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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 Lincoln. 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 Mexico: [www.ford.com.mx](http://www.ford.com.mx)

In Australia: [www.ford.com.au](http://www.ford.com.au)


Additional owner information is given in separate publications.



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.

#### **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.



# Introduction

## 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.

## 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 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.



Rear facing child or baby seats should **NEVER** be used in front of a passenger side air bag.

### **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

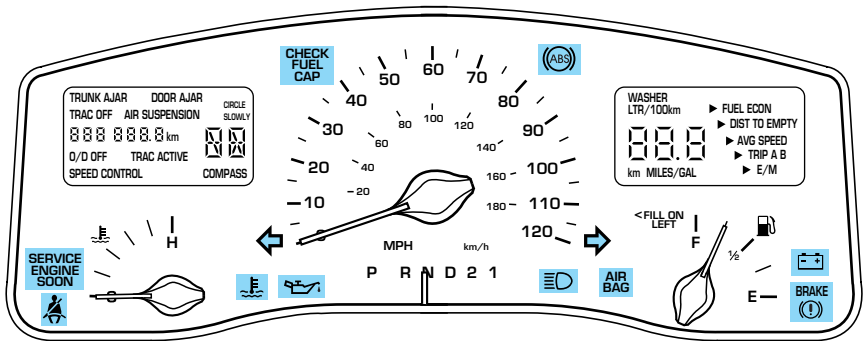
Safety Alert		See Owner's Guide	
Fasten Safety Belt		Air Bag-Front	
Air Bag-Side		Child Seat	
Child Seat Installation Warning		Child Seat Tether Anchorage	
Brake System		Anti-Lock Brake System	
Brake Fluid - Non-Petroleum Based		Traction Control	
Master Lighting Switch		Hazard Warning Flasher	
Fog Lamps-Front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

## Vehicle Symbol Glossary

Child Safety Door Lock/Unlock		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



Warning lights and gauges can alert you to a vehicle condition that may become serious enough to cause expensive repairs. A warning light may illuminate when a problem exists with one of your vehicle's functions. Many lights will illuminate when you start your vehicle to make sure the bulb works. **If any light remains on after starting the vehicle, have the respective system inspected immediately.**

### 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.



### 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.

## Instrument Cluster

These temporary malfunctions can be corrected by filling the fuel tank with high quality fuel of the 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, can activate the *Service Engine Soon/Check Engine* warning light.

**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.

**CHECK  
FUEL  
CAP**

## Instrument Cluster

### Brake system warning

Illuminates if the parking brake is engaged. Also momentarily illuminates at start up to ensure the circuit is functional. If the brake warning lamp does not illuminate at these times, or illuminates after releasing the parking brake, seek service immediately. Refer to *Brakes* in the *Driving* chapter for more information.



### Anti-lock brake system (ABS)

Momentarily illuminates at start up to ensure the circuit is functional. If the light does not illuminate, remains on or continues to flash, the ABS needs to be serviced (refer to *Brakes* in the *Driving* chapter for more information). With the ABS light on, the ABS is disabled and normal braking is still functional.



### 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.



### Safety belt

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



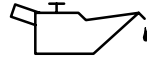
### Charging system

Illuminates when the battery is not charging properly.



## Engine oil pressure

Illuminates when the oil pressure falls below the normal range. Check the oil level and add oil if needed. Refer to *Engine oil* in the *Maintenance and specifications* chapter.



## Engine coolant temperature

Illuminates when the engine coolant temperature is high. Stop the vehicle as soon as safely possible, switch off the engine and let it cool.



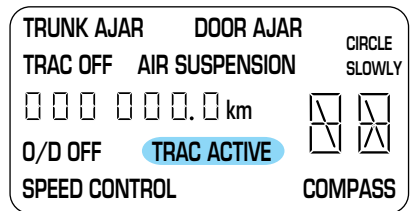
Never remove the coolant recovery cap while the engine is running or hot.

Refer to *Engine coolant* in the *Maintenance and specifications* chapter. If light stays on or continues to turn on after the vehicle warms up, have your vehicle serviced.

## Trac active

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

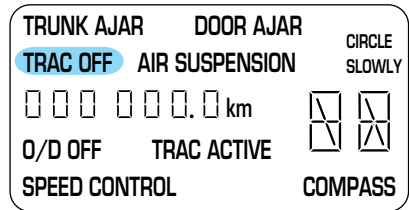
For more information, refer to the *Driving* chapter.



# Instrument Cluster

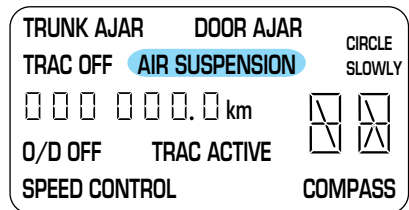
## Trac off

Illuminates when the Traction Control<sup>™</sup> system has been disabled (by the driver or as a result of a system failure). For more information, refer to the *Driving* chapter.



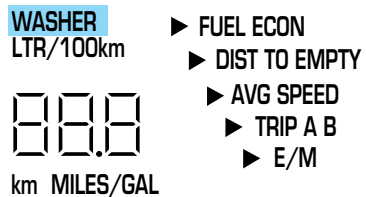
## Air suspension

Illuminates when the air suspension switch is turned OFF or the air suspension system requires servicing.



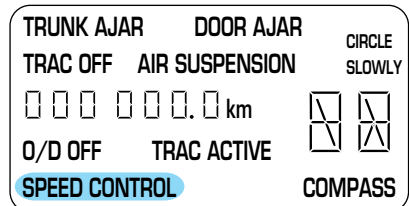
## Washer

Illuminates when the windshield washer fluid is low.



## Speed control

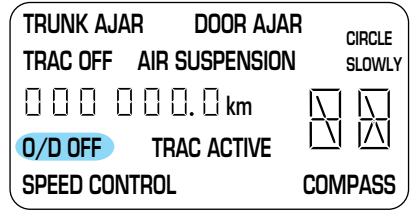
Illuminates when the speed control is activated.



## Instrument Cluster

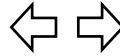
### O/D off

Illuminates when the overdrive function has been turned OFF using the Transmission Control Switch (TCS). 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.



### 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.



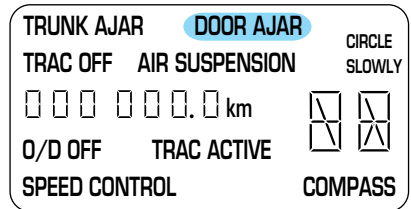
### High beams

Illuminates when the high beam headlamps are turned on.



### Door ajar

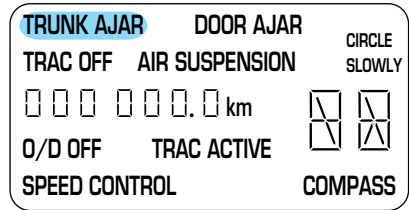
Illuminates when any door is open (or not fully closed).



## Instrument Cluster

### Trunk ajar

Illuminates when the trunk is not completely closed. This light will flash five times and sound a tone for one second, then the light remains on.



### 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.

### 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.

### Key-in-ignition warning chime

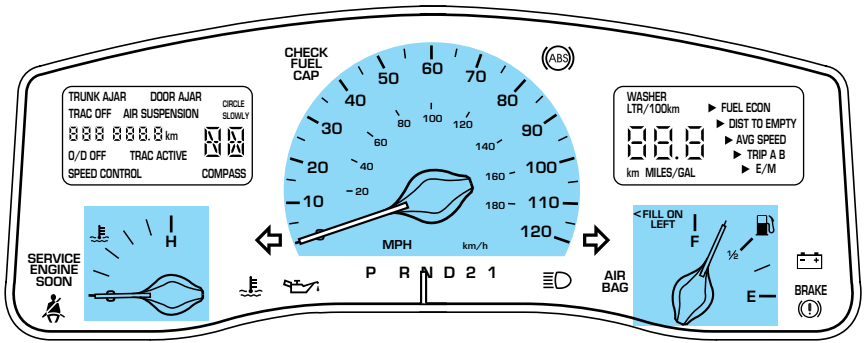
Sounds when the key is left in the ignition and the driver's door is opened.

### Turn signal chime (if equipped)

Sounds when the turn signal lever has been activated to signal a turn and not turned off after the vehicle is driven more than 0.8 km (1/2 mile).

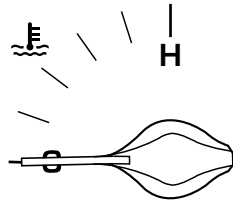
# Instrument Cluster

## 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.



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.

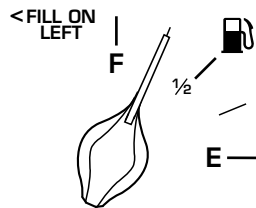
This gauge indicates the temperature of the engine coolant, not the coolant level. If the coolant is not at its proper level the gauge indication will not be accurate. If the gauge enters the red section, the oil pressure/engine coolant and *Check Engine/Service Engine Soon* indicators illuminate, refer to *What you should know about fail-safe cooling* in the *Maintenance and specifications* chapter.

# Instrument Cluster

## Fuel gauge

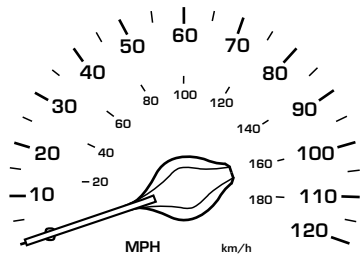
Displays approximately how much fuel is in the fuel tank. The fuel gauge may vary slightly when the vehicle is in motion or on a grade.

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.



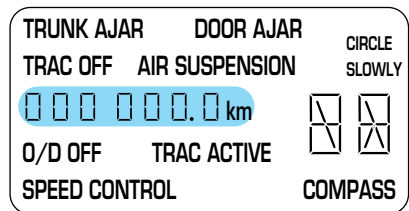
## Speedometer

Indicates the current vehicle speed.



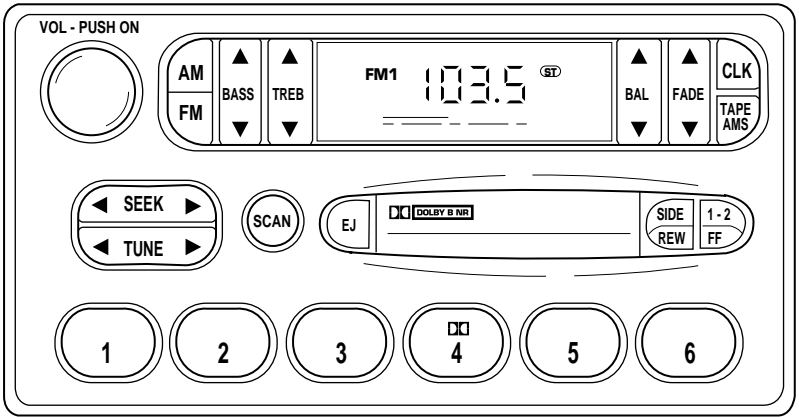
## Odometer

Registers the total kilometers (miles) of the vehicle.



# Entertainment Systems

## AM/FM STEREO CASSETTE

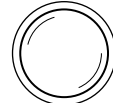


Your vehicle is equipped with a delayed accessory feature. This feature enables the audio playing media to continue playing up to 10 minutes after the ignition has been turned off, or until a door is opened.

### Volume/power control

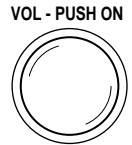
Press the control to turn the audio system on or off.

VOL - PUSH ON



Turn the control to raise or lower volume.

VOL - PUSH ON

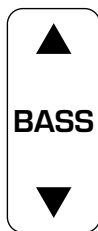


## Entertainment Systems

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.



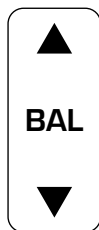
### Treble adjust

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



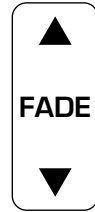
### Speaker balance adjust

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



## Speaker fade adjust

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

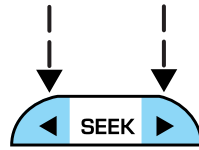


## Seek function

The seek function control works in radio 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.



## Scan function

The scan function works in radio mode.

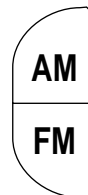


### *Scan function in radio mode*

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.

## AM/FM select

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



## Entertainment Systems

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

This control allows you to select AM or FM frequency bands. Press the AM control to select from AM selections, and press the FM control to select from FM1 or FM2 memory preset stations.

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

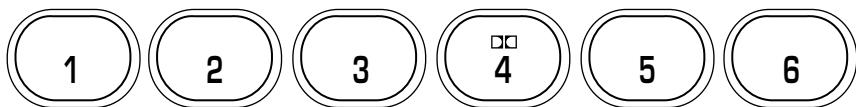
Press this control to stop tape play and begin radio play.

### **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 or the 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.



### **Setting the clock**

This feature applies to vehicles not equipped with a separate, instrument panel mounted clock. If your vehicle has a separate clock, please refer to *Clock* in this chapter.

Press CLK to toggle between listening frequencies and clock mode while in radio mode.

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

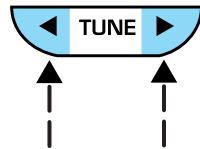
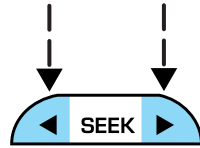


## Entertainment Systems

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

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

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



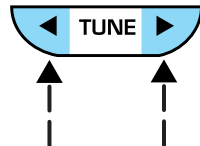
The CLK control will allow you to switch between media display mode (radio station, stereo information, etc.) and clock display mode (time). When in clock mode, the media information will display for 10 seconds, when the radio is turned on, and then revert to clock information. Any time that the media 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.



# Entertainment Systems

## Tape select

- To enter tape mode while in radio mode, press the TAPE AMS control.



## Automatic Music Search

The Automatic Music Search feature allows you to quickly locate the beginning of the tape selection being played or to skip to the next selection.

To activate the feature, momentarily depress the TAPE AMS button.

Then, press either REW (for the beginning of the current selection) or FF (to advance to the next selection). The tape deck stops and returns to play mode when the AMS circuit senses a blank section on the tape.



In order to ensure proper operation of the AMS feature, the tape **MUST** have a blank section of at least four seconds duration between programs.

## Rewind

The rewind control works in tape mode.

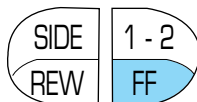
To rewind in tape mode, press the REW control.



## Fast forward

The fast forward control works in tape mode.

To fast forward in tape mode, press the FF control.

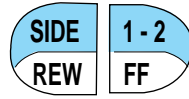


In the tape mode, tape direction will automatically reverse when the end of the tape is reached.

# Entertainment Systems

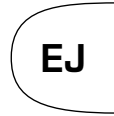
## Tape direction select

Press **SIDE** and **1-2** at the same time to play the alternate side of a tape.




## Eject function

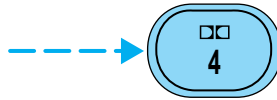
Press the control to stop and eject a tape.



## Dolby® noise reduction

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

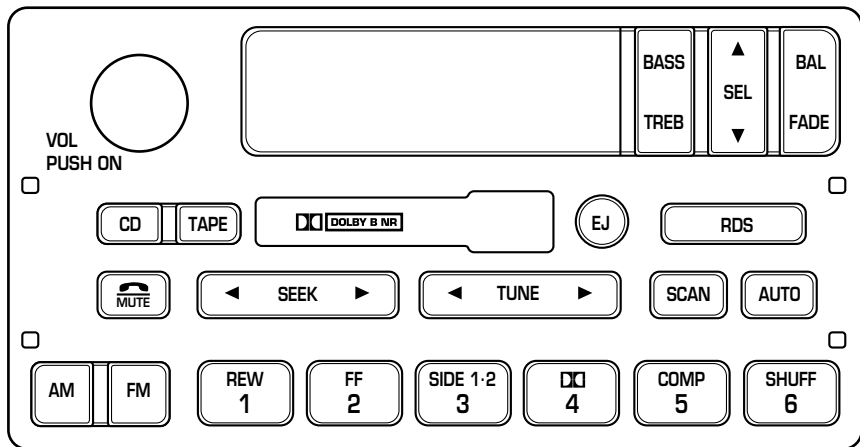
Press the  control to activate (and deactivate) Dolby® noise reduction.



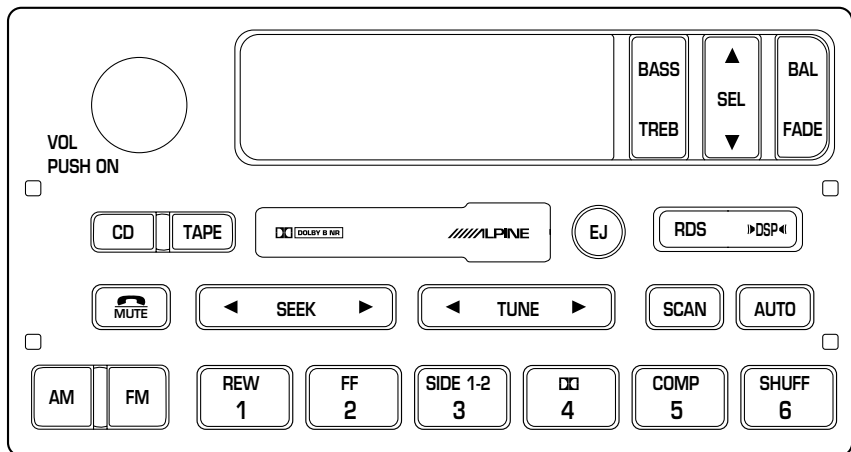
Dolby® noise reduction is manufactured under license from Dolby® Laboratories Licensing Corporation. “Dolby®” and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation.

## Entertainment Systems

### PREMIUM AM/FM STEREO/CASSETTE (CD CHANGER COMPATIBLE)



### ALPINE® AUDIO SYSTEM WITH AM/FM STEREO CASSETTE (CD CHANGER COMPATIBLE)



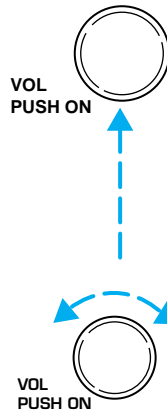
## Entertainment Systems

Your audio system is equipped with selective lighting, a unique lighting strategy. This lighting feature is operable when the headlamps are illuminated. During the operation of any selected mode, lighting for the individual function controls will either illuminate or turn off. Those controls which have a function for the specific mode of operation selected will be lit, while the controls which have no function for that mode will be turned off.

Your vehicle is equipped with a delayed accessory feature. This feature enables the audio playing media to continue playing up to 10 minutes after the ignition has been turned off, or until a door is opened.

### 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 (if equipped)***

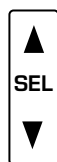
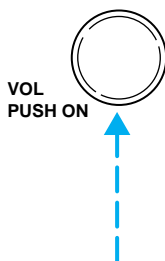
With this feature, radio volume automatically changes slightly with vehicle speed to compensate for road and wind noise.

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.

## Entertainment Systems

With the radio on, press and hold the volume control for five seconds, until the display reads SPEED VOL, then press:

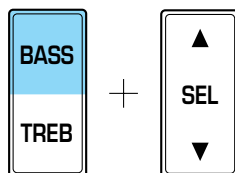
- ▲ to increase volume compensation
- ▼ to decrease or shut off the volume compensation



### Bass adjust

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

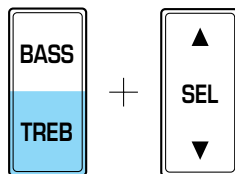
Press the BASS control. Use the SEL control to increase or decrease the amount of bass.



### 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.

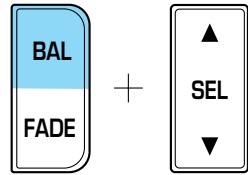


## Entertainment Systems

### Speaker balance adjust

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

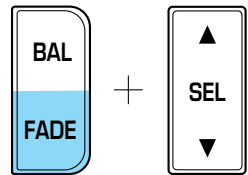
Press the BAL control. Use the SEL control to adjust the sound between the speakers.



### 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.



### Seek function

The seek function control works in radio, tape or CD mode (if equipped).

#### 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

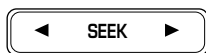
- Press ◀ to listen to the previous selection on the tape or return to the beginning of the current selection.
- Press ▶ to listen to the next selection on the tape.



## Entertainment Systems

### **Seek function for CD changer**

- 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.



### **Scan function**

The scan function works in radio, tape or CD mode (if equipped).



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

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

Press the SCAN control again to disengage scan mode.

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

Press the SCAN control to hear a short sampling of all selections on the tape. The tape will scan 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 SCAN control again.

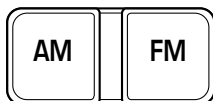
#### **Scan function in CD mode**

Press the SCAN control to hear a short sampling of all selections on the CD. The CD will scan 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 (if equipped).



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

The AM/FM control allows you to select AM or FM frequency bands. Press the control to toggle 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 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.
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.



## **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 AUTO control.
3. When the first six strong stations are filled, the station stored in memory preset control 1 will start playing.



## Entertainment Systems

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.

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

### Setting the clock with radio data system (RDS) feature (if equipped)

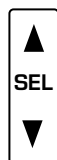
This feature applies to vehicles not equipped with a separate, instrument panel mounted clock. If your vehicle has a separate clock, please refer to *Clock* in this chapter.

Press the RDS control until SELECT HOUR or SELECT MINS is displayed.



Use the SEL control to manually set the time.

- Press ▲ to increase hours/minutes.
- Press ▼ to decrease hours/minutes.



### 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 the button during rewind or fast forward to stop the rewind or fast forward function.
- To begin CD play (if equipped with CD changer), ensure that the CDs are loaded. Press the CD control. The first track of the disc will begin playing. After that, CD play will begin where it stopped last.



**Do not insert any promotional (odd shaped or sized) discs, or discs with removable labels into the CD player as jamming may occur.**

## 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 for less than three seconds results in slow rewind. Pressing the control for more than three seconds results in fast rewind.



## Fast forward

The fast forward control works in tape and CD modes (if equipped).

- In the tape mode, tape direction will automatically reverse when the end of the tape is reached.
- In CD mode, pressing the control for less than three seconds results in slow forward action. Pressing the control for more than three seconds results in fast forward action.



## Tape direction select

Press SIDE 1-2 to play the alternate side of a tape.



## Eject function

Press the control to stop and eject a tape.

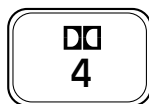


## Entertainment Systems

### Dolby® noise reduction

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

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



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

### Compression feature

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.

The effect of the feature varies with the music content.



### 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 are played.



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

### Phone mode

This feature allows you to control the factory-installed cellular phone (if equipped) through the radio controls.



- Press the phone/mute control to enter phone mode. The playing media will mute.

## Entertainment Systems

- Use SEEK, TUNE or radio presets 1 through 6 to select a phone number previously programmed in the phone.
- Press the phone/mute control again to send and end calls.

This control will mute the playing media even if your vehicle is not equipped with a factory-installed cellular phone.

Press the control again to return to the playing media.

### Mute mode

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



### Digital signal processing (if equipped)

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



These effects will change the sound quality and may need to be adjusted based upon the program material to suit your listening needs.

Press the control to turn the feature on or off.

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



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

## Entertainment Systems

Press the DSP control until one of the following appears:

- ALL SEATS
- DRIVER SEAT
- REAR SEATS

Use the SELECT control to change the equalization to the desired mode.

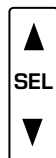


### Radio data system (RDS) feature

This feature allows your audio system to receive station identification or program type from RDS-equipped FM radio stations.

The Federal Communications Commission (FCC) and the Canadian Radio and Telecommunications Commission (CRTC) recommend FM radio broadcasters to use RDS technology to transmit information. FM radio stations are independently operated and individually elect to use RDS technology to transmit station ID and program type as desired.

Press the RDS control until RDS ON or RDS OFF appears in the display.



Use the SEL control to enable (ON) or disable (OFF) the feature. With the RDS activated, press the SEL control to scroll through the following selections:

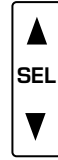
### Traffic

- Press the RDS control until TRAFFIC is displayed.



## Entertainment Systems

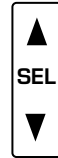
- Use the SEL control to select ON or OFF. With the feature on, use the SEEK or SCAN control to find a radio station broadcasting a traffic report (if it is broadcasting RDS data).



*Traffic information is not available in most U.S. markets.*

### **Program type**

- Press the RDS control until the FIND program type is displayed.
- 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**

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



## Entertainment Systems

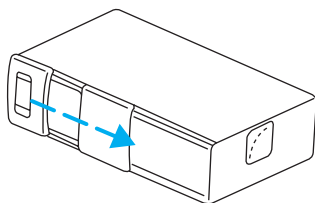
- Use the SEL control to select TYPE (the display shows the program type), NAME (the display shows the call letters of the station) or NONE.



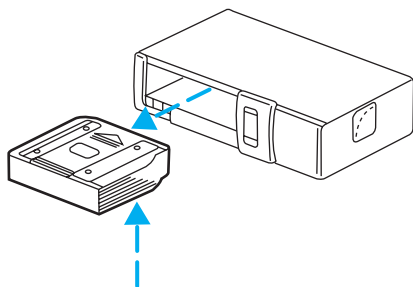
### CD CHANGER (IF EQUIPPED)

Your CD changer is located in the trunk.

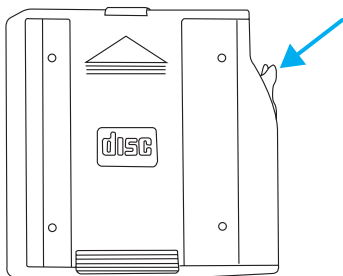
1. Slide the door to access the CD changer magazine.



2. Press ▲ to eject the magazine.



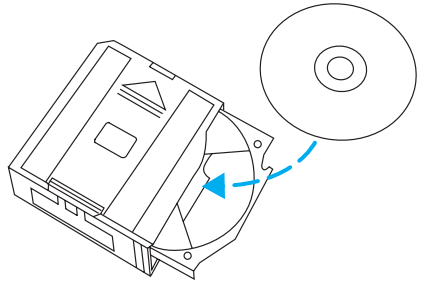
3. Pull the lever to remove a CD tray from the magazine.



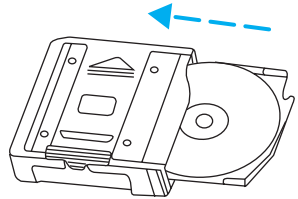
## Entertainment Systems

4. Insert one disc into each CD tray of the magazine (up to 6 discs). Ensure that the label side is facing up.

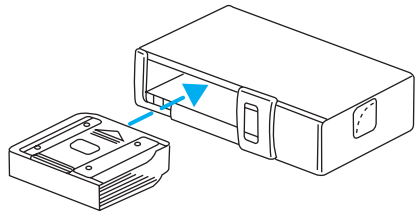
If you pull too hard on the disc holder, the disc holder may come completely out of the magazine. If this happens, reinsert the disc holder back into the magazine.



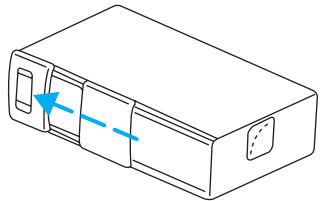
5. Insert each CD tray, with the disc loaded, all the way into the CD magazine.



6. Insert the CD magazine into the changer.



7. Slide the door to the left to close.



Use only compact discs containing this mark.



The magazine does not need to be full for the changer to operate.

## Entertainment Systems

Radio power must be turned on to play the CDs in the changer. The magazine may be stored in the glove compartment when not being used. The CD magazine may be inserted or ejected with the radio power off.

**Do not insert any promotional (odd shaped or sized) discs, or discs with removable labels into the CD player as jamming may occur.**

### TROUBLESHOOTING THE CD CHANGER (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.

### 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.

### CD AND CD CHANGER 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 each slot of the CD changer magazine.

## Entertainment Systems

**Do not insert any promotional (odd shaped or sized) discs, or discs with removable labels into the CD player as jamming may occur.**

### **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.

### **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

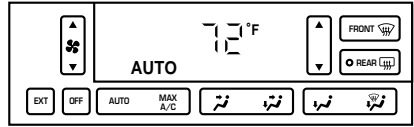
Refer to the *Warranty Guide* for audio system warranty information.

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

# Climate Controls

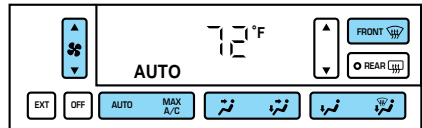
## ELECTRONIC AUTOMATIC TEMPERATURE CONTROL (EATC) SYSTEM

The EATC system will maintain a selected temperature and automatically control airflow. You can override automatic operation with any of the override controls, the fan speed control or the steering wheel controls (if equipped).



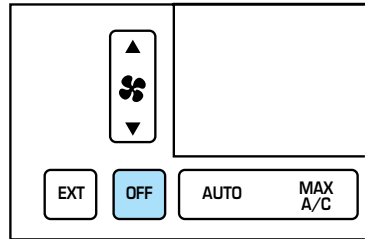
### Turning the EATC on

Press AUTO, any of the override controls or the fan speed control. The EATC will only operate when the vehicle is running.



### Turning the EATC system off

Press OFF. The outside temperature function will continue to operate until the ignition is turned off.



### Automatic operation

Press AUTO and select the desired temperature. The selected temperature and the word AUTO will appear in the display window. The EATC system will either heat or cool to achieve the selected temperature. The system will automatically determine fan speed, airflow location and if outside air or recirculated air is required. Fan speed remains automatic unless the fan speed control is pressed or the steering wheel fan speed control (if equipped) is pressed.

When in AUTO and weather conditions require heat, air will be sent to the floor. However, if the engine is not warm enough to provide heat, the fan will be at a low speed and the air will be directed to the windshield. In approximately 3½ minutes or less, the fan speed will start to increase and the airflow location will change to the floor area.

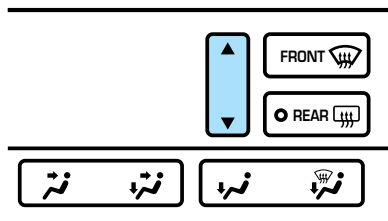
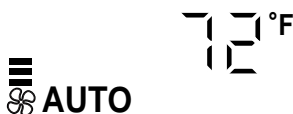
## Climate Controls

If unusual conditions exist (i.e.-window fogging, etc.), the manual override controls allow you to select airflow locations and the fan control allows you to adjust fan speed as necessary.

### Temperature selection

The display window indicates the selected temperature, function (AUTO or one of the override controls) and manual control of fan speed (🌀) if automatic fan speed is not desired.


To control the temperature, select any temperature between 18°C (65°F) and 29°C (85°F) by pressing the temperature control.

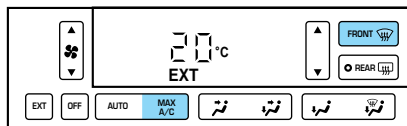


For continuous maximum cooling, push the temperature control until 16°C (60°F) is shown in the display window. The EATC will continue maximum cooling (disregarding the displayed temperature) until a warmer temperature is selected by pressing the temperature control.

For continuous maximum heating, push the temperature control until 32°C (90°F) is shown in the display window. The EATC will continue maximum heating (disregarding the displayed temperature) until a cooler temperature is selected by pressing the temperature control.

### Temperature conversion

Press MAX A/C and FRONT  at the same time (for one second) to switch between Fahrenheit and Celsius.



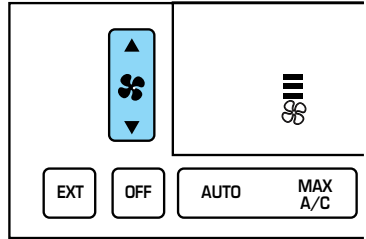
If your vehicle has an English/Metric (E/M) control to change your electronic instrument cluster (if equipped) and the message center (if equipped) from English to Metric, this control will also change the temperature display. Refer to *Electronic Message Center* in the *Driver controls* chapter.

# Climate Controls

## Fan speed (🌀 )

When AUTO is pressed, fan speed is adjusted automatically for existing conditions. You can override fan speed at any time. To control fan speed manually, press the fan control or the steering wheel fan speed control (if equipped) to cancel automatic fan speed operation. Press the control up for higher fan speed or down for lower fan speed. Press the steering wheel control (if equipped) up for higher fan speed or down for lower fan speed.

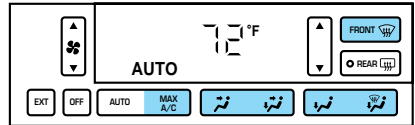
The display will show 🌀 and a bar graph to indicate manual fan operation and relative speed.



To return to automatic fan operation, press AUTO.

## Manual override controls

The override controls allow you to determine where airflow is directed. To return to full automatic control, press AUTO.








The air conditioning compressor can operate in all modes except 🌀. It will also operate only when required when AUTO has been selected. However, the air conditioning will only function if the outside temperature is about 6°C (43°F) or higher.

Since the air conditioner removes considerable moisture from the air during operation, it is normal if clear water drips on the ground under the air conditioner drain while the system is working and even after you have stopped the vehicle.

- **MAX A/C**-Uses recirculated air to cool the vehicle. The temperature display will remain unchanged and air will be cooled based on the selected temperature. To exit, press AUTO or any other override controls. MAX A/C is noisier than normal A/C but more economical and will cool the inside of the vehicle faster. Airflow is from the instrument panel registers. This mode can also be used to prevent undesirable odors from entering the vehicle.

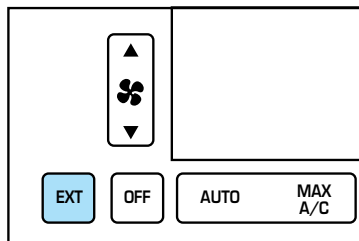
## Climate Controls

-  (Panel)-Distributes outside air through the instrument panel registers. However, the air cannot be cooled below the outside temperature because the air conditioning does not operate in this mode.
-  (Panel and floor) -Distributes outside air through the instrument panel registers and the floor ducts. Heating and air conditioning capabilities are provided in this mode. The air will be heated or cooled based on the temperature selection. For added customer comfort, the air distributed through the floor ducts will be slightly warmer than the air sent to the instrument panel registers.
-  (Floor) -Distributes outside air through the floor ducts. Heating and air conditioning capabilities are provided in this mode.
-  (Floor and defrost)-Distributes outside air through the windshield defroster ducts and the floor ducts. Heating and air conditioning capabilities are provided in this mode. The air will be heated or cooled based on the temperature selection. For added customer comfort, the air distributed through the floor ducts will be slightly warmer than the air sent to the windshield defroster ducts. If the temperature is about 6°C (43°F) or higher, the air conditioner will automatically dehumidify the air to reduce fogging.
- FRONT  -Distributes outside air through the windshield defroster ducts. It can be used to clear ice or fog from the windshield. If the outside air temperature is about 6°C (43°F) or higher, the air conditioner will automatically dehumidify the air to reduce fogging.
- OFF-Outside air is shut out and the fan will not operate. For short periods of time only, use this mode to reduce undesirable odors from entering the vehicle.

### Displaying outside temperature

Press EXT to display the outside air temperature. It will be displayed until EXT is pressed again.

If the selected temperature is changed while the outside temperature is displayed, the new temperature will be displayed for four seconds after it is changed, then the outside temperature will return to the window.




## Climate Controls

If a manual override function is selected while the outside temperature is displayed, the new function will be displayed for four seconds after it is changed, then the outside temperature will return to the window along with the override selection.

The outside temperature reading is most accurate when the vehicle is moving. Higher readings may be obtained when the vehicle is not moving. The readings that you get may not agree with temperatures given on the radio due to differences in vehicle and station locations.


### Operating tips

- In humid weather, select  (Defrost) before driving. This will reduce fogging on your windshield. Once the windshield has been cleared, operate the climate control system as desired.
- To reduce humidity buildup inside the vehicle in cold weather conditions, do not drive with the climate control system in the OFF or MAX A/C position.
- To reduce humidity buildup inside the vehicle in warm weather conditions, do not drive with the climate control system in the OFF position.
- Under normal weather conditions, your vehicle's climate control system should be left in any position other than MAX A/C or OFF when the vehicle is parked. This allows the vehicle to "breathe" through the outside air inlet duct.
- Under snowy or dirty weather conditions, your vehicle's climate control system should be left in the OFF position when the vehicle is parked. This allows the climate control system to be free from contamination of outside pollutants.
- If your vehicle has been parked with the windows closed during warm weather conditions, the air conditioner will perform more efficiently in cooling the vehicle if driven for two or three minutes with the windows open. This will force most of the hot, stale air out of the vehicle. Once the vehicle has been "aired out", operate the climate control system as desired.
- Do not place objects under the front seat that will interfere with the airflow to the rear seats.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.

## Climate Controls

- If your vehicle has been parked with the windows closed during hot weather, the air conditioner will do a much faster job of cooling if you drive for two or three minutes with the windows open. This will force most of the hot, stale air out of the vehicle. Then operate the air conditioner as you would normally.
- Do not place objects over the defroster outlets. These objects may block airflow and reduce visibility through your windshield. Avoid placing small objects on top of your instrument panel. These objects can fall down into the defroster outlets and block airflow, in addition to, damaging the climate control system.

To aid in defogging/demisting in cold weather conditions:

1. Select .
2. Set the temperature control to full heat
3. Set the fan speed to HI
4. Direct the outer panel vents towards the side windows

To increase airflow to the outer panel vents, close the central panel vents.



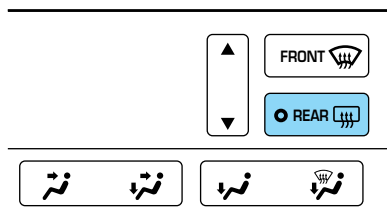
Do not place objects on top of the instrument panel, as these objects may become projectiles in a collision or sudden stop.

### REAR WINDOW DEFROSTER

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.

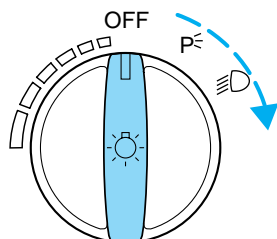


The ignition must be in the ON position to operate the rear window defroster.

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.

## HEADLAMP CONTROL

Rotate the headlamp control to the first position to turn on the parking lamps. Rotate to the second position to also turn on the headlamps.



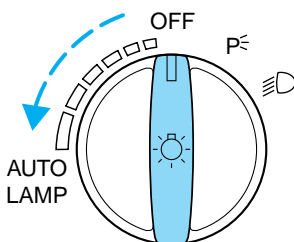
Your vehicle's headlamp system is equipped with a feature that will **not** dim the instrument panel lighting when the headlamps are on in the daytime. Even during full daylight, the instrument panel lighting will still be visible with the headlamp operating.

## Autolamp control

The autolamp system provides light sensitive automatic on-off control of the exterior lights normally controlled by the headlamp control.

The autolamp system also keeps the lights on for a preselected period of time after the ignition switch is turned to OFF.

- To turn autolamps on, rotate the control counterclockwise. The preselected time lapse is adjustable up to approximately three minutes by continuing to rotate the control counterclockwise.
- To turn autolamps off, rotate the control clockwise to the off position (O).



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

The daytime running light system turns the headlamps on, with a reduced light output, when:

- the ignition is in RUN,
- the transmission is not in P (Park), and
- the headlamp system is not turned on by another feature such as using the headlamp control or Autolamp.

# Lights

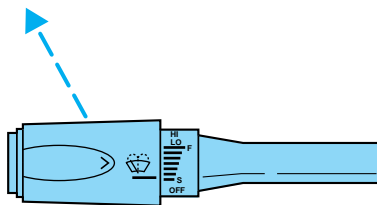


Always remember to turn on your headlamps at dusk or during inclement weather. The Daytime Running Light (DRL) System does not activate your tail lamps and generally may not provide adequate lighting during these conditions. Failure to activate your headlamps under these conditions may result in a collision.

The Daytime Running Light (DRL) system will automatically illuminate the tail lamps and parking lamps at dusk (when the headlamp control is in the OFF position). Since the instrument panel will not be illuminated, turn on the headlamps using the headlamp control.

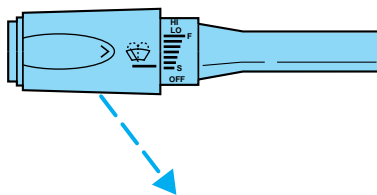
## High beams

- Push forward to activate.
- Pull toward you to deactivate.



## Flash to pass

Pull toward you to activate and release to deactivate.

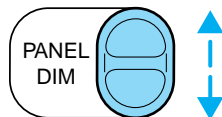


## PANEL DIMMER CONTROL

Use to adjust the brightness of the instrument panel during headlight and parklamp operation.

- Push up to brighten.
- Push down to dim.

During full daylight, the instrument panel will still be visible with the headlamps operating.



## AIMING THE HEADLAMPS

Your vehicle is equipped with a Vehicle Headlamp Aim Device (VHAD) on each headlamp. Each headlamp may be properly aimed in the vertical (up/down) and the horizontal (left/right) directions using your VHAD system. The headlamps on your vehicle are properly aimed at the assembly plant.

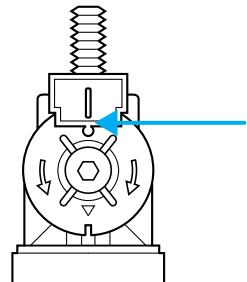
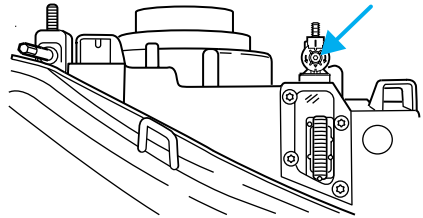
A bubble (vertical indicator) that is not centered between the two red lines does not necessarily indicate out-of-aim headlamps. If your vehicle is not positioned on a level surface, the slope will be included in the vertical indication. Therefore, vertical and horizontal headlamp adjustment should be performed only when the beam direction appears to be incorrect.

You will need one 4 mm wrench or socket to make the adjustments.

If the vehicle has been in an accident, the vehicle's front structure should be properly aligned before aiming the headlamps.

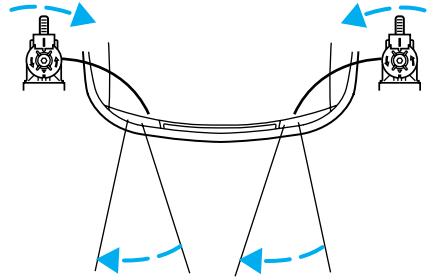
### Horizontal aim adjustment

1. Park the vehicle on a level surface.
2. With the hood open, remove the protective cover, then locate the horizontal indicator and the adjusting screw at the rear of the headlamp assembly.
3. Use a 4 mm wrench or socket to turn the horizontal adjusting screw until the "0" mark on the yellow dial lines up with the reference mark on the marker (as shown) when viewed directly from above.



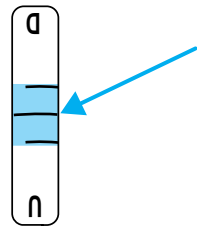
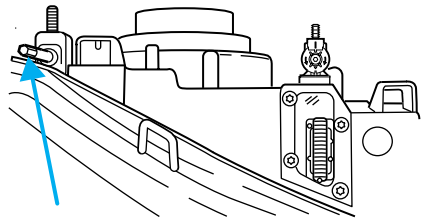
# Lights

Turning the horizontal adjusting screw in the direction of the arrow changes the horizontal aim as shown.



## Vertical aim adjustment

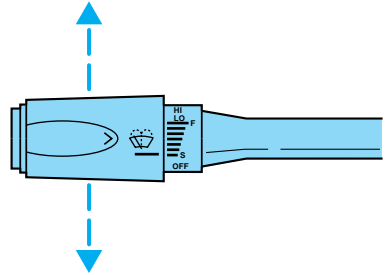
1. Park the vehicle on a level surface.
2. With the hood open, remove protective cover, then locate the bubble level and the vertical adjustment screw. The adjustment screw is located on the outboard side of the headlamp.
3. The “U” and “D” on the bubble indicate the directional change (up or down) of the vertical aim.
4. Use a 4 mm wrench or socket to turn the vertical adjusting screw until the bubble is centered between the two red lines which represents the “0” mark position.
5. Install protective cover.



When the horizontal and vertical indicators are set to the “0” mark, the headlamp has been properly aimed.

## TURN SIGNAL CONTROL ⇄⇄

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



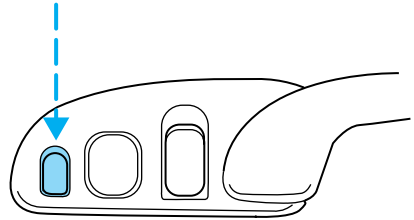
## INTERIOR LAMPS

### Rear courtesy/reading lamps

The courtesy lamp lights when:

- any door is opened.
- any of the remote entry controls are pressed and the ignition is OFF.

With the ignition key in the ACC or ON position, the reading lamp can be turned on by pressing the rocker control.



## BULBS

### Replacing exterior bulbs

Check the operation of the following lamps frequently:

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

# Lights

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.

<b>Function</b>	<b>Trade Number</b>
Tail lamp, brakelamp, turn lamp	3157K
Backup lamp	3156K
Side marker lamp (front)	194
Park, turn lamp (front)	3157 AK (amber)
Headlamp	9007
Cornering lamp	3156K
License plate lamp	168
High-mount brakelamp	912
Luggage compartment lamp	212-2
Map lamp	578
Visor vanity lamp	168
Door courtesy lamp	904
Glove compartment	194
All replacement bulbs are clear in color except where noted.	
To replace all instrument panel lights - see your dealer.	

## Replacing the interior bulbs

Check the operation of the following interior bulbs frequently:

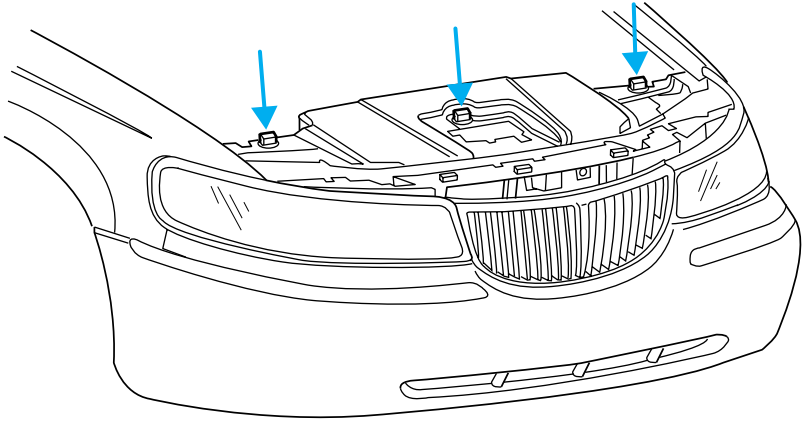
- interior overhead lamp
- map lamp

For bulb replacement, see a dealer or qualified technician.

## Replacing headlamp bulbs

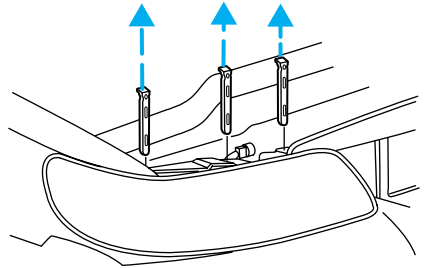
To remove the headlamp bulb:

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

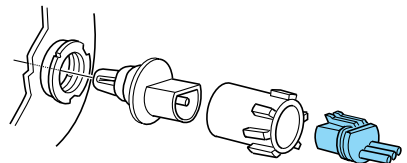


3. Twist the plastic knobs and remove the protective cover from the back of the headlamps. Lift the cover and pull towards the windshield.

4. Remove headlamp by taking the retainer pins out. Pull headlamp forward to access bulb connector.

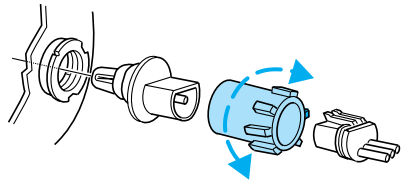


5. Disconnect the electrical connector from the bulb by pulling rearward.

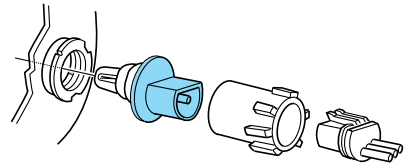


## Lights

6. 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.



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



To install the new bulb:

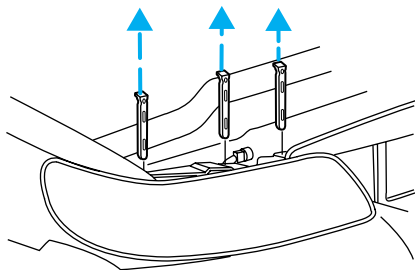


Handle a halogen headlamp bulb carefully and keep out of children's reach. Grasp the bulb only by its plastic base and do not touch the glass. The oil from your hand could cause the bulb to break the next time the headlamps are operated.

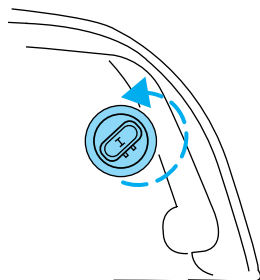
1. Insert the glass end of the new bulb into the lamp assembly. Turn the bulb left or right to align the grooves in the plastic base with the tabs in the lamp assembly. When the grooves are aligned, push the bulb into the lamp assembly until the plastic base contacts the rear of the lamp assembly.
2. Install the bulb retaining ring over the plastic base until it contacts the rear of the socket by rotating it clockwise until you feel a "stop."
3. Connect the electrical connector into the rear of the plastic base until it snaps, locking it into position.
4. 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.
5. Carefully insert the headlamp assembly into the vehicle making sure the retainer pins are inserted into the proper holes and into the guides.
6. Install protective cover on vehicle locking it in place with knobs.

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

1. Make sure the headlamp control is in the OFF position.
2. Open the hood.
3. Twist the plastic knobs and remove the protective cover from the back of the headlamps. Lift the cover and pull towards the windshield.
4. Remove headlamp by taking the retainer pins out. Pull headlamp forward to access bulb connector.



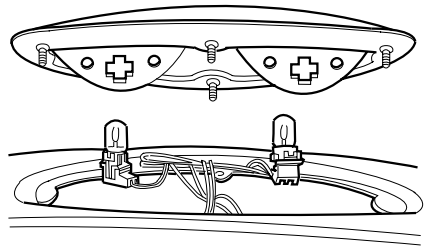
5. Disconnect the electrical connector from the bulb socket.
6. Rotate the bulb socket counterclockwise and remove from lamp assembly.
7. Carefully pull the bulb straight out of socket and push in the new bulb.
8. To complete installation, follow the removal procedure in reverse order.



# Lights

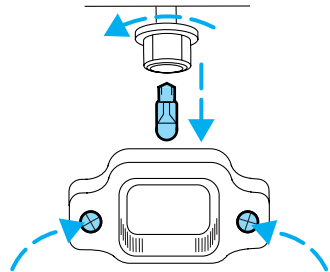
## **Replacing high-mount brakelamp bulbs**

1. Remove the lamp cover by prying up.
2. Rotate the bulb socket counterclockwise and remove from lamp assembly.
3. Carefully pull the bulb straight out of socket and push in the new bulb.
4. To complete installation, follow the removal procedure in reverse order.



## **Replacing license plate lamp bulbs**

1. Remove two screws, grommets and the license plate lamp assembly from the trunk lid.
2. Carefully pull the bulb from the socket and push in the new bulb.
3. Install the lamp assembly on trunk lid with two grommets, ensuring the grommets are pushed all the way in to the trunk lid and secure with two screws.



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

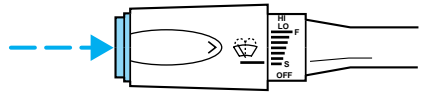
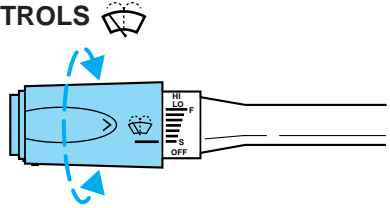
For bulb replacement, see a dealer or qualified technician.

### WINDSHIELD WIPER/WASHER CONTROLS

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

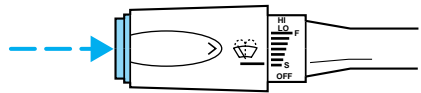
The bars of varying length are for intermittent wipers. When in this position rotate the control upward for fast intervals and downward for slow intervals.

Push the control on the end of the stalk to activate washer. Push and hold for a longer wash cycle.



### 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/washer features

The exterior lamps will illuminate when the ignition is ON and the windshield wiper control is in the interval, LO or HI position.

The lights will remain on until 30 seconds after the wipers are turned off.

### Windshield wiper blades

Check the wiper blades 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.

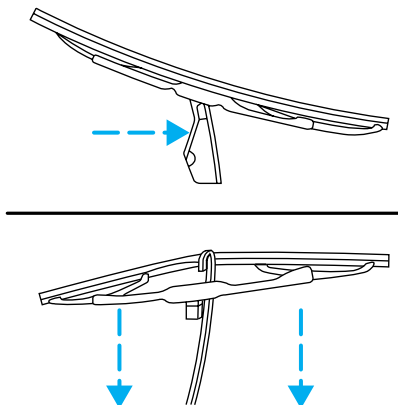
## Driver Controls

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

To make changing the wiper blades easy, turn the ignition to ACC, then turn the wipers on. When the wipers reach the vertical position, turn the ignition to LOCK.

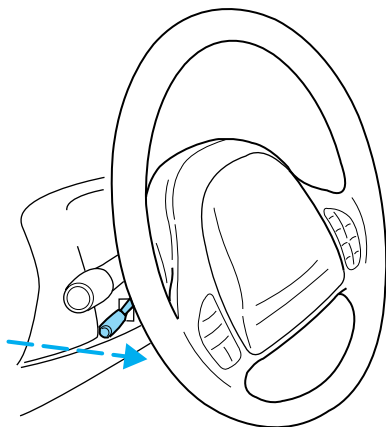
To replace the wiper blades:

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**

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.

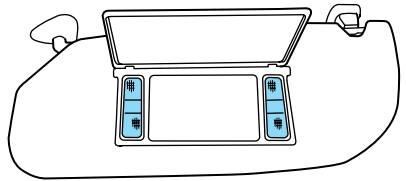




Never adjust the steering wheel when the vehicle is moving.

### ILLUMINATED VISOR MIRROR (IF EQUIPPED)

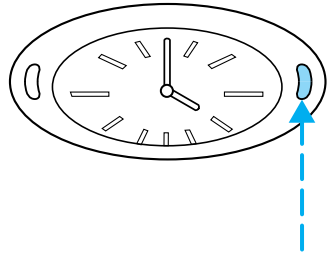
To turn on the visor mirror lamps, lift the mirror cover.



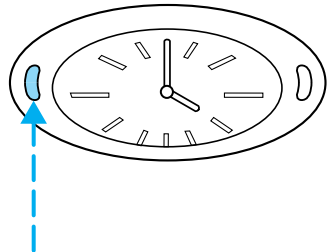
### CLOCK (IF EQUIPPED)

If your vehicle is not equipped with an instrument panel mounted clock, refer to *Setting the Clock* section in the *Entertainment* chapter.

Press the right control to increase the time displayed.



Press the left control to decrease the time displayed.

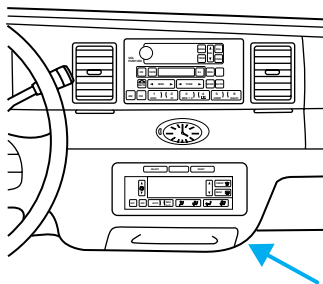


## Driver Controls

### AUXILIARY POWER POINT <sup>12V</sup>

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.

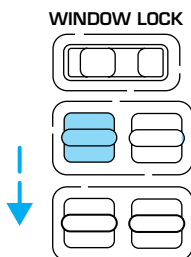
The auxiliary power point is located under the instrument panel. This outlet should be used in place of the cigarette lighter for optional electrical accessories.



### POWER WINDOWS

#### Express down

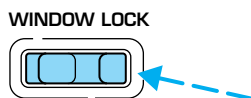
To make the driver window open fully without holding the window control, press the bottom portion of the driver window control completely down and release quickly. Depress again to stop window operation.



#### Window lock

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 right side of the control. Press the left side to restore the window controls.



#### Accessory delay (if equipped)

With accessory delay, the window switches, radio, and moonroof may be used for up to ten minutes after the ignition switch is turned to the OFF position or until any door is opened.

## MIRRORS

### Automatic dimming inside rear view mirror (if equipped)

Your vehicle is equipped with an inside rear view mirror which has an auto-dimming function (available as an option on the outside driver's side mirror). The electronic day/night mirror will change from the normal state to the non-glare state when bright lights (glare) reach the mirror. When the mirror detects bright light from front or behind, it will automatically adjust (darken) to minimize glare.

Do not block the sensor on the backside of the mirror since this may impair proper mirror performance.

Ensure the mirror is pulled down low enough to prevent visibility interference with the moon roof controls. The mirror support arm has two pivot points which lets you adjust the mirror UP or DOWN and from SIDE to SIDE.

Press the control to turn the mirror on or off.

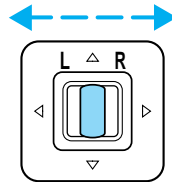
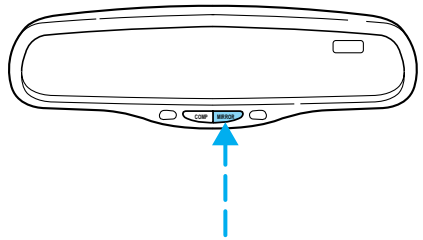
The mirror will automatically return to the normal state whenever the vehicle is placed in R (Reverse)(when the mirror is on) to ensure a bright clear view when backing up.

### Power side view mirrors

The ignition must be in ACC or ON position to adjust the power side view mirrors.

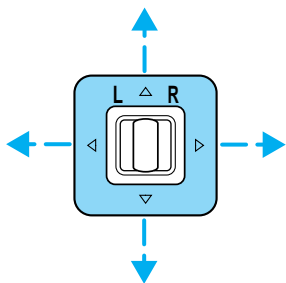
To adjust your mirrors:

1. Select L to adjust the left mirror or R to adjust the right mirror.



## Driver Controls

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

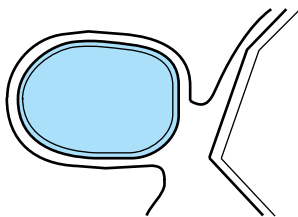


3. Return to the center position to lock mirrors in place.

### Heated outside mirrors (if equipped)

Both mirrors are heated automatically to remove ice, mist and fog when the rear window defrost is activated.

Do not remove ice from the mirrors with a scraper or attempt to readjust the mirror glass if it is frozen in place. These actions could cause damage to the glass and mirrors.

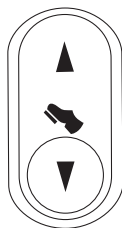


### POWER ADJUSTABLE FOOT PEDALS

The accelerator and brake pedal should only be adjusted when the vehicle is stopped and the gearshift lever is in the P(Park) position.

Press and hold the rocker control to adjust accelerator and brake pedal.

- Press the bottom of the control to adjust the pedals toward you.
- Press the top of the control to adjust the pedals away from you.



The adjustment allows for approximately 65 mm (2.5 inches) of maximum travel.



Never adjust the accelerator and brake pedal with feet on pedals or while the vehicle is moving.

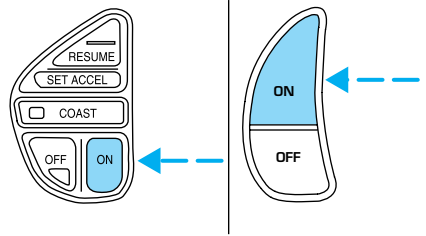
## SPEED CONTROL

### 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.**

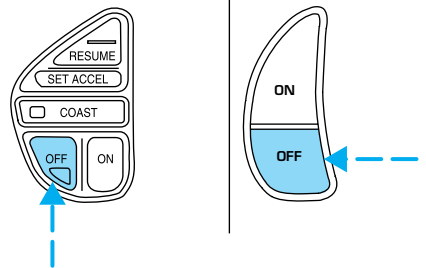


Do not use the speed control in heavy traffic or on roads that are winding, slippery, or unpaved.

### To turn speed control off

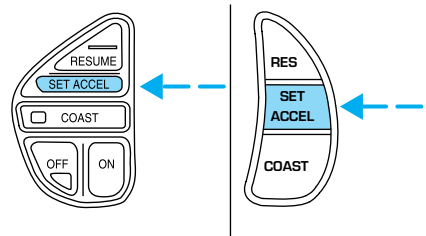
- Press OFF or
- Turn off the vehicle ignition.

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).



## Driver Controls

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.

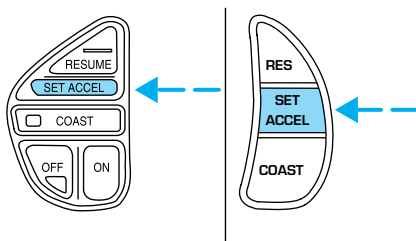
If your vehicle slows down more than 16 km/h (10 mph) below your set speed on an uphill, your speed control will disengage. This is normal. Pressing RES/RESUME will re-engage it.



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

### To set a higher set speed

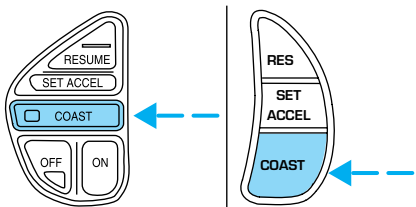
- Press and hold SET ACCEL. Release the control when the desired vehicle speed is reached or
- Press and release SET ACCEL to operate the Tap-Up function. Each press will increase the set speed by 1.6 km/h (1 mph) or
- Accelerate with your accelerator pedal. When the desired vehicle speed is reached,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

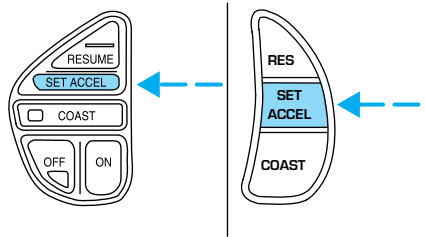
### To set a lower set speed

- 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



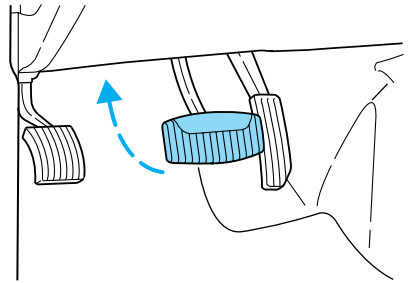
## Driver Controls

- Depress the brake pedal. When the desired vehicle speed is reached, press SET ACCEL.

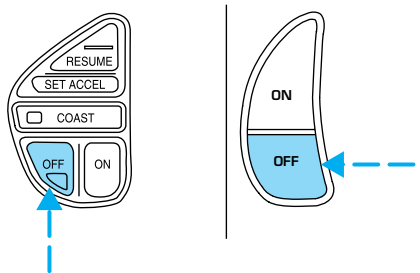


### To disengage speed control

- Depress the brake pedal.
- Disengaging the speed control will not erase the previously programmed set speed.

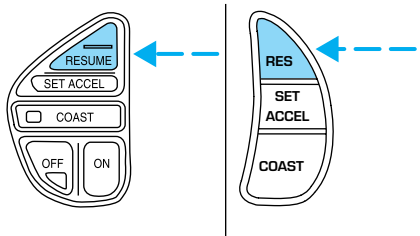


Pressing OFF will erase the previously programmed set speed.



### To return to a previously set speed

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



## Driver Controls

### Indicator light

#### *Indicator message*

This message is displayed in the Message Center when either the SET ACCEL or RES/RESUME controls are pressed. It turns off when the speed control OFF is pressed, the brake is applied or the ignition is turned to the OFF position.

## SPEED CONTROL

### STEERING WHEEL CONTROLS (IF EQUIPPED)

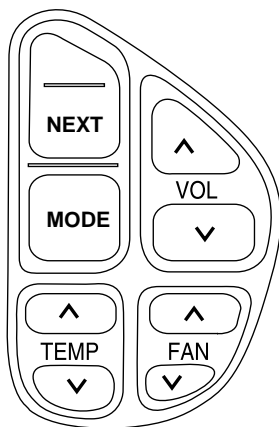
These controls allow you to operate some radio and climate control features.

#### Radio control features

- Press BAND/MODE to select AM, FM1, FM2, TAPE or CD (if equipped).

In Radio mode:

- Press MEM/NEXT to select a preset station from memory.



In Tape mode:

- Press MEM/NEXT to listen to the next selection on the tape.

In CD mode:

- Press MEM/NEXT to listen to the next track on the disc.

In any mode:

- Press VOL up or down to adjust the volume.

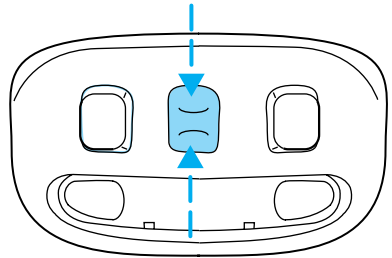
### Climate control features

- Press TEMP up or down to adjust temperature.
- Press FAN up or down to adjust fan speed.

### MOON ROOF (IF EQUIPPED)

To open the moon roof:

- Press and release the control.
- For one-touch operation, press and release the rear portion of the control; this will fully open the moon roof.
- To stop one-touch operation at the desired position, press and release the forward portion of the control.



To close the moon roof:

- Press and hold the front portion of the control.
- To close from the vent position, press and hold the rear portion of the control.

### HOMELINK® UNIVERSAL TRANSCEIVER (IF EQUIPPED)

The HomeLink® Universal Transceiver, located on the driver's visor, provides a convenient way to replace up to three hand-held transmitters with a single built-in device. This feature will learn the radio frequency codes of most current transmitters to operate garage doors, entry gates, security systems, entry door locks, and home or office lighting.



When programming your HomeLink® Universal Transceiver, to a garage door or gate be sure that people and objects are out of the way to prevent potential harm or damage.

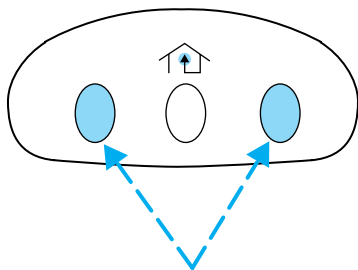
Do not use the HomeLink® Universal Transceiver with any garage door opener that lacks safety stop and reverse features as required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door which cannot detect an object, signaling the door to stop and reverse, does not meet current U.S. federal safety standards. For more information on this matter, call toll-free: 1-800-355-3515 or on the Internet at [HomeLink.jci.com](http://HomeLink.jci.com).

## Driver Controls

### Programming

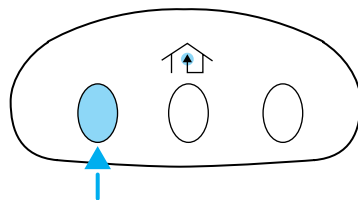
**Do not program the HomeLink® Universal Transceiver with the vehicle parked in the garage.**

1. Prepare for programming the HomeLink® Universal Transceiver by erasing the three factory default codes by holding down the two outside buttons until the red light begins to flash after 20 seconds. Release both buttons.



2. Hold the end of your hand-held transmitter 5–14 cm (2–5 inches) away from the HomeLink® Universal Transceiver surface (located on your visor) while keeping the red light in view.

3. Using both hands simultaneously press and hold the hand-held transmitter button and the desired HomeLink® button. Do not release the buttons until step 4 has been completed.



Some entry gates and garage door openers may require you to replace step 3 with the procedure in the “Canadian Programming” section.

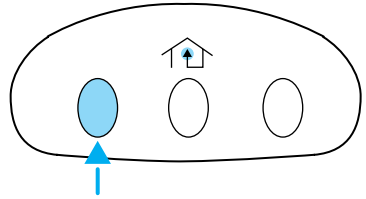
4. The red light will flash slowly and then rapidly. Release both buttons when the red light flashes rapidly.

5. Follow steps 2 through 4 to program the remaining two buttons.

If you do not successfully program the HomeLink® Universal Transceiver after repeated attempts, refer to *Rolling code programming* which follows, or call toll-free customer assistance: 1-800-355-3515 or on the Internet at **HomeLink.jci.com**.

### Operating the HomeLink® Universal Transceiver

Once programmed, the HomeLink® Universal Transceiver can be used in place of hand-held transmitters. To operate, simply press and release the appropriate HomeLink® button (the red light will illuminate, indicating the signal is being transmitted).



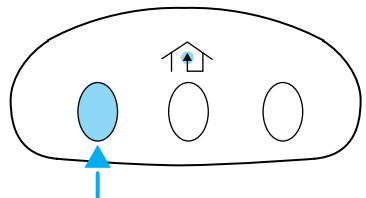
### Rolling code programming

Rolling code garage door openers (or other rolling code devices) which are “code protected” and manufactured after 1996, may be determined by the following:

- Reference the device owner’s manual for verification
- The hand-held transmitter appears to program the HomeLink® Universal Transceiver but does not activate the device.
- Press and hold the trained HomeLink® button. The device has the rolling code feature if the indicator light flashes rapidly and then turns solid after two seconds.

After completing the “Programming” functions, follow these steps to train a garage door opener with the rolling code feature:

1. Locate the **training button** on the garage door motor head unit. Refer to the garage door opener manual or call 1-800-355-3515 or on the Internet at **HomeLink.jci.com**, if there is difficulty locating the training button.
2. Press the training button on the garage door motor head unit (which will activate the **“training” light**).
3. Press and release the programmed HomeLink® button. Press and release the HomeLink® button a *second time* to complete the training process. (Some garage door openers may require this procedure to be done a third time to complete the training.)



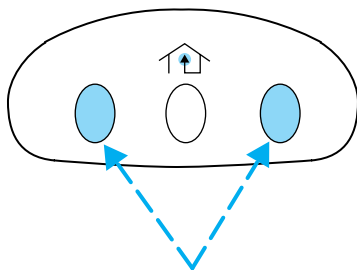
## Driver Controls

The 2nd or 3rd press from step 3 will activate the door. The HomeLink® Universal Transceiver has now been trained to the receiver. The remaining two buttons may now be programmed if this has not previously been done.

### Erasing HomeLink® buttons

Individual buttons cannot be erased, however, to erase the three programmed buttons:

1. Hold down the two outside buttons until the red light begins to flash after 20 seconds.
2. Release both buttons.



### Reprogramming a single HomeLink® button

To program a device to HomeLink® using a HomeLink® button previously trained, follow these steps:

1. Press and hold the desired HomeLink® button. **Do NOT** release until **step 4** has been completed.
2. When the indicator light begins to flash slowly (after 20 seconds), position the hand-held transmitter 5–14 cm (2 to 5 inches) away from the HomeLink® surface.
3. Press and hold the hand-held transmitter button.
4. The HomeLink® indicator light will flash, first slowly and then rapidly. When the indicator light begins to flash rapidly, release both buttons.

The previous device has now been erased and the new device can be activated by pushing the HomeLink® button that has just been programmed.

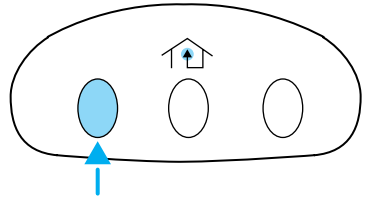
### Canadian Programming

During programming, your hand-held transmitter may automatically stop transmitting after two seconds which may not be long enough to program the HomeLink® Universal Transceiver.

## Driver Controls

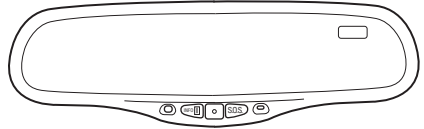
To program your hand-held transmitters:

- Continue to hold the button on the HomeLink® Universal Transceiver.
- Press and re-press the hand-held transmitter button every two seconds until the red light changes from a slow to a fast flash.



### VEHICLE COMMUNICATION SYSTEM (IF EQUIPPED)

The Vehicle Communication System is designed to provide a variety of safety enhancing services and offers access to hands-free calling through the Vehicle Communication System wireless phone. The system includes and requires the use of an activated Vehicle Communication System wireless phone to operate. The wireless phone contains specialized software that integrates it with the vehicle systems. A more detailed owner's manual on how to use the Vehicle Communication System and your wireless phone will be delivered to your home within 7 days of the original vehicle sale date. A detailed owner's manual with terms and conditions for use is included. Contact the dealer if you have any questions or concerns about your Vehicle Communication System.



### Using Vehicle Communication System

To use Vehicle Communication System properly, follow these three steps:

- Activate the wireless phone with Sprint PCS
- Dock the wireless phone in the docking station located in the center console armrest (once the phone is docked, the armrest can be closed)
- Activate your Vehicle Communication System with the Lincoln Response Center by pressing the "i" Button

## Driver Controls

1. **SOS BUTTON** — In an emergency situation or for roadside assistance, press this button to contact the Lincoln Response Center. A response center representative will locate your vehicle and dispatch assistance if needed. Once a connection is made to the Lincoln Response Center, only the response center representative will be able to disconnect the call.



Vehicle Communication System will redial for roadside assistance 3 times before showing on the audio display “CALL FAILED” because of network capacity or lack of analog coverage.

2. **AUTOMATIC AIR BAG NOTIFICATION** — If the air bag deploys, the Vehicle Communication system automatically places a call to the Lincoln Response Center and a representative will dispatch help to your location immediately if requested. If the specialist is unable to reach you, the emergency service provider will be contacted and dispatched to your location.

Vehicle Communication System will redial for automatic airbag notification 5 times before showing on the audio display “CALL FAILED” because of network capacity or lack of analog coverage.

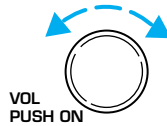
3. **INFO BUTTON** — Press this button for route guidance and information regarding the points of interest such as ATM's, restaurants, etc. The Lincoln Response Center will receive your request and help you find your way.



4. **PHONE BUTTON** — Place or receive a call by pressing this button. When making or receiving a call the audio system will mute automatically. To make or receive a call, just press the phone button. Your Vehicle Communication System service includes the Sprint PCS Voice Command (SM) service. You can place voice-activated calls using names programmed in your web-address book or simply speak the phone number.



**Volume Control** — Volume can be controlled using the audio system controls.



### First Owner/First Time Activation

- After receiving the wireless phone and welcome kit, please contact Sprint PCS at 1-866-PCS-AUTO (1-866-727-2886) and select option “1” for activations. When calling Sprint PCS to activate your phone, please do not call from your new wireless phone.

**Note:** Following the three-month introductory period, you must continue to enroll in a Sprint PCS voice plan in order to enable any of the Vehicle Communication System features.

- Turn the ignition to “ACC”. Open the center console armrest and fold the presenter arm out. Place the wireless phone in the docking station. If the phone is docked properly, the audio display should read “VCS ACTIVE”. The Vehicle Communication System will not function if the phone is not properly docked.
- Press the “i” Button and when voice communication is established with the Lincoln Response Center, indicate that you are a new customer and the specialist will introduce you to the features. The purpose of this call is to verify that your Vehicle Communication System is active and functioning properly. In the event that the Vehicle Communication System does not function properly, please contact your Lincoln dealership for assistance.

### Leased Vehicles

If the vehicle is leased, the wireless phone should be returned to the dealership at the end of the lease term. At the end of the lease term, you have the option to purchase the wireless phone for the price of its replacement. Please be sure to contact Sprint PCS at 1-866-PCS-AUTO (1-866-727-2886) for wireless service options if you keep the phone or call to deactivate your account prior to lease termination.

### Second Owner/Re-Lessee

The Vehicle Communication System will not function without an activated wireless phone with Sprint PCS. The wireless phone may be purchased through Lincoln dealerships. Wireless service can be activated with Sprint PCS. Just following the steps in the “*First Time Activation*” section above.

## Driver Controls

### Vehicle Communication System Limitations

- Vehicle Communication System services are available in the 48 contiguous states and Hawaii
- Vehicle Communication System services are not available in Alaska
- Only available within range of the cellular systems
- Connection limited by atmospheric and topographical conditions
- Connection limited by cellular network capabilities and infrastructure
- The wireless phone must have an active wireless service plan with Sprint PCS and docked in the docking station located in the center console for Vehicle Communication System to function properly
- The vehicle must be running or the ignition must be turned to either “ACC” or “RUN/ON” position
- May become inoperative if the vehicle is involved in an accident, damaging one or more components
- Sprint PCS Voice Command (SM) services are only available on the Sprint PCS network

Global Positioning Satellites are used to deliver location information (only at the request of the vehicle occupants or in the event an airbag deploys) and may not be available if signal is obstructed. (If a signal is unavailable, the last valid position obtained before the signal was obstructed will be sent.)

Vehicle Communication System is powered by the vehicle’s battery and will not operate if the battery is discharged or disconnected.

Vehicle Communication System specialist will make all reasonable efforts to contact the Public Safety service providers but cannot be held responsible for their response time or their activities.

Drivers have the responsibility to pay primary attention to the road and drive safely. A driver may want to pull over to a safe parking spot before using Vehicle Communication System services. Drivers who allow themselves to become distracted may cause an accident. Please use this technology responsibly.

Due to the specialized Lincoln software contained within the phone, your local Sprint PCS store is unable to provide service or replacement units. Issues or questions about equipment including the wireless phone should be directed to your Lincoln dealer.

## Driver Controls

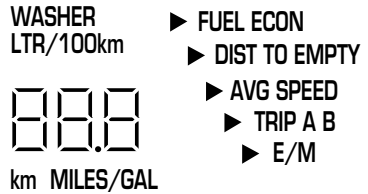
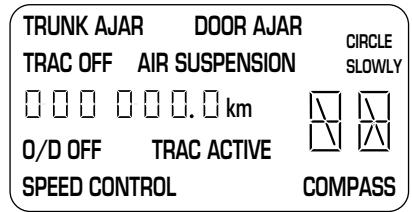
Phone accessories can be purchased at Sprint PCS stores. Billing or services issues should be directed to Sprint PCS at 1-866-PCS-AUTO (1-866-727-2886). Select "2" for Client Services.

### ELECTRONIC MESSAGE CENTER

The electronic message center only works when the ignition is in the ON position.

The message center allows you to:

- see problems such as door ajar and trunk ajar.
  - see the compass direction.
  - check the on/off status of air suspension and speed control systems.
  - see how many kilometers/miles you can drive before running out of fuel.
  - see how many liters/gallons of fuel remain in the fuel tank.
  - monitor the average fuel economy.
  - monitor the average speed.
  - check the distance traveled during a trip on either Trip A or Trip B.
- You can select different features for the message center to display by using the message center controls located in the center of the instrument panel.



# Driver Controls

## Selectable features

### Select

Each press of the SELECT control will select a different feature as follows:

- FUEL ECON
- DIST TO EMPTY
- AVG SPEED
- TRIP A/TRIP B
- E/M

For descriptions of the SELECT features, refer to “Message center functions” later in this chapter.

### Reset

Press this control to reset the selected message center function to zero. (The only functions which can be reset are FUEL ECON and TRIP A or B.)

### Compass display (if equipped)

The compass reading may be affected when you drive near large buildings, bridges, power lines and powerful broadcast antenna. Magnetic or metallic objects placed in, on or near the vehicle may also affect compass accuracy.

Usually, when something affects the compass readings, the compass will correct itself after a few days of operating your vehicle in normal conditions. If the compass still appears to be inaccurate, a manual calibration may be necessary. Refer to *Compass calibration adjustment*.

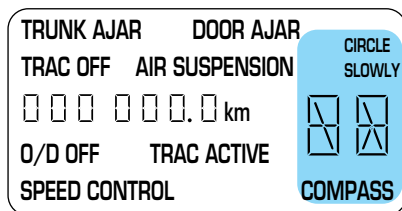
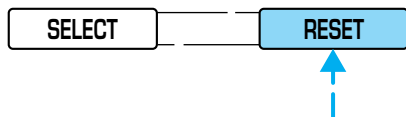
Most geographic areas (zones) have a magnetic north compass point that varies slightly from the northerly direction on maps. This variation is four degrees between adjacent zones and will become noticeable as the vehicle crosses multiple zones. A correct zone setting will eliminate this error. Refer to *Compass zone adjustment*.

WASHER  
LTR/100km

88.8

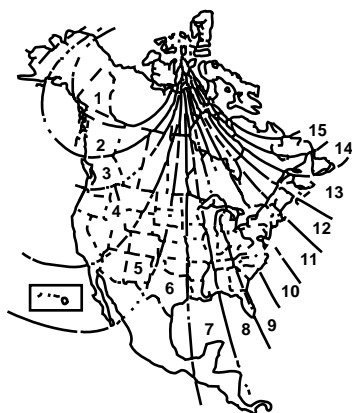
km MILES/GAL

- ▶ FUEL ECON
- ▶ DIST TO EMPTY
- ▶ AVG SPEED
- ▶ TRIP A B
- ▶ E/M



### **Compass zone adjustment**

1. Determine which magnetic zone you are in for your geographic location by referring to the zone map.
2. Locate the compass module and the calibration button mounted on the center rear view mirror post.
3. Turn ignition to the ON position.
4. Press and hold the CALIBRATION BUTTON switch located on top of the compass module until the message center display changes to show the current zone setting.
5. Release the CALIBRATION BUTTON, then slowly press down again. Press the CALIBRATION BUTTON repeatedly until the correct zone setting for your geographic location is displayed on the message center.
6. To exit the zone setting mode, release pressure from the switch for greater than ten seconds.



### **Compass calibration adjustment**

Perform this adjustment in an open area free from steel structures and high voltage lines.

For optimum calibration, turn off all electrical accessories (heater/air conditioning, wipers, etc.) and make sure all vehicle doors are shut.

1. Start the vehicle.
2. Locate the compass module and the CALIBRATION BUTTON mounted on the center rear view mirror post.

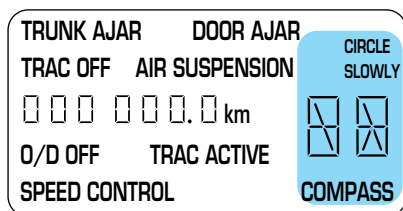
## Driver Controls

3. Press and hold the CALIBRATION BUTTON for 2 to 4 seconds until CIRCLE SLOWLY is displayed on the message center.

4. Release pressure from the button.

5. Slowly drive the vehicle in a circle (less than 5 km/h [3 mph]) until the CIRCLE SLOWLY indicator turns off. This will take up to five circles to complete calibration.

6. The compass is now calibrated.



### Message center functions

#### Fuel econ (Average fuel economy)

Select this function to display your average fuel economy in liters/100 km or miles/gallon.

If you calculate your average fuel economy by dividing liters of fuel used by 100 kilometers traveled (miles traveled by gallons used), your figure may be different than displayed for the following reasons:

- your vehicle was not perfectly level during fill-up
- differences in the automatic shut-off points on the fuel pumps at service stations
- variations in top-off procedure from one fill-up to another
- rounding of the displayed values to the nearest 0.1 liter (gallon)

#### ***Checking your highway fuel economy using the electronic message center display***

The following procedure will allow you to accurately monitor your actual highway fuel economy. Since this procedure requires the vehicle speed control system to be set to highway speeds, it must be run only on suitable roadways where long distance speed control can be safely maintained.

- ▶ FUEL ECON
  - ▶ DIST TO EMPTY
  - ▶ AVG SPEED
  - ▶ TRIP A B
  - ▶ E/M

## Driver Controls

You may notice gradual improvement in fuel economy over the course of your vehicle's break-in period (approximately 1 600 kilometers [1 000 miles]).

1. Set the speed control. Refer to *Speed control* in this chapter.
2. Select FUEL ECON

▶ FUEL ECON

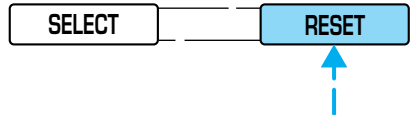
▶ DIST TO EMPTY

▶ AVG SPEED

▶ TRIP A B

▶ E/M

3. Press the RESET control to clear the system memory.



- *Actual highway fuel economy is now displayed.* This current average measure will change as the speed control system changes the engine speed to maintain a constant vehicle speed. This is most noticeable in hilly environments.
4. Drive the vehicle at least 8 km (5 miles) with the speed control system engaged to display a stabilized average.
  5. Record the highway fuel economy for future reference.

It is important to press the RESET control after setting the speed control to get accurate highway fuel economy readings.

### **Dist to empty (DTE)**

This function estimates approximately how far you can drive with the fuel remaining in your tank under normal driving conditions. Remember to turn the ignition OFF when refueling your vehicle. Otherwise, the display will not show the addition of fuel for a few kilometers (miles).

At least 9.5 liters (2.5 gallons) of fuel must be added for DTE to immediately show new distance.

▶ FUEL ECON

▶ DIST TO EMPTY

▶ AVG SPEED

▶ TRIP A B

▶ E/M

## Driver Controls

The DTE function will flash for 5 seconds and sound a tone for 1 second when you have approximately:

- 80 km (50 miles) left before you run out of fuel
- 40 km (25 miles)
- 16 km (10 miles)

If “CO” or “CS” is displayed, there is a problem with the fuel indication system and you should contact your dealer for service as soon as possible.

### **AVG speed**

To use this function, select AVG SPEED and press the RESET control. Your average speed from that point will be displayed until RESET is pressed again.

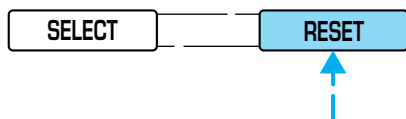
- ▶ FUEL ECON
- ▶ DIST TO EMPTY
- ▶ **AVG SPEED**
- ▶ TRIP A B
- ▶ E/M

### **Trip A B**

These two functions allow you to see how far you have traveled since you last reset. Trip A and Trip B are completely independent and must be reset individually.

- ▶ FUEL ECON
- ▶ DIST TO EMPTY
- ▶ AVG SPEED
- ▶ **TRIP A B**
- ▶ E/M

To reset either trip feature to zero, press the RESET control while the appropriate trip distance feature (A or B) is displayed.



### **E/M**

When this function is displayed, press the RESET control to change the message center display from metric to English units or from English to metric units.

- ▶ FUEL ECON
- ▶ DIST TO EMPTY
- ▶ AVG SPEED
- ▶ TRIP A B
- ▶ **E/M**

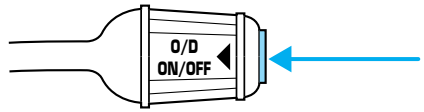
### OVERDRIVE CONTROL

#### Activating overdrive

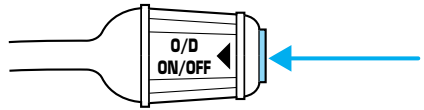
**D** (Overdrive) is the normal drive position for the best fuel economy. The overdrive function allows automatic upshifts and downshifts through all available gears.

#### Deactivating overdrive

Press the Transmission Control Switch (TCS) located on the end of the gearshift lever. The Transmission Control Indicator Light (TCIL) 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 TCIL will no longer be illuminated.



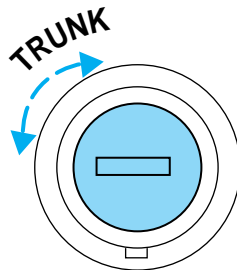
When you shut off and re-start your vehicle, the transmission will automatically return to normal **D** (Overdrive) mode.

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

### TRUNK REMOTE CONTROL

The remote trunk release control is located on the driver's door trim panel and can be operated at any time.

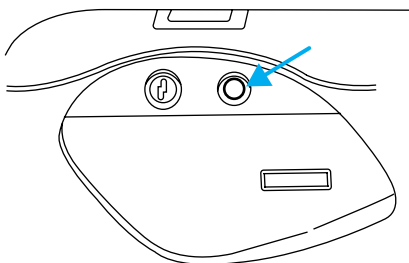
You can render the switch inoperable by locking the button with your master key.



## Driver Controls

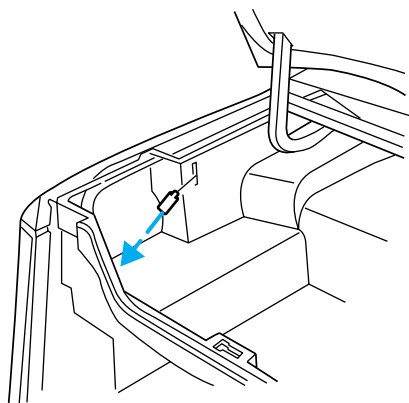
### FUEL DOOR RELEASE

Your vehicle is equipped with a locking fuel door. To open the door, press the control located on the door.



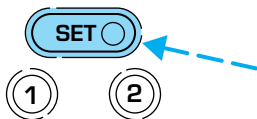
### Fuel filler door override release

If the remote release is inoperative, open the trunk, then pull the override release handle located inside the trunk to open the fuel filler door.



### MEMORY SEATS/REARVIEW MIRRORS/ADJUSTABLE PEDALS (IF EQUIPPED)

This system allows automatic positioning of the driver seat, outside rearview mirrors, and adjustable pedals to three programmable positions.



The memory control is located on the driver door.

- To program position one, move the driver seat, mirrors, and pedals to the desired position using the controls. Press the SET control. The SET control indicator light will briefly illuminate. While the light is illuminated, press control 1.

## Driver Controls

- To program position two, repeat the previous procedure using control 2.
- To program position three, repeat the previous procedure but press controls 1 and 2 simultaneously.

A position can only be recalled when the transmission gearshift is in Park. A memory seat position may be programmed at any time.

The memory positions are also recalled when you press your remote entry transmitter UNLOCK control.

To program the memory settings to remote entry transmitter, refer to *Remote entry system* in the *CLocks and Security* chapter.

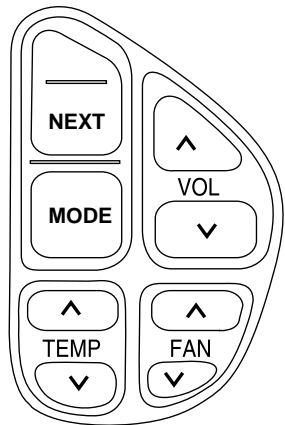
### REAR CENTER CONSOLE FEATURES (IF EQUIPPED)

The rear center console incorporates the following features:

- utility compartment
- cupholders
- auxiliary power point (if equipped)
- remote radio/climate controls (if equipped)
- remote seat adjustment (if equipped)

### Radio/climate controls

Refer to *Steering Wheel Controls* in this chapter for operation instructions.



## Driver Controls

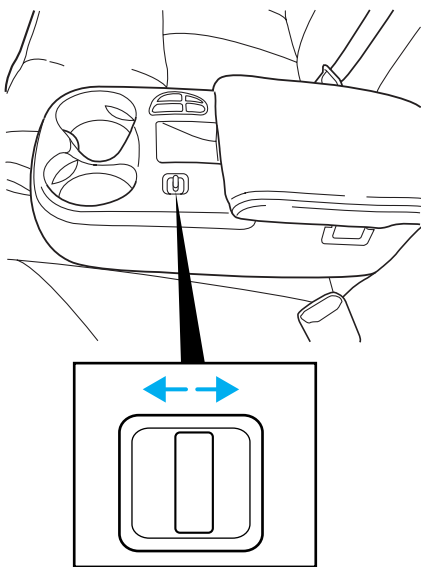
### ***Radio/climate controls lockout***

The rear radio/climate control feature can be locked out by pressing the 3 and the 5 buttons on the radio simultaneously while the radio is on. To enable the rear radio/climate controls, press the 3 and the 5 buttons again.

### **Remote seat adjustment**

The rear passenger can move the front passenger seat forward or backward using the control located in the rear center console.

Move the control forward or backward to move front passenger seat.

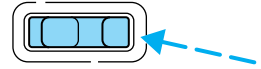


## Driver Controls

### ***Remote seat adjustment lockout***

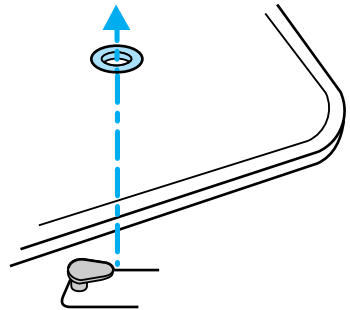
The window lockout control, located on the drivers door, will also lockout the remote seat adjustment. To lock out the remote seat adjustment feature, press the right side of the control. Press the left side to restore the remote seat adjustment control.

WINDOW LOCK



### **POSITIVE RETENTION FLOOR MAT**

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.



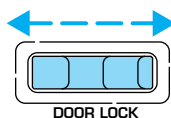
# Locks and Security

## KEYS

The vehicle is equipped with a master key and valet key lock system. The master key will access doors, trunk, glove box, ignition and remote trunk release. The valet key (marked “valet”) will access doors and ignition only. Before using this key, lock the trunk remote control to disable the *Trunk remote control* on the drivers door, then lock the glove compartment with your master key.

## POWER DOOR LOCKS

Press control to unlock or lock all doors.



## Smart locks

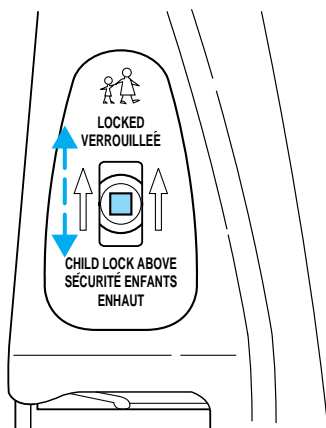
With the key in the ignition, in any switch position, and either the driver's or passenger's door open, the doors cannot be locked using the power door lock switches.

## Childproof door locks

When these locks are set, the rear doors cannot be opened from the inside. The rear doors can be opened from the outside when the doors are unlocked.

The childproof locks are located on rear edge of each rear door and must be set separately for each door. Setting the lock for one door will not automatically set the lock for both doors.

Move lock control up to engage the childproof lock. Move control down to disengage childproof locks.



## Locks and Security

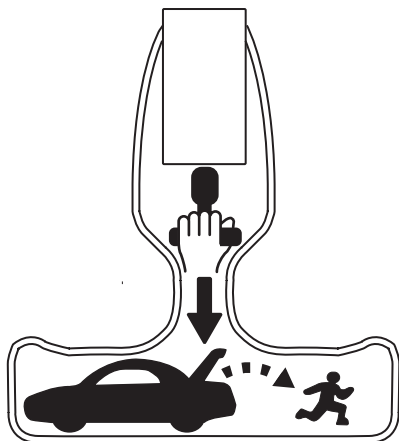
### INTERIOR LUGGAGE COMPARTMENT RELEASE

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.

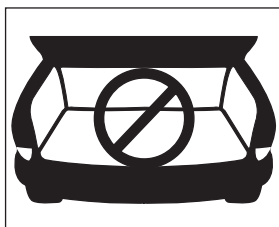
Adults are advised to familiarize themselves with the operation and location of the release handle.

To open the luggage compartment door (lid) from the inside, pull the illuminated “T” shaped handle and push up on the trunk lid. The material that the handle is made of will glow for hours in the darkness of the luggage compartment 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 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.



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.

# Locks and Security

## 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.

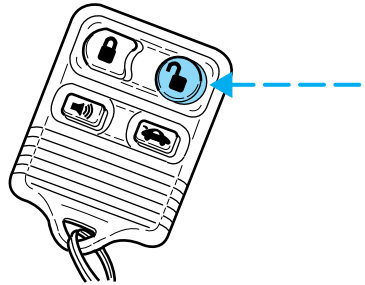
The remote entry features operate with the ignition in any position, except in ACC, and the transmission in P (Park) or N (Neutral).

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

### Unlocking the doors

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

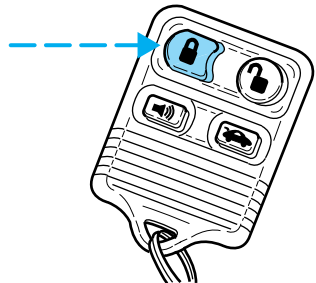
Press the control a second time within five seconds to unlock all doors.



### Locking the doors

Press this control to lock all doors.

The horn will chirp and the parklamps/taillamps will flash to confirm that the control was pressed.



### **Deactivating/activating the horn chirp feature**

The horn chirp feature can be turned on/off through the following procedure:

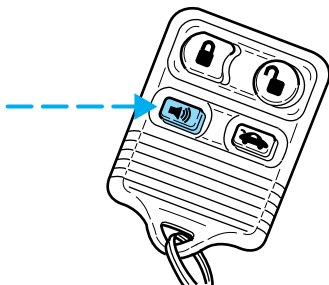
Complete steps 1-7 within 30 seconds or you must repeat the procedure. Wait 30 seconds before repeating the procedure.

1. Turn ignition key to ON.
2. Press power door unlock control on the door panel 3 times.
3. Turn ignition key from ON to OFF.
4. Press power door unlock control 3 times.
5. Turn ignition key back to ON. The doors will lock and unlock.
6. Press unlock control twice within 5 seconds. The horn will chirp twice upon successful toggling of the horn chirp feature.
7. Turn ignition to OFF.

### **Sounding a panic alarm**

Press this control to activate the alarm. The alarm will only operate if the ignition is in the OFF position.

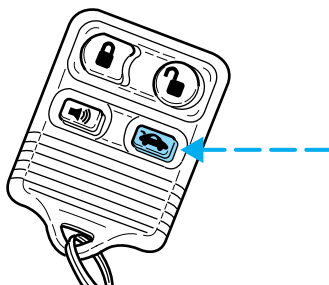
To deactivate the alarm, press the control again or turn the ignition to ACC or ON.



### **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.



## Locks and Security

The remote entry system allows you to open the trunk while the ignition is in any position. However, if the ignition is in the ON position and the gearshift is in D (Drive), the trunk will only open if the vehicle is moving 5 km/h (3 mph) or slower.

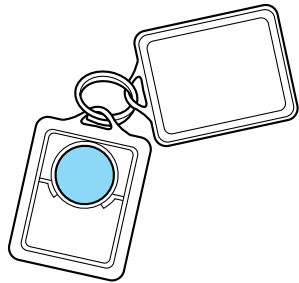
### Replacing the battery

The remote transmitter is powered by one coin type three-volt lithium battery CR2032 or equivalent. 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 battery:

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 battery in the same orientation. Refer to the diagram inside the transmitter unit.
3. Snap the two halves back together.



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 a remote transmitter has been lost and you would like to remove it from the vehicle's memory, or you would like to purchase additional remote transmitters and have them programmed to your vehicle:

- Take **all** your vehicle's transmitters to your dealer for programming, or
- Perform the following programming procedure yourself

To reprogram the transmitters yourself, place the key in the ignition and turn from 2 (LOCK) to 3 (OFF) and cycle between 3 (OFF) and 4 (ON) four times in rapid succession within 3 seconds. After doors lock/unlock, press any control on all transmitters (up to four). When completed, turn the ignition to 3 (OFF).

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

### Illuminated entry

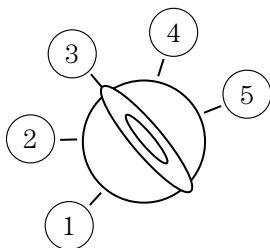
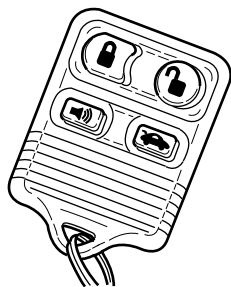
The interior lamps illuminate when the remote entry system is used to unlock the door(s) or sound the personal alarm.

The system automatically turns off after 25 seconds after the UNLOCK button on the remote transmitter is pressed or when the ignition is turned to the START or ACC position.

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 last door is closed or after 10 minutes if the door is left open.



# Locks and Security

## Autolock

The autolock feature will lock all of the vehicle doors when:

- all doors are closed
- the engine is running and
- you shift into any gear putting the vehicle in motion

The autolock feature repeats when:

- any door, except the drivers door, is opened then closed while the engine is running and
- you put the vehicle in motion

Autolock can also be activated or deactivated using the following procedure:

You must complete steps 1 through 7 within 30 seconds or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait 30 seconds.

1. Turn the ignition key to ON.
2. Press the power door unlock control on the door panel three times.
3. Turn the ignition key from ON to OFF.
4. Press the power door unlock control three times.
5. Turn the ignition key back to ON. The doors will lock and unlock.
6. Press the power door unlock control. The horn will chirp once upon successful toggling of the Autolock feature.
7. Turn ignition to OFF.

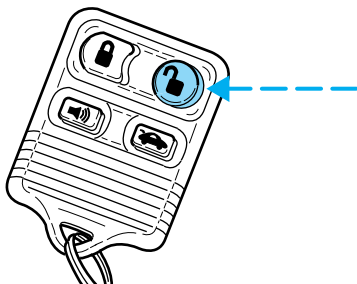
## Memory seat/mirrors/adjustable pedals feature (if equipped)

The remote keyless entry system can also control the seat/mirrors/adjustable pedals feature. With this feature, the first two programmed transmitters will recall a different memory position.

## Locks and Security

Press the control once to unlock the driver's door and move the memory features to the corresponding memory position, just as if you had pressed the memory control in the vehicle.

- transmitter #1 will recall memory feature position one.
- transmitter #2 will recall memory feature position two.
- If a third or fourth transmitter is added, it will not recall a memory position.

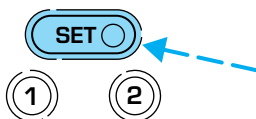


Memory seat positions can be changed at any time. Transmitter #1 will always move the memory features to position #1.

### **Reactivating the memory seat/mirrors/adjustable pedals feature**

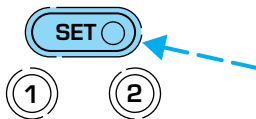
The remote memory seat/mirrors/adjustable pedals feature comes disabled from the factory. The following sequence will reactivate the transmitter:

1. Press the SET control.
2. Press any control on the remote entry transmitter.
3. Within five seconds, press control one or two.



### **Deactivating the memory seat/mirrors/adjustable pedals feature**

1. Press the SET control.
2. Press any control on the remote entry transmitter.
3. Within five seconds, press the SET control again.



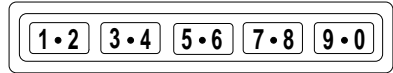
Manually moving any seat, mirror or pedal during these steps will cancel the programming procedure.

# Locks and Security

## KEYLESS ENTRY SYSTEM (IF EQUIPPED)

With the keyless entry keypad, you can:

- lock or unlock the vehicle doors without using the key



Your vehicle has a factory-set 5-digit code that operates the keyless entry system. You can also program your own 5-digit personal entry code.

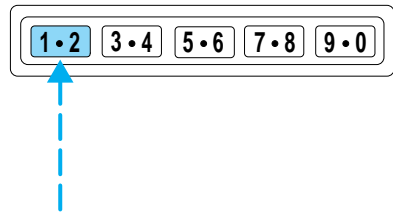
The factory-set code is located:

- on the owner's wallet card in the glove compartment
- taped to the computer module
- or at your dealer

When pressing the controls on the keyless entry keypad, press the middle of the controls to ensure a good activation.

### Programming your own entry code

1. Enter the factory-set code (keypad will illuminate when pressed).
2. Press the 1/2 control within five seconds of step 1.
3. Enter your personal 5-digit code. Enter each digit within five seconds of the previous one.
4. Enter a sixth digit to indicate which personality feature should be recalled by the personal code.



- 1/2 recalls personality 1
- 3/4 recalls personality 2
- 9/0 does not recall a personality

All of the vehicle doors will lock and unlock to confirm programming of the new code. Each personality driver profile (personality 1 or personality 2) can be associated with only one personal code. The factory-set code cannot be associated with a personality code.

Do not set a code that includes five of the same number or presents them in sequential order. Thieves can easily figure out these types of codes.

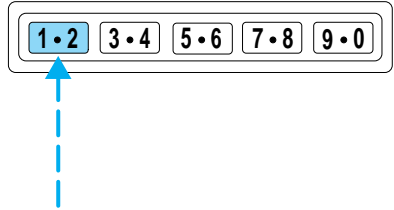
## Locks and Security

You can program up to three personal codes to unlock your vehicle. These codes do not replace the permanent code that the dealership gave you.

### **Erasing personal code**

To erase all of the personal entry codes programmed to a vehicle:

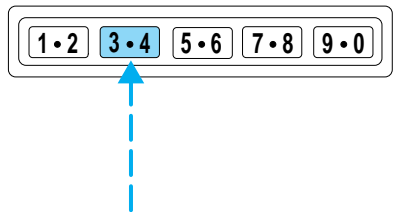
1. Enter the factory-set code.
2. Press 1/2 within 5 seconds of step 1.
3. Press and hold 1/2 for two seconds.



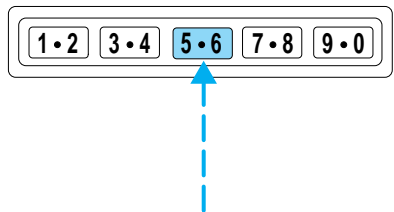
### **Unlocking the doors and releasing the trunk with the keyless entry system**

To unlock the driver door, enter either the factory-set code or personal code (each digit pressed within five seconds of prior digit). The interior lamps will illuminate.

To unlock all doors, enter the factory-set code or personal code (driver door unlocks) and press 3/4 within five seconds.



To release the trunk, enter the factory-set code or personal code (driver door unlocks) and press 5/6 within five seconds.



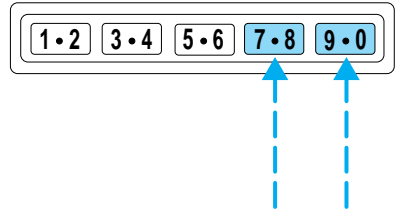
After the factory-set code or personal code has been entered, you can unlock all doors (press 3/4) and release the trunk (press 5/6) as long as the controls are pressed within five seconds of each other.

# Locks and Security

## Locking doors with the keyless entry system

It is not necessary to enter the factory-set code prior to locking all doors. To lock the doors:

- Press 7/8 and 9/0 at the same time.



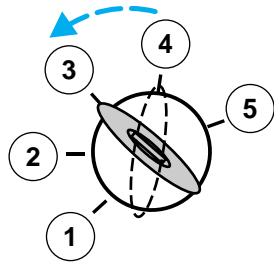
## SECURILOCK™ PASSIVE ANTI-THEFT SYSTEM

SecuriLock™ passive anti-theft system is an engine immobilization system. This system prevents 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.

### Automatic arming

The vehicle is armed immediately after switching the ignition to the 3 (OFF) or 2 (LOCK) position. The indicator light on the instrument panel will flash every two seconds when the vehicle is armed.



### Automatic disarming

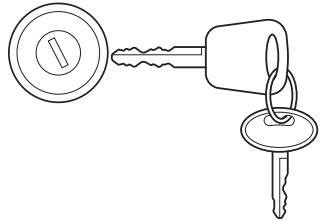
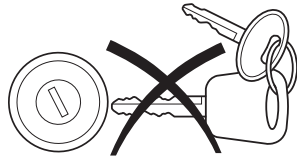
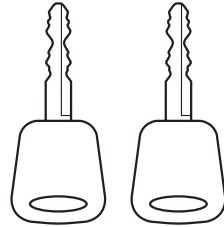
Switching the ignition to the 4 (ON) position with a **coded key** disarms the vehicle. The indicator light on the instrument will illuminate for three seconds and then go out. If the light stays on for an extended period of time or flashes rapidly, have the system serviced by your dealership or a qualified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

## Locks and Security

### 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*.

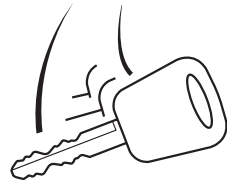
Large metallic objects, electronic devices on the key chain that can be used to purchase gasoline or similar items, or a second key on the same key ring as the **coded key** may cause vehicle starting issues. If present, you need to keep these objects from touching the **coded key** while starting the 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, 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 Lincoln **coded key**.



## Locks and Security

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 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.

## Locks and Security

Please read and understand the entire procedure before you begin.

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 five 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).

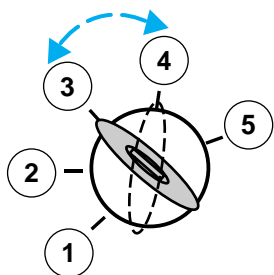
4. Turn the ignition to 3 (OFF) then 2 (LOCK) and remove the second **coded key** from the ignition.

5. Within ten seconds of removing the second **coded key**, insert the new unprogrammed key (new 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.



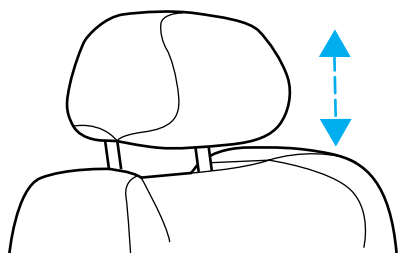
# Seating and Safety Restraints

## SEATING

### Head restraints

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.

Push or pull the head rests to the desired position.



### Using the manual recline function (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.

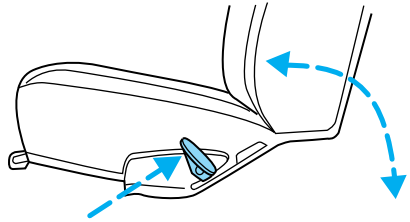


Reclining the seatback can reduce the effectiveness of the seat's safety belt in the event of a collision.

## Seating and Safety Restraints

To adjust the front seatback using the manual recliner:

- Lift and hold the handle located on the side of the seat.
- Lean against the seatback to adjust it to your desired position. You can recline the seat back or bring it forward.
- Release the handle when the desired position has been reached.

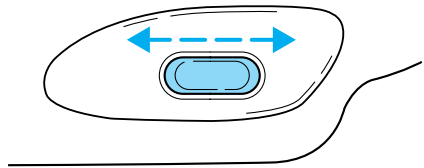


### Using the power lumbar support (if equipped)

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 power front seats – door mounted controls

The controls for the power seats are located on the inside of each front door.



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.



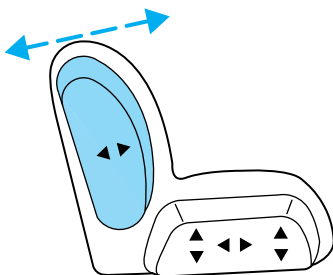
Always drive and ride with your seatback upright and the lap belt snug and low across the hips.



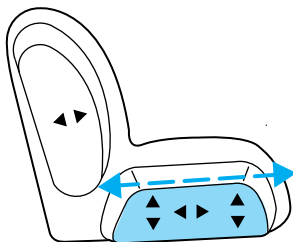
Reclining the seatback can reduce the effectiveness of the seat's safety belt in the event of a collision.

## Seating and Safety Restraints

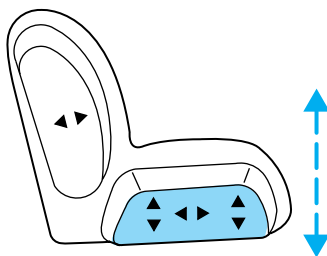
Press the control to recline the seatback forward or backward.



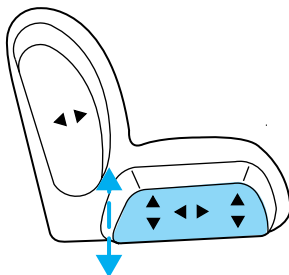
Press to move the seat forward or backward.



Press to move the front portion of the seat cushion up or down.



Press to move the rear portion of the seat cushion up or down.



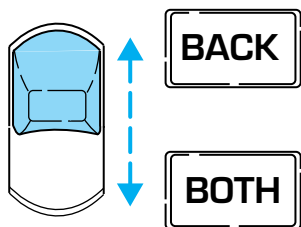
## Seating and Safety Restraints

### Heated seats (if equipped)

The heated seat controls are located on the door trim panel.

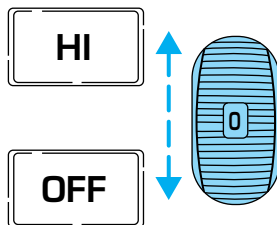
To operate the heated seats:

- Slide the control to BACK to heat the seatback only.
- Slide the control to BOTH to heat the seatback and the seat cushion.



- Rotate the thumbwheel to select the desired heat (from 0 (OFF) to 5 (HI)). Allow five minutes for the heat level to stabilize.

If the heated seat switch is not turned OFF, the seat will heat up to the selected temperature level each time the vehicle is started.



### Rear heated seats (if equipped)

The rear seat heat controls are located on the rear door panels and operate like the front heated seats. Refer to the *Heated Seats* section in this chapter for instructions on operating the rear heated seats.

### Easy access/easy out feature (if equipped)

This feature automatically moves the driver's seat backward when:

- the transmission is in N (Neutral) or P (Park)
- the key is removed from the ignition cylinder

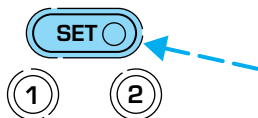
The seat will move 5 cm (2 inches) forward (to the original position) when:

- the transmission is in N (Neutral) or P (Park)
- the key is placed in the ignition cylinder

## Seating and Safety Restraints

### Memory seats/rearview mirrors/adjustable pedals (if equipped)

This system allows automatic positioning of the driver seat, outside rearview mirrors, and adjustable pedals to three programmable positions.



The memory seat control is located on the driver door.

- To program position one, move the driver seat to the desired position using the seat controls. Press the SET control. The SET control indicator light will briefly illuminate. While the light is illuminated, press control 1.
- To program position two, repeat the previous procedure using control 2.
- To program position three, repeat the previous procedure but press controls 1 and 2 simultaneously.

A position can only be recalled when the transmission gearshift is in Park. A memory seat position may be programmed at any time.

The memory seat positions are also recalled when you press your remote entry transmitter UNLOCK control.

To program the memory seat to remote entry transmitter, refer to *Remote entry system* in the *Locks and security* chapter.

## SAFETY RESTRAINTS

### Personal Safety System

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

Your vehicle's Personal Safety System consists of:

- Driver and passenger dual-stage air bag supplemental restraints.
- Front safety belts with pretensioners, energy management retractors, and safety belt usage sensors.
- Driver's seat position sensor.
- Passenger occupant classification sensor (if equipped).

## Seating and Safety Restraints

- Front crash severity sensor.
- Restraints Control Module (RCM) with impact and safing sensors.
- Restraint system warning light and back-up tone.
- The electrical wiring for the air bags, crash sensor(s), safety belt pretensioners, front safety belt usage sensors, driver seat position sensor, passenger occupant classification sensor (if equipped), and indicator lights.

### ***How does the personal safety system work?***

The Personal safety system can adapt the deployment strategy of your vehicle's safety devices according to crash severity and occupant conditions. A collection of crash and occupant sensors provides information to the Restraints control module (RCM). During a crash, the RCM activates the safety belt pretensioners and/or either one or both stages of the dual-stage air bag supplemental restraints based on crash severity and occupant conditions.

The fact that the pretensioners or air bags did not activate for both front seat occupants in a collision does not mean that something is wrong with the system. Rather, it means the Personal safety system determined the accident conditions (crash severity, belt usage, etc.) were not appropriate to activate these safety devices. Front air bags and pretensioners are designed to activate only in frontal and near-frontal collisions, not rollovers, side-impacts, or rear-impacts unless the collision causes sufficient longitudinal deceleration.

### ***Driver and passenger dual-stage air bag supplemental restraints***

The dual-stage air bags offer the capability to tailor the level of air bag inflation energy. A lower, less forceful energy level is provided for more common, moderate-severity impacts. A higher energy level is used for the most severe impacts. Refer to *Air bag supplemental restraints* section in this chapter.

### ***Front crash severity sensor***

The front crash severity sensor enhances the ability to detect the severity of an impact. Positioned up front, it provides valuable information early in the crash event on the severity of the impact. This allows your Personal safety system to distinguish between different levels of crash severity and modify the deployment strategy of the dual-stage air bags and safety belt pretensioners.

## Seating and Safety Restraints

### *Driver's seat position sensor*

The driver's seat position sensor allows your Personal safety system to tailor the deployment level of the driver dual-stage air bag based on seat position. The system is designed to help protect smaller drivers sitting close to the driver air bag by providing a lower air bag output level.

### *Passenger occupant classification sensor (OCS) (if equipped)*

If your vehicle is equipped with this feature, there will be a label located under the front passenger seat which is marked "OCS". Alternatively, you may take your vehicle to any Ford or Lincoln Mercury dealer for assistance.

For air bags to do their job they must inflate with great force, and this force can pose a potentially deadly risk to occupants that are very close to the air bag when it begins to inflate. For some occupants, like infants in rear-facing child seats, this occurs because they are initially sitting very close to the air bag. For other occupants, this occurs when the occupant is not properly restrained by seat belts or child safety seats and they move forward during pre-crash braking. The most effective way to reduce the risk of unnecessary injuries is to make sure all occupants are properly restrained. Accident statistics suggest that children are much safer when properly restrained in the rear seating positions than in the front.



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.



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

The passenger occupant classification sensor can automatically turn off the passenger front air bag and side air bag (if equipped). The system is designed to help protect small (child size) occupants from air bag deployments when they are improperly seated or restrained in the front passenger seat contrary to proper child-seating or restraint usage recommendations. Even with this technology, parents are **STRONGLY** encouraged to always properly restrain children in the rear seat. The sensor also turns off the air bag(s) when the passenger seat is empty to prevent unnecessary replacement of the air bag(s) after a collision.

## Seating and Safety Restraints

### **Front safety belt usage sensors**

The front safety belt usage sensors detect whether or not the driver and front outboard passenger safety belts are fastened. This information allows your Personal safety system to tailor the air bag deployment and safety belt pretensioner activation depending upon safety belt usage. Refer to *Safety belt* section in this chapter.

### **Front safety belt pretensioners**

The safety belt pretensioners are designed to tighten the safety belts firmly against the occupant's body during a collision. This maximizes the effectiveness of the safety belts and helps properly position the occupant relative to the air bag to improve protection. The safety belt pretensioners can be either activated alone or, if the collision is of sufficient severity, together with the air bags.

### **Front safety belt energy management retractors**

The front safety belt energy management retractors allow webbing to be pulled out of the retractor in a gradual and controlled manner in response to the occupant's forward momentum. This helps reduce the risk of force-related injuries to the occupant's chest by limiting the load on the occupant. Refer to *Safety belt* section in this chapter.

### **Determining if the Personal safety system is operational**

The Personal safety system uses a warning light in the instrument cluster or a back-up tone to indicate the condition of the system. Refer to the *Warning light* section in the *Instrument cluster* chapter. Routine maintenance of the Personal safety system is not required.

The Restraints control module (RCM) monitors its own internal circuits and the circuits for the air bag supplemental restraints, crash sensor(s), safety belt pretensioners, front safety belt buckle sensors, driver seat position sensor, and passenger occupant classification sensor (if equipped). In addition, the RCM also monitors the restraints warning light in the instrument cluster. A difficulty with the system is indicated by one or more of the following.

- The warning light will either flash or stay lit.
- The warning 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 warning light are repaired.

## Seating and Safety Restraints

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

### Safety restraints precautions



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



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.

## Seating and Safety Restraints



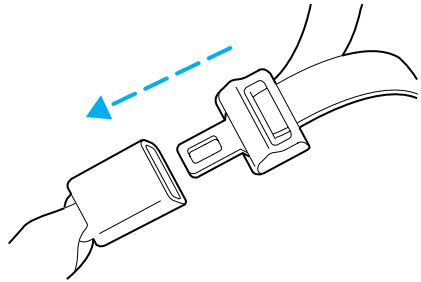
Each seating position in your vehicle has a specific safety belt assembly which is made up of one buckle and one tongue that are designed to be used as a pair. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing the safety belt around your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



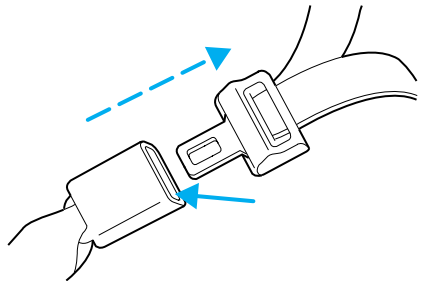
Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints.

### Combination lap and shoulder belts

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



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



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

## Seating and Safety Restraints

### 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.

### 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.

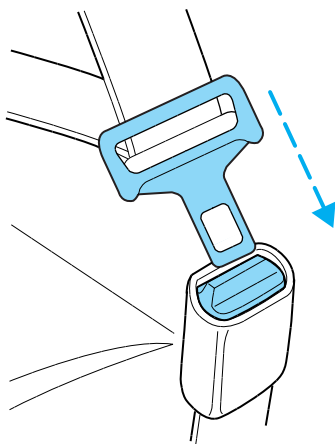
The automatic locking mode is not available on the driver safety belt.

### When to use the automatic locking mode

- **Any time** a child safety seat is installed in the vehicle. 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.

### How to use the automatic locking mode

- Buckle the combination lap and shoulder belt.



## Seating and Safety Restraints

- 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.

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 seat 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 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.

## Seating and Safety Restraints

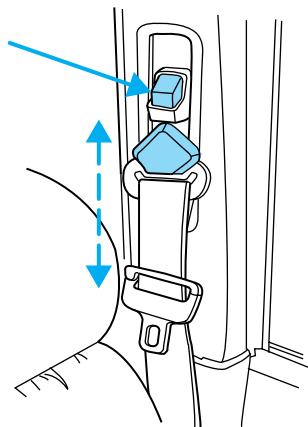


Failure to replace the Belt and Retractor assembly could increase the risk of injury in collisions.

### Front safety belt height adjustment

Your vehicle has safety belt height adjustments for the driver and front passenger. Adjust the height of the shoulder belt so the belt rests across the middle of your shoulder.

To lower the shoulder belt height, push the button and slide the height adjuster down. To raise the height of the shoulder belt, slide the height adjuster up. Pull down on the height adjuster to make sure it is locked in place.



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

### Lap belts

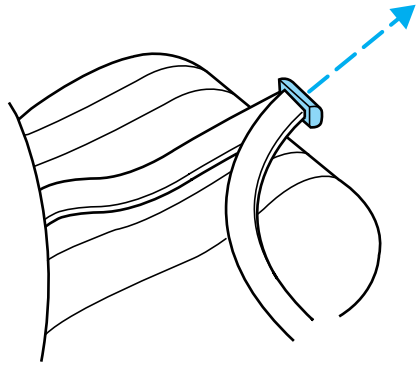
#### *Adjusting the front center seat lap belt (if equipped)*



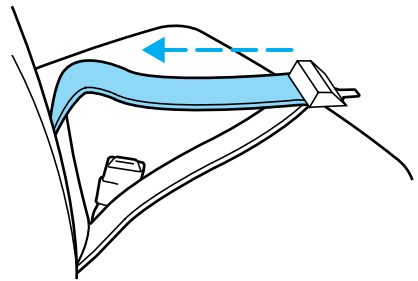
The lap belt should fit snugly and as low as possible around the hips, not across the waist.

## Seating and Safety Restraints

The lap belt does not adjust automatically. Insert the tongue into the correct buckle (the buckle closest to the direction the tongue is coming from). To lengthen the belt, turn the tongue at a right angle to the belt and pull across your lap until it reaches the buckle. To tighten the belt, pull the loose end of the belt through the tongue until it fits snugly across the hips.



Shorten and fasten the belt when not in use.



### 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 and indicator chime 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 before the vehicle has reached at least 5 km/h (3 mph) and 1-2 minutes have elapsed since the ignition switch has been turned to ON...	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>36 700 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.

## Seating and Safety Restraints

Reasons given...	Consider...
“Belts wrinkle my clothes”	Possibly, but a serious crash can do much more than wrinkle your clothes, particularly if you are unbelted.
“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)

## Seating and Safety Restraints

- the ignition switch is in the OFF position
- all vehicle doors are closed
- 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.

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 flashing the safety belt warning light four times per second for three seconds.
8. Confirmation of enabling BeltMinder is provided by flashing the safety belt warning light four times per second for three seconds, followed by three seconds with the safety belt warning light off, then followed by flashing the safety belt warning light four times per second for three seconds again.
9. After receiving confirmation, the deactivation/activation procedure is complete.

## Seating and Safety Restraints

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

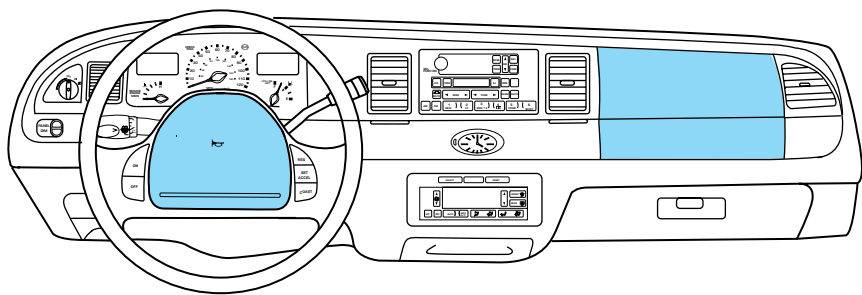


Failure to inspect and if necessary replace the safety belt assembly under the above conditions could result in severe personal injuries in the event of a collision.

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

# Seating and Safety Restraints

## AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

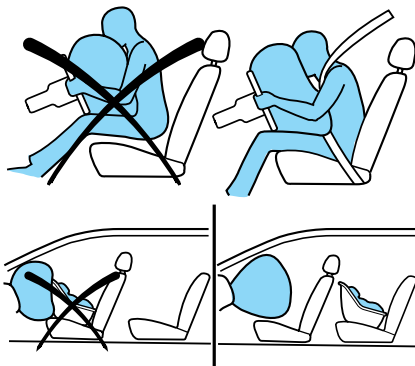


Your vehicle is equipped with a crash sensing and diagnostic module which records information about the air bag and sensor systems. In the event of a collision this module may save information related to the collision including information about the air bag system and impact severity. This information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

### 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.

## Seating and Safety Restraints



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.
- 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.



The front passenger air bag is not designed to offer protection to occupants in the center front seating position.



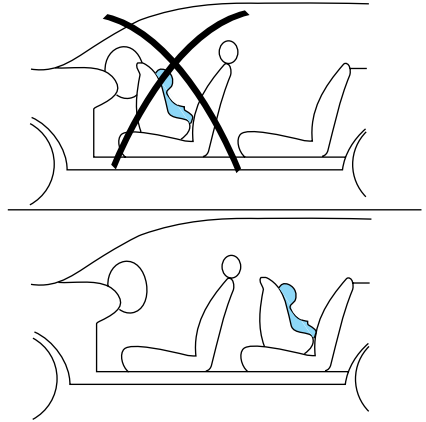
Modifications to the front end of the vehicle, including frame, bumper, front end body structure and tow hooks may affect the performance of the air bag sensors increasing the risk of injury. Do not modify the front end of the vehicle.

# Seating and Safety Restraints

## 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.



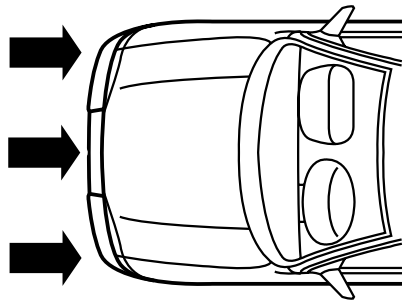
Air bags can kill or injure a child in a child seat.

**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. Front air bags are designed to inflate in frontal and near-frontal collisions, not rollover, side-impacts, or rear-impacts unless the collision causes sufficient longitudinal deceleration.



## Seating and Safety Restraints

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 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.



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.

The SRS consists of:

- driver and passenger air bag modules (which include the inflators and air bags).
- side air bags (if equipped). Refer to *Side air bag system* later in this chapter.
- one or more impact and safing sensors.

## Seating and Safety Restraints

- a readiness light and tone.
- 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.

### 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.
- 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.

**AIR  
BAG**

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.

### Side air bag system (if equipped)



Do not place objects or mount equipment on or near the air bag cover on the side of the seatbacks of the front seats or in front seat areas that may come into contact with a deploying air bag. Failure to follow these instructions may increase the risk of personal injury in the event of a collision.



Do not use accessory seat covers. The use of accessory seat covers may prevent the deployment of the side air bags and increase the risk of injury in an accident.

## Seating and Safety Restraints



Do not lean your head on the door. The side air bag could injure you as it deploys from the side of the seatback.



Do not attempt to service, repair, or modify the air bag supplemental restraint system, its fuses or the seat cover on a seat containing an air bag. See your Ford or Lincoln Mercury dealer.

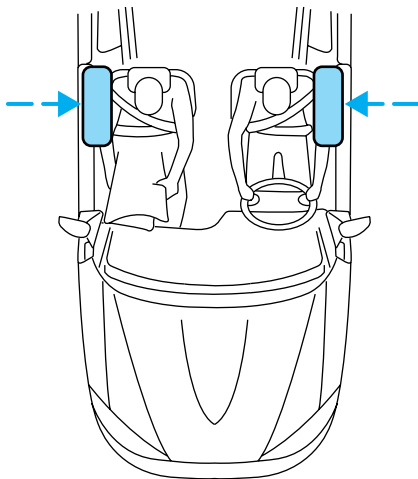


All occupants of the vehicle including the driver should always wear their safety belts even when an air bag SRS is provided.

### ***How does the side air bag system work?***

The side air bag system consists of the following:

- An inflatable nylon bag (air bag) with a gas generator concealed behind the outboard bolster of the driver and front passenger seatbacks.
- A special seat cover designed to allow airbag deployment.
- The same warning light, electronic control and diagnostic unit as used for the front air bags.
- Two crash sensors located under the outboard side of the front seats, attached to the floor.



Side air bags, in combination with seat belts, can help reduce the risk of severe injuries in the event of a significant side impact collision.

The side air bags are fitted on the outboard side of the seatbacks of the front seats. In certain lateral collisions, the air bag on the side affected by the collision will be inflated, even if the respective seat is not occupied. The air bag was designed to inflate between the door panel and occupant to further enhance the protection provided occupants in side impact collisions.

## Seating and Safety Restraints

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

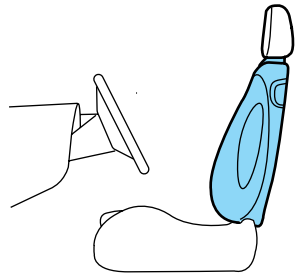
The fact that the air bags did not inflate in a collision does not mean that something is wrong with the system. Rather, it means the forces were not of the type sufficient to cause activation. Side air bags are designed to inflate in side-impact collisions, not roll-over, rear-impact, frontal or near-frontal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



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



If the side air bag has deployed, **the air bag will not function again. The side air bag system (including the seat) must be inspected and serviced by a qualified technician in accordance with the vehicle service manual.** If the air bag is not replaced, the unrepaired area will increase the risk of injury in a collision.



### ***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 the *Air bag readiness* section in the *Instrument cluster* chapter. Routine maintenance of the side air bag is not required.

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

- The readiness light (same light as for front air bag system) will either flash or stay lit.

## Seating and Safety Restraints

- 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 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 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 position.

# Seating and Safety Restraints

## 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.

To improve the fit of lap and shoulder belts on children who have outgrown child safety seats, Ford recommends use of a belt-positioning booster seat that is labelled as conforming to all applicable Federal motor vehicle safety standards. Belt-positioning booster seats raise the child and provide a shorter, firmer seating cushion that encourages safer seating posture and better fit of lap and shoulder belts on the child.

A belt-positioning booster seat should be used if the shoulder belt rests in front of the child's face or neck, or if the lap belt does not fit snugly on both thighs, or if the thighs are too short to let the child sit all the way back on the seat cushion when the lower legs hang over the edge of the seat cushion. You may wish to discuss the special needs of your child with your pediatrician.

## SAFETY SEATS FOR CHILDREN



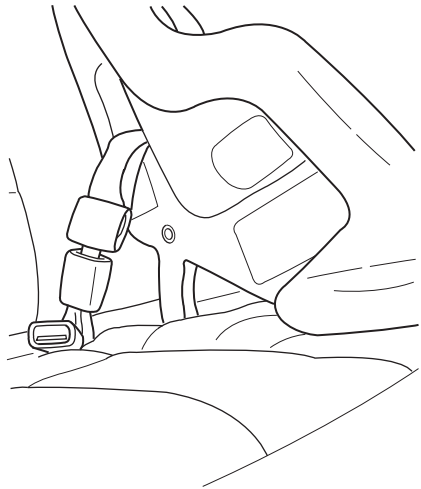
## Seating and Safety Restraints

### 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 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* section in this chapter.
- Use the correct safety belt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode*.



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 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.

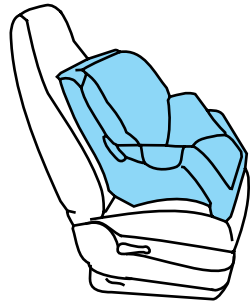
## Seating and Safety Restraints

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



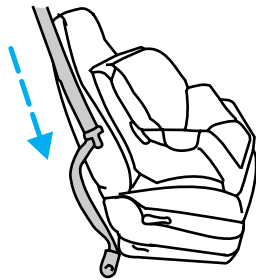
Air bags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active air bag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

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



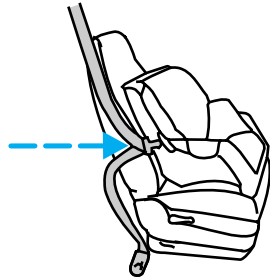
Children 12 and under should be properly restrained in the rear seat whenever possible.

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

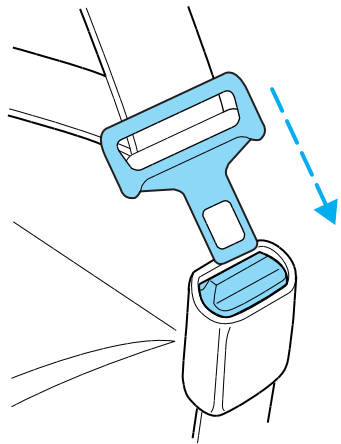


## Seating and Safety Restraints

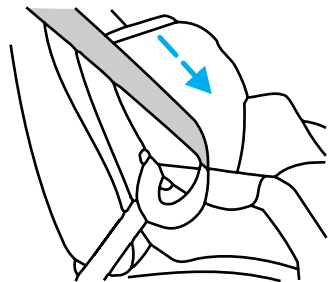
3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



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.



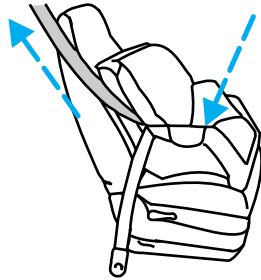
5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is extracted and a click is heard.



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

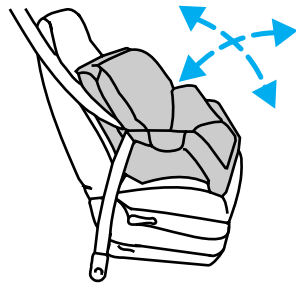
## Seating and Safety Restraints

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 tilt the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 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

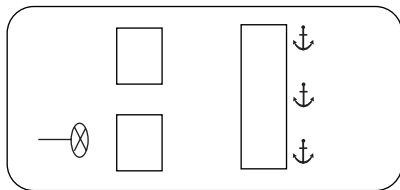
Most new forward-facing child safety seats include a tether strap which goes over the back of the seat and hooks to an anchoring point. Tether straps are available as an accessory for many older safety seats. Contact the manufacturer of your child seat for information about ordering a tether strap.

The rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats as described below.

The tether anchors in your vehicle are located under a cover marked with the tether anchor symbol (shown with title).

## Seating and Safety Restraints

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.



4. Open the tether anchor cover.

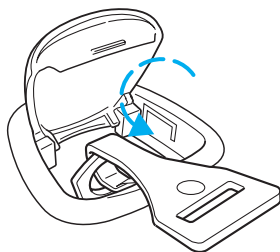


## Seating and Safety Restraints

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



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



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.



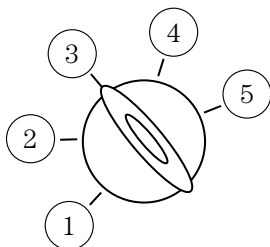
If the safety seat is not anchored properly, the risk of a child being injured in a collision greatly increases.

# Driving

## 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.
3. OFF, shuts off the engine and all accessories without locking the steering wheel.
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.



Refer to the *Securilock™ Passive Anti-Theft System* section in the *Locks and security* chapter for information on Securilock™ keys.

### 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 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.



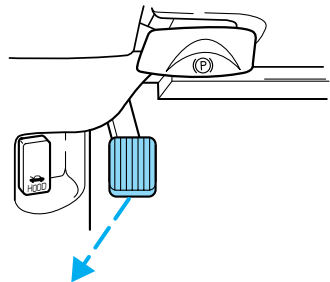
If you smell exhaust fumes inside your vehicle, have your dealer inspect your vehicle immediately. Do not drive if you smell exhaust fumes.

### **Important safety precautions**

A computer system controls the engine's idle revolutions per minute (RPM). When the engine starts, the idle RPM runs faster 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 the higher 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.
2. Make sure the headlamps and vehicle accessories are off.
3. Make sure the gearshift is in P (Park).
4. Make sure the parking brake is set.

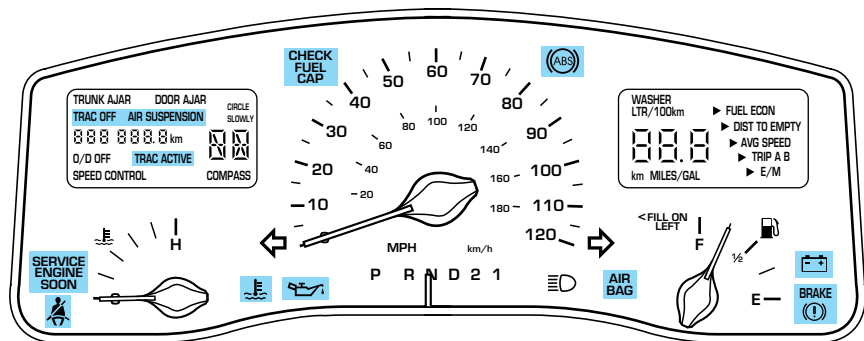
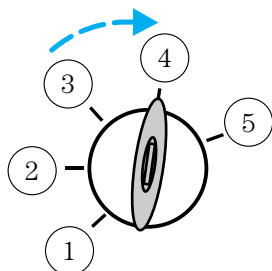


## Driving

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

If there is difficulty in turning the key, firmly rotate the steering wheel left and right until the key turns freely. This condition may occur when:

- front wheels are turned
- front wheel is against the curb
- steering wheel is turned when getting in or out of the vehicle



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.

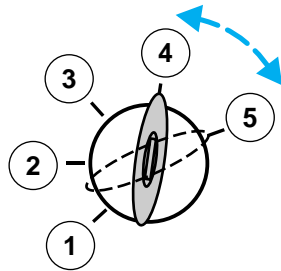
1. Turn the key to 5 (START) without pressing the accelerator pedal and release as soon as the engine starts. The key will return to 4 (ON).

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.

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 and release the parking brake.



### 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.

## Driving



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.

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

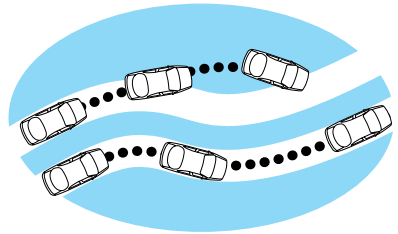
Your service brakes are self-adjusting. Refer to the scheduled maintenance guide for scheduled maintenance.

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 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.

## 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.



## 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 decrease the time necessary to apply the brakes or always 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.

## Driving

### ABS warning lamp (ABS)

The (ABS) 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.)

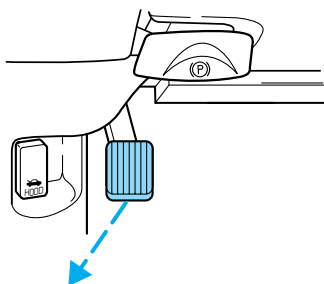
**BRAKE**  
(!)

### Parking brake with auto-release (P)

Apply the parking brake whenever the vehicle is parked.

To set the parking brake:

1. Move the gearshift to P (Park).
2. Push pedal downward.



**BRAKE**  
(!)

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



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

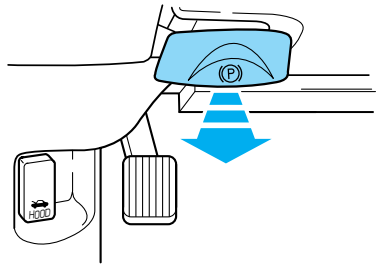
The parking brake is not recommended to stop a moving vehicle. However, if the normal brakes fail, the parking brake can be used to stop your vehicle in an emergency. Since the parking brake applies only the rear brakes, the vehicle's stopping distance will increase greatly and the handling of your vehicle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

Your vehicle has an automatic parking brake release. To release the parking brake:

1. Turn the ignition to the ON position.
2. Press the brake pedal.
3. Move the gearshift from the P (Park) position to one of the forward gears (the parking brake will not release automatically when you shift into reverse). The brake pedal must remain pressed while the gearshift is moved.

If the parking brake fails to release after completing this procedure, use the manual parking brake release lever.

Pull the lever to manually release the parking brake.



### TRACTION CONTROL™

For Traction Control™ warning lights refer to *Warning Lights* in the *Instrumentation* chapter.

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 and/or hilly road 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™ 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.

## Driving

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 and ice covered roads.

During Traction Control<sup>™</sup> operation 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.

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.



### Traction control switch

The traction control switch is located on the left side of the instrument panel. The traction control system defaults to ON when the ignition key is turned from OFF to RUN.

## STEERING

Your vehicle is equipped with power steering. Power steering uses energy from the engine to help steer 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 a low 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

## Speed sensitive steering

The steering in your vehicle is speed sensitive. At high speeds, steering assist will decrease to improve steering feel. At lower speeds, maneuverability will be increased.

If the amount of effort required to steer your vehicle changes while driving at a constant vehicle speed, have the power steering system checked by your dealer or a qualified service technician.

## AIR SUSPENSION SYSTEM

The air suspension system is designed to improve ride, handling and general vehicle performance during:

- certain road conditions
- steering maneuvers
- braking
- accelerations

This system keeps the rear of your vehicle at a constant level by automatically adding air or releasing air from the springs.

If you exceed the load limit, the rear air suspension may not operate.

The air suspension shut-off switch is located on the left side of the trunk. If this switch is in the OFF position, the rear air suspension will not operate.



On vehicles equipped with Air Suspension, turn OFF the Air Suspension switch prior to jacking, hoisting or towing your vehicle.

Normal vehicle operation does not require any action by the driver.

## Driving

### 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 the 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).**
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 off the ignition 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 with a 4-speed automatic transmission

### Understanding gearshift positions

To put your vehicle in gear, start the engine, depress the brake pedal, then 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.

### **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 off the ignition 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.



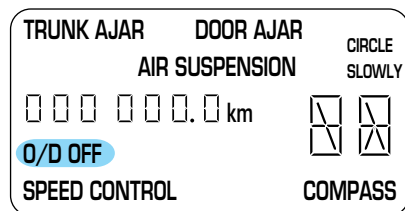
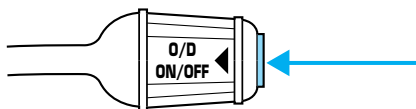
## Driving

### Overdrive

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

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.



### Drive

Not shown on the display. Activate by pressing the transmission control switch on the gearshift lever with the gearshift in the Drive position. The O/D OFF indicator will illuminate in the instrument cluster. Transmission operates in gears one through three. Drive provides more engine braking than 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 the *Trailer Towing* chapter.

To return to Overdrive mode, press the transmission control switch. The O/D OFF indicator light 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 the Overdrive mode is not desired.

## 2 (Second)

Use 2 (Second) to start-up on slippery roads or to provide additional engine braking on downgrades.



## 1 (First)

Use 1 (Low) to provide maximum engine braking on steep downgrades. Upshifts can be made by shifting to 2 (Second) or to 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.

## 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 avoid injury, never run the engine with one wheel off the ground, such as when changing a tire.

## 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.

## Driving

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.**

### 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 the 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 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 Certification Label, found on the inside pillar of the driver's door, lists several important vehicle weight rating limitations. Before adding any additional equipment, refer to these limitations. If you are adding weight to your vehicle, 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.

The weight of your loaded trailer should not exceed 907 kg (2 000 lbs). The GCW of your vehicle and trailer should not exceed 2 993 kg (6 600 lbs).

### TRAILER TOWING

Your vehicle is classified as a light duty towing vehicle. Do not tow a trailer until your vehicle has been driven at least 3 200 km (2 000 miles).

## Driving

Towing a trailer places an additional load on your vehicle's engine, transmission, brakes, tires and suspension. Inspect these components carefully after towing.

Your loaded trailer should weigh no more than 907 kg (2 000 lbs.).



Do not exceed the GVWR or the GAWR specified on the certification label.



Towing trailers beyond the maximum recommended gross trailer weight could result in engine damage, transmission/axle damage, structural damage, loss of control, and personal injury.

### Preparing to tow

Use the proper equipment for towing a trailer, and make sure it is properly attached to your vehicle. See your dealer or a reliable trailer dealer if you require assistance.

### Hitches

Do not use hitches that clamp onto the vehicle bumper. Use a load carrying hitch. You must distribute the load in your trailer so that 10% of the total weight of the trailer is on the tongue.

### Safety chains

Always connect the trailer's safety chains to the frame or hook retainers of the vehicle hitch. To connect the trailer's safety chains, cross the chains under the trailer tongue and allow slack for turning corners.

If you use a rental trailer, follow the instructions that the rental agency gives to you.

**Do not attach safety chains to the bumper.**

### Trailer brakes

Electric brakes and manual, automatic or surge-type trailer brakes are safe if installed properly and adjusted to the manufacturer's specifications. The trailer brakes must meet local and Federal regulations.



Do not connect a trailer's hydraulic brake system directly to your vehicle's brake system. Your vehicle may not have enough braking power and your chances of having a collision greatly increase.

The braking system of the tow vehicle is rated for operation at the GVWR not GCWR.

### Trailer lamps

Trailer lamps are required on most towed vehicles. Make sure your trailer lamps conform to local and Federal regulations. See your dealer or trailer rental agency for proper instructions and equipment for hooking up trailer lamps.

### Driving while you tow

When towing a trailer:

- Ensure that you turn off your speed control. The speed control may shut off automatically when you are towing on long, steep grades.
- Consult your local motor vehicle speed regulations for towing a trailer.
- Use a lower gear when towing up or down steep hills. This will eliminate excessive downshifting and upshifting for optimum fuel economy and transmission cooling.
- Anticipate stops and brake gradually.

**Exceeding the GCWR rating may cause internal transmission damage and void your warranty coverage.**

### *Servicing after towing*

If you tow a trailer for long distances, your vehicle will require more frequent service intervals. Refer to your scheduled maintenance guide for more information.

### Trailer towing tips

- Practice turning, stopping and backing up before starting on a trip to get the feel of the vehicle trailer combination. When turning, make wider turns so the trailer wheels will clear curbs and other obstacles.
- Allow more distance for stopping with a trailer attached.

## Driving

- If you are driving down a long or steep hill, shift to a lower gear. Do not apply the brakes continuously, as they may overheat and become less effective.
- The trailer tongue weight should be 10% of the loaded trailer weight.
- After you have traveled 80 km (50 miles), thoroughly check your hitch, electrical connections and trailer wheel lug nuts.
- When stopped in traffic for long periods of time in hot weather, place the gearshift in P (Park) and increase idle speed. This aids engine cooling and air conditioner efficiency.
- Vehicles with trailers should not be parked on a grade. If you must park on a grade, place wheel chocks under the trailer's wheels.

### Launching or retrieving a boat

When backing down a ramp during boat launching or retrieval:

- do not allow the static water level to rise above the bottom edge of the rear bumper.
- do not allow waves to break higher than 15 cm (6 inches) above the bottom edge of the rear bumper.

Exceeding these limits may allow water to enter critical vehicle components, adversely affecting driveability, emissions, reliability and causing internal transmission damage.

Replace the rear axle lubricant any time the axle has been submerged in water. Rear axle lubricant quantities are not to be checked or changed unless a leak is suspected or repair required.

Disconnect the wiring to the trailer before backing the trailer into the water. Reconnect the wiring to the trailer after the trailer is removed from the water.

### 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 if you should 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 Basic warranty period (Canada) or New Vehicle Limited Warranty period (U.S.) of three years or 60 000 km (36 000 miles), whichever comes 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 25 kms (15.5 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 *Roadside Assistance supplement* for exact fuel amounts.

## 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 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 Roadside Assistance book 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.

## Roadside Emergencies

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

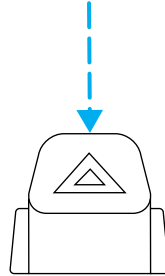
In the United States, you may purchase additional roadside assistance coverage beyond this period through the Ford Auto Club by contacting your Ford or Lincoln Mercury dealer.

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.

- 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.



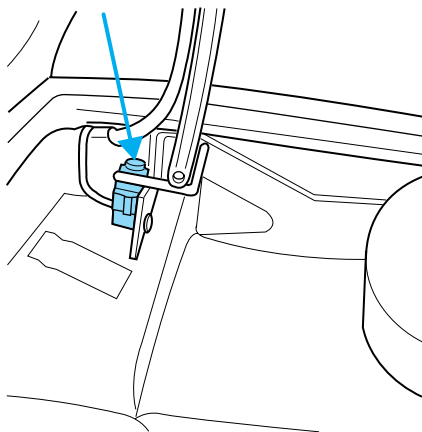
### FUEL PUMP SHUT-OFF SWITCH FUEL RESET

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.

## Roadside Emergencies

The fuel pump shut-off switch is located on a bracket inside of the luggage compartment.



Use the following procedure to reset the fuel pump shut-off switch.

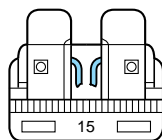
1. Turn the ignition to the OFF position.
2. Check the fuel system for leaks.
3. If no fuel leak is apparent, reset the fuel pump shut-off switch by pushing in on the reset button.
4. Turn the ignition to the ON position. Pause for a few seconds and return the key to the OFF position.
5. Make a further check for leaks in the fuel system.

## 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.



## Roadside Emergencies

### *Standard fuse amperage rating and color*

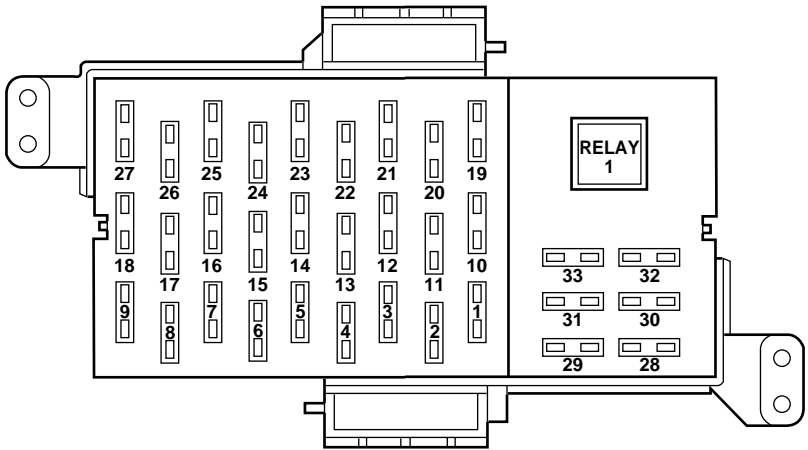
COLOR					
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
2A	Grey	Grey	—	—	—
3A	Violet	Violet	—	—	—
4A	Pink	Pink	—	—	—
5A	Tan	Tan	—	—	—
7.5A	Brown	Brown	—	—	—
10A	Red	Red	—	—	—
15A	Blue	Blue	—	—	—
20A	Yellow	Yellow	Yellow	Blue	Blue
25A	Natural	Natural	—	—	—
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.

To remove a fuse use the fuse puller tool provided on the fuse panel cover.

## Roadside Emergencies



The fuses are coded as follows.

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
1	10A	Lighting Control Module (LCM), Left-Hand Low Beam Headlamp
2	30A	EATC Blower Motor
3	10A	Lighting Control Module (LCM), Right-Hand Low Beam Headlamp
4	7.5A	Instrument Cluster
5	7.5A	Lighting Control Module (LCM), Instrument Panel Light
6	15A	EATC, Heated Seats
7	15A	Lighting Control Module (LCM), Day/Night Sensor/Amplifier, Park/Tail Lamps
8	10A	Shift Lock, Speed Control, Air Suspension, Steering Wheel Rotation Sensor

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
9	20A	Lighting Control Module (LCM), Multi-Function Switch, Hi Beam Headlamps
10	10A	Restraint Control Module (RCM), Air Bags
11	—	Not Used
12	15A	Instrument Cluster, Anti-Theft, Ignition Switch, Ignition Coils
13	10A	Anti-Lock Brake Module, Traction Control Switch
14	7.5A	Transmission Control Switch, Lighting Control Module (LCM), VCS
15	20A	Multi-Function Switch, Turn Signals
16	30A	Wiper Control Module (WCM), Windshield Wiper Motor
17	10A	Digital Transmission Range (DTR) Sensor, Back-Up Lamps, EC Mirrors
18	7.5A	Lighting Control Module (LCM), Front Radio Control Unit, Cellular Telephone Transceiver, Electronic Day/Night Mirror, Compass Module/Rear Audio/Climate Control Module, VCS
19	10A	EATC, Clock, Instrument Cluster, PCM
20	7.5A	Lighting Control Module (LCM), ABS, Shift Lock
21	20A	Multi-Function Switch, Hazard Lamps

## Roadside Emergencies

<b>Fuse/Relay Location</b>	<b>Fuse Amp Rating</b>	<b>Passenger Compartment Fuse Panel Description</b>
22	20A	Multi-Function Switch, High Mounted Stop Lamps, Stop Lamps
23	20A	Datalink Connector, I/P Cigar Lighter, Reardoor Cigar Lighters (Long Wheel Base Only)
24	5A	Front Radio Control Unit
25	15A	Lighting Control Module (LCM), Courtesy/Demand Lamps
26	5A	Digital Transmission Range (DTR) Sensor, Starter Relay Coil
27	20A	Fuel Filler Door Release Switch
28	10A	Heated Mirrors
29	20A	LF Door Module, Door Locks, Decklid Release
30	7.5A	LF Seat Module, Trunk Lid Release Switch, Door Lock Switches, LF Seat Control Switch, LF Door Module, Power Mirror Switch
31	7.5A	Main Light Switch, Lighting Control Module (LCM)
32	25A	Brake Pedal Position Switch (BPP), Brake Pressure Switch, Fuses 20 and 22
33	15A	Front Radio Control Unit, Digital Compact Disk Changer, Cellular Telephone Transceiver, VCS
Relay 1	—	Accessory Delay Relay (Signature/Cartier) or Power Window Relay (Executive)

# Roadside Emergencies

## Power distribution box

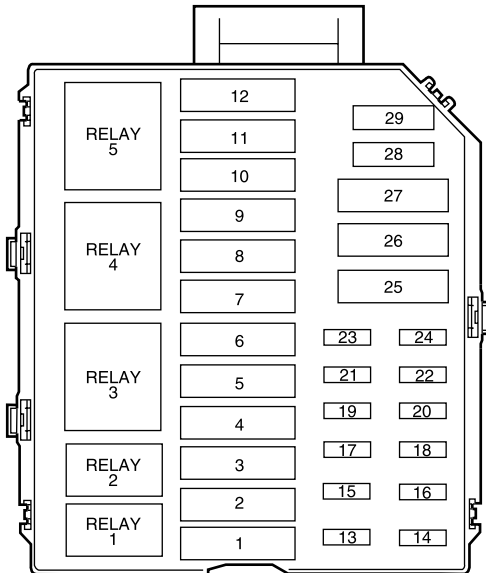
The power distribution box is located in the engine compartment. The power distribution box contains high-current fuses that protect your vehicle's main electrical systems from overloads.



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
1	50A**	Ignition Switch
2	40A**	Ignition Switch
3	50A**	Cooling Fan-High Speed
4	30A**	PCM Power Relay
5	40A**	I/P Fuse Panel, Fuses 11, 19, 21, 23, 25, 27, and 32(Long Wheel Base Only)
6	—	Not Used
7	40A**	I/P Fuse Panel, Fuses 1, 3, 5, 7, 9, 31
8	30A**	Driver Power Seat, I/P Fuse Panel, Fuse 30, Adjustable Pedal, Passenger Power Seat
9	40A**	Anti-Lock Brakes
10	40A**	Rear Defrost, I/P Fuse Panel, Fuse 28
11	40A**	Accessory Delay Relay (Signature/Cartier), Power Window Relay (Executive), I/P Fuse Panel, Fuse 29,
12	30A**	Air Suspension
13	30A*	Rear Heated Seats (Long Wheel Base Only)
14	20A*	Rear Power Point (Long Wheel Base Only)
15	20A*	Rear Power Point (Longe Wheel Base)
16	30A*	Heated Seats
17	10A*	Air Suspension
18	15A*	Horn

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
19	30A*	Subwoofer, I/P Fuse Panel, Fuse 33
20	15A*	Fuel Injectors, PCM
21	15A*	Heated Oxygen Sensors, Transmission Solenoids, EVAP Canaster Vent Solenoid, EGR Vacuum Regulator, EVAP Vapor Management Valve
22	20A	Fuel Pump
23	15A	Charging System
24	20A*	Auxiliary Power Outlet
25	30A**	Passenger Seat (Long Wheel Base Only)
26	30A CB**	Cooling Fan-Low Speed
27	20A**	Anti-Lock Brakes
28	—	PCM Diode
29	—	Not used
Relay 1	—	Fuel Pump Relay
Relay 2	—	A/C Clutch Relay
Relay 3	—	PCM Power Relay
Relay 4	—	Air Suspension Relay
Relay 5	—	Rear Defrost Relay
* 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.

### Temporary spare tire information

Your vehicle may have a temporary or full-size 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:**

- exceed 80 km/h (50 mph) under any circumstances
- load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label
- 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

### Tire change procedure

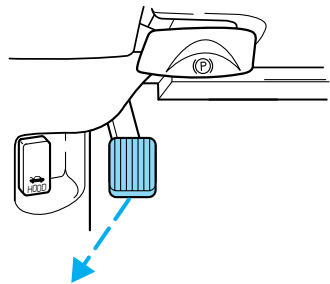


To prevent the vehicle from moving when you change a tire, be sure the parking brake is set, then block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.



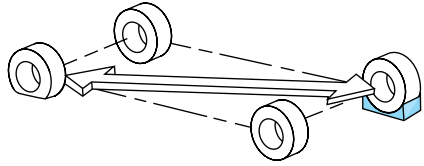
If the vehicle slips off the jack, you or someone else could be seriously injured.

1. Park on a level surface, activate hazard flashers and set parking brake.



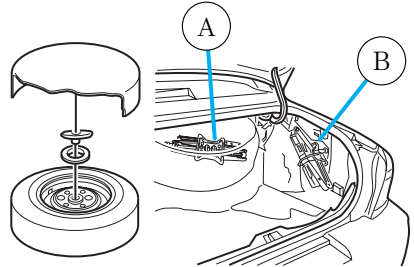
## Roadside Emergencies

2. Place gearshift lever in P (Park), turn engine OFF and block the diagonally opposite wheel.

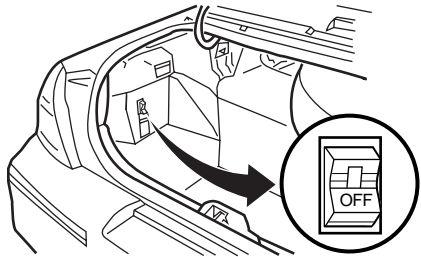


3. Remove the spare tire and the jack. The jack could be located:

- A — under the spare tire or
- B — in the wheel well

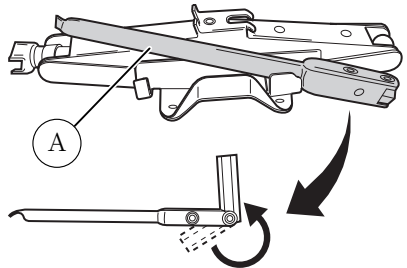


On vehicles equipped with Air Suspension, turn OFF the Air Suspension switch prior to jacking, hoisting or towing your vehicle.



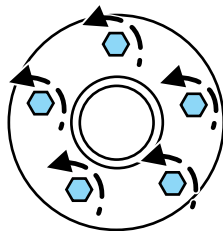
Refer to *Air suspension system* in the *Driving* chapter for more information.

4. Remove the lug wrench (A) from the jack. Rotate the lug wrench socket out from the handle.



## Roadside Emergencies

5. Locate pry off notch (if equipped) and remove the center ornament from the aluminum wheel with the tapered end of the wheel nut wrench that came with your vehicle. Insert and twist the handle, then pry against the wheel.



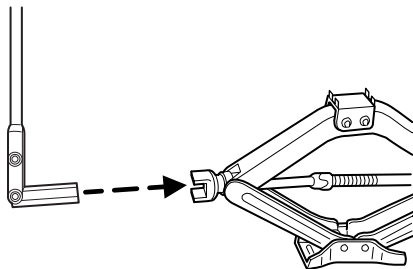
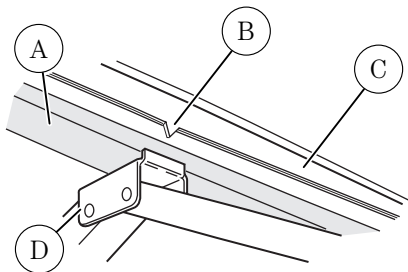
6. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.

**STOP** Before placing the jack under the vehicle, NOTE the jack location markings:

### JACK LOCATION

The jack location markings can be found **on the lower outer edge of the body.**

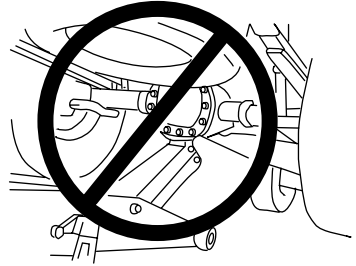
- Locate the jack locator mark (B) on the body (C) near the tire you are changing, then place the jack (D) **under the frame (A) of the vehicle** aligning it with the mark (B).
- Position the jack according to the following guides and turn the jack handle clockwise until the wheel is completely off the ground.



## Roadside Emergencies

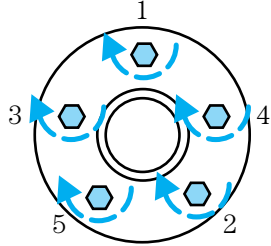


To lessen risk of personal injury, do not put any part of your body under the vehicle while changing a tire. Do not start the engine when your vehicle is on the jack. The jack is **ONLY** meant for changing the tire.



- **Never use the rear differential as a jacking point.**

7. Remove the lug nuts with the lug wrench.
8. 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.
9. Lower the vehicle by turning the jack handle counterclockwise.
10. Remove the jack and fully tighten the lug nuts in the order shown.
11. Put flat tire, jack and lug wrench away.
12. Turn on the air suspension switch.



### 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.

## Roadside Emergencies

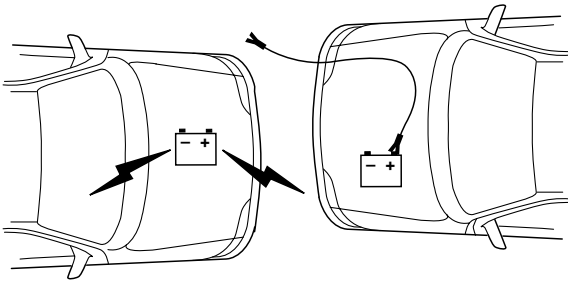
**Do not attempt to push-start your vehicle. Automatic transmissions do not have push-start capability; also, the catalytic converter may become damaged.**

### Preparing your vehicle

When the battery is disconnected or a new battery is installed, the transmission must relearn its 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.

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 that 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.

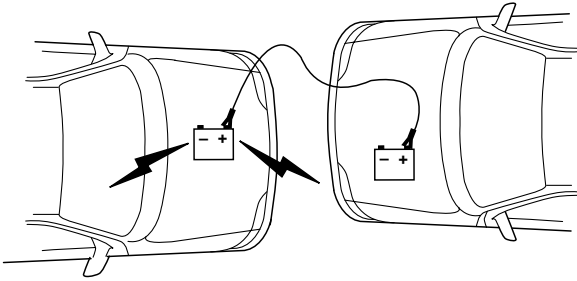
### Connecting the jumper cables



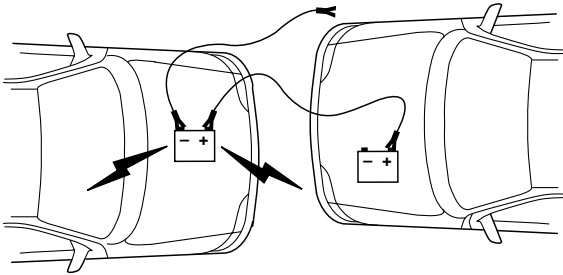
1. Connect the positive (+) booster cable to the positive (+) terminal of the discharged battery.

## Roadside Emergencies

**Note:** In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.

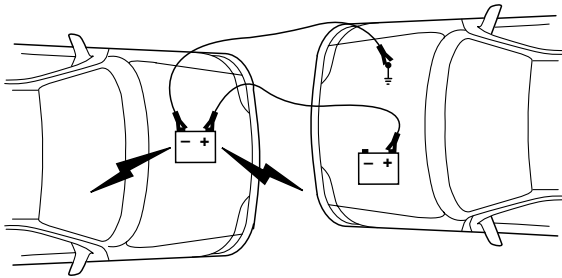


2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.



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.

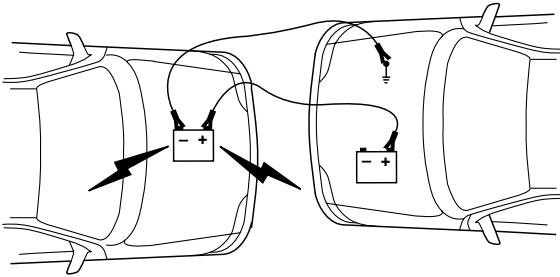
5. Ensure that the cables are clear of fan blades, belts, moving parts of both engines, or any fuel delivery system parts.

### **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

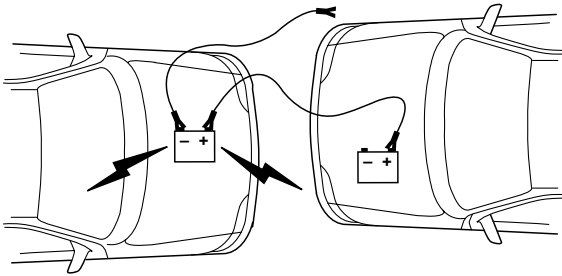
### Removing the jumper cables



**Remove the jumper cables in the reverse order that they were connected.**

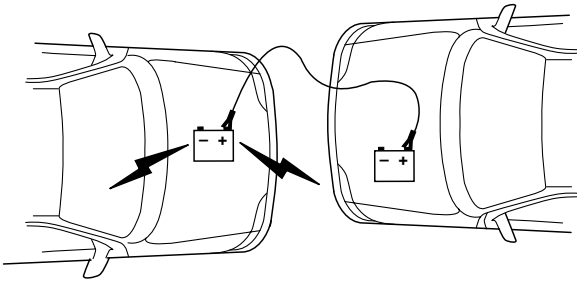
1. Remove the jumper cable from the *ground* metal surface.

**Note:** In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.

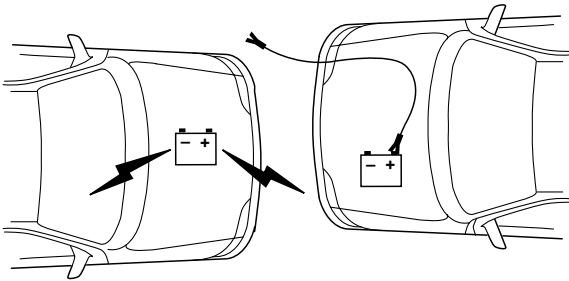


2. Remove the jumper cable on the negative (-) connection of the booster vehicle's battery.

## Roadside Emergencies



3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.

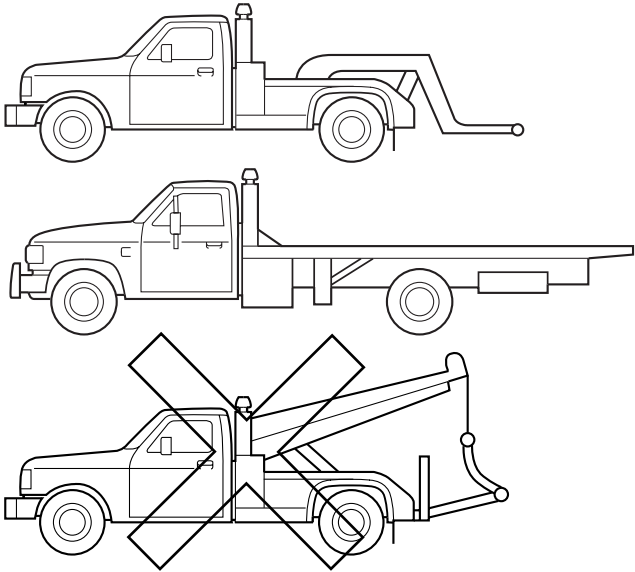


4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

After the disabled vehicle has been started and the jumper cables removed, allow it to idle for several minutes so the engine computer can *relearn* its idle conditions.

## 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.

Before your vehicle can be towed, the air suspension control in the luggage compartment must be turned to the OFF position (if equipped).

**If the vehicle is towed by other means or incorrectly, vehicle damage may occur.**

Ford Motor Company provides 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 Ford 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 can not 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. 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)

## Customer Assistance

In Canada:

Customer Relationship Centre  
Ford Motor Company of Canada, Limited  
P.O. Box 2000  
Oakville, Ontario L6J 5E4  
1-800-565-3673 (FORD)

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)

In Canada:

Customer Relationship Centre  
Ford Motor Company of Canada, Limited  
P.O. Box 2000  
Oakville, Ontario L6J 5E4  
1-800-565-3673 (FORD)

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.).

## Customer Assistance

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).
- 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).

## Customer Assistance

### 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 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.

# Customer Assistance

## **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 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 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

## Customer Assistance

### **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.

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.

## Customer Assistance

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:

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

*(Items in this catalog may be purchased by credit card holders only.)*

### **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.

## Customer Assistance

### 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
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:

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 (202-366-0123 in the Washington D.C. area) or write to:

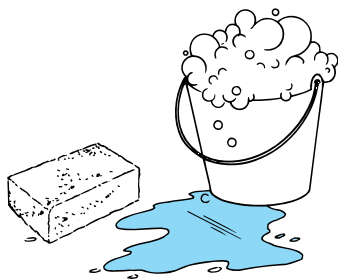
NHTSA  
U.S. Department of Transportation  
400 Seventh Street  
Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from the Hotline.

## Cleaning

### WASHING THE EXTERIOR OF YOUR VEHICLE

Never wash a vehicle that is “hot to the touch” or during exposure to strong, direct sunlight. It is recommended that you 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 authorized Ford, Lincoln or Mercury dealer. 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.



**Never use strong household detergents or soap, such as dish washing or laundry liquid. These products can discolor and spot painted surfaces.**

It is especially important to wash the vehicle regularly during winter months, as dirt and road salt are difficult to remove and do cause damage to the vehicle.

Items such as gasoline, diesel fuel, bird droppings and insect deposits should be washed and sponged off as soon as possible. Deposits not removed promptly can cause damage to the vehicle's paintwork and trim over time.

**Remove any exterior accessories, such as antennas, before entering a car wash.**

### PROTECTING THE PAINT FINISH OF YOUR VEHICLE

Applying a polymer paint sealant to your vehicle on a regular basis will assist in reducing minor scratches and paint damage.

A typical paint sealant lasts approximately six months to a year, depending on local weather conditions and the cleaning soap that is used in washing the vehicle.

**Do not use a wax that beads excessively.**

**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.**

### REPAIRING PAINT CHIPS

Remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout before repairing paint chips.

Minor scratches or paint damage from road debris may be repaired using the Ultra Touch Prep and Finishing Kit (F7AZ-19K507-BA), which is available at your authorized Ford, Lincoln or Mercury dealer. This kit contains:

- Lacquer Touch-Up Paint (ALBZ-19500-XXXXA)
- Exterior Acrylic Spray Lacquer (ALAZ-19500-XXXXA)

Please note that the part numbers (shown as XXXX above) will vary with your vehicle's specific coloring. **Carefully observe the application instructions on the products.**

### CLEANING THE WHEEL RIMS AND COVERS

**Aluminum wheel rims or covers are coated with a clearcoat paint finish.**

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 detergents for soiled wheel rims and covers.**

Never apply any cleaning chemical to hot or warm wheel rims or covers.

Clean wheel rims and covers with Detail Wash (ZC-3-A), which is available from your authorized Ford, Lincoln or Mercury dealer. Spray cleaner on cool wheel rims or covers and allow to set for 2–5 minutes. Agitate the area with a sponge and rinse off with plenty of water.

Use Extra Strength Tar and Road Oil Removal (B7A-19520-AA), available from your authorized Ford, Lincoln or Mercury dealer, in order to remove tar and grease from wheel rims and covers.

### CLEANING THE ENGINE

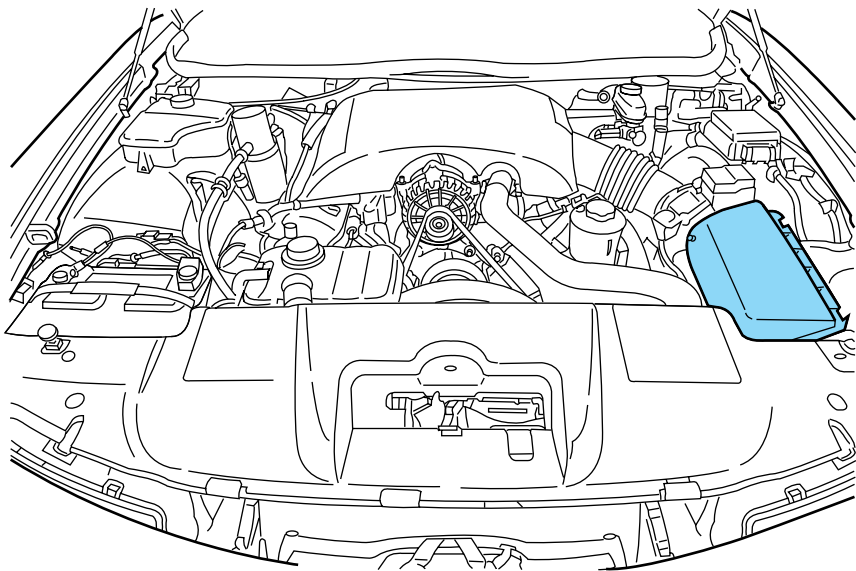
Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal. When washing:

- The engine must be cool to the touch before spraying with water.

## Cleaning

- **Never spray a hot engine with cold water, as damage to the engine block or engine components may occur.**
- Use caution when using a self-serve power washer (1000psi maximum pressure) to clean the engine, as the high-pressure fluid could penetrate the sealed parts and cause damage.
- **Never apply anything to any exposed belts in the engine compartment, including the belt dressing.**

For general cleaning of the engine and engine compartment, spray Engine Shampoo and Degreaser (F4AZ-19A536-A) on all parts that require cleaning and pressure rinse the area with cool water.



- Cover the highlighted areas to prevent water damage when cleaning the engine.
- **Never wash or rinse the engine while it is running; water in the running engine may cause internal damage.**

### WASHING NON-PAINTED PLASTIC EXTERIOR PARTS

Use Detail Wash (ZC-3-A) for routine cleaning.

If tar or grease spots are present, clean with Extra Strength Tar and Road Oil Removal (B7A-19520-AA).

**Use only approved products to clean plastic parts.** These products are available from your authorized Ford, Lincoln or Mercury dealer.

### WASHING THE EXTERIOR LAMPS

**In order to avoid scratching the plastic lamps, do not use dry paper towels, non-approved chemical solvents or abrasive cleaners.**

Use a soft cloth and a solution of Triple Clean (EOAZ-19526-AA), mixed properly with water, in order to remove bug residue. If tar or grease spots are present, clean with Extra Strength Tar and Road Oil Removal (B7A-19520-AA).

### CLEANING THE WINDSHIELD, WIPER BLADES AND REAR WINDOW

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.

**Do not clean the windshield or rear window glass with abrasives, as they may cause scratches.**

**Do not use fuel, kerosene, or paint thinner to clean the windshield, rear window or the wiper blades as damage may occur.**

Clean the outside of the windshield or rear window with a non-abrasive cleaner such as Ultra Clear Spray Glass Cleaner (E4AZ-19C507-AA), available from your authorized Ford, Lincoln or Mercury dealer. If after cleaning the glass surface, the water sheets from the glass (e.g., does not bead), then the window is clean.

The windshield, rear window and wiper blades should be cleaned regularly. 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.

## Cleaning

### CLEANING THE INSTRUMENT PANEL

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.



Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the air bag system.

### Cleaning the instrument cluster lens

Wipe the cluster area with a soft, damp cotton towel. Dry the area with a clean, dry towel.

### CLEANING SEATS EQUIPPED WITH SIDE AIR BAGS

Remove dust and loose dirt with a vacuum cleaner. In order to remove stains and soil, clean with Extra Strength Upholstery Cleaner (E8AZ-19523-AA).

**Never saturate the seat covers with any cleaning solution.**



Do not use chemical solvents or strong detergents when cleaning the seat where the side air bag is mounted. Such products could 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 injury reduction benefits.

### CLEANING THE INTERIOR FABRIC, CARPETS AND CLOTH SEATS

Remove dust and loose dirt with a vacuum cleaner. Remove light stains and soil with Extra Strength Upholstery Cleaner (E8AZ-19523-AA).

**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.**

If grease or tar is present on the material, spot-clean the area first with Spot and Stain Remover (F3AZ-19521-WA). Follow up by recleaning the area with Extra Strength Upholstery Cleaner (E8AZ-19523-AA).

### **CLEANING LEATHER SEATS (IF EQUIPPED)**

All Ford, Lincoln and Mercury vehicles with leather seating surfaces have a clear, protective coating over the leather.

To clean the leather seats, simply use a soft cloth with Deluxe Leather and Vinyl Cleaner (F2AZ-19521-WA). Dry the area with a soft cloth.

It is recommended that you use the Deluxe Leather Care Kit (F8AZ-19G253-AA), available from your authorized Ford, Lincoln or Mercury dealer. The mild cleaner and special pad available in the kit cleans the leather and maintains its natural beauty. For best results, follow the instructions printed on the cleaner label. Regular cleaning of your leather upholstery helps maintain its resiliency and color.

**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.**

### **CLEANING THE INSIDE WINDOWS**

Use Ultra Clear Spray Glass Cleaner (E4AZ-19C507-AA) for the inside windows if they become fogged.

To clean, use two lint-free, soft towels, folded into a pad-shape. Mist the glass completely with cleaner, and use one of the towels to evenly agitate the surface. Use the other towel to remove the residue.

### **CLEANING AND MAINTAINING THE SAFETY BELTS**

Clean the safety belts with Extra Strength Upholstery Cleaner (E8AZ-19523-AA), available from your authorized Ford, Lincoln or Mercury dealer.

**Do not use bleach, dye or any other solvent to clean the belts, as these actions may weaken the belt webbing.**

### **UNDERBODY**

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free from packed dirt.

## Cleaning

### **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 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 or products of equivalent quality:

Ford Custom Clearcoat Polish\*

Ford Custom Silicone Gloss Polish

Ford Custom Vinyl Protectant\* (not available in Canada)

Motorcraft Vinyl Conditioner (Canada only)

Ford Deluxe Leather and Vinyl Cleaner (not available in Canada)

Motorcraft Vinyl Cleaner (Canada only)

Ford Extra Strength Tar and Road Oil Remover\* (not available in Canada)

Ford Extra Strength Upholstery Cleaner (not available in Canada)

Ford Custom Bright Metal Cleaner

Motorcraft Premium Car Wash Concentrate

Motorcraft Carlite Glass Cleaner (Canada only)

Ford Spot and Stain Remover\*

Ford Super Premium Tire and Trim Dressing

Ford Triple Clean

Ford Ultra-Clear Spray Glass Cleaner (not available in Canada)

Ford Engine Shampoo and Degreaser

\* 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* 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

1. Set the parking brake and ensure the gearshift is securely latched in P (Park).
2. Turn off the engine and remove the key.
3. Block the wheels to prevent the vehicle from moving unexpectedly.

### Working with the engine on

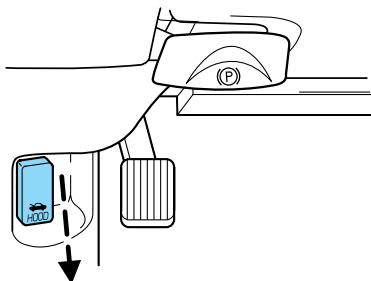
1. Set the parking brake and ensure the gearshift is securely latched in P (Park).
2. Block the wheels to prevent the vehicle from moving unexpectedly.

## Maintenance and Specifications

**Note:** Do not start your engine with the air cleaner removed and do not remove it while the engine is running.

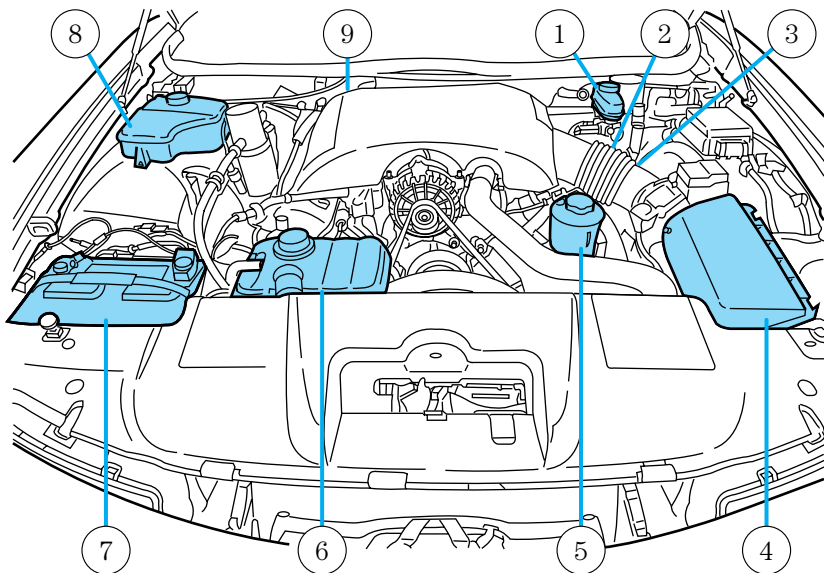
### OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the instrument panel.
2. Go to the front of the vehicle and release the auxiliary latch that is located under the front of the hood.
3. Lift the hood until the lift cylinders hold it open.



### IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

#### 4.6L SOHC V8 engine



1. Brake fluid reservoir

## Maintenance and Specifications

2. Engine oil dipstick
3. Engine oil filler cap
4. Air filter assembly
5. Power steering fluid reservoir
6. Engine coolant reservoir
7. Battery
8. Windshield washer fluid reservoir
9. Automatic transmission fluid dipstick

### WINDSHIELD WASHER FLUID

#### Checking and adding washer fluid

Check the washer fluid whenever you stop for fuel.

If the level is low, add enough fluid to fill the reservoir. In very cold weather, do not fill the reservoir all the way.

Only use a washer fluid that meets Ford specifications. Refer to *Refill capacities* 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.

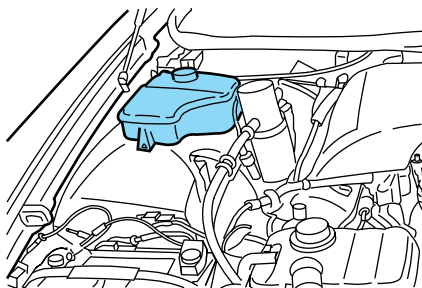
**Note:** Do not put washer fluid in the engine coolant reservoir. Washer fluid placed in the cooling system may harm engine and cooling system components.

### ENGINE OIL

#### Checking the engine oil

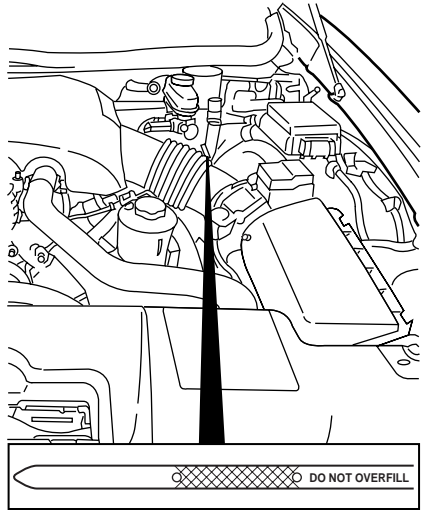
Refer to the scheduled maintenance guide for the appropriate intervals for checking the engine oil.

1. Make sure the vehicle is on level ground.



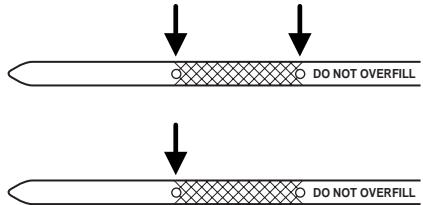
## Maintenance and Specifications

- Turn the engine off and wait up to 10 minutes for the oil to drain into the oil pan.
- Set the parking brake and ensure the gearshift is securely latched in P (Park).
- Open the hood. Protect yourself from engine heat.
- Locate and carefully remove the engine oil level indicator (dipstick).



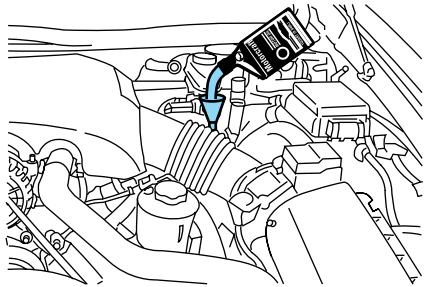
- Wipe the indicator clean. Insert the indicator fully, then remove it again.

- If the oil level is **within this range**, the oil level is acceptable. **DO NOT ADD OIL.**
- If the oil level is **below this mark**, engine **oil must be added** to raise the level within the normal operating range.

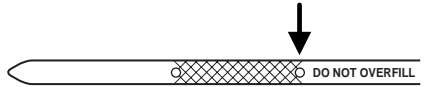


## Maintenance and Specifications

- If required, add engine oil to the engine. Refer to *Adding engine oil* in this chapter.



- **Do not overfill the engine with oil. Oil levels above this mark may cause engine damage.** If the engine is overfilled, some oil must be removed from the engine by a qualified service technician.



7. Put the indicator back in and ensure it is fully seated.

### Adding engine oil

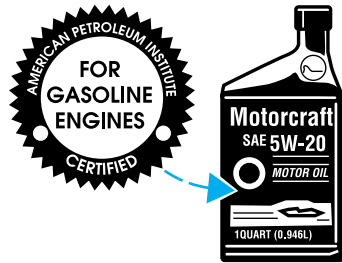
1. Check the engine oil. For instructions, refer to *Checking the engine oil* in this chapter.
2. If the engine oil level is not within the normal operating range, add only certified engine oil of the recommended viscosity. Remove the engine oil filler cap and use a funnel to pour the engine oil into the opening.
3. Recheck the engine oil level. Make sure the oil level is not above the normal operating range 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 until three clicks can be heard.

**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.

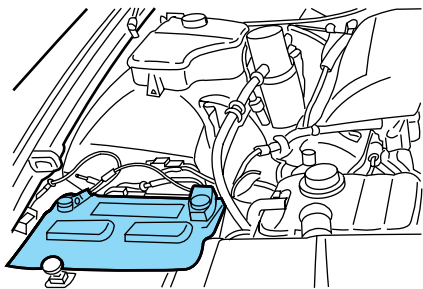
Ford production and aftermarket (Motorcraft) oil filters are designed for added engine protection and long life. If a replacement oil filter is used that does not meet Ford material and design specifications, start-up engine noises or knock may be experienced.

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.



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.

## Maintenance and Specifications



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.**

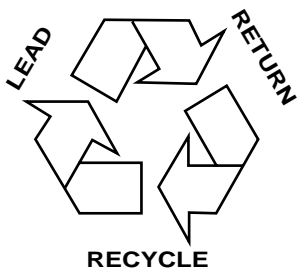
Because your vehicle's engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance. To begin this process:

1. With the vehicle at a complete stop, set the parking brake.
  2. Put the gearshift in P (Park), turn off all accessories and start the engine.
  3. Run the engine until it reaches normal operating temperature.
  4. Allow the engine to idle for at least one minute.
  5. Turn the A/C on and allow the engine to idle for at least one minute.
  6. With your foot on the brake pedal and with the A/C on, put the vehicle in D (Drive) and allow the engine to idle for at least one minute.
  7. 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.**

## Maintenance and Specifications

If the battery has been disconnected or a new battery has been installed, the clock 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.



### ENGINE COOLANT

#### Checking engine coolant

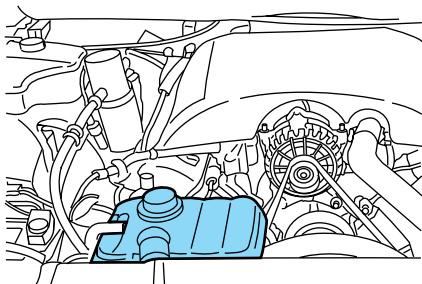
The concentration and level of engine coolant should be checked at the mileage intervals listed in the scheduled maintenance guide. The coolant concentration should be maintained at 50/50 coolant and water, which equates to a freeze point of  $-36^{\circ}\text{C}$  ( $-34^{\circ}\text{F}$ ). Coolant 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” of “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 gauges to work properly.**

## Maintenance and Specifications

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” or within the “cold fill range” as listed on the engine coolant reservoir (depending upon application).
- 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.



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.

## Maintenance and Specifications

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, 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.
- **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 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).**

For vehicles with overflow coolant systems with a non-pressurized cap on the coolant recovery system, add coolant to the coolant recovery reservoir when the engine is cool. Add the proper mixture of coolant and water to the "cold full" level. For all other vehicles, which have a coolant degas system with a pressurized cap, or if it is necessary to remove the coolant pressure relief cap on the radiator of a vehicle with an overflow system, follow these steps to add engine coolant.

## Maintenance and Specifications



To avoid 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.

1. Before you begin, turn the engine off and let it cool.
2. When the engine is cool, wrap a thick cloth around the coolant pressure relief cap on the coolant reservoir (an opaque plastic bottle). Slowly turn cap counterclockwise (left) 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.
5. Fill the coolant reservoir slowly with the proper coolant mixture (see above), to within the “cold fill range” or the “cold full” level on the reservoir. If you removed the radiator cap in an overflow system, fill the radiator until the coolant is visible and radiator is almost full.
6. Replace the cap. Turn until tightly installed. (Cap must be tightly installed to prevent coolant loss.)

After any coolant has been added, check the coolant concentration see Checking Engine Coolant section). If the concentration is not 50/50 (protection to  $-34^{\circ}\text{F}/-36^{\circ}\text{C}$ ), 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 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.

## Maintenance and Specifications

### 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%.**
- **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%.**

## Maintenance and Specifications

- **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.

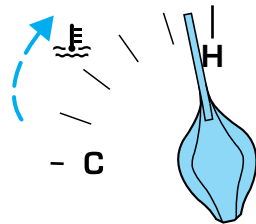
### What you should know about fail-safe cooling

If the engine coolant supply is depleted, this feature allows the vehicle to be driven temporarily before incremental component damage is incurred. The “fail-safe” distance depends on ambient temperatures, vehicle load and terrain.

#### How fail-safe cooling works

If the engine begins to overheat:

- The engine coolant temperature gauge will move to the H (hot) area.
- The  symbol will illuminate.
- A tone will sound 3 times.
- The *Service Engine Soon* indicator light will illuminate.




If the engine reaches a preset over-temperature condition, the engine will automatically switch to alternating cylinder operation. Each disabled cylinder acts as an air pump and cools the engine.

When this occurs the vehicle will still operate. However:

- The engine power will be limited.
- The air conditioning system will be disabled.

## Maintenance and Specifications

Continued operation will increase the engine temperature:

- The  symbol will begin to flash.
- A tone will sound 5 times.
- The engine will completely shut down, causing steering and braking effort to increase.

Once the engine temperature cools, the engine can be re-started. Take your vehicle to a service facility as soon as possible to minimize engine damage.

### ***When fail-safe mode is activated***

You have limited engine power when in the fail-safe mode, so drive the vehicle with caution. The vehicle will not be able to maintain high-speed operation and the engine will run rough. Remember that the engine is capable of completely shutting down automatically to prevent engine damage, therefore:

1. Pull off the road as soon as safely possible and turn off the engine.
2. Arrange for the vehicle to be taken to a service facility.
3. If this is not possible, wait a short period for the engine to cool.
4. Check the coolant level and replenish if low.



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

5. Re-start the engine and take your vehicle to a service facility.

**Driving the vehicle without repairing the engine problem increases the chance of engine damage. Take your vehicle to a service facility as soon as possible.**

## **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.

## 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.



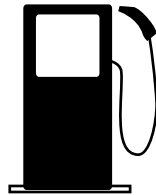
Automotive fuels can cause serious injury or death if misused or mishandled.



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 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.



## Maintenance and Specifications

- 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.

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.

## Maintenance and Specifications

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.

The “Check Fuel Cap” light illuminates when the ignition is turned to the ON position. It will also illuminate when the fuel filler cap is not properly installed. Proper fuel filler cap installation is checked automatically as the vehicle is driven, but not until after some fuel is used (fuel gauge drops below full). Once the fuel filler cap is properly secured, the “Check Fuel Cap” light will turn off after a short period of driving.

**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.**



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.

## Maintenance and Specifications

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.

### Fuel quality

If you are experiencing starting, rough idle or hesitation driveability problems during a cold start, try a different brand of gasoline. “Premium” unleaded gasoline should not be used (particularly in the United States) if “Regular” unleaded gasoline is recommended 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.



# Maintenance and Specifications

## 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:

- 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 fillups 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.

## Maintenance and Specifications

The advertised capacity is the amount of the indicated capacity and the empty reserve combined. Indicated capacity is the difference in the amount of fuel in a full tank and a tank when the fuel gauge indicates empty. Empty reserve is the 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.
4. Subtract your initial odometer reading from the current odometer reading.

## Maintenance and Specifications

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.
- 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 and Specifications

### **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.
- 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.

## Maintenance and Specifications

### 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 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.

## Maintenance and 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.

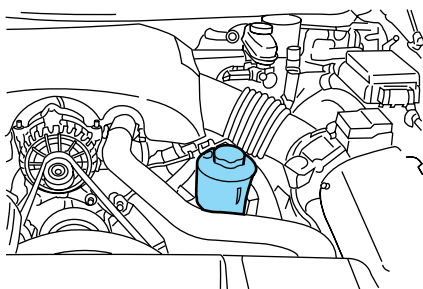
If the vehicle’s powertrain system or its battery has just been serviced, the on-board diagnostics system is reset to a “not ready for I/M test” condition. To ready the on-board diagnostics system for I/M testing, a minimum of 30 minutes of city and highway driving is necessary as described below:

- 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

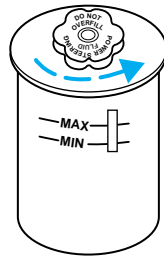
Check the power steering fluid.  
Refer to the scheduled maintenance guide for the service interval schedules. If adding fluid is necessary, use only MERCON® ATF.



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).
2. While the engine idles, turn the steering wheel left and right several times.

## Maintenance and Specifications

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 in this range.



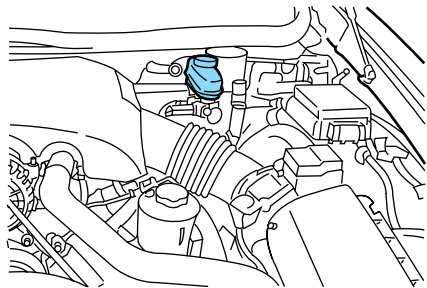
5. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the range between the MIN and MAX lines. Be sure to put the cap back on the reservoir.

### BRAKE FLUID (⚠)

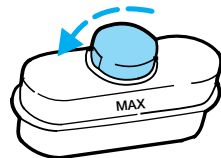
#### Checking and adding brake fluid

Brake fluid should be checked and refilled as needed. Refer to the scheduled maintenance guide for the service interval schedules.

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 brake fluids certified to meet Ford specification ESA-M6C25-A. Refer to *Lubricant specifications* in this chapter. DOT 3 fluid is recommended. However, if DOT 3 is not available, DOT 4 fluid can be used.

## Maintenance and Specifications



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.



If you use DOT 5 or any other brake fluid that is not DOT 3 or DOT 4, 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.

### 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 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.

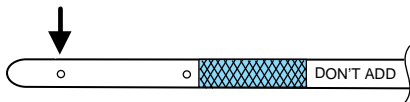
1. Drive the vehicle 30 km (20 miles) or until it reaches normal operating temperature.
2. Park the vehicle on a level surface and engage the parking brake.
3. With the parking brake engaged and your foot on the brake pedal, start the engine and move the gearshift lever through all of the gear ranges. 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.

## Maintenance and Specifications

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).

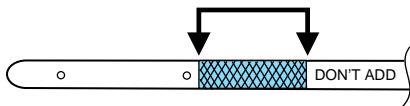


### **Correct fluid level**

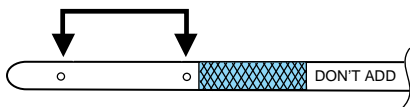
The transmission fluid should be checked at normal operating temperature 66°C-77°C (150°F-170°F) on a level surface. The normal operating temperature can be reached after approximately 30 km (20 miles) of driving.

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]).

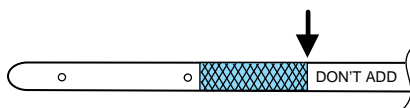


## Maintenance and Specifications

### **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**

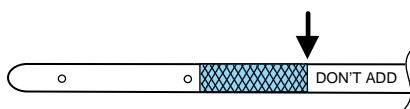
Before adding any fluid, make sure the correct type is used. The type of fluid used is normally indicated on the dipstick and also in the *Lubricant specifications* section in this chapter.

**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.

**An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.**



### **AIR FILTER MAINTENANCE**

Refer to the scheduled maintenance guide for the appropriate intervals for changing the air filter element.

When changing the air filter element, use only the Motorcraft air filter element listed. Refer to *Motorcraft Part Numbers*.

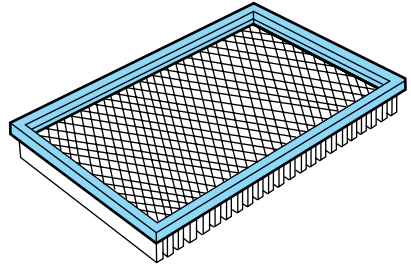
**Note:** Do not start your engine with the air cleaner removed and do not remove it while the engine is running.

### **Changing the air filter element**

1. Loosen the clamp that secures the air inlet tube to the engine air filter cover and disconnect the tube from the cover.

## Maintenance and Specifications

2. Release the clamps that secure the air filter housing cover.
3. Carefully separate the two halves of the air filter housing.
4. Remove the air filter element from the air filter housing.
5. Wipe the air filter housing and cover clean to remove any dirt or debris and to ensure good sealing.
6. Install a new air filter element. Be careful not to crimp the filter element edges between the air filter housing and cover. This could cause filter damage and allow unfiltered air to enter the engine if not properly seated.

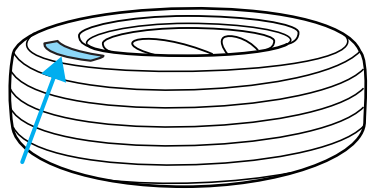


7. Replace the air filter housing cover and secure the clamps.
8. Replace the air inlet tube and secure the clamp.

**Note:** Failure to use the correct air filter element may result in severe engine damage. The customer warranty may be voided for any damage to the engine if the correct air filter element is not used.

### 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).

## Maintenance and Specifications

**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 climate.

### 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 B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

## Maintenance and Specifications



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.

### 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.

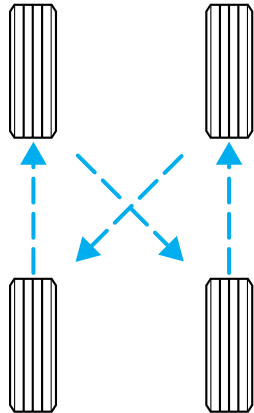


Improperly inflated tires can affect vehicle handling and can fail suddenly, possibly resulting in loss of vehicle control.

#### 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.

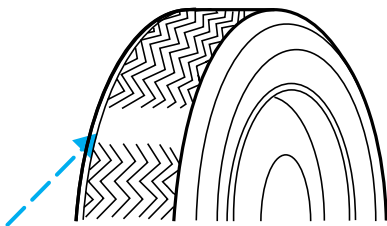
- Four tire rotation





## Maintenance and Specifications


### 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 Certification or Tire Label. 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.

 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

 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.

## Maintenance and Specifications

Follow these guidelines when using snow tires and chains:

- Use only cable type chains offered by Ford as an accessory or equivalent. Using SAE class S or other conventional link type chains may cause damage to the vehicle's wheel house and/or body.
- 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.
- 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	4.6L SOHC V8 engine
Air filter element	FA-1668
Fuel filter	FG-986B
Battery-standard	BXT-65-650
Battery-heavy duty <sup>1</sup>	BXT-65-750
Oil filter	FL-820-S
PCV valve	EV-98
Spark plugs <sup>2</sup>	AWSF-32P

<sup>1</sup>Included in long wheelbase package.

<sup>2</sup>Refer to Vehicle Emissions Control Information (VECI) decal for spark plug gap information.

## Maintenance and Specifications

### REFILL CAPACITIES

Fluid	Ford Part Name	Capacity
Engine oil (includes filter change)	Motorcraft SAE 5W-20 Super Premium Motor Oil	4.7L (5.0 quarts)
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid <sup>1</sup>	Fill to line on reservoir
Power steering fluid	Motorcraft MERCON® ATF	Fill to line on reservoir
Transmission fluid <sup>2</sup>	Motorcraft MERCON®V ATF	13.2L (13.9 quarts) <sup>3</sup>
Engine coolant <sup>4</sup>	Motorcraft Premium Engine Coolant (green-colored) <b>or</b> Motorcraft Premium Gold Engine Coolant (yellow-colored)	15.0L (15.8 quarts)
Fuel tank	N/A	71.9L (19.0 gallons)
Rear axle lubricant <sup>5</sup>	Motorcraft SAE 80W-90 Premium Rear Axle Lubricant	1.8L (3.75 pints) <sup>6</sup>
Windshield washer fluid	Ultra-Clear Windshield Washer Concentrate	Fill to line on reservoir

<sup>1</sup>Use only brake fluids certified to meet Ford specifications. Refer to *Lubricant Specifications* in this chapter. DOT 3 fluid is recommended. However, if DOT 3 is not available, DOT 4 fluid can be used.

<sup>2</sup>Ensure the correct automatic transmission fluid is used. MERCON® and MERCON® V are not interchangeable. DO NOT MIX MERCON® and MERCON® V. Refer to the scheduled maintenance guide to determine the correct service interval.

<sup>3</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.

## Maintenance and Specifications

<sup>4</sup>Add the coolant type originally equipped in your vehicle.

<sup>5</sup>Rear axles are considered lubricated for life when the vehicle is used for normal service. See your scheduled maintenance guide for Severe Duty requirements.

<sup>6</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 rear axle.

For limousine, use 2.4L (5.0 pints) of Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant or equivalent meeting Ford specification WSL-M2C192-A for complete refill of rear axle.

Service refill capacities are determined by filling the rear axle 6 mm to 14 mm (1/4 inch to 9/16 inch) below the bottom of the filler hole.

### LUBRICANT SPECIFICATIONS

Item	Ford part name	Ford part number	Ford specification
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid <sup>1</sup>	PM-1	ESA-M6C25-A and DOT 3
Door weatherstrips	Silicone Lubricant	F7AZ-19G208-BA and F5AZ-19553-AA	ESR-M13P4-A
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-M97B 51-A1
Engine oil	Motorcraft SAE 5W20 Super Premium Motor Oil	XO-5W20-QSP	WSS-M2C153-H with API Certification Mark

## Maintenance and Specifications

Item	Ford part name	Ford part number	Ford specification
Hinges, latches, striker plates, fuel filler door hinge and seat tracks	Multi-Purpose Grease	XG-4 or F5AZ-19G209-AA	ESB-M1C93-B or ESR-M1C159-A
Lock cylinders	Penetrating and Lock Lubricant	Motorcraft XL-1	N/A
Power steering fluid	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Automatic transmission (4R70W) <sup>3</sup>	Motorcraft MERCON®V ATF	XT-5-QM	MERCON®V
Rear Axle Lubricant <sup>2</sup>	Motorcraft SAE 80W-90 Premium Rear Axle Lubricant	XY-80W90-QL	WSP-M2C197-A
Windshield washer fluid	Ultra-clear Windshield Washer Concentrate	C9AZ-19550-AC	ESR-M17P5-A

<sup>1</sup>Use only brake fluids certified to meet Ford specifications. DOT 3 fluid is recommended. However, if DOT 3 is not available, DOT 4 fluid can be used.

<sup>2</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 rear axles.

For limousine, use 2.2–2.4L (4.75–5.0 pints) of Motorcraft SAE 75W-140Synthetic High Performance Rear Axle Lubricant XY-75W140-QL or equivalent meeting Ford Specification WSL-M2C192-A for complete refill of rear axles.

<sup>3</sup>Ensure the correct transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or 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.

# Maintenance and Specifications

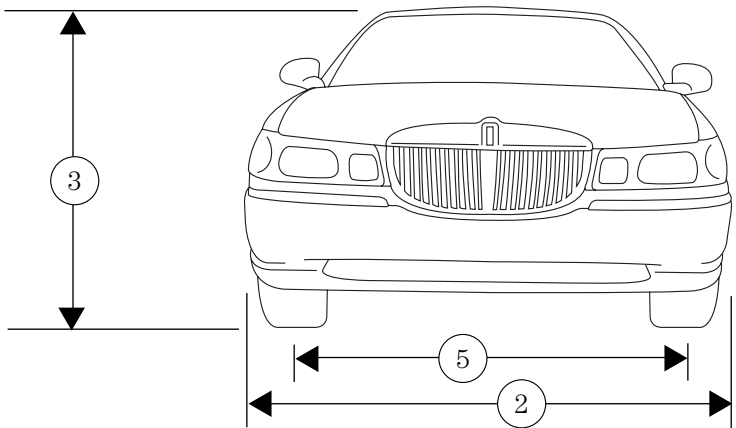
## ENGINE DATA

<b>Engine</b>	<b>4.6L SOHC V8 engine</b>
Cubic inches	281
Required fuel	87 octane
Firing order	1-3-7-2-6-5-4-8
Spark plug gap	1.3-1.4 mm (0.052-0.056 inch)
Ignition system	Coil on plug
Compression ratio	9.4:1

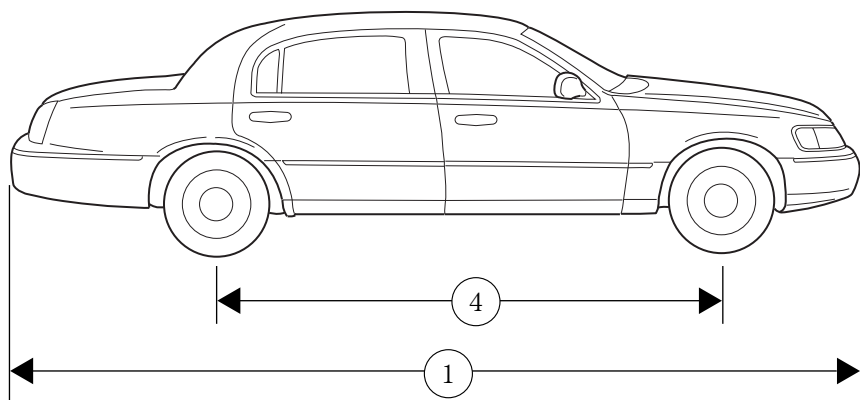
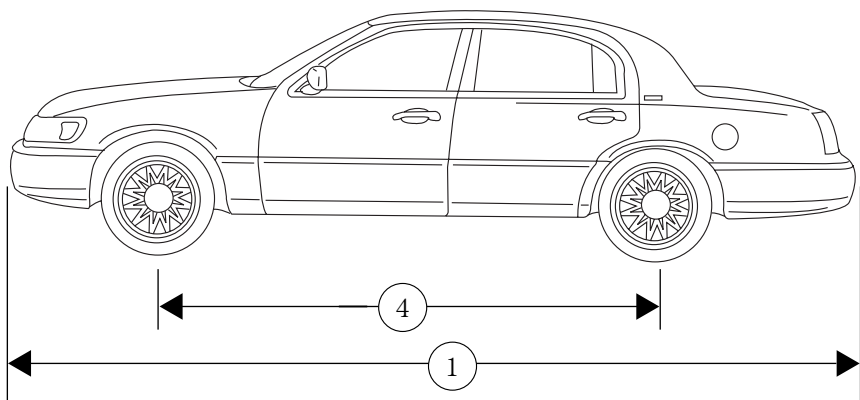
## VEHICLE DIMENSIONS

<b>Vehicle dimensions</b>	<b>mm (in)</b>
(1) Overall length	5 469 (215.3)/5 621 (221.3) <sup>a</sup>
(2) Overall width	1 987 (78.2)
(3) Overall height	1 472 (58.0)
(4) Wheelbase	2 990 (117.7)/3 142 (123.7) <sup>a</sup>
(5) Track - Front	1 611 (63.4)
(5) Track - Rear	1 659 (65.3)

<sup>a</sup> Denotes long wheel base



## Maintenance and Specifications




# Maintenance and Specifications

## IDENTIFYING YOUR VEHICLE

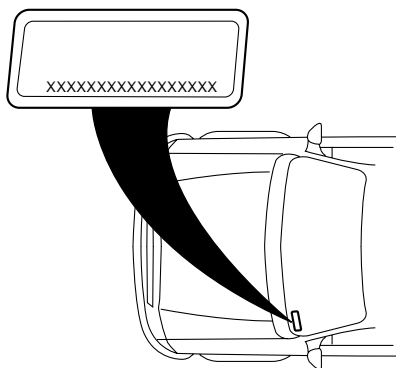
### Certification label

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: XXXXX LB/ XXXXX KG
FGAWR: XXXXXX/XXXXXXXX	RGAWR: XXXXXX/XXXXXXXX
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.	
VIN: XXXXXXXXXXXXXXXXX	TYPE: XXXXXXXXXXXXXXXXX
	
MAXIMUM LOAD=OCCUPANTS + LUGGAGE=XXXXX/XXXXLB	
OCCUPANTS: X TOTAL X FR X 2ND X RR OCCUPANTS LUGGAGE	
	XX XXXKG/XXXXLB
TIRE: XXXX/XXXX XXX	X XXXKG/XXXXLB
PRESSURE (FR) XXX kPa/ XX PSI COLD	
PRESSURE (RR) XXX kPa/ XX PSI COLD	
<small>TRAILER TOWING - SEE OWNER GUIDE</small>	
EXT PNT: XXXXXX XXXXXX   RC: XX   DSO: XXXX   F0000	
BAR   INT TR   TP/PS   R   AXLE   TR   SPR   T0000	
X XX XXX X XX X XXXX	
UTC VFOHT-15294A10-GA	

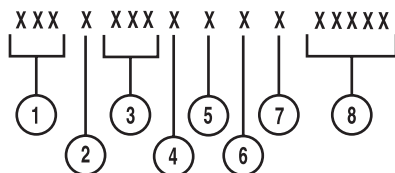
### Vehicle identification number

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.)



## Maintenance and Specifications

1. World manufacturer identifier
2. Brake type and gross vehicle weight rating (GVWR)
3. Vehicle line, series, body type
4. Engine type
5. Check digit
6. Model year
7. Assembly plant
8. Production sequence number



### Engine number

The engine number (the last eight numbers of the vehicle identification number) is stamped on the engine block, transmission, frame and transfer case (if equipped).

## Accessories

### FORD ACCESSORIES FOR YOUR VEHICLE

A wide selection of genuine Ford accessories are available for your vehicle through your local authorized Lincoln Mercury 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 20 000 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

Locking gas cap

Remote keyless entry

Styled wheel locks

Underbody security lighting

Vehicle security systems

### **Comfort and convenience**

Cargo nets

Cargo organizer

Electrochromic compass mirror

Electrochromic compass mirror with temperature display

Engine block heaters

HomeLink®

Remote start system

### **Travel equipment**

Automatic headlamps with daytime running lights (DRL)

Chrome wheel arch molding

Daytime running lights (DRL)

HomeLink®

### **Protection and appearance equipment**

Carpet floor mats

Door edge guards

First aid kit

Flat splash guards

Front end covers

Highway safety kit

Locking gas cap

Molded splash guards

Styled hood deflector

Universal floor mats

## Accessories

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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