets or exceeds Ford's rigorous engineering and safety specifications. Ford Motor Company will repair or replace any properly dealer-installed Ford accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessory. The accessory will be warranted for whichever provides you the greatest benefit:

- 12 months or 2,000 km (12,000 miles) (whichever occurs first), or
- the remainder of your new vehicle limited warranty.

This means that genuine Ford accessories purchased along with your new vehicle and installed by the dealer are covered for the full length of your New Vehicle's Limited Warranty — 3 years or 60,000 km (36,000 miles) (whichever occurs first). Contact your dealer for details and a copy of the warranty.

**Not all accessories are available for all models.**

#### Vehicle Security

Air bag anti-theft locks  
Styled wheel locks  
Vehicle security systems

#### Comfort and convenience

Ash Cup  
Cargo nets  
Cargo organizers  
Cargo tray

## Accessories

Dash trim  
Electrochromic mirror with compass  
Electrochromic mirror with compass and temperature display  
Engine block heaters  
Remote keyless entry system  
Remote start system

### Travel equipment

Auto headlamps with daytime running lights (DRL)  
Daytime running lights (DRL)  
First aid kit  
Fog lights  
Highway safety kit  
Removable luggage rack  
Removable luggage rack adapters (Bike, ski, snowboard)  
Speed control

### Protection and appearance equipment

All-weather vinyl floor mats  
Car cover  
Cargo liners, interior  
Carpet floor mats  
Door edge guards  
Door sill scuff plates, stainless  
Flat splash guards  
Front end covers (full and mini)  
Gearshift knob  
Leather steering wheel  
Molded splash guards  
Pedal covers  
Seat belt extenders

## Accessories

Side air deflector

Spoiler

Styled hood deflector

Tonneau cover (mini, for convertible top)

Universal floor mats

Wheels (chrome and painted)

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 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 or are not properly installed. When operated, such systems may cause the engine to stumble or stall or cause the transmission to be damaged or operate improperly. In addition, such systems may be damaged or their performance may be affected by operating your vehicle. (Citizens band [CB] transceivers, garage door openers and other transmitters with outputs of five watts or less will not ordinarily affect your vehicle's operation.)
- Ford cannot assume responsibility for any adverse effects or damage that may result from the use of such equipment.

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