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## Introduction

### CALIFORNIA Proposition 65 Warning



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

### CONGRATULATIONS

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

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

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

Additional owner information is given in separate publications.

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 this *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 to yourself or others? 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.



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

Your vehicle does not need an extensive break-in. Try not to drive continuously at the same speed for the first 1,000 miles (1,600 km) of new vehicle operation. Vary your speed frequently in order to give the moving parts a chance to break in.

Do not add friction modifier compounds or special break-in oils during the first few thousand miles (kilometers) of operation, since these additives may prevent piston ring seating. See *Engine oil* in the *Maintenance and Specifications* chapter for more information on oil usage.

## Introduction

### SPECIAL NOTICES

#### New Vehicle Limited Warranty

For a detailed description of what is covered and what is not covered by your vehicle's New Vehicle Limited Warranty, refer to the *Warranty Guide* that is provided to you along with your *Owner's Guide*.

#### Special instructions

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



Please read the section *Supplemental restraint system (SRS)* in the *Seating and Safety Restraints* chapter. Failure to follow the specific warnings and instructions could result in personal injury.



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

#### Service Data Recording

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle, such as engine, throttle, steering or brake systems. In order to properly diagnose and service your vehicle, Ford Motor Company, Ford of Canada, and service and repair facilities may access vehicle diagnostic information through a direct connection to your vehicle when diagnosing or servicing your vehicle.

## Introduction

### **Event Data Recording**

Other modules in your vehicle — event data recorders — are capable of collecting and storing data during a crash or near crash event. The recorded information may assist in the investigation of such an event. The modules may record information about both the vehicle and the occupants, potentially including information such as:

- how various systems in your vehicle were operating;
- whether or not the driver and passenger seatbelts were buckled;
- how far (if at all) the driver was depressing the accelerator and/or the brake pedal;
- how fast the vehicle was traveling; and
- where the driver was positioning the steering wheel.

To access this information, special equipment must be directly connected to the recording modules. Ford Motor Company and Ford of Canada do not access event data recorder information without obtaining consent, unless pursuant to court order or where required by law enforcement, other government authorities or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada.







### **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's 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's 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		Airbag - Front	
Airbag - Side		Child Seat	
Child Seat Installation Warning		Child Seat Lower Anchor	
Child Seat Tether Anchor		Brake System	
Anti-Lock Brake System		Brake Fluid - Non-Petroleum Based	
Powertrain Malfunction		Speed 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	



## Introduction

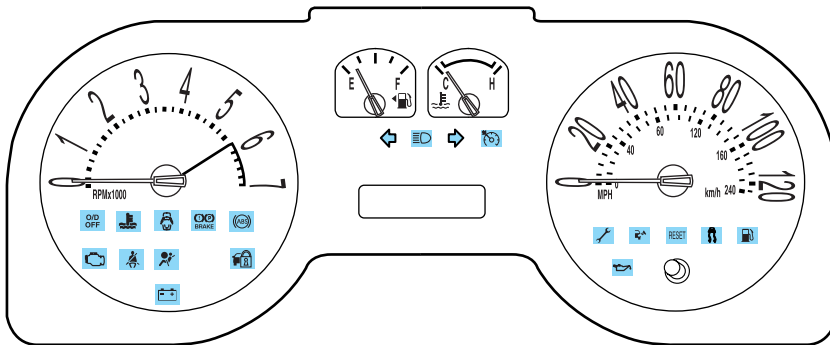
### Vehicle Symbol Glossary

Power Windows Front/Rear		Power Window Lockout	
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 Pressure Warning	

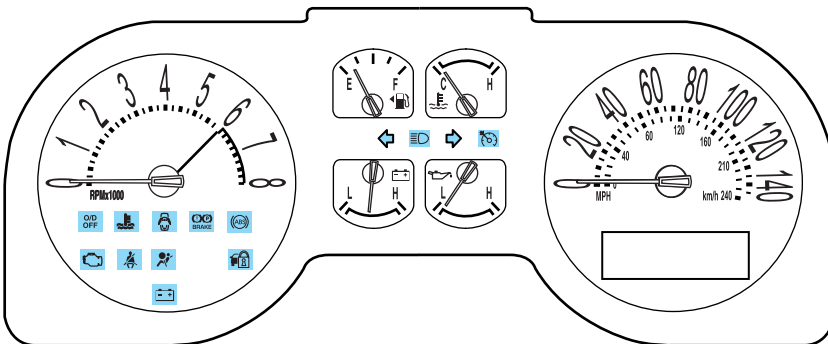
## Instrument Cluster

### WARNING LIGHTS AND CHIMES

#### Base instrument cluster



#### Optional instrument cluster



Warning lights and gauges can alert you to a vehicle condition that may become serious enough to cause extensive 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 bulbs work. If any light remains on after starting the vehicle, refer to the respective system warning light for additional information.

## Instrument Cluster

**Service Engine Soon:** The *Service Engine Soon* indicator light illuminates when the ignition is first turned to the ON position to check the bulb. Solid illumination after the engine is started indicates the On Board Diagnostics System (OBD-II) has detected a malfunction. Refer to *On board diagnostics (OBD-II)* in the *Maintenance and Specifications* chapter. If the light is blinking, engine misfire is occurring which could damage your catalytic converter. Drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle serviced immediately by your authorized dealer.



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 (if equipped):**

Illuminates when the fuel cap may not be properly installed. Continued driving with this light on may cause the Service engine soon warning light to come on. Refer to *Fuel filler cap* in the *Maintenance and Specifications* chapter.



**Brake system warning light:** To confirm the brake system warning light is functional, it will momentarily illuminate when the ignition is turned to the ON position when the engine is not running, or in a position between ON and START, or by applying the parking brake when the ignition is turned to the ON position. If the brake system warning light does not illuminate at this time, seek service immediately from your authorized dealer. Illumination after releasing the parking brake indicates low brake fluid level and the brake system should be inspected immediately by your authorized dealer.



Driving a vehicle with the brake system warning light on is dangerous. A significant decrease in braking performance may occur. It will take you longer to stop the vehicle. Have the vehicle checked by your authorized dealer.

## Instrument Cluster

### **Anti-lock brake system (if equipped):**

If the ABS light stays illuminated or continues to flash, a malfunction has been detected, have the system serviced immediately by your authorized dealer. Normal braking is still functional unless the brake warning light also is illuminated.



**Airbag readiness:** If this light fails to illuminate when ignition is turned to ON, continues to flash or remains on, have the system serviced



immediately by your authorized dealer. A chime will also sound when a malfunction in the supplemental restraint system has been detected.

**Safety belt:** Reminds you to fasten your safety belt. A chime will also sound to remind you to fasten your safety belt.



**Charging system:** Illuminates when the battery is not charging properly.



### **Engine oil pressure (if equipped):**

Illuminates when the oil pressure falls below the normal range, 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 possible, switch off the engine and let cool. Refer to *Engine coolant* in the *Maintenance and Specifications* chapter.



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

## Instrument Cluster

**Traction Control™ active (if equipped):** Flashes when the Traction Control™ is active. If the light remains on a malfunction has been detected; have the system serviced immediately, refer to the *Driving* chapter for more information.



**Overdrive off (automatic transmission):** Illuminates when the overdrive function of the transmission has been turned off, refer to the *Driving* chapter. If the light flashes steadily or does not illuminate, have the transmission serviced soon, or damage may occur.

O/D  
OFF

**Low fuel (if equipped):** Illuminates when the fuel level in the fuel tank is at or near empty (refer to *Fuel gauge* in this chapter).



**Speed control (if equipped):** Illuminates when the speed control is engaged. Turns off when the speed control system is disengaged.



**Door/Trunk ajar (if equipped):** Illuminates when the ignition is in the ON position and any door or trunk is open.



**Anti-theft system:** Flashes when the Securilock™ Passive Anti-theft System has been activated.



**Electronic throttle control (if equipped):** Illuminates when the engine has defaulted to a 'limp-home' operation. Report the fault to a dealer at the earliest opportunity.



## Instrument Cluster

**Turn signal:** Illuminates when the left or right turn signal or the hazard lights are turned on. If the indicators stay on or flash faster, check for a burned out bulb.



**High beams:** Illuminates when the high beam headlamps are turned on.



**Daytime running lamps (DRL) (if equipped):** Illuminates when the Daytime running lamps are on.

Also is an indication that the tail lamps, license plate lamps, side marker lamps and parking lamps are switched OFF.



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

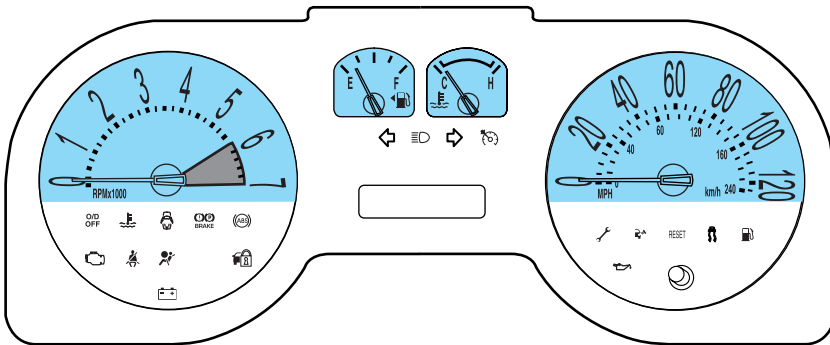
**Key-in-ignition warning chime:** Sounds when the key is left in the ignition in the OFF/LOCK or ACCESSORY position and the driver's door is opened.

**Headlamps on warning chime:** Sounds when the headlamps or parking lamps are on, the ignition is off (the key is not in the ignition) and the driver's door is opened.

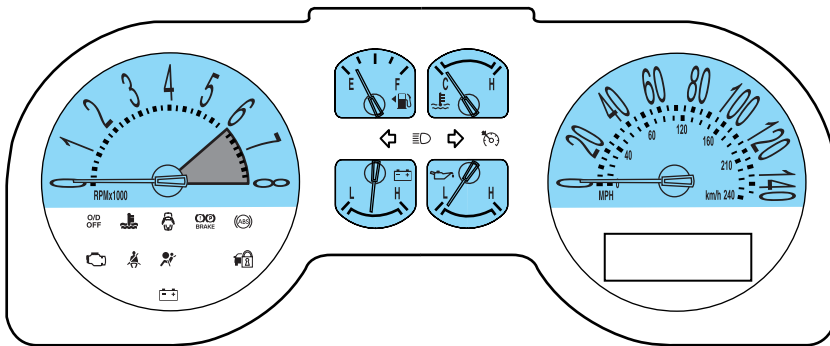
## Instrument Cluster

### GAUGES

#### Base instrument cluster gauges



#### Optional instrument cluster gauges

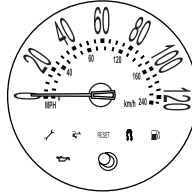


Refer to *Message Center (if equipped)* in the *Driver Controls* chapter to select one of six preset colors or one user definable color (MyColor) for the nighttime gauge backlighting.

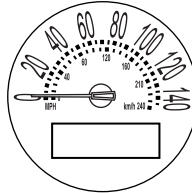
## Instrument Cluster

**Speedometer:** Indicates the current vehicle speed.

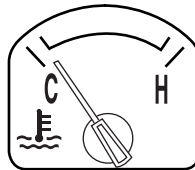
- Base instrument cluster



- Optional instrument cluster



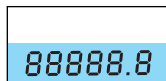
**Engine coolant temperature gauge:** Indicates engine coolant temperature. At normal operating temperature, the needle will be in the normal range (between "H" and "C"). If it enters the red section, the engine is overheating. Stop the vehicle as soon as safely possible, switch off the engine and let the engine cool.



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

**Odometer:** Registers the total miles (kilometers) of the vehicle.

- Base instrument cluster

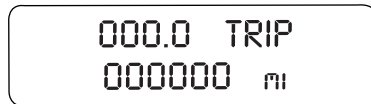




## Instrument Cluster

- Optional instrument cluster

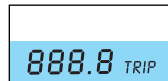
Refer to *Message Center* in the *Driver Controls* chapter on how to switch the display from Metric to English.



**Trip odometer:** Registers the miles (kilometers) of individual journeys.

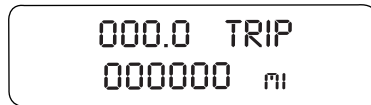
- Base instrument cluster

Press and release the RESET button on the cluster to toggle between odometer and trip odometer display. To reset, press and hold for less than 2 seconds.



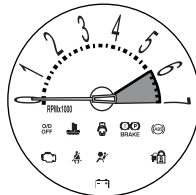
- Optional instrument cluster

Press and release the message center INFO button until TRIP mode appears in the display. Press the RESET button to reset.

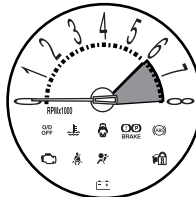


**Tachometer:** Indicates the engine speed in revolutions per minute. Driving with your tachometer pointer continuously at the top of the scale may damage the engine.

- Base instrument cluster

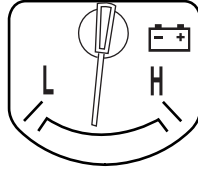


- Optional instrument cluster

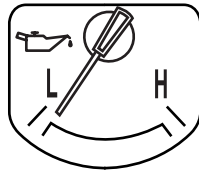


## Instrument Cluster

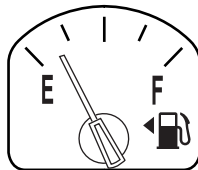
**Battery voltage gauge (if equipped):** Indicates the battery voltage when the ignition is in the ON position. If the pointer moves and stays outside the normal operating range, have the vehicle's electrical system checked by your authorized dealer as soon as possible.



**Engine oil pressure gauge (if equipped):** Indicates engine oil pressure. The needle should stay in the normal operating range (between "L" and "H"). If the needle falls below the normal range, stop the vehicle, turn off the engine and check the engine oil level. Add oil if needed. If the oil level is correct (and gauge reads no/low oil pressure....), shut down the engine immediately and contact your dealer for service or by a qualified technician.



**Fuel gauge:** Indicates approximately how much fuel is left in the fuel tank (when the ignition is in the ON position). The fuel gauge may vary slightly when the vehicle is in motion or on a grade.

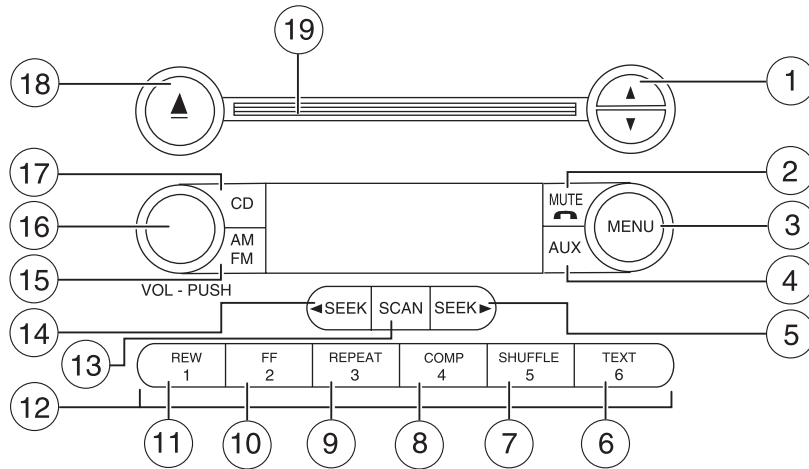


The FUEL icon and arrow indicates which side of the vehicle the fuel filler door is located.

Refer to *Filling the tank* in the *Maintenance and Specifications* chapter for more information.

## Entertainment Systems

### AM/FM STEREO/ SINGLE CD SOUND SYSTEM (IF EQUIPPED)



1. **▲ / ▼ Tuner:** Press to manually go up or down the radio frequency. Also use in menu mode to select various settings.



2. **Phone/mute:** Press to mute the playing media. Press again to return to the playing media.



3. **Menu:** Press to toggle through the following modes:



**Bass:** Press to adjust the bass setting. Use ▲ / ▼ / ◀ SEEK ▶ .

**Treble:** Press to adjust the treble setting. Use ▲ / ▼ / ◀ SEEK ▶ .

**Balance:** Press to adjust the audio between the left and right speakers. Use ▲ / ▼ / ◀ SEEK ▶ .

**Fade:** Press to adjust the audio between the front and rear speakers. Use ▲ / ▼ / ◀ SEEK ▶ .

## Entertainment Systems

**Speed sensitive volume:** Radio volume changes automatically and slightly with vehicle speed to compensate for road and wind noise. Recommended level is 1–3. Level 0 turns the feature off and level 7 is the maximum setting.

Press MENU to access and use ▲ / ▼ / ◀ SEEK ▶ to adjust the volume setting. The level will appear in the display.

**Setting the clock:** Press MENU until SELECT HOUR or SELECT MINUTE is displayed. Use ▲ / ▼ to manually increase/decrease Press MENU again to disengage clock mode.

**Autoset:** Allows you to set the strongest local radio stations without losing your original manually set preset stations for AM/FM1/FM2. Press MENU to access. Use ▲ / ▼ / ◀ SEEK ▶ to set or turn on/off.

When the six strongest stations are filled, the station stored in preset 1 will begin playing. If there are less than six strong stations, the system will store the last one in the remaining presets. You can then access the stations by pressing the memory presets. To disengage, press MENU to access and press ▲ / ▼ / ◀ SEEK ▶ to turn the feature off.

4. **Aux:** If no auxiliary sources are available, NO AUX AUDIO will be displayed.



5. **Seek:** Press to access the next strong radio station or the next track on the compact disc.



6. **Text:** This control is not operational.



7. **Shuffle:** Press to play tracks in random order.



8. **Comp (Compression):** In CD mode, brings soft and loud CD passages together for a more consistent listening level.



9. **Repeat:** Press to repeat the current CD track.



## Entertainment Systems

10. **Fast forward:** Press to manually advance in a CD track.



11. **Rewind:** Press to manually reverse in a CD track.



12. **Memory presets:** To set a station: Select frequency band AM/FM; tune to a station, press and hold a preset button until sound returns.



13. **Scan:** Press for a brief sampling of radio stations or CD tracks. Press again to stop.



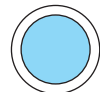
14. **Seek:** Press to access the next strong radio station or the previous track on the compact disc.



15. **AM/FM:** Press to select AM/FM frequency band.



16. **ON/OFF/Volume:** Press to turn ON/OFF. Turn to increase/decrease volume.



VOL - PUSH

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.

17. **CD:** Press to enter CD mode. If a CD is already loaded into the system, CD play will begin where it ended last.



18. **CD eject:** Press to eject a CD.

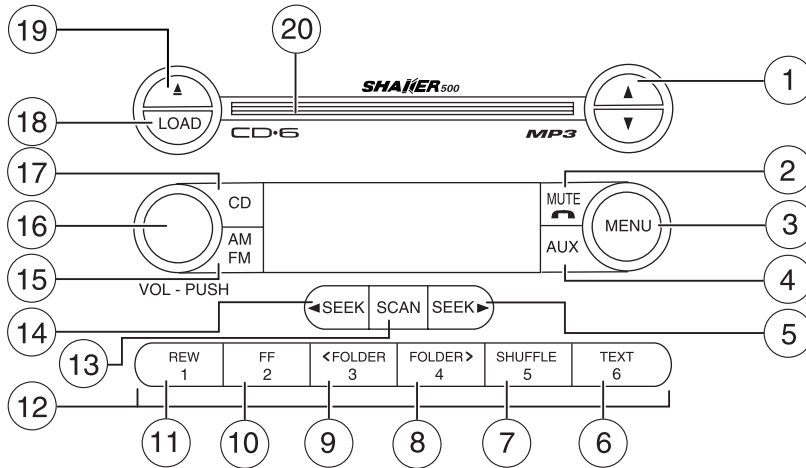


19. **CD slot:** Insert a CD label side up.

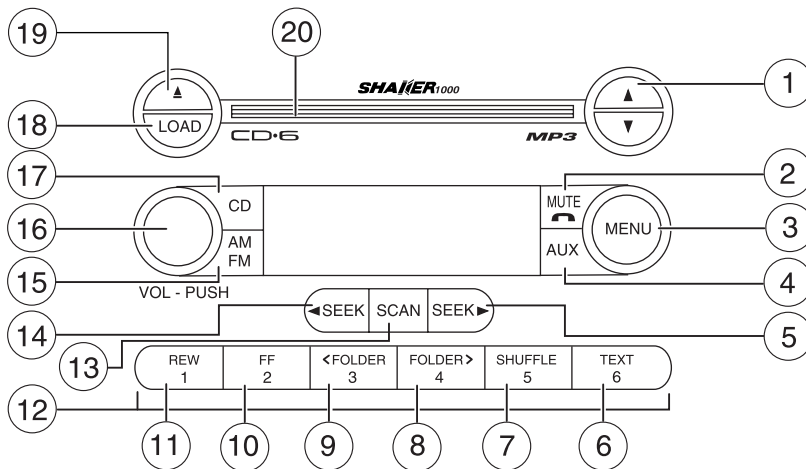


## Entertainment Systems

### SHAKER 500 — AUDIOPHILE IN-DASH SIX CD/MP3 SOUND SYSTEM (IF EQUIPPED)



### SHAKER 1000 — AUDIOPHILE IN-DASH SIX CD/MP3 SOUND SYSTEM (IF EQUIPPED)



## Entertainment Systems

Your vehicle may be equipped with the **SHAKER 1000**<sup>®</sup> audio system. This system is equipped with a rack of amplifiers and subwoofers in the trunk of the vehicle.

The **SHAKER 1000**<sup>®</sup> audio system is capable of producing very high sound pressure levels. For your listening comfort and protection, it is not recommended to listen to the **SHAKER 1000**<sup>®</sup> audio system at high volume levels for extended periods of time.

1. **▲ / ▼ Tune/Disc selector:**

Press to manually go up or down the radio frequency or to select a desired disc. Also use in menu mode to select various settings.



2. **Phone/mute:** Press to mute the playing media. Press again to return to the playing media.



3. **Menu:** Press to toggle through the following modes:



**SHAKER:** Select to engage SHAKER 1000 mode. SHAKER 1000 mode enhances acoustic sound for all seating locations and increases the signal to the trunk mounted speakers and amplifiers for enhanced bass performance. Use ▲ / ▼ or ◀ SEEK ▶ to toggle SHAKER mode on/off.

**Track/Folder Mode:** Available only on MP3 discs in CD mode. In Track Mode, pressing ◀ SEEK ▶ will scroll through all tracks on the disc. In Folder mode, pressing ◀ SEEK ▶ will scroll only through tracks within the selected folder.

**Compression:** Available only in CD mode, brings soft and loud CD passages together for a more consistent listening level.

**Repeat:** Available only in CD mode. Press to repeat the current CD track.

**Autoset:** Allows you to set the strongest local radio stations without losing your original manually set preset stations for AM/FM1/FM2. Press MENU to access. Use ▲ / ▼ / ◀, SEEK ▶ to set or turn on/off.

When the six strongest stations are filled, the station stored in preset 1

## Entertainment Systems

will begin playing. If there are less than six strong stations, the system will store the last one in the remaining presets. You can then access the stations by pressing the memory presets. To disengage, press MENU to access and press ▲ /▼ /◀ SEEK ▶ to turn the feature off.

**Bass:** Press to adjust the bass setting. Use ▲ /▼ /◀ SEEK ▶ .

**Treble:** Press to adjust the treble setting. Use ▲ /▼ /◀ SEEK ▶ .

**Balance:** Press to adjust the audio between the left and right speakers. Use ▲ /▼ /◀ , SEEK ▶ .

**Fade:** Press to adjust the audio between the front and rear speakers. Use ▲ /▼ /◀ , SEEK ▶ .

**Occupancy mode:** Use ▲ /▼ /◀ SEEK ▶ select and optimize sound for ALL SEATS, DRIVERS SEAT or REAR SEATS.

**Speed sensitive volume:** Radio volume changes automatically and slightly with vehicle speed to compensate for road and wind noise. Recommended level is 1–3. Level 0 turns the feature off and level 7 is the maximum setting.

Press MENU to access and use ▲ /▼ /◀ SEEK ▶ to adjust the volume setting. The level will appear in the display.

**Setting the clock:** Press until SELECT HOUR or SELECT MINS is displayed. Press ▲ /▼ /◀ SEEK ▶ to adjust the hours/minutes.

**RDS:** Available only in FM mode. This feature allows you to search RDS-equipped stations for a certain category of music format: Classic, Country, Info, Jazz/RB, Religious, Rock, Soft, Top 40. RDS must be activated to access Find and Show functions.

To activate, press and hold MENU until RDS (ON/OFF) appears in the display. Press MENU repeatedly to scroll through Find, Show and RDS.

Use ▲ /▼ .◀ SEEK ▶ to toggle RDS ON/OFF. When RDS is Off, you will not be able to access Find and Show functions.

**Find:** Allows you to search RDS-equipped stations for the desired music category. Use ▲ /▼ to find the desired program type, then use ◀ SEEK ▶ or SCAN to begin the search.

**Show:** Allows you to display the name of the radio station or program type. Use ▲ /▼ /◀ SEEK ▶ to show type, name or none.



## Entertainment Systems

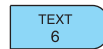
4. **Aux:** If no auxiliary sources are available, NO AUX AUDIO will be displayed.



5. **Seek:** Press to access the next strong station or track. Also use in menu mode to select various settings.



6. **Text:** In CD mode, this feature reads and displays track song title, artist name and album title.



7. **Shuffle:** Press to play the tracks in random order.



8. **FOLDER:** Press to access next folder on MP3 discs, if folders are available.



9. **FOLDER:** press to access the previous folder on MP3 discs, if folders are available.



10. **Fast forward:** Press to manually advance in a CD track.



11. **Rewind:** Press to manually reverse in a CD track.



12. **Memory presets:** To set a station: Select frequency band AM/FM; tune to a station, press and hold a preset button until sound returns.



13. **Scan:** Press for a brief sampling of radio stations or CD tracks. Press again to stop.



14. **Seek:** Press to access the previous strong station or track.



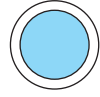
15. **AM/FM:** Press to select AM/FM frequency band.



## Entertainment Systems

16. **ON/OFF/Volume:** Press to turn ON/OFF. Turn to increase/decrease 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.



VOL - PUSH

17. **CD:** Press to enter CD mode. If a CD is already loaded into the system, CD play will begin where it ended last.



18. **LOAD:** Press to begin the CD load sequence. When the radio prompts to select a slot, use the presets to select the desired slot to load the CD. If the selected slot already contains a CD, the display will read SLOT FULL. Press and hold to autoload up to 6 CDs. Load CDs one at a time when the radio prompts to load a CD.



19. **CD eject:** Press to begin the CD eject sequence. When the radio prompts to select a CD, use the presets to select the desired CD to eject. Press and hold to auto eject all CDs present in the system. If there is no CD present, the display will read NO CD.



20. **CD slot:** Insert one CD at a time, label side up, when the system prompts to load a CD.



### MP3 TRACK AND FOLDER STRUCTURE

Your MP3 system recognizes MP3 individual tracks and a folder structure as follows:

- There are two different modes for MP3 disc playback: MP3 track mode (system default) and MP3 folder mode.
- MP3 track mode ignores any folder structure present on the MP3 disc. The player sequentially numbers each MP3 track on the disc (denoted by the .mp3 file extension) from T001 to T255.
- MP3 folder mode represents a folder structure consisting of one level of folders. The CD player sequentially numbers all MP3 tracks on the disc (denoted by the .mp3 extension) and all folders containing MP3 files,

## Entertainment Systems

from 01–01 to 99–99. The first two digits denote the folder number and the last two digits denote the track number within that folder.

- Creating discs with only one level of folders will help with navigation through the disc files.

### ACCESSORY DELAY

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

### RADIO FREQUENCIES

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

AM - 530, 540–1600, 1710 kHz

FM- 87.7, 87.9–107.7, 107.9 MHz

### RADIO RECEPTION FACTORS

There are three factors that can affect radio reception:

- Distance/strength: The further you travel from an FM station, the weaker the signal and the weaker the reception.
- Terrain: Hills, mountains, tall buildings, power lines, electric fences, traffic lights and thunderstorms can interfere with your reception.
- Station overload: When you pass a broadcast tower, a stronger signal may overtake a weaker one and play while the weak station frequency is displayed.

### CD PLAYER CARE

Do:

- Handle discs by their edges only. Never touch the playing surface.
- Inspect discs before playing. Clean only with an approved CD cleaner and wipe from the center out.

Don't:

- Expose discs to direct sunlight or heat sources for extended periods of time.
- Insert more than one disc into each slot of the CD changer magazine.
- Clean using a circular motion.

## Entertainment Systems

**CD units are designed to play commercially pressed 4.75 in (12 cm) audio compact discs only. Due to technical incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford CD players. Irregular shaped CDs, CDs with a scratch protection film attached, and CDs with homemade paper (adhesive) labels should not be inserted into the CD player. The label may peel and cause the CD to become jammed. It is recommended that homemade CDs be identified with permanent felt tip marker rather than adhesive labels. Ball point pens may damage CDs. Please contact your dealer for further information.**

### **AUDIO SYSTEM WARRANTY AND SERVICE**

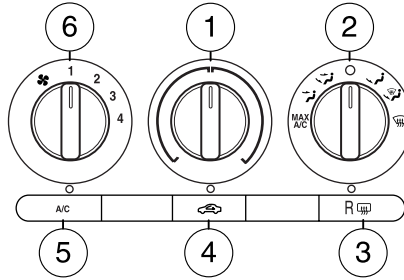
Refer to the *Warranty Guide* for audio system warranty information. If service is necessary, see your dealer or qualified technician.

## Climate Controls


### MANUAL HEATING AND AIR CONDITIONING SYSTEM

- Temperature selection:** Controls the temperature of the airflow in the vehicle.
- Mode selections:** Controls the location of the airflow in the vehicle. See the following for a brief description of each selection.

**MAX A/C:** Distributes recirculated air through the instrument panel vents to cool the vehicle. This re-cooling of the interior air is more economical and efficient. Recirculated air may also help reduce undesirable odors from entering the vehicle.





 : Distributes air through the instrument panel vents.


 : Distributes air through the instrument panel vents and the floor vents.



**O (OFF):** Outside air is shut out and the climate system is turned off.

 : Distributes air through the floor vents.



 : Distributes air through the windshield defroster vents and floor vents.

 : Distributes air through the windshield defroster vents. Can be used to clear the windshield of fog and thin ice.

3. **Rear defroster (R ):** Press to activate/deactivate the rear window defroster. Refer to *Rear window defroster* later in this section for more information.

4. **Recirculation control**  : Press to activate/deactivate air recirculation in cabin. Recirculated air may reduce the amount of time to cool down the interior of the vehicle and may also help reduce undesired exterior odors from reaching the interior of the vehicle. Recirculation engages automatically with selection of MAX A/C or can be engaged manually in any other mode selection except  (defrost).


Recirculation may turn off automatically in all airflow selections except MAX A/C.

5. **A/C:** Press to activate/deactivate air conditioning. Use with recirculated air to improve cooling performance. Engages automatically in MAX A/C,  (defrost) and  (floor/defrost).

## Climate Controls

6. **Fan speed adjustment:** Controls the volume of air circulated in the vehicle.


### Operating tips

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the  (defrost) position.
- To reduce humidity build up inside the vehicle, do not drive with the airflow selector in the O (OFF) position or with recirculated air engaged.
- Do not put objects under the front seats that will interfere with the airflow to the back seats.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.
- To improve the A/C cool down, drive with the windows slightly open for 2-3 minutes after start up or until the vehicle has been "aired out."


### For maximum cooling performance in MAX A/C mode:

1. Move temperature control to the coolest setting.
2. Set the fan to the highest speed initially, then adjust to maintain comfort.

### For maximum cooling performance in panel or panel/floor modes:

1. Move temperature control to the coolest setting.
2. Select A/C and recirculated air () to provide colder airflow.
3. Set the fan to the highest speed initially, then adjust to maintain comfort.

### To aid in side window defogging/demisting in cold weather:

1. Select .
2. Select A/C.
3. Adjust the temperature control to maintain comfort.
4. Set the fan speed to the highest setting.
5. Direct the outer instrument panel vents towards the side windows.
6. To increase airflow to the outer instrument panel vents, close the vents located in the middle of the instrument panel.



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

## Climate Controls

### REAR WINDOW DEFROSTER (R)

Ensure that the ignition is in the 3 (ON) position. Press the control to clear the rear window of thin ice and fog. The LED will illuminate.

The rear window defroster turns off automatically after 10 minutes, or when the ignition is turned to the 1 (OFF/LOCK) position. To manually turn off the defroster before 10 minutes have passed, push the control again.

**Do not use razor blades or other sharp objects to clean the inside of the rear window or to remove decals from the inside of the rear window. This may cause damage to the heated grid lines and will not be covered by your warranty.**

### CABIN AIR FILTER

Your vehicle is equipped with a cabin air filter, which is located just in front of the windshield under the cowl grille on the passenger side of the vehicle.

The particulate air filtration system is designed to reduce the concentration of airborne particles such as dust, spores and pollen in the air being supplied to the interior of the vehicle. The particulate filtration system gives the following benefits to customers:

- Improves the customer's driving comfort by reducing particle concentration
- Improves the interior compartment cleanliness
- Protects the climate control components from particle deposits

For more information regarding the interval at which you should replace the cabin air filter, refer to your *Scheduled Maintenance Guide*.

For more cabin air filter information, or to replace the filter, see your authorized dealer.

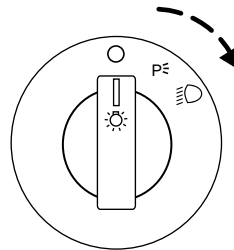
## Lights

### HEADLAMP CONTROL ☀

○ Turns the lamps off.

P☹ Turns on the parking lamps, instrument panel lamps, license plate lamps and tail lamps.

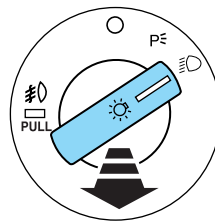
☹ Turns the headlamps on.



### Foglamp control (if equipped) ☹

The foglamps can be turned on when the headlamp control is in the P☹ or ☹ position and the high beams are not on.

Pull the headlamp control towards you to turn on the foglamps. The indicator light under the foglamp symbol will illuminate.




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

Turns the headlamps on with a reduced output. When activated, the DRL telltale is illuminated.

To activate:

- the ignition must be in the ON position,
- the headlamp control is in the OFF or parking lamp position and
- the parking brake must be disengaged.

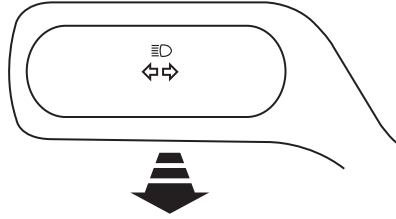
 Always remember to turn on your headlamps at dusk or during inclement weather. The Daytime Running Lamp (DRL) system does not activate the tail lamps and generally may not provide adequate lighting during these conditions. Failure to activate your headlamps under these conditions may result in a collision.



## Lights

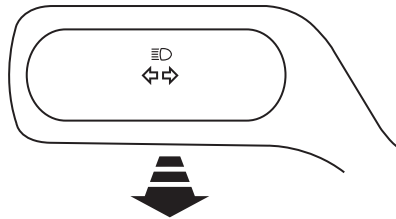
### High beams

Pull the lever towards you, to the second detent, to activate. Pull the lever towards you again to deactivate.



### Flash to pass

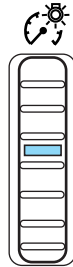
Pull toward you, to the first detent, to activate and release to deactivate.



### PANEL DIMMER CONTROL

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

Move the control to the full upright position, past detent, to turn on the interior lamps.



### AIMING THE HEADLAMPS

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

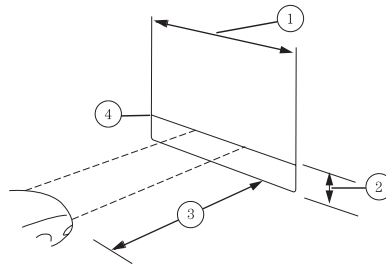
If your vehicle has been in an accident the alignment of your headlamps should be checked by your authorized dealer.

## Lights

### Headlamp vertical aim adjustment

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

- (1) 8 feet (2.4 meters)
- (2) Center height of lamp to ground
- (3) 25 feet (7.6 meters)
- (4) Horizontal reference line



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

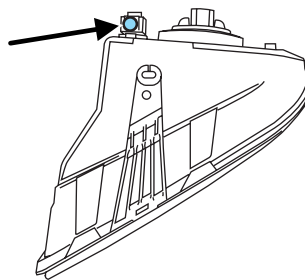
3. Turn on the low beam headlamps to illuminate the wall or screen and open the hood.

4. On the wall or screen you will observe a flat zone of high intensity light located at the top of the beam pattern.



5. If the top edge of the high intensity light zone is not at the horizontal reference line, the headlamp will need to be adjusted.

6. Locate the vertical adjuster on each headlamp, then use a 7 mm Allen wrench or a Phillips screwdriver to adjust the headlamp up or down.



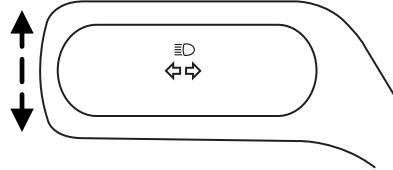
7. HORIZONTAL AIM IS NOT REQUIRED FOR THIS VEHICLE AND IS NON-ADJUSTABLE.

8. Close the hood and turn off the lamps.

## Lights

### TURN SIGNAL CONTROL ⇐⇒

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

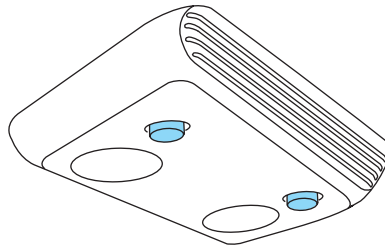


The flash rate of the turn signal will speed up considerably if the Lighting Control Module detects a left or right turn lamp bulb (front or rear) is burned out.

### INTERIOR LAMPS

#### Map lamps

Press the controls on either side of the lamp to turn the light on.



### BULB REPLACEMENT

#### Headlamp Condensation

The headlamps are vented to equalize pressure. When moist air enters the headlamp(s) through the vents, there is a possibility that condensation can occur. This condensation is normal and will clear within 45 minutes of headlamp operation.

#### Interior bulbs

Check the operation of all bulbs frequently.

#### Replacing exterior bulbs

Check the operation of all the bulbs frequently.

## Lights

### Using the right bulbs

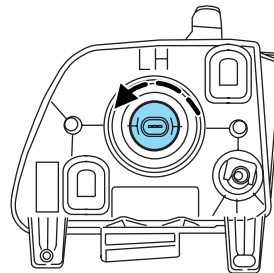
Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized "D.O.T." for North America and an "E" for Europe to ensure lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb burn time.

Function	Trade Number
Headlamp	H13
Park lamp, turn lamp, side marker (front)	3157 or 3157K
Sidemarkers (front)	W5W or W5WL
Fog lamp	9145 or H11 (if equipped)
Tail lamp, brakelamp, turn lamp	3057K or 4057K
Sidemarkers (rear)	W5W or W5WL
High-mount brakelamp	921
Backup lamp	921
License plate lamp	168
Overhead console/map lamp	W5W
All replacement bulbs are clear in color except where noted.	
To replace all instrument panel lights - see your authorized dealer.	

### Replacing headlamp bulbs

To remove the headlamp bulb:

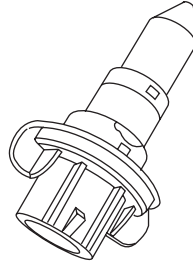
1. Make sure headlamp switch is in the OFF position, then open the hood.
2. Disconnect the electrical connector from the bulb by depressing the retainer clip and pulling rearward.
3. Remove the bulb by rotating it counterclockwise and pulling it straight out.



## Lights



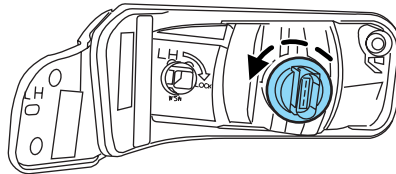
Handle a halogen headlamp bulb carefully and keep out of children's reach. Grasp the bulb only by its plastic base and do not touch the glass. The oil from your hand could cause the bulb to break the next time the headlamps are operated.



Install the new bulb in reverse order.

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

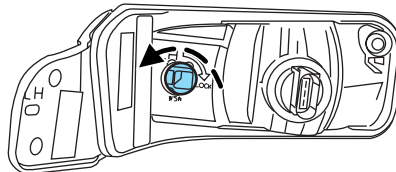
1. Make sure the headlamp control is in the OFF position and open the hood.
2. Locate the lamp assembly from underneath the vehicle and rotate the bulb socket counterclockwise and remove from lamp assembly.
3. Pull the bulb straight out from the socket.



Install the new bulb in reverse order.

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

1. Make sure the headlamp control is in the OFF position and open the hood.
2. Locate the lamp assembly from underneath the vehicle and rotate the bulb socket counterclockwise and remove from lamp assembly.
3. Pull the bulb straight out from the socket.

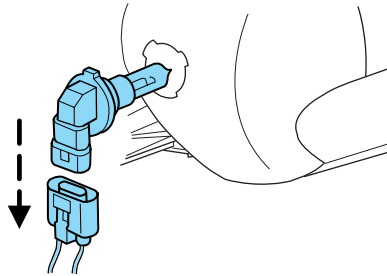


Install the new bulb in reverse order.

## Lights

### **Replacing foglamp bulbs**

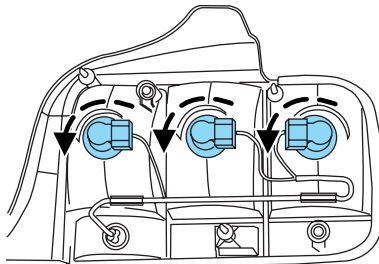
1. Make sure the headlamp control is in the OFF position and open the hood.
  2. Remove the sight shield by loosening the six fasteners with a flat head screwdriver.
  3. Remove the two underhood bolts attaching the bumper cover next to the grill and then pull the cover/grille/foglamp assembly forward to access the foglamp bulbs.
  4. Disconnect the electrical connector from the bulb by pulling it straight off.
  5. Rotate the bulb counterclockwise and remove from the lamp assembly.
- Install the new bulb in reverse order.



### **Replacing tail lamp/brake/rear turn signal lamp bulbs**

The tail lamp, the brake lamp and the turn signal lamp bulbs are located in the tail lamp assembly. Follow the same steps to replace either bulb.

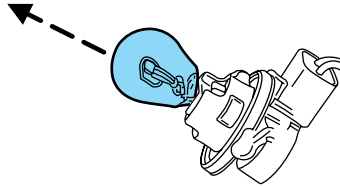
1. Make sure headlamp switch is in OFF position, then open the trunk.
2. Carefully remove fasteners around the lamp area and then remove the interior trunk trim.
3. Disconnect the electrical grommet by pulling it straight off of the lamp assembly.
4. Remove three nut and washer assemblies and the lamp assembly from the vehicle.
5. Remove the bulb socket by rotating it counterclockwise, then pulling it out of the lamp assembly.



## Lights

6. Pull the bulb straight from the socket.

Install the new bulb in reverse order.



### **Replacing backup bulbs**

The backup lamp is located in the tail lamp assembly. Follow the same steps to replace either bulb.

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

2. Carefully remove fasteners around the lamp area, then remove the interior trunk trim.

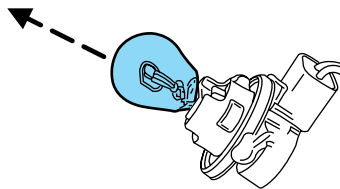
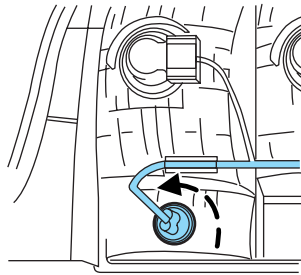
3. Disconnect the electrical connector by pulling it straight off of the lamp assembly.

4. Remove the three nut and washer assemblies and the lamp assembly from the vehicle.

5. Remove the bulb socket by rotating it counterclockwise, then pulling it out of the lamp assembly.

6. Pull the bulb straight from the socket.

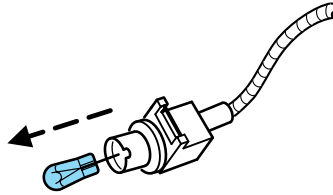
Install the new bulb in reverse order.



## Lights

### **Replacing rear sidemarker lamp bulbs**

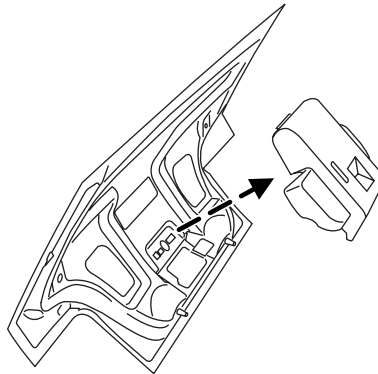
1. Make sure the headlamp switch is in the OFF position and locate the sidemarker on the rear bumper fascia.
2. Install a flathead screwdriver between the rear of the sidemarker lens and the bumper fascia.
3. Push the screwdriver to the front of the vehicle and then slide it towards you to pop out the lens cover.
4. Carefully pull the bulb straight out of socket.



Install the new bulb in reverse order.

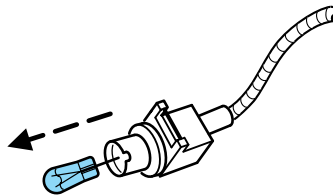
### **Replacing high-mount brake lamp bulbs**

1. Make sure the headlamp switch is in the OFF position and then open the trunk.
2. Inside trunk, pull the trim panel straight off of the underside of the trunk lid.
3. Locate the lighting assembly and push the release tab to access the bulb socket.



4. Carefully pull the bulb straight out of socket.

Install the new bulb in reverse order.



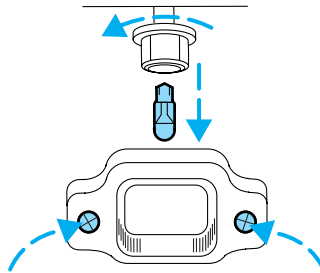


## Lights

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

1. Make sure the headlamp switch is in the OFF position, then remove the two screws and the license plate lamp assembly.
2. Remove bulb socket by turning counterclockwise.
3. Carefully pull the bulb out from the socket.

Install new bulb(s) in reverse order.

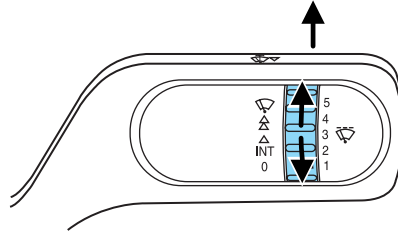


## Driver Controls

### MULTI-FUNCTION LEVER

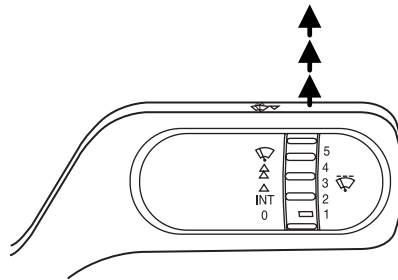
**Windshield wiper:** For intermittent operation, move control up one position.

Adjust the rotary control to the desired speed setting.



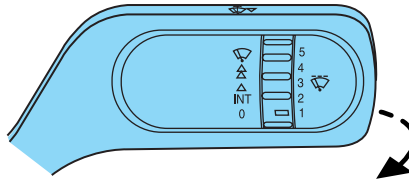
For normal or low speed wiper operation, move control up two positions from OFF.

For high speed wiper operation, move control up three positions from OFF.



**Windshield washer:** Pull the end of the stalk towards you:

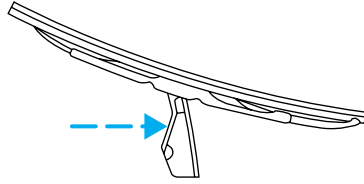
- briefly: causes a single swipe of the wipers without washer fluid.
- a quick pull and hold: the wipers will swipe three times with washer fluid.
- a long pull and hold: the wipers and washer fluid will be activated for up to ten seconds.



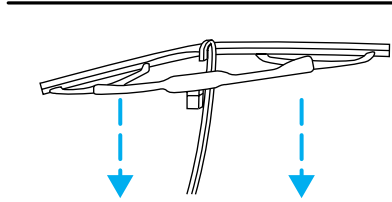
## Driver Controls

### Changing the wiper blades

1. Pull the wiper arm away from the vehicle. 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.



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



Replace wiper blades at least once per year for optimum performance.

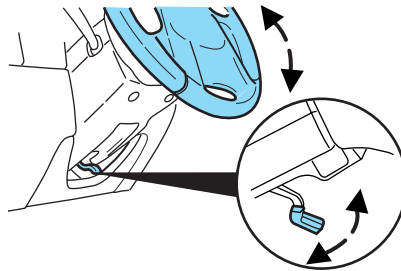
Poor wiper quality can be improved by cleaning the wiper blades and the windshield, refer to *Windows and wiper blades* in the *Cleaning* chapter.

To prolong the life of the wiper blades, it is highly recommended to scrape off the ice on the windshield before turning on the wipers. The layer of ice has many sharp edges and can damage the micro edge of the wiper rubber element.

### TILT STEERING WHEEL (IF EQUIPPED)

To adjust the steering wheel:

1. Push the lever down to unlock the steering column. While the lever is in the down position, tilt the steering column to its desired orientation.
2. While holding the steering column, pull the lever up to its original position to lock the steering column.



Never adjust the steering wheel when the vehicle is moving.

## Driver Controls

### AUXILIARY POWER POINT (12VDC)

**Power outlets are designed for accessory plugs only. Do not insert any other object in the power outlet as this will damage the outlet and blow the fuse. 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 power point is an additional power source for electrical accessories. The power points are located on the instrument panel and inside the center console storage bin.

Do not use the power point for operating the cigarette lighter element (if equipped).

To prevent the fuse from being blown, do not use the power point(s) over the vehicle capacity of 12 VDC/180W.

To prevent the battery from being discharged, do not use the power point longer than necessary when the engine is not running.

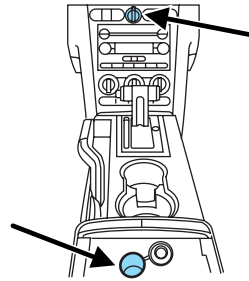
Always keep the power point caps closed when not being used.

### Cigarette/Cigar lighter (if equipped)

Do not plug optional electrical accessories into the cigarette lighter socket.

Do not hold the lighter in with your hand while it is heating, this will damage the lighter element and socket. The lighter will be released from its heating position when it is ready to be used.

Improper use of the lighter can cause damage not covered by your warranty.




### POWER WINDOWS



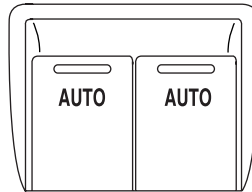
Do not leave children unattended in the vehicle and do not let children play with the power windows. They may seriously injure themselves.

## Driver Controls

 When closing the power windows, you should verify they are free of obstructions and ensure that children and/or pets are not in the proximity of the window openings.

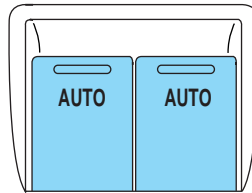
Press and pull the switches to open and close windows.

- Push down (to the first detent) and hold the switch to open.
- Pull up (to the first detent) and hold the switch to close.



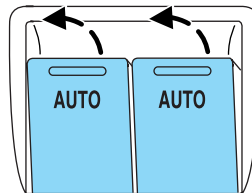
### **Express down (One Touch Down, Front windows only)**

Allows the driver and passenger's window to open fully without holding the control down. Push the switch completely down to the second detent and release quickly. The window will open fully. Momentarily press the switch to any position to stop the window operation.



### **Express Up (One Touch Up, Front windows only)**

Allows the driver and passenger's window to close fully without holding the control up. Pull the switch completely up to the second detent and release quickly. The window will close fully. Momentarily press the switch to any position to stop the window operation.



### **Accessory delay**

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

### **Bounce Back (Front windows only)**

When an obstacle has been detected in the window opening as the window is moving upward, the window will automatically move down and stop at a prescribed position.

## Driver Controls

### ***Bounce Back Override (Front windows only)***

To override Bounce Back, within 2 seconds after reaching Bounce Back position, if the switch is moved from the Neutral to the Express Up position **the window will travel up with no bounce back protection.** If the switch is released before the window reaches fully closed position, the window will stop. For example: Bounce Back Override can be used to overcome the resistance of ice on the window or seals.

### ***Restoring the Express up functionality (Front windows only)***

Under low battery power conditions, Express Up only functionality may be lost. To reset this function after restoring full battery power, pull the switch to the Express Up position, hold the switch until the glass reaches the stall position and continue to hold for 2 seconds. Push the window switch DOWN and operate the window to the full down position. Express UP will now be functional. **Perform Express UP re-calibration with door closed only. Calibrating with door open will cause the window to continuously bounce back.**

### ***Short drop glass (Front windows only)***

In order to improve door efforts and sealing, your vehicle is equipped with short drop glass. This feature lowers the glass when either door is opened. The glass returns to its closed position when the door is closed.

Proper operation of the short drop glass requires that the windows be calibrated. **Though your windows will have been calibrated before your vehicle is delivered to you, it is possible for the windows to lose calibration.** If a window loses its calibration, your short drop feature will lower the window, but will not raise it again when the door is closed. To re-calibrate the window, pull the switch up to raise the window until it completes its travel and hold the switch up for 2 seconds. Another possible effect of lost calibration is that the feature may not lower the window. To re-calibrate the window in this case, lower the window until it completes its travel and hold the switch down for 2 seconds. Immediately after releasing the window down switch, pull the switch up to raise the window until it completes its travel and hold the switch up for 2 seconds. **Perform Short drop re-calibration with doors closed only. Re-Calibrating with doors open will cause the window to continuously bounce back.**

### ***Rear Power Windows (Convertible Only)***

The rear quarter windows are operated by a single window switch located at the Driver door window controls. Press and pull the window switch to open and close the windows.

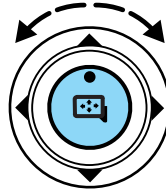
## Driver Controls

- Push down and hold the switch to open.
- Pull up and hold the switch to close.

### POWER SIDE VIEW MIRRORS (IF EQUIPPED)

To adjust your mirrors:

1. Rotate the control clockwise to adjust the right mirror and rotate the control counterclockwise to adjust the left mirror.
2. Move the control in the direction you wish to tilt the mirror.
3. Return to the center position to lock mirrors in place.



### SPEED CONTROL (IF EQUIPPED)


With speed control set, you can maintain a speed of 30 mph (48 km/h) or more without keeping your foot on the accelerator pedal. Speed control does not work at speeds below 30 mph (48 km/h).



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

### Setting speed control

The controls for using your speed control are located on the steering wheel for your convenience.

1. Press the ON control and release it.
2. Accelerate to the desired speed.
3. Press the SET + control and release it.
4. Take your foot off the accelerator pedal.
5. The indicator light  on the instrument cluster will turn on.



#### Note:

- Vehicle speed may vary momentarily when driving up and down a steep hill.
- If the vehicle speed increases above the set speed on a downhill, you may want to apply the brakes to reduce the speed.

## Driver Controls

- If the vehicle speed decreases more than 10 mph (16 km/h) below your set speed on an uphill, your speed control will disengage.
- If the vehicle speed decreases to 30 mph (48 km/h) or less, your speed control will disengage

### **Disengaging speed control**

To disengage the speed control:

- Depress the brake pedal or clutch pedal (if equipped)

Disengaging the speed control will not erase previous set speed.

### **Resuming a set speed**

Press the RES (resume) control and release it. This will automatically return the vehicle to the previously set speed. The RES control will not work if the vehicle speed is not faster than 30 mph (48 km/h).



### **Increasing speed while using speed control**

There are three ways to set a higher speed:

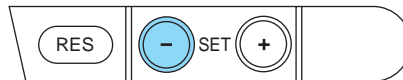
- Press and hold the SET + control until you get to the desired speed, then release the control.
- Press and release the SET + control to operate the Tap-Up function. Each tap will increase the set speed by 1 mph (1.6 km/h).
- Use the accelerator pedal to get to the desired speed. When the vehicle reaches that speed press and release the SET + control.



### **Reducing speed while using speed control**

There are three ways to reduce a set speed:

- Press and hold the SET - control until you get to the desired speed, then release the control.
- Press and release the SET - control to operate the Tap-Down function. Each tap will decrease the set speed by 1 mph (1.6 km/h).





## Driver Controls

- Depress the brake pedal until the desired vehicle speed is reached, press the SET + control.



### Turning off speed control

There are two ways to turn off the speed control:

- Press the speed control OFF control.
- Turn OFF the ignition.



**Note:** When you turn off the speed control or the ignition, your speed control set speed memory is erased.

### CENTER CONSOLE

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

- Dual cupholders
- Auxiliary power point (in bin)
- Coin holder slots (in bin)



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

### Cell phone use

The use of Mobile Communications Equipment has become increasingly important in the conduct of business and personal affairs. However, drivers must not compromise their own or others' safety when using such equipment. Mobile Communications can enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits.

Mobile Communication Equipment includes, but is not limited to cellular phones, pagers, portable email devices, in-vehicle communications systems, telematics devices and portable two-way radios.



A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communications Equipment.

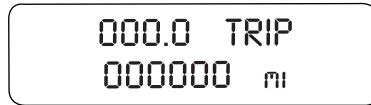
## Driver Controls

### MESSAGE CENTER (IF EQUIPPED)

With the ignition in the ON position, the message center, located on your instrument cluster, displays important vehicle information

**through a constant monitor of vehicle systems.** You may select

display features on the message center for a display of status preceded by a brief indicator chime. The system will also notify you of potential vehicle problems with a display of system warnings followed by a long indicator chime.

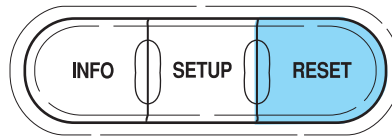


**Note:** Refer to the SETUP menu in this section to select the Single or Dual mode display in your message center.

### Selectable features

#### Reset

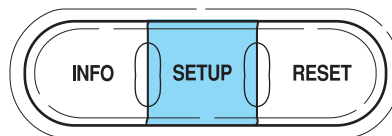
Press this control to select and reset functions shown in the INFO menu and SETUP menu.



#### Setup menu

Press this control for the following displays:


- System Check
- Display Color
- Units (English/Metric)
- Display Mode
- Language



## Driver Controls

### **System check**

Selecting this function from the SETUP menu causes the message center to cycle through each of the systems being monitored. For each of the monitored systems, the message center will indicate either an OK message or a warning message for two seconds.



PRESS RESET  
FOR SYS CHECK

Pressing the RESET control cycles the message center through each of the systems being monitored.

The sequence of the system check report and how it appears in the message center is as follows:

1. OIL PRESSURE
2. ENGINE COOLANT TEMPERATURE
3. CHARGING SYSTEM
4. DRIVER DOOR
5. PASSENGER DOOR
6. TRUNK
7. BRAKE SYSTEM
8. ETC SYSTEM
9. SECURITY SYSTEM (if equipped)
10. TRAC CONTROL (if equipped)
11. FUEL CAP
12. FUEL LEVEL
13. MILES TO EMPTY

### **Display color**

The instrument cluster gauges are backlit with white backlighting when the headlamps are off. When the headlamps are on, the user can select one of six preset colors or one user definable color (MyColor™) for the nighttime gauge backlighting. Headlamps must be on to set up the nighttime display color.

**Note:** A gauge in a warning condition will be lit red when the headlamps are on.

## Driver Controls

1. Press SETUP to get to the DISPLAY COLOR set up menu.
2. Pressing RESET will scroll through the following selectable colors:

Green	Blue
Purple	White
Orange	Red
MyColor	Adjust (to define MyColor)

DISPLAY COLOR  
TURN HEADLAMP ON

**Adjusting MyColor™:** MyColor™ is a user defined backlighting color. The backlighting colors are achieved through the blending of light from Red, Green, and Blue LEDs. Apart from the 6 preset colors, drivers can create their own color by adjusting the levels of the three primary colors through the MyColor™ feature to achieve any of 125 different combinations.

The vehicle must be stationary to enter the MyColor™ adjust mode. To enter the MyColor™ adjust mode, hold RESET for 3 seconds at the Adjust menu, or press SETUP to scroll through the display colors again. When in the MyColor™ adjust mode, pressing RESET will step through the Red, Green, Blue and Exit options. Pressing SETUP will increment the proportion of the color being adjusted. Try many combinations and record your favorites. To Exit MyColor™ adjust hold RESET for 3 seconds when prompted. Pressing RESET for less than 3 seconds will cycle back through the color components.

### **Units (English/Metric)**

1. Select this function from the SETUP menu for the current units to be displayed.
2. Press the RESET control to change from English to Metric.

UNITS  
> ENG METRIC

### **Display Mode**

1. Select this function from the SETUP menu to select the Display Mode.
2. Single Mode will display only the selected function. Dual Mode will display the selected function and the odometer.

DISPLAY MODE  
SINGLE > DUAL

## Driver Controls

### Language

1. Select this function from the SETUP menu for the current language to be displayed.



ENGLISH  
RESET FOR NEW

2. Pressing the RESET control cycles the message center through each of the language choices.



FOR ENGLISH  
HOLD RESET

3. Press and hold the RESET control to set the language choice.

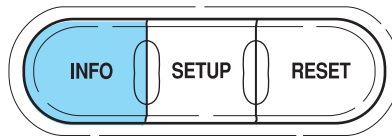


SET TO  
ENGLISH

### Info menu

This control displays the following control displays:

- Odometer
- Trip odometer
- Distance to Empty
- Average Fuel Economy
- Instantaneous Fuel Economy
- Fuel Used
- Trip Elapsed Drive Time
- Average Speed
- Blank Display



### Odometer/Trip odometer

Refer to *Gauges* in the *Instrument Cluster* chapter.

### Distance to empty (DTE)

Selecting this function from the INFO menu 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 to allow this feature to correctly detect the added fuel.

## Driver Controls

### Single mode display



XXX mi TO E  
000000.0 mi

### Dual mode display



XXX MILES TO E  
000000 mi 000.0

The DTE function will display LOW FUEL LEVEL and sound a tone for one second when you have approximately 50 miles (80 km) to empty. If you RESET this warning message, this display and tone will return within 10 minutes.

DTE is calculated using a running average fuel economy, which is based on your recent driving history of 500 miles (800 km). This value is not the same as the average fuel economy display. The running average fuel economy is reinitialized to a factory default value if the battery is disconnected.

### Average fuel economy (AFE)

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



XX.X AVERAGE MPG  
000000 mi 000.0

If you calculate your average fuel economy by dividing miles traveled by gallons of fuel used (liters of fuel used by 100 kilometers traveled), 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 gallon (0.1 liter)

1. Drive the vehicle at least 5 miles (8 km) with the speed control system engaged to display a stabilized average.

2. 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.

## Driver Controls

### **Instantaneous fuel economy**

Select this function from the INFO menu to display your instantaneous fuel economy. This will display your fuel economy as a Bar Graph ranging from ▼ poor economy to ▲ excellent economy.



Your vehicle must be moving to calculate instantaneous fuel economy. When your vehicle is not moving, this function shows ▼, one or no bars illuminated. Instantaneous fuel economy cannot be reset.

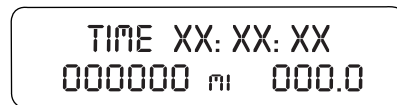
### **Fuel Used**

Select this function from the INFO menu to display the fuel used since last reset. The information displayed will be in gallons or liters, depending on English/metric mode state.



### **Trip elapsed drive time**

Select this function from the INFO menu to display a timer. Trip elapsed drive time will only accumulate time when the ignition is in the Run/Start position.



To operate the Trip Elapsed Drive Time perform the following:

1. Press and release RESET in order to start the timer.
2. Press and release RESET to pause the timer.
3. Press and hold RESET for 2 seconds in order to reset the timer.

### **Average speed**

Select this function from the INFO menu to display average speed since last reset.



### **Blank Display**

Select this function from the INFO control to turn your message center display OFF.

## Driver Controls

### System warnings

System warnings alert you to possible problems or malfunctions in your vehicle's operating systems.

In the event of a multiple warning situation, the message center will cycle the display to show all warnings by displaying each one for 4 seconds.

The message center will display the last selected feature if there are no more warning messages. This allows you to use the full functionality of the message center after you acknowledge the warning by pressing the RESET control and clearing the warning message.

Warning messages that have been reset are divided into three categories:

- They will not disappear until a condition is changed.
- They will reappear on the display ten minutes from the reset.
- They will not reappear until an ignition OFF-ON cycle has been completed.

This acts as a reminder that these warning conditions still exist within the vehicle.

Warning display	Status
Driver's door ajar	Warning cannot be reset
Passenger door ajar	
Low oil pressure	Warning returns after 10 minutes
Reduced engine power	
Engine failsafe mode	
Check engine temperature	
Check charging system	
Check traction control <sup>™</sup>	
Traction control <sup>™</sup> active	
Check fuel cap	
Low fuel level	



## Driver Controls

Warning display	Status
Check brake system	Warning returns after the ignition key is turned from OFF to ON.
Low brake fluid level	
Service ETC system	
Trunk ajar	
Park brake on	
Security event occurred	
Turn signal on reminder	

**DRIVER'S DOOR AJAR.** Displayed when the driver's door is not completely closed.

**PASSENGER DOOR AJAR.** Displayed when the passenger side door is not completely closed.

**TRUNK AJAR.** Displayed when the trunk is not completely closed.

**CHECK ENGINE TEMPERATURE.** Displayed when the engine coolant is overheating. Stop the vehicle as soon as safely possible, turn off the engine and let it cool. Check the coolant and coolant level. Refer to *Engine coolant* in the *Maintenance and Specifications* chapter. If the warning stays on or continues to come on, contact your authorized dealer as soon as possible.

**REDUCED ENGINE POWER.** Displayed when the engine is overheating. Stop the vehicle as soon as safely possible, turn off the engine. If the warning stays on or continues to come on, contact your authorized dealer as soon as possible.

**LOW FUEL LEVEL.** Displayed as an early reminder of a low fuel condition.

**CHECK CHARGING SYSTEM.** Displayed when the electrical system is not maintaining proper voltage. If you are operating electrical accessories when the engine is idling at a low speed, turn off as many of the electrical loads as soon as possible. If the warning stays on or comes on when the engine is operating at normal speeds, have the electrical system checked as soon as possible.

**PARK BRAKE ON.** Displayed when the manual park brake is set. If the warning stays on after the park brake is released, contact your authorized dealer as soon as possible.

**CHECK BRAKE SYSTEM.** Displayed when the braking system is not operating properly. If the warning stays on or continues to come on, contact your authorized dealer as soon as possible.

## Driver Controls

**LOW BRAKE FLUID LEVEL.** Indicates the brake fluid level is low and the brake system should be inspected immediately. Refer to *Brake fluid reservoir* in the *Maintenance and Specifications* chapter.

**LOW OIL PRESSURE.** Displayed when the engine oil pressure is low. If this warning message is displayed, check the level of the engine oil. Refer to *Engine oil* in the *Maintenance and Specifications* chapter for information about adding engine oil. If the oil level is OK and this warning persists, shut down the engine immediately and contact your authorized dealer for service.

**CHECK FUEL CAP.** Displayed when the fuel filler cap is not properly installed. Check the fuel filler cap for proper installation. Refer to *Fuel filler cap* under the *Fuel Information section* in the *Maintenance and Specifications* chapter.

**CHECK TRACTION CONTROL™.** Displayed when the Traction Control™ system is not operating properly. If this message is displayed on the message center the Traction Control™ system will be partially operable. If this warning stays on, contact your authorized dealer for service as soon as possible. For further information, refer to *Traction control™* in the *Driving* chapter.

**TRACTION CONTROL™ ACTIVE.** Displayed when the Traction Control™ system is active. For further information, refer to *Traction control™* in the *Driving* chapter.

**ENGINE FAILSAFE MODE.** Displayed when the engine has defaulted to a 'limp-home' operation. If the warning stays on or continues to come on, contact your authorized dealer as soon as possible.

**SERVICE ETC SYSTEM.** Displayed when the engine has defaulted to a 'limp-home' operation. If the warning stays on or continues to come on, contact your authorized dealer as soon as possible.

**SECURITY EVENT OCCURRED (if equipped).** Displayed when the active anti-theft system (if equipped) was activated since the prior ignition cycle.

**TURN SIGNAL ON REMINDER.** Displayed when the turn signal is activated and the vehicle is driven more than 1/2 mile (0.8 km).

**DATA ERR.** These messages indicate improper operation of the vehicle network communication between electronic modules.

- Fuel computer
- Charging system
- Brake fluid

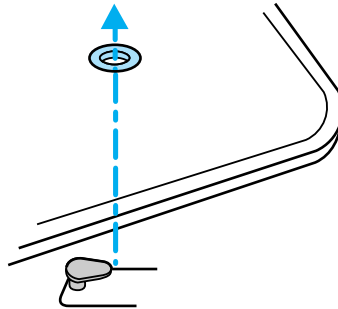
## Driver Controls

- Engine sensor

Contact your authorized dealer as soon as possible if these messages occur on a regular basis.

### POSITIVE RETENTION FLOOR MAT (IF EQUIPPED)

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



### CONVERTIBLE (IF EQUIPPED)

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

#### Lowering the convertible top

The convertible top can be lowered with the side windows down. The windows will automatically lower when lowering or raising the top.

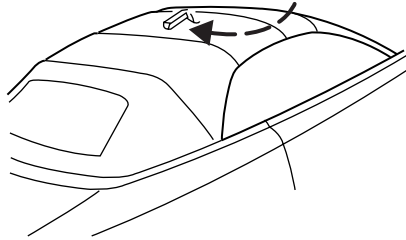
The convertible top **will not operate** unless the vehicle is traveling under 3.1 mph (5 km/h). Do not lower the top when the top material is wet.

To lower the convertible top:

1. Bring vehicle to a complete stop. Key must be in the ON position. It is recommended that the vehicle's engine is running when lowering the top to prevent draining the battery.
2. Check the convertible top stowage compartment behind the rear seat to be sure it is empty and ready to receive the top. Check the convertible top outer surface to be sure it is free of leaves and debris.

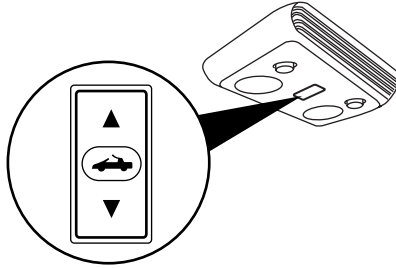
## Driver Controls

3. Unclamp the top from the windshield header at both the right and left sides by pulling each handle down and rearward until the handle clears the windshield header. The handles are flush with the header when in the closed position.



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

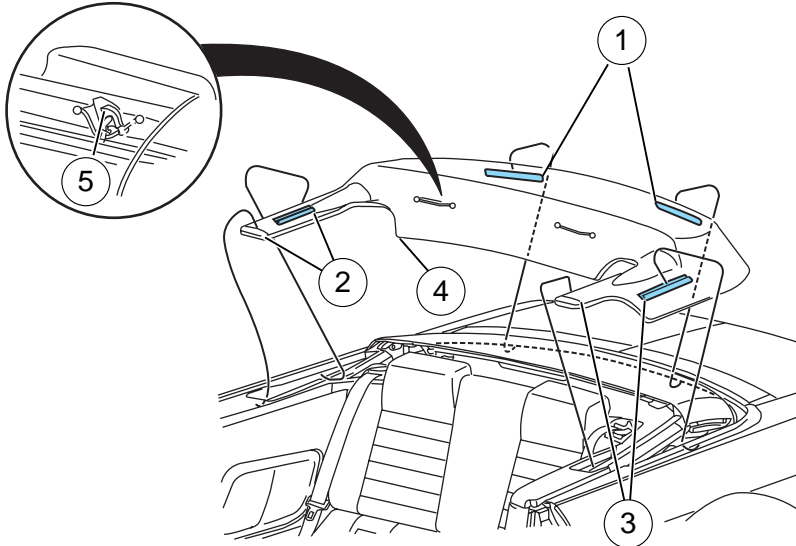
4. Push the convertible top switch on the overhead console and hold until the windows are completely down and the top is completely stored.



## Driver Controls

### **Installation of the boot (if equipped)**

Be sure the boot is secure on the vehicle before driving.



1. Install the boot on the vehicle by hooking the boot retaining clips on the back panel.
2. Install the boot on the right side tucking in the front part of the boot in the quarter panel and hooking the retaining clip on the side.
3. Install the boot on the left side tucking in the front part of the boot in the quarter panel and hooking the retaining clip on the side.
4. Tuck the boot corners behind the shoulder belts.
5. Secure the boot straps on the rear seat hooks behind the rear seat.

**Note: Improper installation can result in loss and/or damage of the boot while driving.**

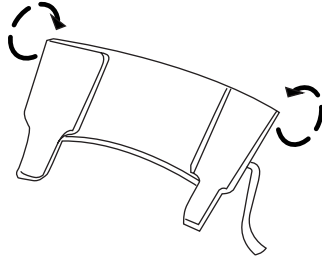


Always secure the retaining clips and boot straps on the vehicle or the boot may come loose while driving.

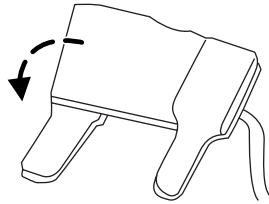
To remove, unhook the boot straps from the rear seat hooks and push the boot down slightly unhooking the boot retaining clips from the vehicle and lift off.

## Driver Controls

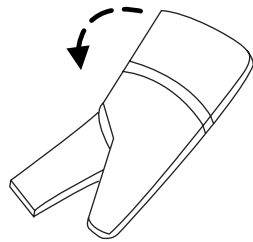
### Storing the boot



1. Position the boot right-side up and fold each side of the boot inward.



2. Turn the boot upside down and fold the left side of the boot inward.



3. Fold the right side inward and secure the boot with the strap.  
Stow the boot in the trunk.

## Driver Controls

### Raising the convertible top

The convertible top **will not operate** unless the vehicle is traveling under 3.1 mph (5 km/h).

To raise the convertible top:

1. Bring the vehicle to a complete stop. Key must be in the ON position. It is recommended that the vehicle's engine is running when raising the top to prevent draining the battery.
2. Push the convertible top switch, holding it until the windows lower completely and the top unfolds and moves forward toward the windshield header.
3. Open both handles before the top meets the windshield header.
4. Continue to use the convertible top switch to raise the top until it has reached the fully closed position flush to the header.

**Note:** The two pins under the forward edge of the top should seat themselves in the matching holes in the header.

5. To fasten both handles securely, rotate the driver's handle into the header on the top until it reaches full forward and push up to flush the handle with the header. Pulling down on the header at the center grip while closing the handle may assist in fastening the top. Repeat this step for the passenger side handle.
6. Raise the front and rear side windows.

## Locks and Security

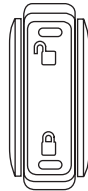
### KEYS

One key operates all the locks and starts the vehicle. Always carry a spare key with you in case of an emergency.

Your keys are programmed to your vehicle; using a non-programmed key will not permit your vehicle to start. If you lose your authorized dealer supplied keys, replacement keys are available through your authorized dealer. Refer to the *SecuriLock™ passive anti-theft system* section later in this chapter for more information.

### POWER DOOR LOCKS

The power door lock controls are located on the driver and front passenger door panels.



Press the  control to unlock all doors.

**Note:** When the active anti-theft system (if equipped) is armed and the power door trim switch inhibit feature (the default for power door switch inhibit feature is disabled) has been activated via the driver configuration process, control of the interior power door locks is disabled until the vehicle is disarmed. For more information about the driver configuration process, refer to the *Deactivating/activating the power door trim switch inhibit feature* section later in this chapter.

Press the  control to lock all doors.

### Smart locks

This feature helps prevent you from locking yourself out of the vehicle if your key is still in the ignition.

When you open the driver's door and you lock the vehicle with the power door lock control, all the doors will lock, then the driver's door will automatically unlock reminding you that your key is still in the ignition.

The vehicle can still be locked, with the key in the ignition, using the manual lock button on the door, locking the driver's door with a key or using the lock button on the remote entry transmitter.



## Locks and Security

### **Autolock (if equipped)**

On vehicles equipped with an automatic transmission, this feature automatically locks all vehicle doors when:

- all doors are closed,
- the ignition is in the 3 (ON) position,
- the brake is pressed before reaching 5 mph (8 km/h), and
- then the vehicle increases to more than 5 mph (8 km/h).

### **Relock**

The autolock feature repeats when:

- an “autolock” occurrence has already taken place,
- the brake is depressed while vehicle speed is less than 5 mph (8 km/h),
- any vehicle door is opened and then all doors become closed again, and
- then the vehicle increases to more than 5 mph (8 km/h).

### **Deactivating/activating the autolock feature**

Before following the procedure, make sure that the ignition is in the 1 (OFF/LOCK) position and all vehicle doors are closed.

You must complete Steps 1-7 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 to the 3 (ON) position.
2. Press the power door unlock control three times.
3. Turn the ignition from the 3 (ON) to the 1 (OFF/LOCK) position.
4. Press the power door unlock control three times.
5. Turn the ignition back to the 3 (ON) position. The horn will chirp.
6. Press the unlock control, then press the lock control. The horn will chirp once if autolock was deactivated or twice (one short and one long chirp) if autolock was activated.
7. Turn the ignition to the 1 (OFF/LOCK) position. The horn will chirp once to confirm the procedure is complete.

### **Central locking and unlocking feature**

Your vehicle's keys are designed to lock and unlock the driver's door, as well as open the trunk.

## Locks and Security

- The driver's door is unlocked when the key is inserted in the driver door key cylinder and turned to the unlock position. The driver's door is locked when the key is inserted in the driver door key cylinder and turned to the lock position.

**Note:** Locking the driver door with the key does not lock the passenger door. Use the power door lock control or manually lock the passenger door to ensure the vehicle is properly secured.

### **Power door trim switch inhibit (if equipped)**

This feature disables the power door lock controls if all the doors are locked and the active anti-theft system (if equipped) becomes armed. For more information concerning the active anti-theft system, refer to *Active anti-theft system (if equipped)* later in this chapter.

Once the power door trim switches are disabled, they can only become active when a valid electronic unlock event (i.e., using the remote entry transmitter) occurs.

### **Deactivating/activating the power door trim switch inhibit feature**

Before following the procedure, make sure that the ignition is in the 1 (OFF/LOCK) position and all vehicle doors are closed.

You must complete Steps 1-7 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 to the 3 (ON) position.
2. Press the power door unlock control three times.
3. Turn the ignition from the 3 (ON) to the 1 (OFF/LOCK) position.
4. Press the power door unlock control three times.
5. Turn the ignition back to the 3 (ON) position. The horn will chirp.
6. Press the lock control two times. The horn will chirp once if power door trim switch inhibit was deactivated or twice (one short and one long chirp) if the feature was activated.
7. Turn the ignition to the 1 (OFF/LOCK) position. The horn will chirp once to confirm the procedure is complete.

### **INTERIOR LUGGAGE COMPARTMENT RELEASE**

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

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

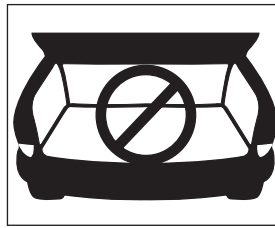
## Locks and Security

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

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



Keep vehicle doors and luggage compartment locked and keep keys and remote transmitters out of a child's reach. Unsupervised children could lock themselves in the 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.

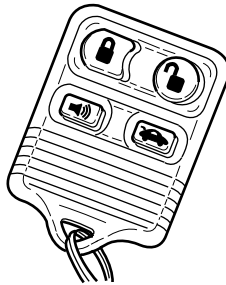
**Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

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

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



Your vehicle is equipped with a remote entry system which allows you to:

- unlock the vehicle doors without a key.
- lock all the vehicle doors without a key.
- activate the personal alarm.
- release the decklid.
- arm and disarm the active anti-theft system (if equipped).





If there are problems with the remote entry system, make sure to take **ALL remote entry transmitters** with you to the authorized dealer in order to aid in troubleshooting the problem.

### Unlocking the doors

1. Press  and release to unlock the driver's door. **Note:** The interior lamps will illuminate and the active anti-theft system (if equipped) will disarm.
2. Press  and release again within three seconds to unlock the passenger door.


## Locks and Security

### Locking the doors

1. Press  and release to lock all the doors. **Note:** The interior lamps will turn off (unless the dome lamp control is in the full-up position), and the turn signal lamps will flash if all doors, trunk and hood (if equipped with active anti-theft system) are closed and locked. If the vehicle is not equipped with the active anti-theft system, the turn signal lamps will flash if all doors and the trunk are closed and locked.
2. Press  and release again within three seconds to confirm that all the doors are closed and locked. **Note:** The doors will lock again, the horn will chirp once and the turn signal lamps will flash once more.

If any of the doors, trunk or hood (if equipped with active anti-theft system) are not properly closed the horn will make two quick chirps and the turn signal lamps will not flash. If the vehicle is not equipped with the active anti-theft system, the horn will make two quick chirps and the turn signal lamps will not flash if the doors and the trunk are not closed and locked.

### Sounding a panic alarm

Press  to activate the alarm. The horn will sound and the turn signal and interior lamps will flash for a maximum of approximately 3 minutes. Press again or turn the ignition to the 2 (ACCESSORY) or 3 (ON) position to deactivate, or wait for the alarm to timeout in 3 minutes.

**Note:** The panic alarm will only operate when the ignition is in the 1 (OFF/LOCK) position.

### Opening the trunk

Press  once to open the trunk.

- Ensure that the trunk is closed and latched before driving your vehicle. Failure to properly latch the trunk may cause objects to fall out or block the driver's rear view.

The remote entry system allows you to open the trunk while the ignition is in any position. However, if the ignition is in the 3 (ON) position and the vehicle is in motion, the trunk will not open if the vehicle is moving 3 mph (5 km/h) or faster.

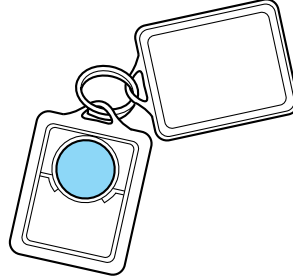
### Replacing the battery

The remote entry transmitter uses one coin type three-volt lithium battery CR2032 or equivalent.

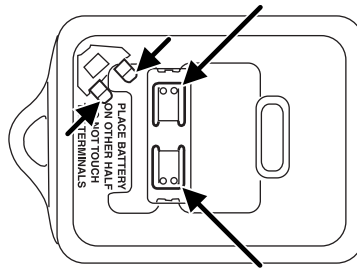
## Locks and Security

To replace the battery:

1. Twist a thin coin between the two halves of the remote entry transmitter near the key ring. **DO NOT TAKE THE RUBBER COVER AND CIRCUIT BOARD OFF THE FRONT HOUSING OF THE REMOTE ENTRY TRANSMITTER.**



2. Do not wipe off any grease on the battery terminals on the back surface of the circuit board.



3. Remove the old battery. **Note:** Please refer to local regulations when disposing of transmitter batteries.

4. Insert the new battery. Refer to the diagram inside the remote entry transmitter for the correct orientation of the battery. Press the battery down to ensure that the battery is fully seated in the battery housing cavity.

5. Snap the two halves back together.

**Note:** 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 remote entry transmitters

If you would like to have your remote entry transmitter reprogrammed because you lost one, or would like to buy additional remote entry transmitters, you can either reprogram them yourself, or take **all remote entry transmitters** to your authorized dealer for reprogramming.

## Locks and Security

### How to reprogram your remote entry transmitters

You must have **all remote entry transmitters** (maximum of four) available before beginning this procedure.

To reprogram the remote entry transmitters:

1. Ensure the vehicle is electronically unlocked.
2. Put the key in the ignition.
3. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON).

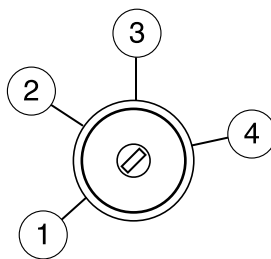
**Note:** The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.

4. Within 20 seconds press any button on the remote entry transmitter.

**Note:** If more than 20 seconds have passed you will need to start the procedure over again. The doors will lock, then unlock, to confirm that this remote entry transmitter has been programmed.

5. Repeat Step 4 to program each additional remote entry transmitter.

6. Turn the ignition to the 1 (OFF/LOCK) position after you have finished programming all of the remote entry transmitters. **Note:** After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.



### Illuminated entry

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

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

- the ignition switch is turned to the 3 (ON) position, or
- the remote transmitter lock control is pressed, or
- after 25 seconds of illumination.

The dome lamp control must **not** be set to the off position for the illuminated entry system to operate.

The inside lights will not turn off if:

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

## Locks and Security

The battery saver will shut off the interior lamps 10 minutes after the ignition has been turned to the 1 (OFF/LOCK) position and a door is left open, and in 30 minutes if the dome lamp control is left on and the ignition has been turned to the 1 (OFF/LOCK) position. The battery saver will also shut off the trunk lamps in 30 minutes if the trunk is left open.

### SECURILOCK™ PASSIVE ANTI-THEFT SYSTEM

SecuriLock™ passive anti-theft system is an engine immobilization system. This system is designed to help prevent the engine from being started unless a **coded key programmed to your vehicle** is used. The use of the wrong type of coded key may lead to a “no-start” condition.

Your vehicle comes with two coded keys; additional coded keys may be purchased from your authorized dealer. The authorized dealer can program your spare keys to your vehicle or you can program the keys yourself. Refer to *Programming spare keys* for instructions on how to program the coded key.

**Note:** 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.

**Note:** Large metallic objects, electronic devices that are used to purchase gasoline or similar items, or a second coded key on the same key chain may cause vehicle starting issues. You need to prevent these objects from touching the coded key while starting the engine. These objects will not cause damage to the coded key, but may cause a momentary issue if they are too close to the key when starting the engine. If a problem occurs, turn the ignition off, remove all objects on the key chain away from the coded key and restart the engine.

### Theft indicator

The theft indicator is located in the instrument cluster.



- When the ignition is in the 1 (OFF/LOCK) position, the indicator will flash once every 2 seconds to indicate the SecuriLock™ system is functioning as a theft deterrent.
- When the ignition is in the 3 (ON) position, the indicator will glow for 3 seconds, then turn off to indicate normal system functionality.

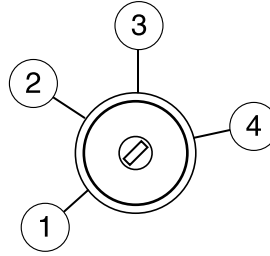


## Locks and Security

If a problem occurs with the SecuriLock<sup>™</sup> system, the indicator will flash rapidly or glow steadily when the ignition is in the 3 (ON) position. If this occurs, the vehicle should be taken to an authorized dealer for service.

### Automatic arming

The vehicle is armed immediately after switching the ignition to the 1 (OFF/LOCK) position.



The theft indicator will flash every two seconds when the vehicle is armed.



### Automatic disarming

Switching the ignition to the 3 (ON) position with a **coded key** disarms the vehicle.

- The theft indicator will illuminate for three seconds and then go out.
- If the theft indicator stays on for an extended period of time or flashes rapidly, have the system serviced by your authorized dealer.



### Replacement keys

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

Replacing coded keys can be very costly. Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. Please visit an authorized dealer to purchase additional spare or replacement keys.

## Locks and Security

### Programming spare keys

You can program your own coded keys to your vehicle. Please read and understand the entire procedure before you begin.

#### Tips:

- A maximum of eight keys can be coded to your vehicle.
- Only use Securilock<sup>SM</sup> keys.
- You must have two previously programmed coded keys (keys that already operate your vehicle's engine) and the new unprogrammed key(s) readily accessible.
- If no previously programmed coded keys are available, you must take your vehicle to your authorized dealer to have the spare key(s) programmed.

1. Insert a previously programmed coded key into the ignition.

2. Turn the ignition from the 1 (OFF/LOCK) position to the 3 (ON) position. Keep the ignition in the 3 (ON) position for at least one second, but no more than 10 seconds.

3. Turn the ignition to the 1 (OFF/LOCK) position, and remove the coded key from the ignition.

4. Within ten seconds of removing the previously programmed coded key, insert the other previously programmed coded key into the ignition.

5. Turn the ignition from the 1 (OFF/LOCK) position to the 3 (ON) position. Keep the ignition in the 3 (ON) position for at least one second but not more than 10 seconds.

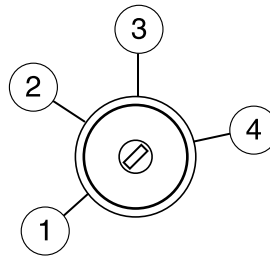
6. Turn the ignition to the 1 (OFF/LOCK) position, and remove the second key from the ignition.

7. Within twenty seconds of removing the previously programmed coded key, insert the unprogrammed key (new/valet key) into the ignition.

8. Turn the ignition from the 1 (OFF/LOCK) position to the 3 (ON) position. Keep the ignition in the 3 (ON) position for at least one second.

9. Your new unprogrammed key is now programmed.

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



## Locks and Security

then go out. If the key was not successfully programmed, it will not start your vehicle's engine and the theft indicator light will flash on and off rapidly. If failure repeats, bring your vehicle to your authorized dealer to have the new key(s) programmed.

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

### ACTIVE ANTI-THEFT SYSTEM (IF EQUIPPED)

The active anti-theft system is designed to warn you in the event of an unauthorized entry to your vehicle and is also designed to help prevent the unwanted towing of the vehicle.

When the vehicle is locked and armed, the active anti-theft system monitors the following:

- Doors
- Hood
- Trunk
- Movement inside the vehicle
- Change in vehicle inclination

**Note:** The active anti-theft system includes a motion detection system which monitors the passenger cabin and a vehicle incline sensor which detects changes in vehicle attitude.

**The interior motion detection and vehicle incline sensing systems will operate only when the vehicle is locked using the remote keyless entry transmitter or when using the power door lock control with the accompanying door open and all doors then become closed. For convertible vehicles, the convertible top must be in the fully closed and latched position for the interior motion sensing system to arm. If you lock the vehicle using the key in the driver door key cylinder, the system will monitor the doors, trunk, and hood but the motion sensing and vehicle incline sensing will not arm.**

Do not arm the interior motion detection system if movement within the vehicle is likely to occur. Additionally, do not arm the vehicle incline sensing system when the vehicle is in transport.

For proper operation of the interior motion detection system, ensure all windows are closed prior to arming the system. This will help prevent accidental alarm activation due to external influences and ensure proper interior motion detection. Additionally, the interior motion sensing system will not arm if either door or the trunk is ajar.

## Locks and Security

If there is any potential active anti-theft problem with your vehicle, ensure **ALL remote entry transmitters** are taken to an authorized dealer to aid in troubleshooting.

### Arming the system

When armed, the active anti-theft system is designed to notify you of an unauthorized entry. When unauthorized entry or towing occurs, the system will flash the turn signal lamps and interior lamps and sounds the security horn.

The system is ready to arm whenever the key is out of the ignition. Any of the following actions will arm the alarm system:

- Press the remote transmitter lock control one time to arm the system.
- Lock all doors using the interior power lock switch while the driver or passenger door is open and then becomes closed.
- Lock the driver door with the key in the key lock cylinder (this will **not** however arm the interior motion or vehicle incline sensing systems or lock the passenger door).

If all the closures (doors, trunk, hood) are closed, the turn signal lamps will flash once. If any closure is not properly closed the parklamps will not flash. **Note:** Locking the driver door with the key does not lock the passenger door. Use the power door lock control or manually lock the passenger door to ensure the vehicle is properly secured.

The system will wait 20 seconds after locking before triggering an alarm. After the 20-second pre-arm phase, the power door unlock control is disabled (for more information, refer to *Power door trim switch inhibit* section earlier in this chapter) to further protect your vehicle.

### Disarming the system

You can disarm the active anti-theft system by any of the following actions:

- Unlock the doors by using the remote entry transmitter.
- Unlock the driver's door with the key in the door lock cylinder.
- Turn the ignition to the 3 (ON) position with a programmed coded ignition key.

**Note:** Unlocking the trunk inhibits the motion and tilt sensing systems, but the system continues to monitor the doors and hood. Once the trunk becomes closed the motion and tilt sensing systems will re-arm.

## Seating and Safety Restraints

### SEATING

#### Notes:



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



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



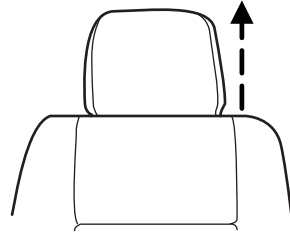
Before returning the seatback to its original position, make sure that cargo or any objects are not trapped behind the seatback. After returning the seatback to its original position, pull on the seatback to ensure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden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

#### Adjustable head restraints

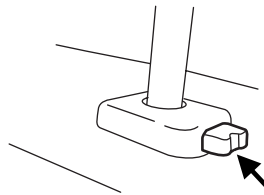
Your vehicle's seats are equipped with head restraints which are vertically adjustable. The purpose of these head restraints is to help limit head motion in the event of a rear collision. To properly adjust your head restraints, lift the head restraint so that it is located directly behind your head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

## Seating and Safety Restraints


Lift the head restraint to raise the height.




To lower the head restraint, press the button located on the driver's side post.

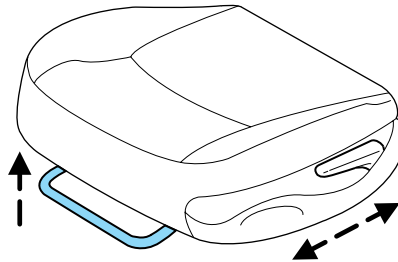


### Adjusting the front manual seat (if equipped)

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

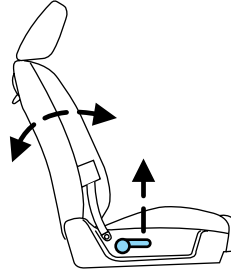
 Always drive and ride with your seatback upright and the lap belt snug and low across the hips.

Lift handle to move seat forward or backward.



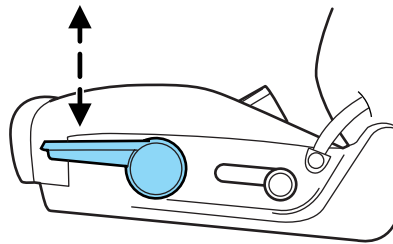
## Seating and Safety Restraints

Pull lever up to adjust the angle of the seatback.



### **Four-way seat adjust (driver side only)**

Pump the handle upwards to raise the cushion and pump downward to lower the cushion to the desired location.

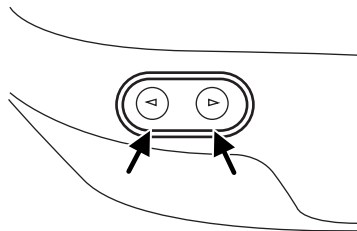


### **Using the power lumbar support (if equipped)**

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

Press one side of the control to increase lower back firmness.

Press the other side of the control to decrease lower back firmness.



## Seating and Safety Restraints

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



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



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

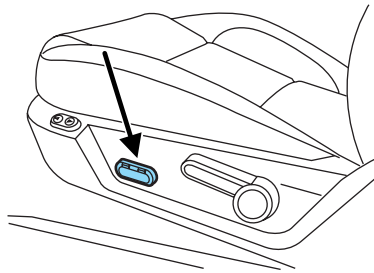


Always drive and ride with your seatback upright and the lap belt snug and low across the hips.

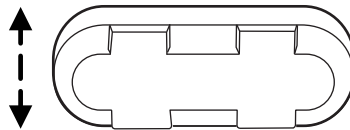


Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

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



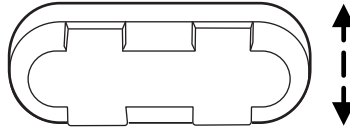
Move the switch in the direction of the arrows to raise or lower the front portion of the seat cushion.



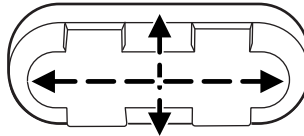


## Seating and Safety Restraints

Move the switch in the direction of the arrows to raise or lower the rear portion of the seat cushion.

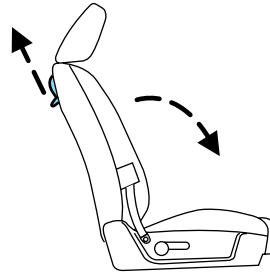


Press the switch in the direction of the arrows to move the seat forward, backward, up or down.

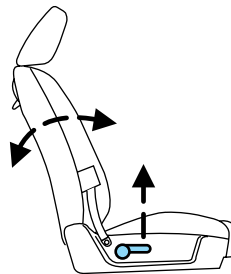


### Rear seat entry/exit

Use the seatback release to fold the back of the front seat forward for rear seat access. This release handle is located on the upper back of the front seat. The seatback locks automatically when returned to the normal position.



Use the recliner handle to return the seatback to the desired position.



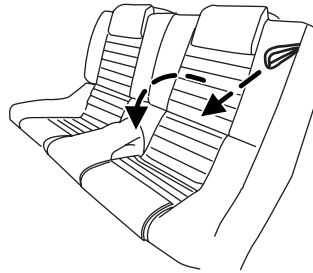
## Seating and Safety Restraints

### REAR SEATS

#### 2nd seat/split-folding rear seat

One or both rear seatbacks (coupe only) can be folded down to provide additional cargo space.

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



When raising the seatback(s), make sure you hear the seat latch into place. Pull on the seatback to ensure that it has latched.



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

### 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 airbag-related injuries. The system is able to analyze different occupant conditions and crash severity before activating the appropriate safety devices to help better protect a range of occupants in a variety of frontal crash situations.

Your vehicle's Personal Safety System™ consists of:

- Driver and passenger dual-stage airbag supplemental restraints.
- Driver and front passenger side airbags (if equipped)
- Front safety belts with pretensioners, energy management retractors, and safety belt usage sensors.
- Driver's seat position sensor.

## Seating and Safety Restraints

- Front crash severity sensor.
- Front passenger sensing system
- Restraints Control Module (RCM) with impact and safing sensors.
- Restraint system warning light and back-up tone.
- The electrical wiring for the airbags, crash sensor(s), safety belt pretensioners, front safety belt usage sensors, driver seat position sensor, 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 conditions. A collection of crash sensors provides information to the Restraints Control Module (RCM). During a crash, the RCM activates the safety belt pretensioners and/or either none, one, or both stages of the dual-stage airbag supplemental restraints based on crash severity and conditions.

The fact that the pretensioners or airbags 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 airbags 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 airbag supplemental restraints**

The dual-stage airbags offer the capability to tailor the level of airbag 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 *Airbag 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 airbags and safety belt pretensioners.

### **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 airbag based on seat

## Seating and Safety Restraints

position. The system is designed to help protect smaller drivers sitting close to the driver airbag by providing a lower airbag output level.

### **Front passenger sensing system**

For airbags 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 airbag 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 airbag. 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 front passenger sensing system can automatically turn off the passenger front airbag. The system is designed to help protect small (child size) occupants from airbag 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 passenger front airbag and side airbag (if equipped) when the passenger seat is empty to prevent unnecessary replacement of airbag(s) after a collision.

When the front passenger seat is occupied and the sensing system has turned off the passenger's frontal airbag, the "pass airbag off" indicator will light and stay lit to remind you that the front passenger frontal airbag is off. See *Front passenger sensing system* in the airbags section of this chapter.

### **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

## Seating and Safety Restraints

allows your Personal Safety System<sup>™</sup> to tailor the airbag 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 airbag to improve protection. The safety belt pretensioners can be either activated alone or, if the collision is of sufficient severity, together with the airbags.

### **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<sup>™</sup> is operational**

The Personal Safety System<sup>™</sup> 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<sup>™</sup> is not required.

The Restraints Control Module (RCM) monitors its own internal circuits and the circuits for the airbag supplemental restraints, crash sensor(s), safety belt pretensioners, front safety belt buckle sensors, and the driver seat position sensor. 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.

If any of these things happen, even intermittently, have the Personal Safety System<sup>™</sup> serviced at an authorized dealer immediately. Unless serviced, the system may not function properly in the event of a collision.

## Seating and Safety Restraints

### 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 in the back seat 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 airbag supplemental restraint system (SRS) is provided.



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



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



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



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

## Seating and Safety Restraints

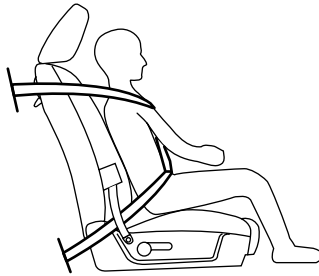


Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check seat covers and buckles before you place a child anywhere near them.

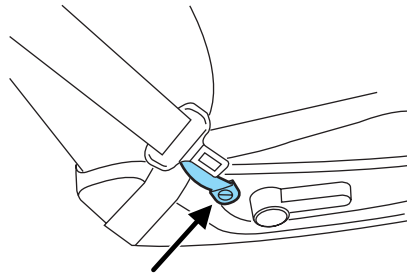
### Combination lap and shoulder belts

The belt guide is intended to improve access to the safety belt and to allow access to the rear seat.

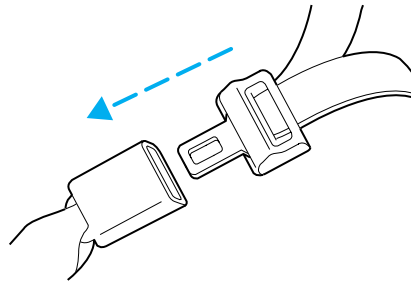
Before fastening the safety belt, make sure lower portion of the lap and shoulder belt passes underneath the belt guide at the bottom of the seatback. Pull the magnets apart to release the belt guide and move the lap and shoulder belt out of the way of passengers entering and exiting the rear seats.



The belt guide is secured to the side shield by fastening the magnet on the guide strap to the magnet on the side shield.

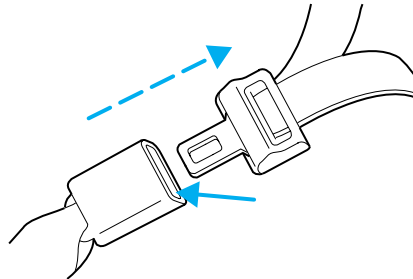


1. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.




## Seating and Safety Restraints


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




### Energy Management Feature

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

 After any vehicle collision, the safety belt system at all outboard seating positions (except driver, which has no “automatic locking retractor” feature) must be checked by an authorized dealer to verify that the “automatic locking retractor” feature for child seats is still functioning properly. In addition, all safety belts should be checked for proper function.

 **BELT AND RETRACTOR ASSEMBLY MUST BE REPLACED** if the safety belt assembly “automatic locking retractor” feature or any other safety belt function is not operating properly when checked by an authorized dealer.

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

The front 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:

#### Vehicle sensitive mode

This is the normal retractor mode, which allows free shoulder belt length adjustment to your movements and locking in response to vehicle



## Seating and Safety Restraints

movement. For example, if the driver brakes suddenly or turns a corner sharply, or the vehicle receives an impact of approximately 5 mph (8 km/h) or more, the combination safety belts will lock to help reduce forward movement of the driver and passengers.

### Automatic locking mode

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

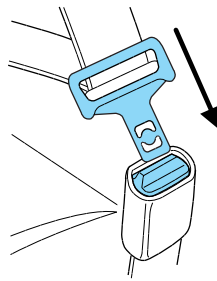
### When to use the automatic locking mode

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.

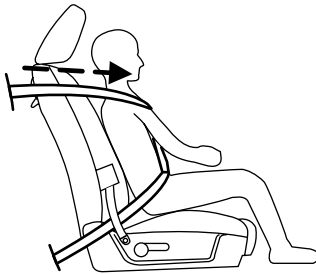
This mode should be used **any time** a child safety seat is installed in a passenger front or outboard rear seating position. Children 12 years old and under should be properly restrained in the rear seat whenever possible. Refer to *Safety restraints for children* or *Safety seats for children* later in this chapter.

### How to use the automatic locking mode

- Buckle the combination lap and shoulder belt.



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




- 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.


## Seating and Safety Restraints

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

 Ford Motor Company recommends that all safety belt assemblies and attaching hardware should be inspected by an authorized dealer 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 front passenger and rear outboard seat belt systems must be checked by an authorized dealer to verify that the “automatic locking retractor” feature for child seats is still functioning properly. In addition, all seat belts should be checked for proper function.

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

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

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

The safety 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 will remain off.

### **BeltMinder™**

**Note:** If your vehicle is built without the passenger occupant classification sensor, the passenger BeltMinder™ feature is not available.

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

The BeltMinder™ feature uses information from the passenger occupant classification sensor to determine if a front seat passenger is present and therefore potentially in need of a warning. To avoid activating the BeltMinder™ feature for objects placed in the front passenger seat, warnings will only be given to large front seat occupants as determined by the passenger occupant classification sensor.

Both the driver's and passenger's safety belt usages are monitored and either may activate the BeltMinder™ feature. The warnings are the same for the driver and the front passenger. If the BeltMinder™ warnings have expired (warnings for approximately 5 minutes) for one occupant (driver or front passenger), the other occupant can still activate the BeltMinder™ feature.

## Seating and Safety Restraints

<b>If...</b>	<b>Then...</b>
The driver's and front passenger's safety belts are buckled before the ignition switch is turned to the ON position or less than 1-2 minutes have elapsed since the ignition switch has been turned ON...	The BeltMinder <sup>™</sup> feature will not activate.
The driver's or front passenger's safety belt is not buckled when the vehicle has reached at least 3 mph (5 km/h) and 1-2 minutes have elapsed since the ignition switch has been turned to ON...	The BeltMinder <sup>™</sup> 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 the safety belts are buckled.
The driver's or front passenger's safety belt becomes unbuckled for approximately 1 minute while the vehicle is traveling at least 3 mph (5 km/h) and more than 1-2 minutes have elapsed since the ignition switch has been turned to ON...	The BeltMinder <sup>™</sup> 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 the safety belts are buckled.

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

## Seating and Safety Restraints

Reasons given...	Consider...
"Crashes are rare events"	<b>36700 crashes occur every day.</b> The more we drive, the more we are exposed to "rare" events, even for good drivers. <i>1 in 4 of us will be seriously injured in a crash during our lifetime.</i>
"I'm not going far"	<b>3 of 4</b> fatal crashes occur within <b>25</b> miles (40 km) 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 <sup>™</sup> reminds us to take a few seconds to buckle up.
"Safety belts don't work"	<b>Safety belts</b> , when used properly, <b>reduce risk of death</b> to front seat occupants by <b>45% in cars</b> , and by <b>60% in light trucks</b> .
"Traffic is light"	<b>Nearly 1 of 2 deaths occur in single-vehicle crashes</b> , many when no other vehicles are around.
"Belts wrinkle my clothes"	Possibly, but a serious crash can do much more than wrinkle your clothes, particularly if you are unbelted.
"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.

## Seating and Safety Restraints

Reasons given...	Consider...
"I have an airbag"	Airbags 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 BeltMinder™ chime. Sitting on the safety belt will increase the risk of injury in an accident. To disable (one-time) or deactivate the BeltMinder™ feature please follow the directions stated below.

### **One time disable**

If at any time the driver/front passenger quickly buckles then unbuckles the safety belt for that seating position, the BeltMinder™ is disabled for the current ignition cycle. The BeltMinder™ feature will enable during the same ignition cycle if the occupant buckles and remains buckled for approximately 30 seconds. Confirmation is not given for the one time disable.

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

**The driver and front passenger BeltMinder™ are deactivated/activated independently. When deactivating/activating one seating position, do not buckle the other position as this will terminate the process.**

*Read Steps 1 - 4 thoroughly before proceeding with the deactivation/activation programming procedure.*

**Note:** The driver and front passenger BeltMinder™ features must be disabled/enabled separately. Both cannot be disabled/enabled during the same key cycle.

The driver and front passenger BeltMinder™ features can be deactivated/activated by performing the following procedure:

Before following the procedure, make sure that:

- The parking brake is set

## Seating and Safety Restraints

- The gearshift is in P (Park) (automatic transmission)
- The ignition switch is in the OFF position
- The driver and front passenger safety belts are unbuckled



To reduce the risk of injury, do not deactivate/activate the BeltMinder™ 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 minute)
  - Step 3 must be completed within 50 seconds after the safety belt warning light turns off.
3. For the seating position being disabled, at a moderate speed, buckle then unbuckle the safety belt 9 times, ending in the unbuckled state. (Step 3 must be completed within 50 seconds after the safety belt warning light turns off.)
  - After Step 3, the restraint system warning light (airbag light) will be turned on for three seconds.
4. Within 10 seconds of the light turning on, at a moderate speed, buckle then unbuckle the safety belt.
  - This will disable the BeltMinder™ feature for that seating position if it is currently enabled. As confirmation, the restraint system warning light will flash 4 times per second for 3 seconds.
  - This will enable the BeltMinder™ feature for that seating position if it is currently disabled. As confirmation, the restraint system warning light will flash 4 times per second for 3 seconds, followed by 3 seconds with the light off, then followed by the restraint system warning light flashing 4 times per second for 3 seconds again.

### Safety belt extension assembly

If the safety belt is too short when fully extended, there is a 8 inch (20 cm) safety belt extension assembly that can be added (part number 611C22). This assembly can be obtained from an authorized 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.

## Seating and Safety Restraints



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

### Safety belt maintenance

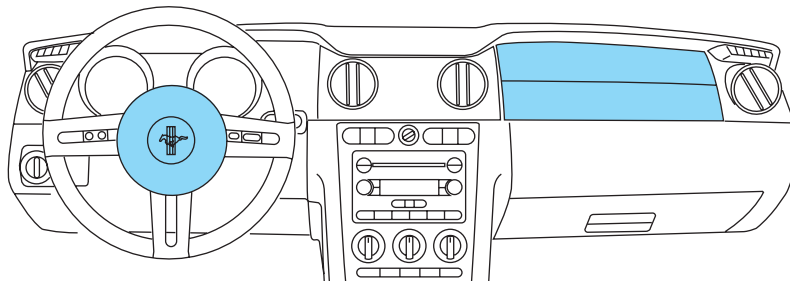
Inspect the safety belt systems periodically to make sure they work properly and are not damaged. Inspect the safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All safety belt assemblies, including retractors, buckles, front safety belt buckle assemblies, buckle support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

For proper care of soiled safety belts, refer to *Interior* in the *Cleaning* chapter.

### AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

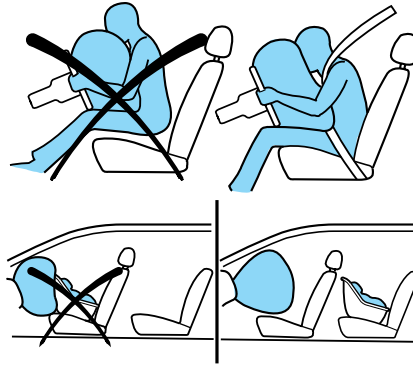






## Seating and Safety Restraints


### Important SRS precautions


The SRS is designed to work with the safety belt to help protect the driver and right front passenger from certain upper body injuries. Airbags DO NOT inflate slowly; there is a risk of injury from a deploying airbag.



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


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

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

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

To properly position yourself away from the airbag:

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

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

## Seating and Safety Restraints



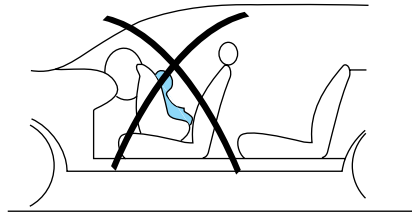
Do not attempt to service, repair, or modify the airbag supplemental restraint systems or its fuses. See your authorized dealer.



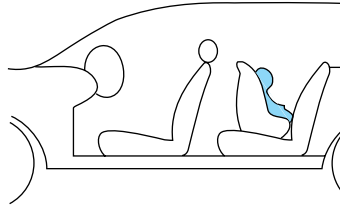
Modifying or adding equipment to the front end of the vehicle (including frame, bumper, front end body structure and tow hooks) may affect the performance of the airbag system, increasing the risk of injury. Do not modify the front end of the vehicle.

### Children and airbags

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.



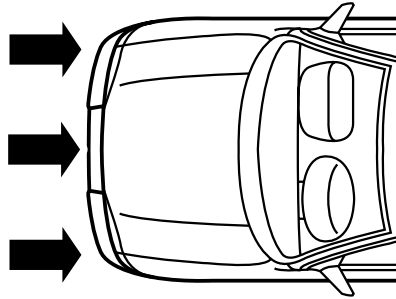
Airbags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.



## Seating and Safety Restraints

### How does the airbag supplemental restraint system work?

The airbag SRS is designed to activate when the vehicle sustains a longitudinal deceleration sufficient to cause the airbag sensors to close an electrical circuit that initiates airbag inflation. The fact that the airbags did not inflate in a collision does not mean that something is wrong with the system. Rather, it means the forces were not sufficient enough to cause activation. Airbags are designed to inflate in frontal and near-frontal collisions, not rollover, side-impact, or rear-impacts unless the collision causes sufficient longitudinal deceleration.



The airbags inflate and deflate rapidly upon activation. After airbag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder or sodium compounds which may irritate the skin and eyes, but none of the residue is toxic.



While the SRS is designed to help reduce serious injuries, contact with a deploying airbag may also cause abrasions, swelling or temporary hearing loss. Because airbags must inflate rapidly and with considerable force, there is the risk of death or serious injuries such as fractures, facial and eye injuries or internal injuries, particularly to occupants who are not properly restrained or are otherwise out of position at the time of airbag deployment. It is extremely important that occupants be properly restrained as far away from the airbag module as possible while maintaining vehicle control.

The SRS consists of:

- driver and passenger airbag modules (which include the inflators and airbags)
- one or more impact and safing sensors

## Seating and Safety Restraints

- a readiness light and tone
- a diagnostic module
- and the electrical wiring which connects the components

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



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



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

### Front passenger sensing system

The front passenger sensing system will turn off the front passenger's frontal airbag under certain conditions. For side airbag equipped vehicles, the front passenger sensing system will turn off the passenger seat side airbag if the seat is empty (unless for some reason the safety belt is properly buckled). The front passenger sensing system works with sensors that are part of the front passenger's seat and safety belt. The sensors are designed to detect the presence of a properly-seated occupant and determine if the front passenger's frontal airbag should be enabled (may inflate) or not.

The front passenger sensing system is designed to meet the regulatory requirements of Federal Motor Vehicle Safety Standard (FMVSS) 208 and is designed to turn off the front passenger's frontal airbag if:

- the front passenger seat is unoccupied, or has small/medium objects in the front seat,
- the system determines that an infant is present in a rear-facing infant seat that is installed according to the manufacturer's instructions,
- the system determines that a small child is present in a forward-facing child restraint that is installed according to the manufacturer's instructions,
- the system determines that a small child is present in a booster seat,
- a front passenger takes his/her weight off of the seat for a period of time,

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## Seating and Safety Restraints

- A smaller person, such as a child who has outgrown child restraints, or a small adult occupies the front passenger seat.



Even with the front passenger sensing system, children 12 and under should be properly restrained in the back seat.

When the front passenger seat is occupied and the sensing system has turned off the passenger's frontal airbag, the "passenger airbag off" or "pass airbag off" indicator will light and stay lit to remind you that the front passenger frontal airbag is off. When the front passenger seat is not occupied (empty seat) or in the event that the front passenger frontal airbag is enabled (may inflate), the indicator light will be unlit.



The "pass airbag off" indicator light is located on the top right corner of the center stack of the instrument panel above the radio. To confirm the indicator light is functional, it will momentarily illuminate when the ignition is turned to the ON position.

The front passenger sensing system is designed to turn off the front passenger's frontal airbag when a rear facing infant seat, a forward-facing child restraint, or a booster seat is detected. If the child restraint has been installed and the indicator is not lit, then turn the vehicle off, remove the child restraint from the vehicle and reinstall the restraint following the child restraint manufacturer's directions.


The front passenger sensing system is designed to enable (may inflate) the right front passenger's frontal airbag anytime the system senses that a person of adult size is sitting properly in the front passenger seat. When the passenger sensing system has allowed the airbag to be enabled, the indicator will be unlit and stay unlit to remind you that the airbag is enabled (may inflate).

If a person of adult-size is sitting in the front passenger's seat, but the "passenger airbag off" or "pass airbag off" indicator is lit, it is possible that the person isn't sitting properly in the seat. If this happens, turn the vehicle off and ask the person to place the seatback in the full upright position, sit upright in the seat, centered on the seat cushion, with the person's legs comfortably extended. Restart the vehicle and have the person remain in this position for about two minutes. This will allow the system to detect that person and enable the passenger's airbag. If the indicator lamp remains lit even after this, the occupant should be advised to ride in the rear seat.

After all occupants have adjusted their seats and put on safety belts, it's very important that they continue to sit upright with their back against

## Seating and Safety Restraints

the seatback, with their feet comfortably extended on the floor while the vehicle is still in motion. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.


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

The front passenger sensing system may detect small or medium objects placed on the seat cushion. For most objects that are in the front passenger seat, the passenger airbag will be disabled. Even though the passenger airbag is disabled, the "pass airbag off" light may or may not be illuminated according to the table below.

Objects	Pass Airbag Off Indicator Light	Passenger Airbag
Empty seat	Unlit	Disabled
Small (i.e. 3 ring binder, small purse, bottled water)	Unlit	Disabled
Medium (i.e. heavy briefcase, fully packed luggage)	Lit	Disabled
Empty seat, Small or medium object with safety belt buckled	Lit	Disabled

In case there is a problem with the passenger sensing system, the airbag readiness light in the instrument cluster will stay lit. DO NOT attempt to repair or service the system; take your vehicle immediately to the authorized dealer.



 The front passenger airbag is not designed to offer protection to an occupant in the center seating position.

## Seating and Safety Restraints



An out of position front center occupant could affect the decision of the front passenger sensing system.

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



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

### Side airbag system (if equipped)



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



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



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



Do not attempt to service, repair, or modify the airbag SRS, its fuses or the seat cover on a seat containing an airbag. See your authorized dealer.



All occupants of the vehicle should always wear their safety belts even when an airbag SRS is provided.

### **How does the side airbag system work?**

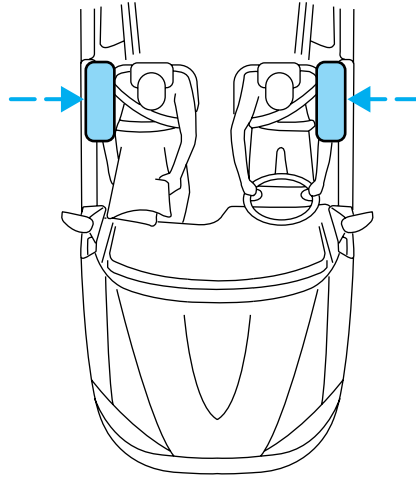
The design and development of the side airbag system included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working

## Seating and Safety Restraints

Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags.

The side airbag system consists of the following:

- An inflatable nylon bag (airbag) 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 airbags.
- Two crash sensors located under the outboard side of the front seats, attached to the floor.



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

The side airbags are fitted on the outboard side of the seatbacks of the front seats. In certain lateral collisions, the airbag on the side affected by the collision will be inflated. The front passenger sensing system will turn off the passenger seat side airbag if the seat is empty. The airbag was designed to inflate between the door panel and occupant to further enhance the protection provided to occupants in side impact collisions.

The airbag SRS is designed to activate when the vehicle sustains lateral deceleration sufficient to cause the sensors to initiate airbag inflation.

The fact that the airbags 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 airbags 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.



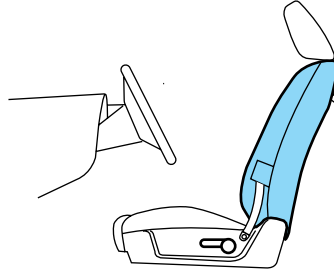
Several air bag system components get hot after inflation. Do not touch them after inflation.



## Seating and Safety Restraints



If the side airbag has deployed, **the airbag will not function again. The side airbag system (including the seat) must be inspected and serviced by an authorized dealer**. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a 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 *Airbag readiness* section in the *Instrument Cluster* chapter. Routine maintenance of the airbag is not required.

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

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



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

### Disposal of airbags and airbag equipped vehicles

See authorized dealer. Airbags **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 *Airbag supplemental restraint system (SRS)* in this chapter for special instructions about using airbags.

### Important child restraint precautions

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

## Seating and Safety Restraints

or younger and who weigh 40 lb. [18 kg] or less) ride in your vehicle, you must put them in safety seats made especially for children. Many states require that children use approved booster seats until they are eight years old. Check your local and state or provincial laws for specific requirements regarding the safety of children in your vehicle. 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.



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.

### 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 airbag precautions that apply to adult passengers in your vehicle.

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



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

### Child booster seats

Children outgrow a typical convertible or toddler seat when they weigh 40 lb. (18 kg) and are around 4 years of age. Although the lap/shoulder belt will provide some protection, these children are still too small for lap/shoulder belts to fit properly, which could increase the risk of serious injury.

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

## Seating and Safety Restraints

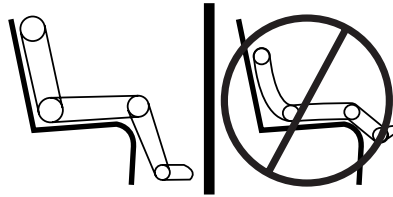
Booster seats position a child so that safety belts fit better. They lift the child up so that the lap belt rests low across the hips and the knees bend comfortably. Booster seats also make the shoulder belt fit better and more comfortably for growing children.

### When children should use booster seats

Children need to use booster seats from the time they outgrow the toddler seat until they are big enough for the vehicle seat and lap/shoulder belt to fit properly. Generally this is when they weigh about 80 lb. (36 kg) (about 8 to 12 years old).

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

- Can the child sit all the way back against the vehicle seat back with knees bent comfortably at the edge of the seat without slouching?



- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

### Types of booster seats

There are two types of belt-positioning booster seats:

- Those that are backless.

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



## Seating and Safety Restraints

- Those with a high back.

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



Both can be used in any vehicle in a seating position equipped with lap/shoulder belts if your child is over 40 lb. (18 kg).

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

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

### The importance of shoulder belts

Using a booster without a shoulder belt increases the risk of a child's head hitting a hard surface in a collision. For this reason, you should never use a booster seat with a lap belt only. It is best to use a booster seat with lap/shoulder belts in the back seat- the safest place for children to ride.



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



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



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

## Seating and Safety Restraints

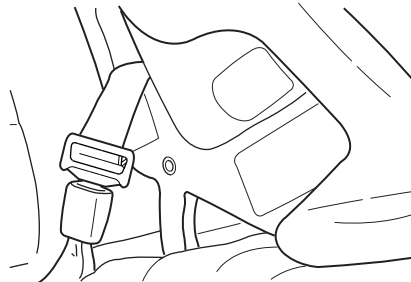
### SAFETY SEATS FOR CHILDREN

#### Child and infant or child safety seats

Use a safety seat that is recommended for the size and weight of the child. Carefully follow all of the manufacturer's instructions with the safety seat you 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 *Airbag supplemental restraint system (SRS)* section in this chapter.
- Use the correct safety belt buckle for that seating position (the buckle closest to the direction the tongue is coming from).
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode* (passenger side front and outboard rear seating positions) (if equipped) section in this chapter.
- LATCH lower anchors are recommended for use by children up to 48 lb. (22 kg) in a child restraint. Top tether anchors can be used for children up to 60 lb. (27 kg) in a child restraint, and to provide upper torso restraint for children up to 80 lb. (36 kg) using an upper torso harness and a belt-positioning booster.




Ford recommends the use of a child safety seat having a top tether strap. Install the child safety seat in a seating position with LATCH and tether anchors. For more information on top tether straps and anchors, refer to *Attaching safety seats with tether straps* in this chapter. For more information of LATCH anchors refer to *Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments* in this chapter.

## Seating and Safety Restraints

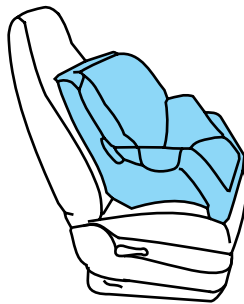
 Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.


 Rear-facing child seats or infant carriers should never be placed in the front seats.

### Installing child safety seats with combination lap and shoulder belts

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

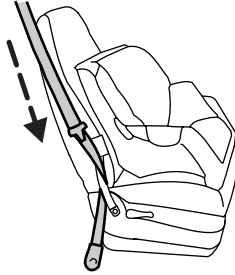
1. Position the child safety seat in a seat with a combination lap and shoulder belt.



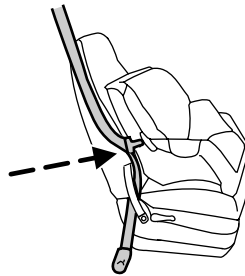
 Children 12 and under should be properly restrained in the rear seat whenever possible.

## Seating and Safety Restraints

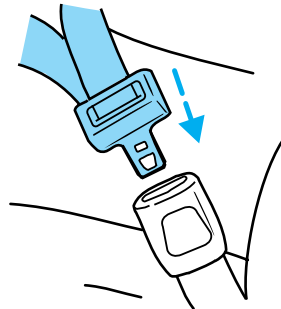
2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



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

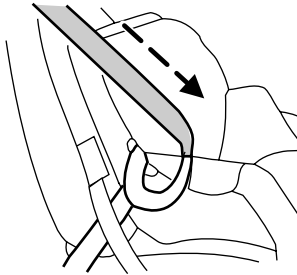


4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



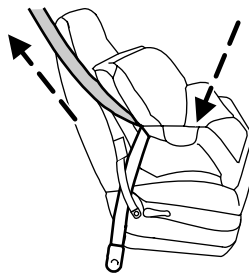
## Seating and Safety Restraints

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.



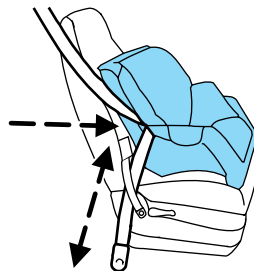
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

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



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

9. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward. There should be no more than one inch of movement for proper installation.



10. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 2 through 9.

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



## Seating and Safety Restraints


### Attaching child safety seats with tether straps

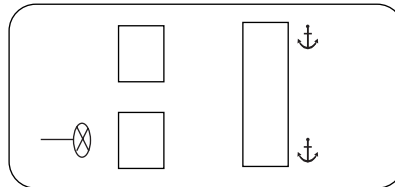
Most new forward-facing child safety seats include a tether strap which goes over the back of the seat and hooks to an anchoring point. Tether straps are available as an accessory for many older safety seats. Contact the manufacturer of your child seat for information about ordering a tether strap.

The rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats and below the rear window behind the speakers (coupe) or rearward of the seatback in the convertible top sling (convertible).

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

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

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



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

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

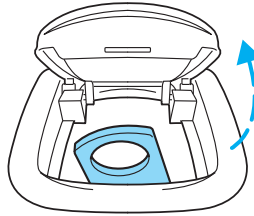
3. Locate the correct anchor for the selected seating position as shown previously.



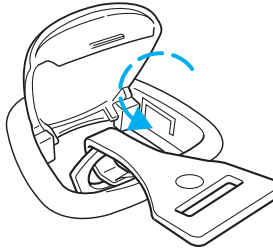
## Seating and Safety Restraints

### **For Coupe only:**

4. Open the tether anchor covers.



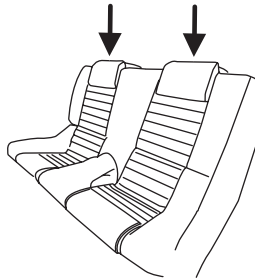
5. Clip the tether strap to the anchor as shown.



### **For Convertible only:**

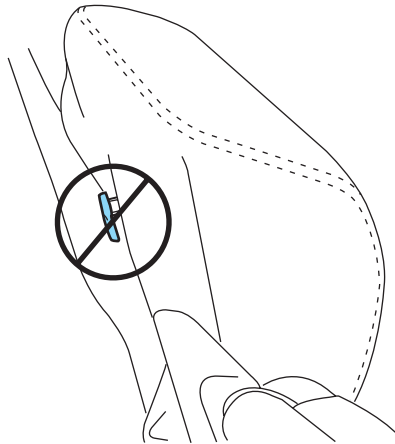
The tether anchors on the convertible are located rearward of the seatback in the convertible top sling.

**Note:** For easier access, attach the tether with the convertible top up.



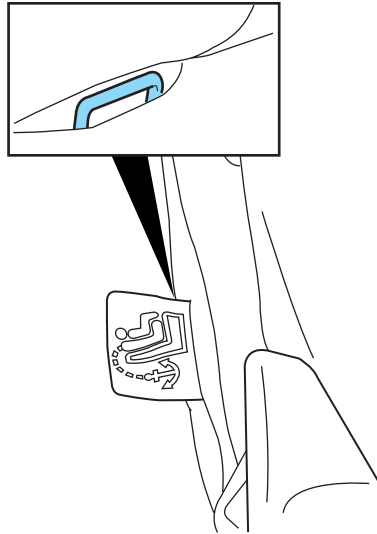
## Seating and Safety Restraints

**Note:** The attachments for the convertible boot located on the back of the head restraints are not tether anchors.

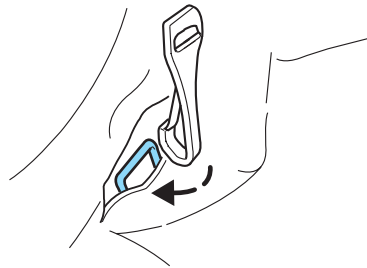


## Seating and Safety Restraints

4. Access tether anchors located behind the seatback under the vinyl tag marked with the child tether anchor symbol.



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. Install the child safety seat tightly using the LATCH anchors or safety belts. Follow the instructions in this chapter.

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

## Seating and Safety Restraints



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

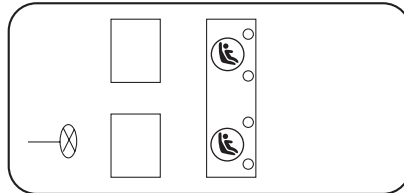
### Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments

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

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



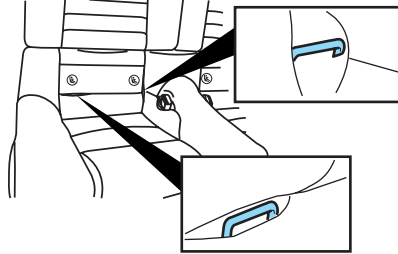
The center of the rear seat is **NOT** designed as a seating position. The LATCH anchors were not designed to be used with a child seat in the center position and there is no tether anchor available at the center. Attempted use of the center as a seating position will increase the risk of injury or death in the event of a collision.



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

## Seating and Safety Restraints

Locator symbols on the seat cushion indicate the seat has LATCH anchors. The LATCH anchors are located behind the slits in the seat cushion.



Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments.



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

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

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

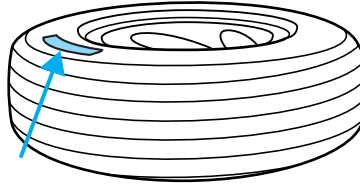


If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

## Tires, Wheels and Loading

### INFORMATION ABOUT UNIFORM TIRE QUALITY GRADING

New vehicles are fitted with tires that have a rating on them called Tire Quality Grades. The Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:



- **Treadwear 200 Traction AA Temperature A**

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic tires for use on passenger cars. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104(c)(2).

**U.S. Department of Transportation-Tire quality grades:** The U.S. Department of Transportation requires Ford Motor Company to give you the following information about tire grades exactly as the government has written it.

#### **Treadwear**

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear 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.

## Tires, Wheels and Loading



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.



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.

### TIRES

Tires are designed to give many thousands of miles of service, but they must be maintained in order to get the maximum benefit from them.

#### Glossary of tire terminology

- **Tire label:** A label showing the OE (Original Equipment) tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.
- **Tire Identification Number (TIN):** A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture.
- **Inflation pressure:** A measure of the amount of air in a tire.
- **Standard load:** A class of P-metric or Metric tires designed to carry a maximum load at 35 psi [37 psi (2.5 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.
- **Extra load:** A class of P-metric or Metric tires designed to carry a heavier maximum load at 41 psi [43 psi (2.9 bar) for Metric tires].

120



## Tires, Wheels and Loading

Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

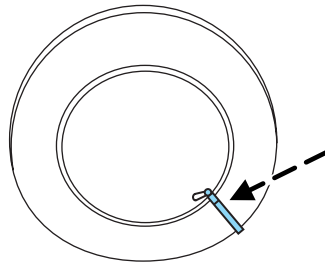
- **kPa:** Kilopascal, a metric unit of air pressure.
- **PSI:** Pounds per square inch, a standard unit of air pressure.
- **Cold inflation pressure:** The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mile (1.6 km).
- **Recommended inflation pressure:** The cold inflation pressure found on the Safety Compliance Certification Label located on the B-Pillar or the edge of the driver's door.
- **B-pillar:** The structural member at the side of the vehicle behind the front door.
- **Bead area of the tire:** Area of the tire next to the rim.
- **Sidewall of the tire:** Area between the bead area and the tread.
- **Tread area of the tire:** Area of the perimeter of the tire that contacts the road when mounted on the vehicle.
- **Rim:** The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

### INSPECTING AND INFLATING YOUR TIRES

Safe operation of your vehicle requires that your tires are properly inflated. Remember that a tire can lose up to half of its air pressure without appearing flat.

Every day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires, and adjust if required.

At least once a month and before long trips, inspect each tire and check the tire pressure with a tire gauge (including spare, if equipped). Inflate all tires to the inflation pressure recommended by Ford Motor Company.



## Tires, Wheels and Loading

### Inspecting your tires

Periodically inspect the tire treads for uneven or excessive wear and remove stones, nails, glass or other objects that may be wedged in the tread grooves. Check for holes or cuts that may permit air leakage from the tire and make necessary repairs.

Also inspect the tire sidewalls for cuts, bruises and other damage. If internal damage to the tire is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced. For your safety, tires that are damaged should not be used because they are more likely to blow out or fail. Tires can be damaged during off-road use, so inspection after off-road use is also recommended.

### Inflating your tires

Use a tire gauge to check the tire inflation pressure, including the spare (if equipped), at least monthly and before long trips. You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate. Ford Motor Company recommends the use of a digital or dial-type tire pressure gauge rather than a stick-type tire pressure gauge.

Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven treadwear patterns.



Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or "blowout", with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat buildup and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

Always inflate your tires to the Ford recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. The Ford recommended tire inflation pressure is found on the Safety Compliance Certification Label which is located on the B-Pillar or the edge of the driver's door. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

## Tires, Wheels and Loading

**Maximum Permissible Inflation Pressure** is the tire manufacturer's maximum permissible pressure and/or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the Safety Compliance Certification Label.

When weather temperature changes occur, tire inflation pressures also change. A 10° F (6° C) temperature drop can cause a corresponding drop of 1 psi (7 kPa) in inflation pressure. Check your tire pressures frequently and adjust them to the proper pressure which can be found on the Safety Compliance Certification Label.

If you are checking tire pressure when the tire is hot, (i.e. driven more than 1 mile [1.6 km]), never "bleed" or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly under-inflated.

To check the pressure in your tire(s):

1. Make sure the tires are cool, meaning they are not hot from driving even a mile.

**Note:** If you have to drive a distance to get air for your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump. It is normal for tires to heat up and the air pressure inside to go up as you drive. Never "bleed" or reduce air pressure when tires are hot.

2. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure with the tire gauge.
3. Add enough air to reach the recommended air pressure.

**Note:** If you overfill the tire, release air by pushing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.

4. Replace the valve cap.

5. Repeat this procedure for each tire, including the spare.

**Note:** Some spare tires require higher inflation pressure than the other tires. Check the Tire Label on the B pillar or the edge of the driver's door for the recommended spare tire pressure.


6. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.

7. Check the sidewalls to make sure there are no gouges, cuts or bulges.

## Tires, Wheels and Loading

### TIRE REPLACEMENT REQUIREMENTS

Your vehicle is equipped with tires designed to provide a safe ride and handling capability.

 Only use replacement tires and wheels that are the same size and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally the use of non-recommended tires and wheels could cause steering, suspension, axle or transfer case/power transfer unit failure. If you have questions regarding tire replacement, see an authorized dealer.

Make sure all tires and wheels on the vehicle are of the same size, type, tread design, brand, load-carrying capacity and speed rating because it can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.


**Important:** Remember to replace the spare tire when you replace the road tires on your vehicle. Even if it has never been used, the spare tire should be replaced because tires degrade over time.

**Important:** Remember to replace the wheel air valves when the road tires are replaced on your vehicle.

### CHANGING THE TIRES

If you get a flat tire while driving:

- do not brake heavily.
- gradually decrease the vehicle's speed.
- hold the steering wheel firmly.
- slowly move to a safe place on the side of the road.

 The use of tire sealants is not recommended and may damage your tires.

## Tires, Wheels and Loading

### Temporary Emergency Spare Tire Information

Your vehicle may be equipped with a temporary emergency spare tire. This tire may be a T-type/mini-spare tire which will have the words “Temporary Use Only” molded into the tire sidewall or it may be a full size dissimilar spare tire/wheel that is different in brand, size or appearance from the road tire, which will be identified with a “Caution” label on the wheel. Both of these spare tires are considered “temporary”. Replace these temporary emergency spare tires on the vehicle with a tire of the same size, speed rating and load carrying capacity as the other road tires as soon as possible.

When driving with the temporary emergency spare tire **do not:**

- Exceed 50 mph (80 km/h)
- Exceed 2000 miles (3200 km)
- Load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label
- Tow a trailer
- Use snow chains
- Use more than one temporary emergency spare tire
- Use commercial car washing equipment
- Try to repair the temporary emergency spare tire

Use of a temporary emergency spare tire at any one wheel location can lead to impairment of the following:

- Handling, stability and braking performance
- Comfort and noise
- Ground clearance and parking at curbs
- Winter weather driving capability
- Wet weather driving capability

### How to change a flat tire



To help 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.

## Tires, Wheels and Loading



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



Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

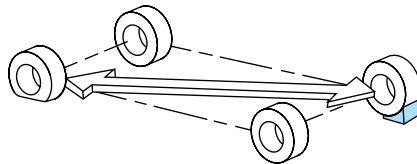
Before changing the tire:

1. Park on a level surface.
2. Activate the hazard flashers.
3. Place the gearshift lever in P (Park) (automatic transmission) or R (Reverse) (manual transmission).
4. Set the parking brake.
5. Turn off the ignition.

To change the tire:

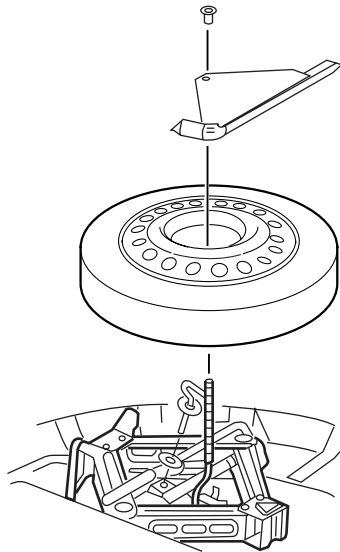
**Note:** Passengers should not remain in the vehicle when the vehicle is being jacked.

1. Block both the front and rear of the wheel diagonally opposite the flat tire. For example, if the left front tire is flat, block the right rear wheel.

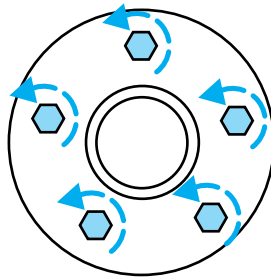


## Tires, Wheels and Loading

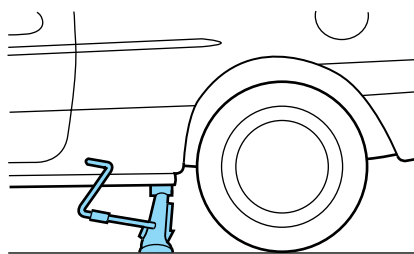
2. Remove the lug wrench, spare tire and jack.



3. Remove the center ornament (if equipped) from the wheel. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.




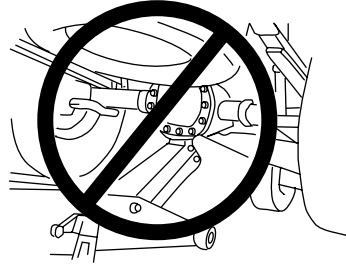
4. Put the jack in the jack notch next to the tire you are changing. Turn the jack handle clockwise until the wheel is completely off the ground.



## Tires, Wheels and Loading

### Never use the rear differential as a jacking point.

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

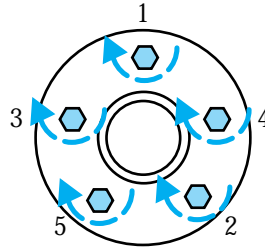


5. Remove the lug nuts with the lug wrench.
6. Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.

If you are using the temporary tire, the lug nut washers will not appear to be flush with the rim. This is normal only when using the temporary spare tire.

7. Lower the wheel by turning the jack handle counterclockwise.

8. Remove the jack and fully tighten the lug nuts in the order shown. Refer to *Wheel lug nut torque specifications* later in this chapter for the proper lug nut torque specification.



9. Put flat tire, wheel ornament (if equipped), jack and lug wrench away. Make sure jack is fastened so it does not rattle when you drive.
10. Unblock the wheels.



## Tires, Wheels and Loading

### WHEEL LUG NUT TORQUE SPECIFICATIONS

Retighten the lug nuts to the specified torque at 500 miles (800 km) after any wheel disturbance (tire rotation, changing a flat tire, wheel removal, etc.).

Bolt size	Wheel lug nut torque*	
	lb.ft.	N•m
1/2 x 20	100	135

\* Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.



When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Ensure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while the vehicle is in motion, resulting in loss of control.

### INFORMATION CONTAINED ON THE TIRE SIDEWALL

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

## Tires, Wheels and Loading

### Information on “P” type tires

P215/65R15 95H is an example of a tire size, load index and speed rating. The definitions of these items are listed below. (Note that the tire size, load index and speed rating for your vehicle may be different from this example.)

1. **P:** Indicates a tire, designated by the Tire and Rim Association (T&RA), that may be used for service on cars, SUVs, minivans and light trucks.

**Note:** If your tire size does not begin with a letter this may mean it is designated by either ETRTO (European Tire and Rim Technical Organization) or JATMA (Japan Tire Manufacturing Association).

2. **215:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

3. **65:** Indicates the aspect ratio which gives the tire’s ratio of height to width.

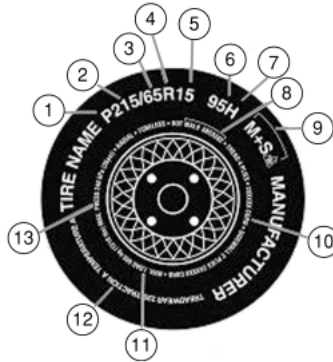
4. **R:** Indicates a “radial” type tire.

5. **15:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

6. **95:** Indicates the tire’s load index. It is an index that relates to how much weight a tire can carry. You may find this information in your *Owner’s Guide*. If not, contact a local tire dealer.

**Note:** You may not find this information on all tires because it is not required by federal law.

7. **H:** Indicates the tire’s speed rating. The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time under a standard condition of load and inflation pressure. The tires on your vehicle may operate at different conditions for load and inflation pressure. These speed ratings may need to be adjusted for the difference in conditions. The ratings range from 81 mph (130 km/h) to 186 mph (299 km/h). These ratings are listed in the following chart.



## Tires, Wheels and Loading

**Note:** You may not find this information on all tires because it is not required by federal law.

Letter rating	Speed rating - mph (km/h)
M	81 mph (130 km/h)
N	87 mph (140 km/h)
Q	99 mph (159 km/h)
R	106 mph (171 km/h)
S	112 mph (180 km/h)
T	118 mph (190 km/h)
U	124 mph (200 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)
W	168 mph (270 km/h)
Y	186 mph (299 km/h)

**Note:** For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.

**8. U.S. DOT Tire Identification Number (TIN):** This begins with the letters "DOT" and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

**9. M+S or M/S:** Mud and Snow, or

**AT:** All Terrain, or

**AS:** All Season.

**10. Tire Ply Composition and Material Used:** Indicates the number of plies or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.

**11. Maximum Load:** Indicates the maximum load in kilograms and pounds that can be carried by the tire. Refer to the Safety Compliance Certification Label, which is located on the B-Pillar or the edge of the driver's door, for the correct tire pressure for your vehicle.

## Tires, Wheels and Loading

### 12. Treadwear, Traction and Temperature Grades

- **Treadwear:** The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half (1½) times as well on the government course as a tire graded 100.
- **Traction:** The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.
- **Temperature:** The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

13. **Maximum Permissible Inflation Pressure:** Indicates the tire manufacturers' maximum permissible pressure and/or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

The tire suppliers may have additional markings, notes or warnings such as standard load, radial tubeless, etc.

## Tires, Wheels and Loading

### Additional information contained on the tire sidewall for “LT” type tires

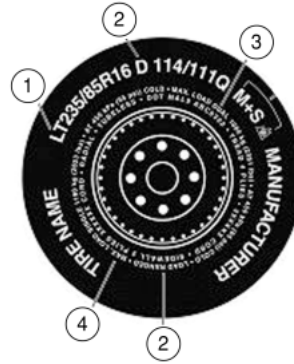
“LT” type tires have some additional information beyond those of “P” type tires; these differences are described below:

1. **LT:** Indicates a tire, designated by the Tire and Rim Association (T&RA), that is intended for service on light trucks.

2. **Load Range/Load Inflation Limits:** Indicates the tire’s load-carrying capabilities and its inflation limits.

3. **Maximum Load Dual lb. (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a dual; defined as four tires on the rear axle (a total of six or more tires on the vehicle).

4. **Maximum Load Single lb. (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a single; defined as two tires (total) on the rear axle.



## Tires, Wheels and Loading

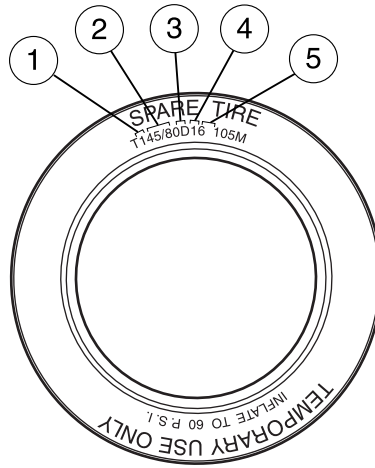
### Information on “T” type tires

“T” type tires have some additional information beyond those of “P” type tires; these differences are described below:

T145/80D16 is an example of a tire size.

**Note:** The temporary tire size for your vehicle may be different from this example.

1. **T:** Indicates a type of tire, designated by the Tire and Rim Association (T&RA), that is intended for temporary service on cars, SUVs, minivans and light trucks.
2. **145:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.
3. **80:** Indicates the aspect ratio which gives the tire’s ratio of height to width. Numbers of 70 or lower indicate a short sidewall.
4. **D:** Indicates a “diagonal” type tire.  
**R:** Indicates a “radial” type tire.
5. **16:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.



### Location of the tire label

You will find a Tire Label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver’s door. Refer to the payload description and graphic in the *Vehicle loading — with and without a trailer* section.

### TIRE CARE

Improper or inadequate vehicle maintenance can also cause tires to wear abnormally. Here are some of the important maintenance items:

#### Tire wear

Measure and inspect the tire tread on all your tires periodically. Advanced and unusual tire wear can reduce the ability of tread to grip

## Tires, Wheels and Loading

the road in adverse (wet, snowy, etc.) conditions. Visually check your tires for uneven wear, looking for high and low areas or unusually smooth areas. Also check for signs of tire damage.

When the tread is worn down to 1/16th of an inch (2 mm), tires must be replaced to prevent your vehicle from skidding and hydroplaning. Built-in treadwear indicators, or “wear bars”, which look like narrow strips of smooth rubber across the tread will appear on the tire when the tread is worn down to 1/16th of an inch (2 mm). When the tire tread wears down to the same height as these “wear bars”, the tire is worn out and should be replaced.

Inspect your tires frequently for any of the following conditions and replace them if one or more of the following conditions exist:

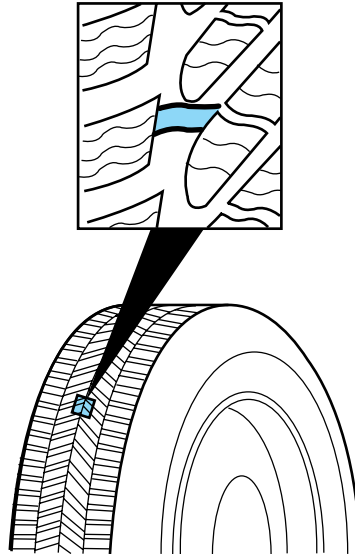
- Fabric showing through the tire rubber
- Bulges in the tread or sidewalls
- Cracks or cuts on the sidewalls
- Cracks in the tread groove
- Impact damage resulting from use
- Separation in the tread
- Separation in the sidewall
- Severe abrasion on the sidewall

If your vehicle has a leak in the exhaust system, a road tire or the spare tire may be exposed to hot exhaust temperatures requiring the tire to be replaced.

### Safety practices

Driving habits have a great deal to do with your tire mileage and safety.

- Observe posted speed limits
- Avoid fast starts, stops and turns
- Avoid potholes and objects on the road
- Do not run over curbs or hit the tire against a curb when parking



## Tires, Wheels and Loading



If your vehicle is stuck in snow, mud, sand, etc., **do not** rapidly spin the tires; spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.



Never spin the tires in excess of the 35 mph (55 km/h) point indicated on the speedometer.

### Highway hazards

No matter how carefully you drive there's always the possibility that you may eventually have a flat tire on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but your safety is more important.

If you feel a sudden vibration or ride disturbance while driving, or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage. If a tire is under-inflated or damaged, deflate it, remove wheel and replace it with your spare tire and wheel. If you cannot detect a cause, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle inspected.

### Tire and wheel alignment

A bad jolt from hitting a curb or pothole can cause the front end of your vehicle to become misaligned or cause damage to your tires. If your vehicle seems to pull to one side when you're driving, the wheels may be out of alignment. Have an authorized dealer check the wheel alignment periodically.

Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by an authorized dealer. Front wheel drive (FWD) vehicles and those with an independent rear suspension (if equipped) may require alignment of all four wheels.

The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

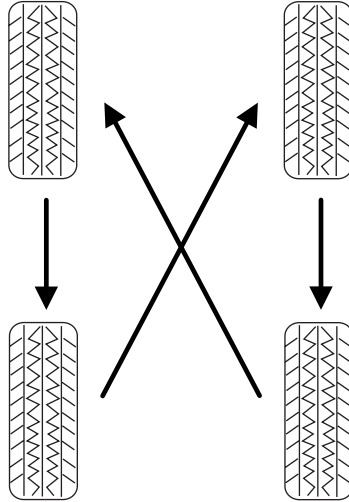
### Tire rotation

Rotating your tires at the recommended interval (as indicated in the *scheduled maintenance information* that comes with your vehicle) will help your tires wear more evenly, providing better tire performance and longer tire life. Unless otherwise specified, rotate the tires approximately every 5,000 miles (8,000 km).

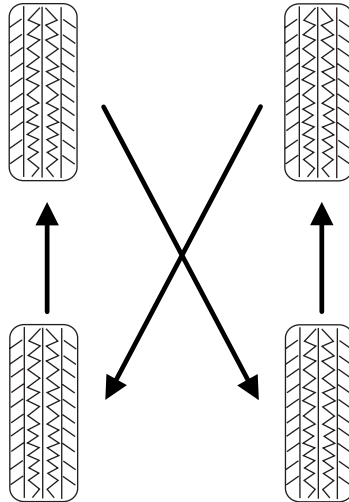


## Tires, Wheels and Loading

- Front Wheel Drive (FWD) vehicles (front tires at top of diagram)



- Rear Wheel Drive (RWD) vehicles/Four Wheel Drive (4WD)/ All Wheel Drive (AWD) vehicles (front tires at top of diagram)



## Tires, Wheels and Loading

Sometimes irregular tire wear can be corrected by rotating the tires.

**Note:** If your tires show uneven wear ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.

**Note:** Your vehicle may be equipped with a dissimilar spare tire/wheel. A dissimilar spare tire/wheel is defined as a spare tire and/or wheel that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare tire/wheel it is intended for temporary use only and should not be used in a tire rotation.

**Note:** After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.

### SNOW TIRES AND CHAINS



Driving too fast for conditions creates the possibility of loss of vehicle control. Driving at very high speeds for extended periods of time may result in damage to vehicle components.



Snow tires must be the same size and grade as the tires you currently have on your vehicle.

If your vehicle has P215/65R16 or P235/55R17 tires, they have all weather treads to provide traction in rain or snow. However, in some climates, you may need to use snow tires and chains. Use chains on the tires only in an emergency or if the law requires them.

Follow these guidelines when using snow tires and chains:

- Chains may damage aluminum wheels.
- Use only SAE Class S chains with P215/65R16 tires on the rear of the vehicle only.
- Do not use tire chains with size P235/55R17 or P255/45R18 tires. Use of SAE Class S chains or other chain types may damage your vehicle.
- 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.

## Tires, Wheels and Loading

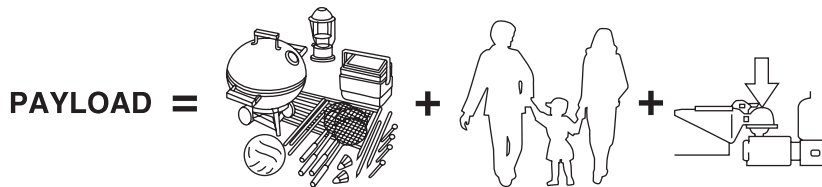
- The suspension insulation and bumpers will help prevent vehicle damage. Do not remove these components from your vehicle when using snow tires and chains.

### VEHICLE LOADING – WITH AND WITHOUT A TRAILER

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's Safety Compliance Certification Label:


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

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



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

## Tires, Wheels and Loading

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

### Example only:

TIRE AND LOAD INFORMATION			
SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION			
The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.			
SEATING CAPACITY	TOTAL: 5	FRONT: 2	REAR: 3
ORIGINAL TIRE SIZE		COLD TIRE INFLATION PRESSURE	
FRONT	P195 / 70R14	FRONT	200KPA, 29PSI
REAR	P195 / 70R14	REAR	200KPA, 29PSI
SPARE TIRE SIZE		COLD TIRE INFLATION PRESSURE	
T125/70D15		420KPA, 50PSI	

TIRE AND LOAD INFORMATION			
SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION			
RENSEIGNEMENTS RELATIFS AUX PNEUS ET À LA CHARGE			
CONSULTER LE GUIDE DU PROPRIÉTAIRE POUR DE PLUS AMPLES RENSEIGNEMENTS			
The combined weight of occupants and cargo should never exceed <sup>kg or P.M.T.</sup> lbs. <sub>kg ou P.M.T.</sub>			
La charge du véhicule (occupants et bagages) ne doit jamais dépasser <sup>kg ou P.M.T.</sup> lbs. <sub>kg ou P.M.T.</sub>			
SEATING CAPACITY	TOTAL: TS	FRONT: FS	REAR: RS
NOMBRE DE PLACES	TOTAL:	AVANT:	ARRIÈRE:
ORIGINAL TIRE SIZE		COLD TIRE INFLATION PRESSURE	
DIMENSIONS DES PNEUS D'ORIGINE		PRESSION DE GONFLAGE À FROID	
FRONT/ AVANT	FTIREXXXXXE	FRONT/ AVANT	FKPA KPA, FPS PSI
REAR/ ARRIÈRE	RTIREXXXXXE	REAR/ ARRIÈRE	RKPA KPA, RPS PSI
SPARE TIRE SIZE		COLD TIRE INFLATION PRESSURE	
DIMENSION DU PNEU SECOURS		PRESSION DE GONFLAGE À FROID	
STIREXXXXXE		SKP KPA, SPS PSI	


## Tires, Wheels and Loading



**Cargo Weight** – includes all weight added to the Base Curb Weight, including cargo and optional equipment. When towing, trailer tongue load or king pin weight is also part of cargo weight.

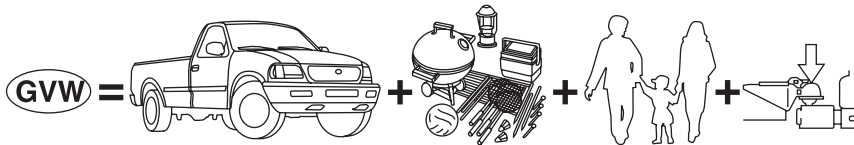
**GAW (Gross Axle Weight)** – is the total weight placed on each axle (front and rear) – including vehicle curb weight and all payload.

**GAWR (Gross Axle Weight Rating)** – is the maximum allowable weight that can be carried by a single axle (front or rear). **These numbers are shown on the Safety Compliance Certification Label located on the B-Pillar or the edge of the driver's door. The total load on each axle must never exceed its GAWR.**

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

**Note:** For trailer towing information refer to *Trailer towing* found in this chapter or the *RV and Trailer Towing Guide* provided by your authorized dealer.

## Tires, Wheels and Loading



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

**GVWR (Gross Vehicle Weight Rating)** – is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo).

**The GVWR is shown on the Safety Compliance Certification Label located on the B-Pillar or the edge of the driver's door. The GVW must never exceed the GVWR.**

Sample Safety Compliance Certification Label <small>(Refer to actual label on your vehicle)</small>			
Front GAWR	GVWR	Rear GAWR	
<b>MFD. BY FORD MOTOR CO. IN U.S.A.</b>			
DATE: 06/95	GVWR: 6250 LB/2834 KG		
FRONT GAWR: 3450 LB 1564KG	WITH 1713KG	REAR GAWR: 3777 LB	WITH
P265/75R15SL	TIRES P265/75R15SL		TIRES
15X7.5J	RIMS 15X7.5J		RIMS
AT 30 PSI COLD	AT 30 PSI COLD		
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.			
XXXXXXXXXXXX	VIN: 1FTEX14H0SKB 00000		F0018
TYPE: XXXXXXXXXXXXX			TC183
EXT PNT: XXXXXX XXXXXX			DSO
WD	TYPE-GVW	BODY	TRANS
155		REM	E
			HB
			TAPE
			SPRINGS
			MM



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

## Tires, Wheels and Loading



**GCW (Gross Combined Weight)** – is the weight of the loaded vehicle (GVW) plus the weight of the fully loaded trailer.

**GCWR (Gross Combined Weight Rating)** – is the maximum allowable weight of the vehicle and the loaded trailer – including all cargo and passengers – that the vehicle can handle without risking damage.

(Important: The towing vehicles' braking system is rated for operation at GVWR, not at GCWR. Separate functional brakes should be used for safe control of towed vehicles and for trailers where the GCW of the towing vehicle plus the trailer exceed the GVWR of the towing vehicle. **The GCW must never exceed the GCWR.**

**Maximum Loaded Trailer Weight** – is the highest possible weight of a fully loaded trailer the vehicle can tow. It assumes a vehicle with only mandatory options, no cargo (internal or external), a tongue load of 10–15% (conventional trailer) or king pin weight of 15–25% (fifth wheel trailer), and driver only (150 lb. [68 kg]). **Consult your authorized dealer (or the *RV and Trailer Towing Guide* provided by your authorized dealer) for more detailed information.**



Do not exceed the GVWR or the GAWR specified on the Safety Compliance 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.



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

### Steps for determining the correct load limit:

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.

## Tires, Wheels and Loading

2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1,400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. ( $1400 - 750$  ( $5 \times 150$ ) = 650 lb.). In metric units ( $635 - 340$  ( $5 \times 68$ ) = 295 kg.)
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

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

- Another example for your vehicle with 1400 lb. (635 kg) of cargo and luggage capacity. You decide to go golfing. Is there enough load capacity to carry you, 4 of your friends and all the golf bags? You and four friends average 220 lb. (99 kg) each and the golf bags weigh approximately 30 lb. (13.5 kg) each. The calculation would be:  $1400 - (5 \times 220) - (5 \times 30) = 1400 - 1100 - 150 = 150$  lb. Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be:  $635 \text{ kg} - (5 \times 99 \text{ kg}) - (5 \times 13.5 \text{ kg}) = 635 - 495 - 67.5 = 72.5$  kg.
- A final example for your vehicle with 1400 lb. (635 kg) of cargo and luggage capacity. You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past 2 years. Measuring the inside of the vehicle with the rear seat folded down, you have room for 12-100 lb. (45 kg) bags of cement. Do you have enough load capacity to transport the cement to your home? If you and your friend each weigh 220 lb. (99 kg), the calculation would be:  $1400 - (2 \times 220) - (12 \times 100) = 1400 - 440 - 1200 = -240$  lb. No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would be:  $635 \text{ kg} - (2 \times 99 \text{ kg}) - (12 \times 45 \text{ kg}) = 635 - 198 - 540 = -103$  kg. You will need to reduce the load weight by at least 240 lb. (104 kg). If you remove 3-100 lb. (45 kg) cement bags, then the load calculation would be:



## Tires, Wheels and Loading

$1400 - (2 \times 220) - (9 \times 100) = 1400 - 440 - 900 = 60 \text{ lb.}$  Now you have the load capacity to transport the cement and your friend home. .  
In metric units, the calculation would be:  $635 \text{ kg} - (2 \times 99 \text{ kg}) - (9 \times 45 \text{ kg}) = 635 - 198 - 405 = 32 \text{ kg.}$

The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the Front or the Rear Gross Axle Weight Rating specified for your vehicle on the Safety Compliance Certification Label found on the edge of the driver's door.

### TRAILER TOWING

Your vehicle is capable of towing a trailer up to 1,000 lb. (454 kg) gross trailer weight with a maximum tongue load of 100 lb. (45 kg). Do not tow a trailer until your vehicle has been driven at least 500 miles (800 km).

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



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



Towing trailers beyond the maximum recommended gross trailer weight exceeds the limit of the vehicle and could result in engine damage, transmission damage, structural damage, loss of vehicle control, vehicle rollover 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 authorized 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 10–15% 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.

## Tires, Wheels and Loading

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 all running lights, brake lights, turn signals and hazard lights are working.

**Do not splice into the vehicle lamp wiring for trailer lamps. Your vehicle uses an advanced electronic module to control and monitor your vehicle lamps. Splicing into the wiring or attaching wiring to the vehicle bulb, may DISABLE the rear vehicle lamps or cause them not to function properly.**

See your authorized dealer for proper instructions and equipment for hooking up trailer lamps.

### Driving while you tow

When towing a trailer:

- Turn off the 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.
- Shift out of D (Overdrive) into D (Overdrive cancelled) or a lower gear (3, 2, or 1) 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.

### 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.

## Tires, Wheels and Loading

### 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.
- The trailer tongue weight should be 10–15% of the loaded trailer weight.
- After you have traveled 50 miles (80 km), thoroughly check your hitch, electrical connections and trailer wheel lug nuts.
- To aid in engine/transmission cooling and A/C efficiency during hot weather while stopped in traffic, place the gearshift lever in P (Park) (automatic transmission) or N (Neutral) (manual transmissions).
- 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.

### 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.

- Place the transmission in N (Neutral)
- Maximum speed is 35 mph (56 km/h)
- Maximum distance is 50 miles (80 km)

If a distance of 50 miles (80 km) or a speed of 35 mph (56 km/h) must be exceeded, you must disconnect the driveshaft. Ford Motor Company recommends the driveshaft be removed/installed only by a qualified technician at an authorized dealer. See your authorized dealer for driveshaft removal/installation.

**Improper removal/installation of the driveshaft can cause transmission fluid loss, damage to the driveshaft and internal transmission components.**

## Driving

### STARTING

#### Positions of the ignition

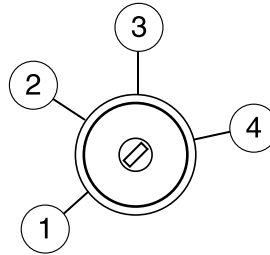
1. OFF/LOCK, locks the steering wheel, automatic transmission gearshift lever and allows key removal.

**Note:** The ignition key cannot be removed from the ignition unless the gearshift lever is securely latched in P (Park).

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

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

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



#### Preparing to start your vehicle

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

When starting a fuel-injected engine, don't press 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.

## Driving



Do not start your vehicle in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine. See *Guarding against exhaust fumes* in this chapter for more instructions.



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

### ***Important safety precautions***

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

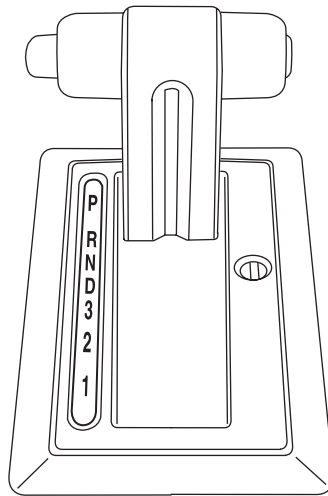
Before starting the vehicle:

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.

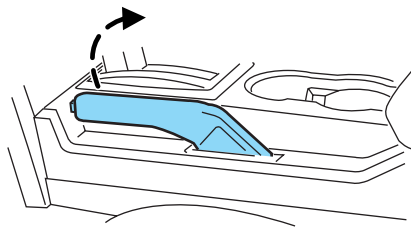
If starting a vehicle with an automatic transmission:

## Driving

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

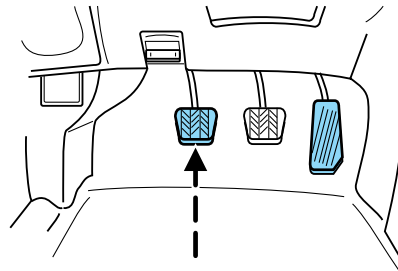


- Make sure the parking brake is set.



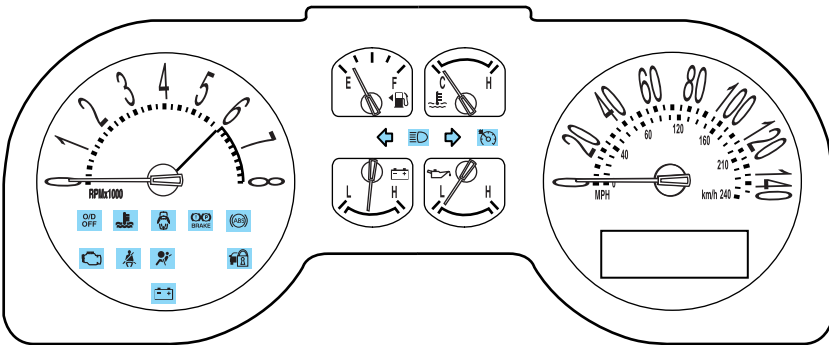
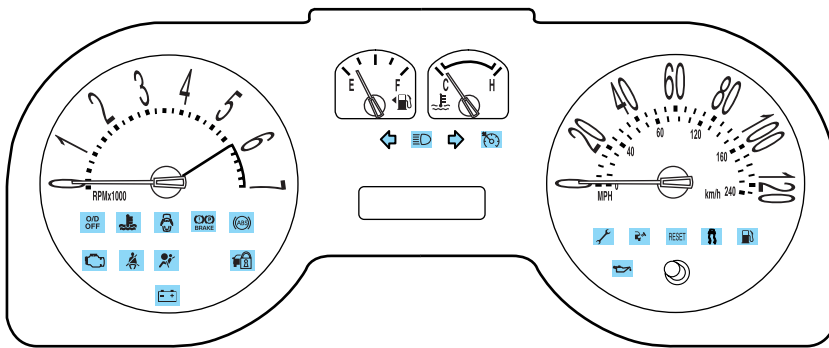
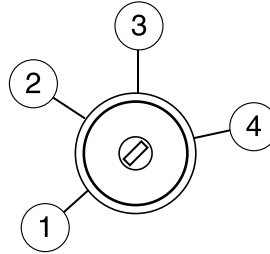
If starting a vehicle with a manual transmission:

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



## Driving

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



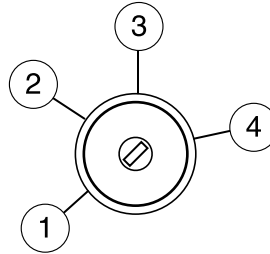
Make sure the corresponding lights illuminate or illuminate briefly. If a light fails to illuminate, have the vehicle serviced.

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

## Driving

### Starting the engine

1. Turn the key to 3 (ON) without turning the key to 4 (START). If there is difficulty in turning the key, rotate the steering wheel until the key turns freely.
2. Turn the key to 4 (START), then release the key as soon as the engine starts.



**Note:** If the engine does not start within five seconds on the first try, turn the key to OFF, wait 10 seconds and try again. If the engine still fails to start, press and hold the accelerator to the floor and try again; this will allow the engine to crank with the fuel shut off in case the engine is flooded with fuel.

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

An engine block heater warms the engine coolant which aids in starting and heater/defroster performance. Use of an engine block heater is strongly recommended if you live in a region where temperatures reach  $-10^{\circ}\text{F}$  ( $-23^{\circ}\text{C}$ ) or below. For best results, plug the heater in at least three hours before starting the vehicle. The heater can be plugged in the night before starting the vehicle.



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

### Guarding against exhaust fumes

Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.



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

### Important ventilating information

If the engine is idling while the vehicle is stopped for a long period of time, open the windows at least one inch (2.5 cm) or adjust the heating or air conditioning to bring in fresh air.



**BRAKES**

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

Refer to *Brake system warning light* in the *Instrument Cluster* chapter for information on the brake system warning light.



**Four-wheel anti-lock brake system (ABS) (if equipped)**

Your vehicle may be equipped with an Anti-lock Braking System (ABS). This system helps you maintain steering control during emergency stops by keeping the brakes from locking. Noise from the ABS pump motor and brake pedal pulsation may be observed during ABS braking; any pulsation or mechanical noise you may feel or hear is normal.

**ABS warning lamp**

The ABS lamp in the instrument cluster momentarily illuminates when the ignition is turned on. If the light does not illuminate during start up, remains on or flashes, the ABS may be disabled and may need to be serviced.



Even when the ABS is disabled, normal braking is still effective. (If your BRAKE warning lamp illuminates with the parking brake released, have your brake system serviced immediately.)



**Using ABS**

When hard braking is required, apply continuous force on the brake pedal; do not pump the brake pedal since this will reduce the effectiveness of the ABS and will increase your vehicle's stopping distance. The ABS will be activated immediately, allowing you to retain full steering control during hard braking and on slippery surfaces. However, the ABS does not decrease stopping distance.

## Driving

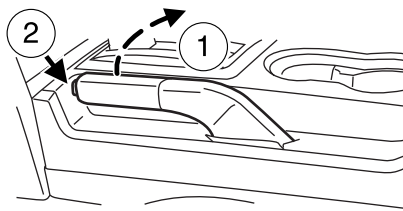
### **Brake Assist (if equipped)**

The Brake Assist system provides full braking force during panic braking situations. It detects a rapid application of the brake pedal and maximizes the amount of brake booster assist, helping the driver to achieve maximum braking pressure. Once a panic brake application is detected, the system will remain activated as long as the brake pedal is depressed. The system is deactivated by releasing the brake pedal.

When the system activates, the brake pedal will travel with very little effort; this is normal.

### **Parking brake**


To set the parking brake (1), pull the parking brake handle up as far as possible.




The BRAKE warning lamp will illuminate and will remain illuminated until the parking brake is released.



To release, press and hold the button (2), pull the handle up slightly, then push the handle down.

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

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

## **STEERING**

To prevent damage to the power steering system:

- Never hold the steering wheel at its furthest turning points (until it stops) for more than a few seconds when the engine is running.

- Do not operate the vehicle with a low power steering pump reservoir 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, check for:

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

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

### **TRACTION CONTROL™ (IF EQUIPPED)**

Your vehicle may be equipped with a Traction Control™ system. This system helps you maintain the stability and steerability of your vehicle, especially on slippery road surfaces such as snow- or ice-covered roads and gravel roads. 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.

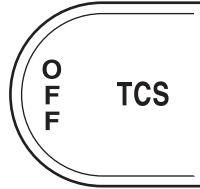
The Traction Control™ system will allow your vehicle to make better use of available traction on slippery surfaces while you are trying to accelerate or while your foot is on the accelerator pedal. The system is a driver aid which makes your vehicle easier to handle primarily on snow and ice covered roads.

During Traction Control™ operation, the traction control active light will illuminate. If your vehicle is equipped with a message center, a message will display during Traction Control™ 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 and should be no reason for concern.



## Driving

The Traction Control<sup>™</sup> switch, located above the radio, illuminates when the system is off. The Traction Control<sup>™</sup> system will automatically turn on every time the ignition is turned OFF and ON.



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

The traction control on/off status is shown by an indicator lamp on the traction control switch. If the system is off, the indicator will be illuminated. If a system fault is detected, the traction control active light will illuminate, the Traction Control<sup>™</sup> button will also illuminate and will not turn the system on or off and your vehicle should be serviced by an authorized dealer.



Aggressive driving in any road conditions can cause you to lose control of your vehicle increasing the risk of severe personal injury or property damage. The occurrence of a Traction Control<sup>™</sup> event is an indication that at least some of the tires have exceeded their ability to grip the road; this may lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. If you experience a severe road event, SLOW DOWN.

### **TRACTION-LOK<sup>™</sup> 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<sup>™</sup> axle functions like a standard rear axle.

Extended use of other than the manufacturer's specified size tires on a Traction-Lok<sup>™</sup> 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.

### **AUTOMATIC TRANSMISSION OPERATION (IF EQUIPPED)**

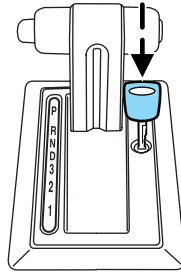
#### **Brake-shift interlock**

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.

## Driving

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. Using a flat head screwdriver, remove the plastic cover.
3. Insert the ignition key and push it straight down to release the interlock.



4. Apply the parking brake, then shift to N (Neutral).
5. Start the vehicle.

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.



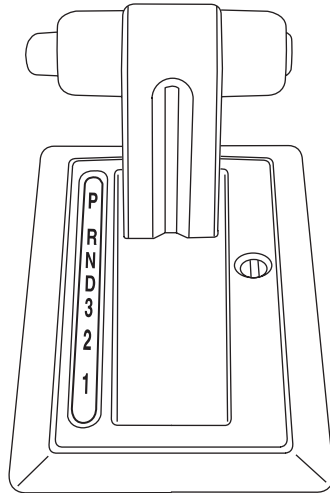
Always set the parking brake fully and make sure the gearshift is latched in P (Park). Turn the ignition to the LOCK position and remove the key whenever you leave your vehicle.



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

## Driving

### Understanding the gearshift positions of the 5-speed automatic transmission



This vehicle is equipped with an adaptive Transmission Shift Strategy. Adaptive Shift Strategy offers the optimal transmission operation and shift quality. When the vehicle's battery has been disconnected for any type of service or repair, the transmission will need to relearn the normal shift strategy parameters, much like having to reset your radio stations when your vehicle battery has been disconnected. The Adaptive Transmission Strategy allows the transmission to relearn these operating parameters. This learning process could take several transmission upshifts and downshifts; during this learning process, slightly firmer shifts may occur. After this learning process, normal shift feel and shift scheduling will resume.

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

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


To put your vehicle in gear:

- Start the engine
- Depress the brake pedal
- Move the gearshift lever into the desired gear

## Driving

To put your vehicle in P (Park):

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

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

### **R (Reverse)**

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

### **N (Neutral)**

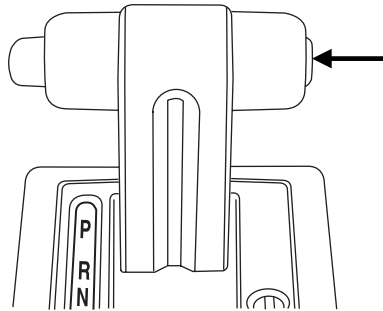
With the gearshift lever in N (Neutral), the vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

### **D (Drive) with Overdrive**

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

### **D (Drive) without Overdrive**

D (Drive) with Overdrive can be deactivated by pressing the transmission control switch on the right side of the shift handle.



- This position allows for all forward gears except Overdrive.
- O/D OFF lamp is illuminated.

**O/D  
OFF**

- Provides engine braking.
- Use when driving conditions cause excessive shifting from O/D to other gears. Examples: city traffic, hilly terrain, heavy loads, trailer towing and when engine braking is required.
- To return to Overdrive mode, press the transmission control switch. The O/D OFF lamp will not be illuminated.

## Driving

- Overdrive mode is automatically returned each time the key is turned off.

### **3 (Third)**

This position allows for third gear only.

- Provides engine braking.
- To return to D (Drive) without Overdrive, move the transmission shift lever into the D (Drive) position.
- Selecting 3 (Third) at higher speeds will cause the transmission to downshift to third gear at the appropriate vehicle speed.

### **2 (Second)**

This position allows for second gear only.

- Provides engine braking.
- Use to start-up on slippery roads.
- To return to D (Drive) without Overdrive or 3 (Third), move the transmission shift lever into the D (Drive) or 3 (Third) position.
- Selecting 2 (Second) at higher speeds will cause the transmission to downshift to second gear at the appropriate vehicle speed.

### **1 (First)**

This position allows for first gear only.

- Provides maximum engine braking.
- Will not downshift into first gear at high speeds; will cause the transmission to downshift to a lower gear, then allows for first gear when the vehicle reaches slower speeds.

### **Forced downshifts**

- Allowed in Overdrive or Drive.
- Depress the accelerator to the floor.
- Allows transmission to select an appropriate gear.

### ***If your vehicle gets stuck in mud or snow***

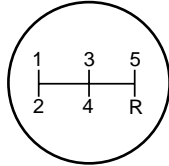
If your vehicle gets stuck in mud or snow, it may be rocked out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

**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 minute or damage to the transmission and tires may occur, or the engine may overheat.**



### MANUAL TRANSMISSION OPERATION (IF EQUIPPED)



#### Using the clutch

The manual transmission has a starter interlock that prevents cranking the engine unless the clutch pedal is fully depressed.

To start the vehicle:

1. Make sure the parking brake is fully set.
2. Press the clutch pedal to the floor, then put the gearshift lever in the neutral position.
3. Start the engine, then press the brake pedal and release the parking brake.
4. Move the gearshift lever to 1st gear, then slowly release the clutch pedal while slowly pressing on the accelerator.

During each shift, the clutch pedal must be fully depressed to the floor. Failure to fully depress the clutch pedal to the floor may cause increased shift efforts, prematurely wear transmission components or damage the transmission. Make sure the floor mat is properly positioned so it doesn't interfere with the full extension of the clutch pedal.

Do not drive with your foot resting on the clutch pedal or use the clutch pedal to hold your vehicle at a standstill while waiting on a hill. These actions will reduce the life of the clutch.

#### Recommended shift speeds

**Do not downshift into 1 (First) when your vehicle is moving faster than 15 mph (24 km/h). This will damage the clutch.**

## Driving

Upshift according to the following chart:

<b>Upshifts when accelerating (recommended for best fuel economy)</b>	
Shift from:	
1 - 2	11 mph (18 km/h)
2 - 3	19 mph (31 km/h)
3 - 4	30 mph (48 km/h)
4 - 5	40 mph (64 km/h)

### Reverse

1. Make sure that your vehicle is at a complete stop before you shift into R (Reverse). Failure to do so may damage the transmission.
2. Move the gearshift lever into the neutral position and wait at least three seconds before shifting into R (Reverse).
  - The gearshift lever can only be moved into R (Reverse) by moving it from left of 3 (Third) and 4 (Fourth) before shifting into R (Reverse). This is a lockout feature that protects the transmission from accidentally being shifted into R (Reverse) from 5 (Overdrive).

### Parking your vehicle

1. Apply the brake and shift into the neutral position.
2. Fully apply the parking brake, then shift into 1 (First).
3. Turn the ignition off.



Do not park your vehicle in Neutral, it may move unexpectedly and injure someone. Use 1 (First) gear and set the parking brake fully.

### **DRIVING THROUGH WATER**

Do not drive quickly through standing water, especially if the depth is unknown. Traction or brake capability may be limited and if the ignition system gets wet, your engine may stall. Water may also enter your engine's air intake and severely damage your engine.

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

Once through the water, always try the brakes. Wet brakes do not stop the vehicle as effectively as dry brakes. Drying can be improved by moving your vehicle slowly while applying light pressure on the brake pedal.

**Driving through deep water where the transmission vent tube is submerged may allow water into the transmission and cause internal transmission damage. Have the fluid checked and, if water is found, replace the fluid.**

## Roadside Emergencies

### GETTING ROADSIDE ASSISTANCE

To fully assist you should you have a vehicle concern, Ford Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty. The service is available:

- 24-hours, seven days a week
- for the New Vehicle Limited Warranty period of three years or 36,000 miles (60,000 km), whichever occurs first on Ford and Mercury vehicles, and four years or 50,000 miles (80,000 km) on Lincoln vehicles.

Roadside assistance will cover:

- a flat tire change with a good spare (except Ford GT which has a tire inflation kit)
- battery jump start
- lock-out assistance (key replacement cost is the customer's responsibility)
- fuel delivery (2.0 gallons [7.5L], maximum two occurrences within 12 month period)
- towing of your disabled vehicle to the nearest authorized dealer, or your selling authorized dealer if within 35 miles (56.3 km) of the nearest authorized dealer (one tow per disablement). Even non-warranty related tows, like accidents, are covered (some exclusions apply, such as impound towing or repossession).

### Canadian customers refer to your Owner Information Guide for information on:

- coverage period
- exact fuel amounts
- towing of your disabled vehicle
- emergency travel expense reimbursement
- travel planning benefits

### USING ROADSIDE ASSISTANCE

Complete the roadside assistance identification card and place it in your wallet for quick reference. In the United States, this card is found in the Owner Guide portfolio in the glove compartment. In Canada, the card is found in the *Owner Information Guide* in the glove compartment.

U.S. Ford or Mercury vehicle customers who require roadside assistance, call 1-800-241-3673; Lincoln vehicle customers call 1-800-521-4140.

## Roadside Emergencies

Canadian customers who require roadside assistance, call 1-800-665-2006.

If you need to arrange roadside assistance for yourself, Ford Motor Company will reimburse a reasonable amount. To obtain reimbursement information, U.S. Ford or Mercury vehicles customers call 1-800-241-3673; Lincoln vehicle customers call 1-800-521-4140.

Canadian customers who need to obtain reimbursement information, call 1-800-665-2006.

### ROADSIDE COVERAGE BEYOND BASIC WARRANTY

In the United States, you may purchase additional roadside assistance coverage beyond this period through the Ford Auto Club by contacting your authorized 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 CONTROL

The hazard flasher is located on the instrument panel by the radio. The hazard flashers will operate when the ignition is in any position or if the key is not in the ignition.



Push in the flasher control and all front and rear direction signals will flash. Press the flasher control again to turn them off. Use it when your vehicle is disabled and is creating a safety hazard for other motorists.

**Note:** With extended use, the flasher may run down your battery.

### FUEL PUMP SHUT-OFF SWITCH FUEL RESET

This device stops the electric fuel pump from sending fuel to the engine when your vehicle has had a substantial jolt.

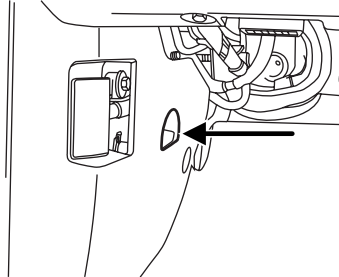
After an accident, if the engine cranks but does not start, this switch may have been activated.

## Roadside Emergencies

The fuel pump shut-off switch is located in the driver's footwell, by the hood release

To reset the switch:

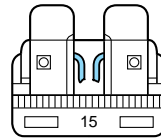
1. Turn the ignition OFF.
2. Check the fuel system for leaks.
3. If no leaks are apparent, reset the switch by pushing in on the reset button.
4. Turn the ignition ON.
5. Wait a few seconds and return the key to OFF.
6. Make another check for leaks.



## FUSES AND RELAYS

### Fuses

If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.



**Note:** Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.

### Standard fuse amperage rating and color

COLOR					
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
2A	Grey	Grey	—	—	—
3A	Violet	Violet	—	—	—
4A	Pink	Pink	—	—	—
5A	Tan	Tan	—	—	—

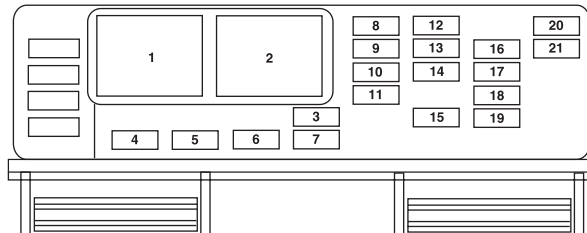
## Roadside Emergencies

COLOR					
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
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 in the lower passenger side area behind the kick panel. Remove the trim panel cover and the fuse 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	Mini relay	Accessory delay #1
2	—	Not used
3	10A	Wiper power
4	5A	Power mirrors
5	—	Not used
6	5A	Accessory delay feeds
7	10A	Overdrive cancel
8	10A	Cluster, Data Link Connector (DLC)
9	—	Not used
10	5A	Intrusion Sensing Module (ISM), Climate control
11	—	Not used
12	5A	Climate control, Ignition
13	—	Not used
14	5A	A/C cycle switch
15	10A	Brake On/Off (BOO) power
16	5A	Cluster
17	10A	Restraint Control Module (RCM), Passenger Occupant Detection System (PODS), Passenger Air bag Deactivation Indicator (PADI)
18	10A	Anti-lock Brake System (ABS), Positive Crankcase Ventilation (PCV) valve heater, Ignition
19	5A	Powertrain Control Module (PCM) relays, Passive Anti-Theft System (PATS)
20	10A	Radio (Start)
21	10A	Starter relay



## 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.

**Do not probe the contacts for the fuses and relays in the power distribution box as damage will occur, causing improper, or loss of, electrical functionality.**

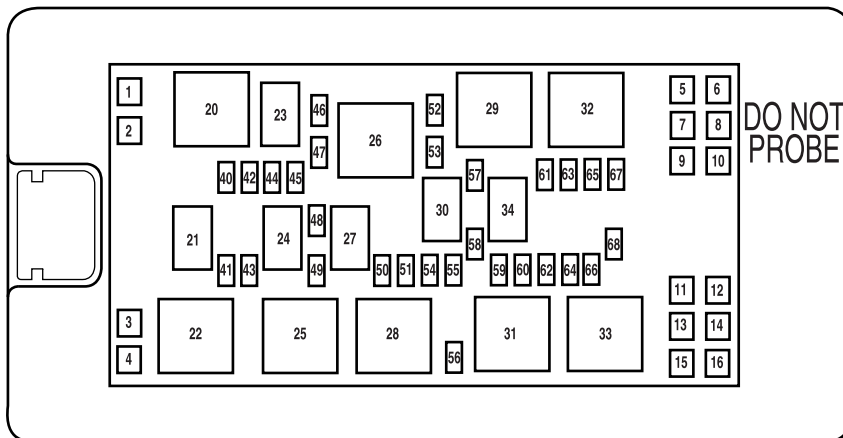


Always disconnect the battery before servicing high current fuses.



To reduce risk of electrical shock, 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.



The high-current fuses are coded as follows.

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
1	—	Not used
2	30A*	Climate control blower
3	40A*	Cooling fan
4	30A*	Starter
5	30A*	Right front window motor
6	30A*	Rear amplifier (Shaker 1000 radio)
7	30A*	Left front window motor
8	40A*	Anti-lock Brake System (ABS) #1
9	30A*	Rear amplifier (Shaker 1000 radio)
10	30A*	Wipers
11	30A*	Left rear window motor (Convertible only)
12	30A*	Right rear window motor (Convertible only)
13	40A*	Convertible top
14	30A*	Seat
15	—	Not used
16	30A*	Front amplifier (Shaker 500 radio)
20	Mini relay	PCM #2
21	Micro relay	Fuel pump
22	Mini relay	Starter
23	Micro relay	PCM #1
24	Micro relay	A/C clutch
25	Mini relay	Cooling fan (High-speed)
26	Mini relay	Horn
27	Micro relay	High beams
28	Mini relay	Cooling fan (Low-speed)
29	Mini relay	Rear defroster
30	Micro relay	Fog lamps

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
31	Mini relay	Convertible top (Up)
32	Mini relay	Climate control blower
33	Mini relay	Convertible top (Down)
34	—	Not used
35	—	Not used
36	—	Not used
37	—	Not used
38	—	Not used
39	—	Not used
40	15A**	Engine #2
41	15A**	Fuel pump
42	15A**	Engine #3
43	10A**	Alternator
44	10A**	Delayed accessory
45	10A**	PCM
46	25A**	Horn
47	15A**	Engine #1
48	Diode	A/C clutch
49	15A**	A/C clutch
50	15A**	High beams
51	10A**	Convertible top
52	30A**	Rear defroster
53	Diode	PCM
54	10A**	PCM delay
55	—	Not used
56	20A**	Radio
57	20A**	Decklid release
58	15A**	Fog lamps
59	30A**	SJB #5 (Instrument panel fuse box)
60	—	Not used

## Roadside Emergencies


Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
61	20A**	Power point #1 (Instrument panel)
62	20A**	SJB #7 (Instrument panel fuse box)
63	30A**	SJB #6 (Instrument panel fuse box)
64	20A**	Power point #2 (Console)
65	30A**	ABS #2
66	—	Not used
67	30A**	SJB #4 (Instrument panel fuse box)
68	20A**	Ignition


\* Cartridge Fuses \*\* Mini Fuses

### Auxiliary relay

There is a relay located on the accelerator pedal assembly for the PCM delay. Note: Only on manual transmission applications.

### JUMP STARTING YOUR VEHICLE

 The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in injury or vehicle damage.

 Batteries contain sulfuric acid which can burn skin, eyes and clothing, if contacted.

**Do not attempt to push-start your vehicle. Automatic transmissions do not have push-start capability; doing so may damage the catalytic converter.**

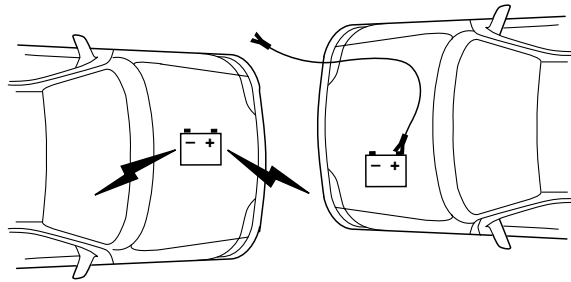
### Preparing your vehicle

When the battery is disconnected or a new battery is installed, the transmission must relearn its shift strategy. As a result, the transmission may have firm and/or soft shifts. This operation is considered normal and will not affect function or durability of the transmission. Over time, the adaptive learning process will fully update transmission operation.

## Roadside Emergencies

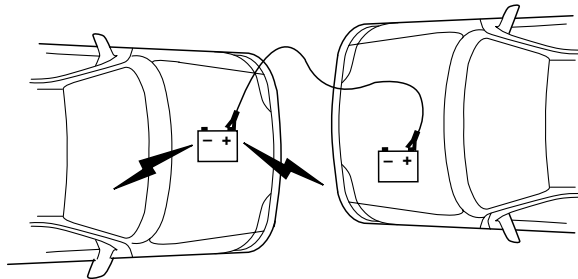
1. **Use only a 12-volt supply to start your vehicle.**
2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.
3. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles **do not** touch. Set the parking brake on both vehicles and stay clear of the engine cooling fan and other moving parts.
4. Check all battery terminals and remove any excessive corrosion before you attach the battery cables. Ensure the vent caps are tight and level.
5. Turn the heater fan on in both vehicles to protect any electrical surges. Turn all other accessories off.

### Connecting the jumper cables



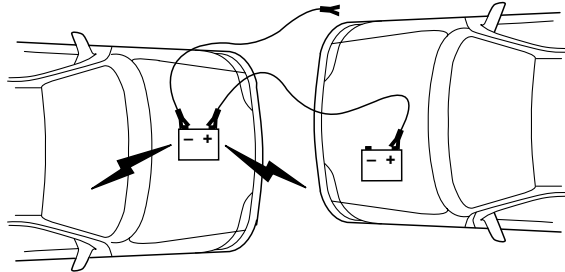
1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

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

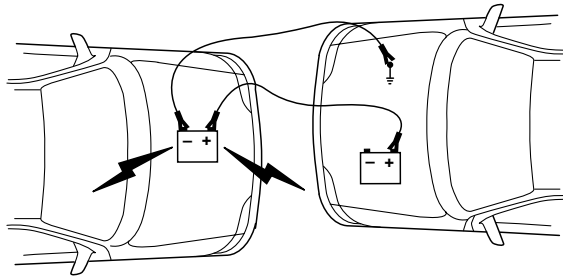


## Roadside Emergencies


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



3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.



4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the carburetor/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.

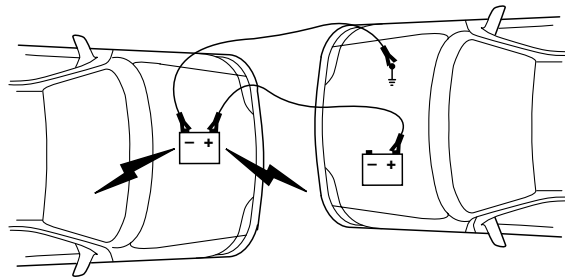
5. Ensure that the cables are clear of fan blades, belts, moving parts of both engines, or any fuel delivery system parts.

## Roadside Emergencies

### 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.

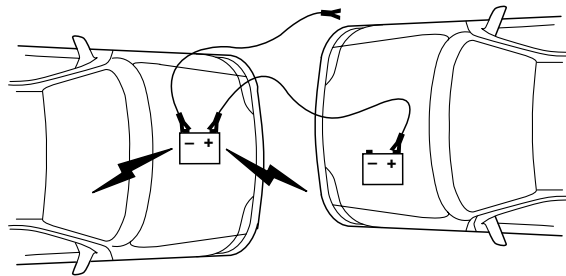
### Removing the jumper cables



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

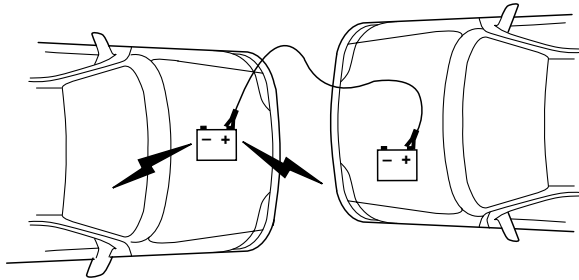
1. Remove the jumper cable from the *ground* metal surface.

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

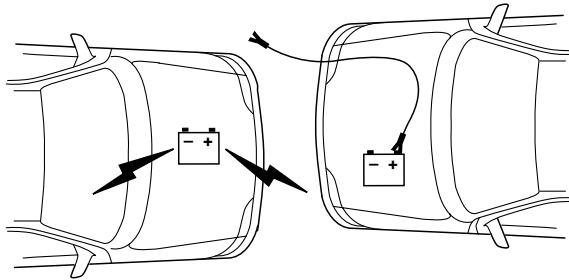


2. Remove the jumper cable on the negative (-) connection of the booster vehicle's battery.

## Roadside Emergencies



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



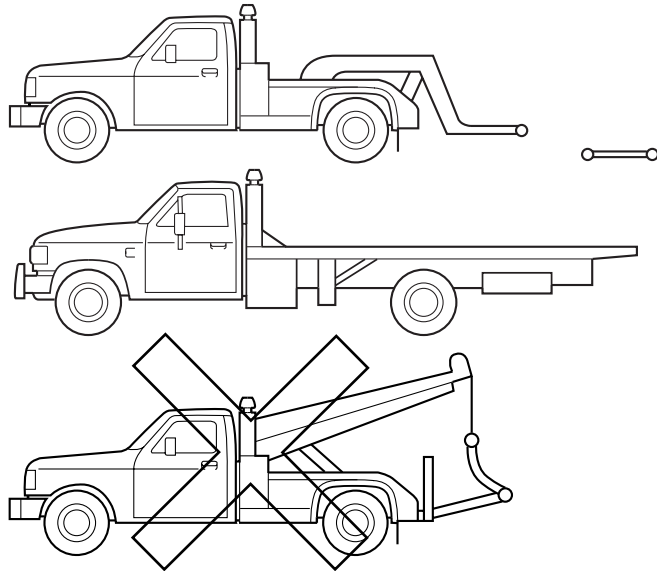
4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

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 of a roadside assistance program, your roadside assistance service provider.

It is recommended that your vehicle be towed with a wheel lift and dollies or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

If your vehicle is to be towed from the front using wheel lift equipment, it is recommended that the rear wheels (drive wheels) be placed on a dolly to prevent damage to the transmission.

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

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

## Customer Assistance

### GETTING THE SERVICES YOU NEED

#### At home

You must take your Ford vehicle to an authorized dealer for warranty repairs. While any authorized dealer handling your vehicle line will provide warranty service, we recommend you return to your selling authorized dealer who wants to ensure your continued satisfaction. Please note that certain warranty repairs require special training and/or equipment, so not all authorized dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another authorized dealer. A reasonable time must be allowed to perform a repair after taking your vehicle to the authorized dealer. Repairs will be made using Ford or Motorcraft parts, or remanufactured or other parts that are authorized by Ford.

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 authorized dealer.
2. If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.
3. If you require assistance or clarification on Ford Motor Company policies or procedures, please contact the Ford Customer Relationship Center at 1-800-392-3673 (FORD).

#### 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 authorized dealer could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealer to help you.

In the United States:

Ford Motor Company  
Customer Relationship Center  
P.O. Box 6248  
Dearborn, MI 48121  
1-800-392-3673 (FORD)  
(TDD for the hearing impaired: 1-800-232-5952)  
[www.customersaskford.com](http://www.customersaskford.com)

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## 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)  
[www.ford.ca](http://www.ford.ca)

If you own a Lincoln vehicle and are away from home when your vehicle needs service, or if you need more help than the authorized dealer could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealer to help you.

In the United States:  
Ford Motor Company  
Customer Relationship Center  
P.O. Box 6248  
Dearborn, MI 48121  
1-800-521-4140  
(TDD for the hearing impaired: 1-800-232-5952)  
[www.customersaskford.com](http://www.customersaskford.com)

In Canada:  
Lincoln Centre  
Ford Motor Company of Canada, Limited  
P.O. Box 2000  
Oakville, Ontario L6J 5E4  
1-800-387-9333  
[www.lincolncanada.com](http://www.lincolncanada.com)

In order to help you service your Lincoln vehicle, please have the following information available when contacting the Lincoln Centre:

- Your telephone number (home and business)
- The name of the authorized dealer and the city where the authorized dealer is located
- The year and make of your vehicle
- The date of vehicle purchase
- The current odometer reading
- The vehicle identification number (VIN)

### **Additional Assistance**

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.

### **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 18,000 miles (29,000 km), whichever occurs first:

1. Two or more repair attempts are made on the same non-conformity likely to cause death or serious bodily injury OR
2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR
3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time)

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company  
16800 Executive Plaza Drive  
Mail Drop 3NE-B  
Dearborn, MI 48126

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## 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-authorized dealership
- sales disputes between customer and authorized 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
- An authorized dealer representative

Consumer candidates for Board membership are recruited and trained by an independent consulting firm. The dealership Board member is chosen from authorized dealer 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 authorized dealer 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 authorized dealer(s) who sold or serviced the vehicle.
- A brief description of your unresolved concern.
- A brief summary of the action taken by the authorized dealer(s) and Ford Motor Company.
- The names (if known) of all the people you contacted at the authorized dealer(s).
- A description of the action you expect to resolve your concern.

You will receive a letter of explanation if your application does not qualify for Board review.

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## Customer Assistance

### **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 authorized 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 authorized dealer or write/call the Board at the following address/phone number:

Dispute Settlement Board  
P.O. Box 1424  
Waukesha, WI 53187-1424  
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  
P.O. Box 6248  
Dearborn, Michigan 48121

## Customer Assistance

### **UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)**

For vehicles delivered to authorized Canadian dealers. In those cases where you continue to feel that the efforts by Ford of Canada and the authorized dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/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 as 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 regional office 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. Using leaded fuel may also result in difficulty importing your vehicle back into the U.S.

If your vehicle must be serviced while you are traveling or living in Central or South America, the Caribbean, or the Middle East, contact the nearest authorized dealer. If the authorized dealer cannot help you, write or call:

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## Customer Assistance

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 authorized dealer. If the authorized dealer 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.

### **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. 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 authorized 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 4,600 participating authorized 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. Since this information is subject to change, please ask your authorized 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

### 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

Helm, Incorporated can also be reached by their website:  
[www.helminc.com](http://www.helminc.com).

*(Items in this catalog may be purchased by credit card, check or money order.)*

### Obtaining a French owner's guide

French Owner's Guides can be obtained from your authorized dealer or by writing to Ford Motor Company of Canada, Limited, Service Publications, P.O. Box 1580, Station B, Mississauga, Ontario L4Y 4G3.

### REPORTING SAFETY DEFECTS (U.S. ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety



Administration (NHTSA) in addition to notifying Ford Motor Company.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ford Motor Company.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in the Washington D.C. area) or write to:

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

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

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*2005 05+ Mustang (197)  
Owners Guide (post-2002-fmt)  
USA (fus)*

### WASHING THE EXTERIOR

Wash your vehicle regularly with cool or lukewarm water and a neutral pH shampoo, such as Motorcraft Detail Wash (ZC-3-A), which is available from your authorized dealer.

- Never use strong household detergents or soap, such as dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash a vehicle that is “hot to the touch” or during exposure to strong, direct sunlight.
- Always use a clean sponge or car wash mitt with plenty of water for best results.
- Dry the vehicle with a chamois or soft terry cloth towel in order to eliminate water spotting.
- It is especially important to wash the vehicle regularly during the winter months, as dirt and road salt are difficult to remove and cause damage to the vehicle.
- Immediately remove items such as gasoline, diesel fuel, bird droppings and insect deposits because they can cause damage to the vehicle’s paintwork and trim over time.
- Remove any exterior accessories, such as antennas, before entering a car wash.
- **Suntan lotions and insect repellents can damage any painted surface; if these substances come in contact with your vehicle, wash off as soon as possible.**

### WAXING

Applying Motorcraft Paint Sealant (ZC-45) to your vehicle every six months will assist in reducing minor scratches and paint damage.

- Wash the vehicle first.
- Do not use waxes that contain abrasives; use Motorcraft Premium Liquid Wax (ZC-53-A), which is available from your authorized dealer, or an equivalent quality product.
- 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.

### PAINT CHIPS

Your authorized dealer has touch-up paint and sprays to match your vehicle’s color. Take your color code (printed on a sticker in the driver’s door jamb) to your authorized dealer to ensure you get the correct color.

## Cleaning

- Remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout before repairing paint chips.
- Always read the instructions before using the products.

### ALUMINUM WHEELS AND WHEEL COVERS

Aluminum wheels and wheel covers are coated with a clearcoat paint finish. In order to maintain their shine:

- Clean weekly with Motorcraft Wheel and Tire Cleaner (ZC-37-A), which is available from your authorized dealer. Heavy dirt and brake dust accumulation may require agitation with a sponge. Rinse thoroughly with a strong stream of water.
- Never apply any cleaning chemical to hot or warm wheel rims or covers.
- Some automatic car washes may cause damage to the finish on your wheel rims or covers. Chemical-strength cleaners, or cleaning chemicals, in combination with brush agitation to remove brake dust and dirt, could wear away the clearcoat finish over time.
- Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergent.
- To remove tar and grease, use Motorcraft Bug and Tar Remover (ZC-42), available from your authorized dealer.

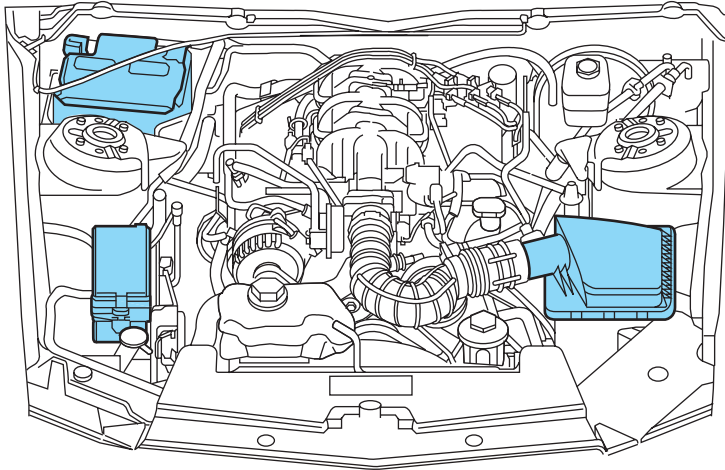
### ENGINE

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

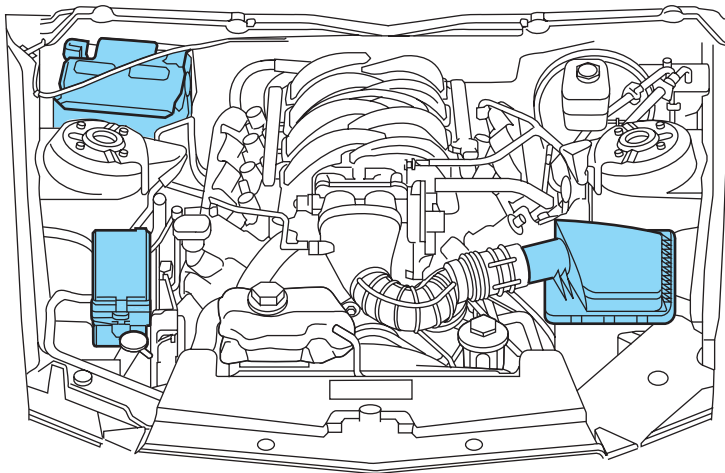
- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser (ZC-20) on all parts that require cleaning and pressure rinse clean.
- Cover the highlighted areas to prevent water damage when cleaning the engine.

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## Cleaning



- **4.0L SOHC V6 engine**



- **4.6L 3V SOHC V8 engine**

- Never wash or rinse the engine while it is running; water in the running engine may cause internal damage.

## Cleaning

### **PLASTIC (NON-PAINTED) EXTERIOR PARTS**

Use only approved products to clean plastic parts. These products are available from your authorized dealer.

- For routine cleaning, use Motorcraft Detail Wash (ZC-3-A).
- If tar or grease spots are present, use Motorcraft Bug and Tar Remover (ZC-42).

### **WINDOWS AND WIPER BLADES**

The windshield, rear and side windows and the wiper blades should be cleaned regularly. If the wipers do not wipe properly, substances on the vehicle's glass or the wiper blades may be the cause. These may include hot wax treatments used by commercial car washes, water repellent coatings, tree sap, or other organic contamination; these contaminants may cause squeaking or chatter noise from the blades, and streaking and smearing of the windshield. To clean these items, follow these tips:

- The windshield, rear windows and side windows may be cleaned with a non-abrasive cleaner such as Motorcraft Ultra-Clear Spray Glass Cleaner (ZC-23), available from your authorized dealer.
- The wiper blades can be cleaned with isopropyl (rubbing) alcohol or Motorcraft Premium Windshield Washer Concentrate (ZC-32-A), available from your authorized dealer. This washer fluid contains special solution in addition to alcohol which helps to remove the hot wax deposited on the wiper blade and windshield from automated car wash facilities. Be sure to replace wiper blades when they appear worn or do not function properly.
- Do not use abrasives, as they may cause scratches.
- Do not use fuel, kerosene, or paint thinner to clean any parts.

### **CONVERTIBLE TOP AND PADDED MOLDING**

Wash with Motorcraft Triple Clean (ZC-13), which is available from your authorized dealer.


- Do not use stiff bristle brushes or abrasive materials or cleaners.
- Hot waxes applied by commercial car washes can affect the cleanability of vinyl material.
- Using high water pressure or wand-type car washes against the convertible top and windows may cause water leaks and possible seal damage.

## Cleaning

### INSTRUMENT PANEL AND CLUSTER LENS

Clean the instrument panel with a damp cloth, then with a clean, dry cloth, or use Motorcraft Dash & Vinyl Cleaner (ZC-38-A).

- 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 airbag system.


- Be certain to wash or wipe your hands clean if you have been in contact with certain products such as insect repellent and suntan lotion in order to avoid possible damage to the interior painted surfaces.

### INTERIOR

For fabric, carpets, cloth seats, safety belts and seats equipped with side airbags:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Motorcraft Professional Strength Carpet & Upholstery Cleaner (ZC-54).
- If grease or tar is present on the material, spot-clean the area first with Motorcraft Spot and Stain Remover (ZC-14).
- If a ring forms on the fabric after spot cleaning, clean the entire area immediately (but do not oversaturate) or the ring will set.
- Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.

 Do not use cleaning solvents, bleach or dye on the vehicle's safety belts, as these actions may weaken the belt webbing.

 Do not use chemical solvents or strong detergents when cleaning the seat-mounted side airbag. Such products could contaminate the side airbag system and affect performance of the side airbag in a collision.

## Cleaning

### LEATHER SEATS (IF EQUIPPED)

Your leather seating surfaces have a clear, protective coating over the leather.

- To clean, use a soft cloth with Motorcraft Deluxe Leather and Vinyl Cleaner (ZC-11-A). Dry the area with a soft cloth.
- To help maintain its resiliency and color, use the Motorcraft Deluxe Leather Care Kit (ZC-11-D), available from your authorized dealer.
- Do not use household cleaning products, alcohol solutions, solvents or cleaners intended for rubber, vinyl and plastics, or oil/petroleum-based leather conditioners. These products may cause premature wearing of the clear, protective coating.

**Note:** In some instances, color or dye transfer can occur when wet clothing comes in contact with leather upholstery. If this occurs, the leather should be cleaned immediately to avoid permanent staining.

### UNDERBODY

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

### FORD AND LINCOLN MERCURY CAR CARE PRODUCTS

Your Ford or Lincoln Mercury authorized 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 products or products of equivalent quality:

Motorcraft Bug and Tar Remover (ZC-42)

Motorcraft Car Care Kit (ZC-26)

Motorcraft Car Wash (Canada only) (CXC-21)

Motorcraft Custom Bright Metal Cleaner (ZC-15)

Motorcraft Custom Clear Coat Polish (ZC-8-A)

Motorcraft Custom Vinyl Protectant (U.S. only) (ZC-40-A)

Motorcraft Dash and Vinyl Cleaner (ZC-38-A)

Motorcraft Deluxe Leather and Vinyl Cleaner (U.S. only) (ZC-11-A)

Motorcraft Detail Wash (ZC-3-A)

Motorcraft Dusting Cloth (ZC-24)



## Cleaning

Motorcraft Engine Shampoo and Degreaser (U.S. only) (ZC-20)  
Motorcraft Engine Shampoo (Canada only) (CXC-66-A)  
Motorcraft One Step Wash and Wax Concentrate (ZC-6-A)  
Motorcraft Paint Sealant (ZC-45)  
Motorcraft Premium Car Wash Concentrate (U.S. only) (ZC-17-B)  
Motorcraft Premium Glass Cleaner (Canada only) (CXC-100)  
Motorcraft Premium Liquid Wax (ZC-53-A)  
Motorcraft Premium Windshield Washer Concentrate (ZC-32-A)  
Motorcraft Professional Strength Carpet & Upholstery Cleaner (ZC-54)  
Motorcraft Spot and Stain Remover (U.S. only) (ZC-14)  
Motorcraft Tire Clean and Shine (ZC-28)  
Motorcraft Triple Clean (U.S. only) (ZC-13)  
Motorcraft Ultra-Clear Spray Glass Cleaner (ZC-23)  
Motorcraft Vinyl Cleaner (Canada only) (CXC-93)  
Motorcraft Vinyl Conditioner (Canada only) (CXC-94)  
Motorcraft Wheel and Tire Cleaner (ZC-37-A)

## 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 *scheduled maintenance information* which makes tracking routine service easy.

If your vehicle requires professional service, your authorized dealer can provide the necessary parts and service. Check your *Warranty Guide/Owner Information Guide* to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft parts are designed and built to provide the best performance in your vehicle.

### PRECAUTIONS WHEN SERVICING YOUR VEHICLE

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning (cigarettes) material away from the battery and all fuel related parts.

### Working with the engine off

- Automatic transmission:
  1. Set the parking brake and shift to P (Park).
  2. Turn off the engine and remove the key.
  3. Block the wheels.
- Manual transmission:
  1. Set the parking brake, depress the clutch and place the gearshift in 1 (First).
  2. Turn off the engine and remove the key.
  3. Block the wheels.

### Working with the engine on

- Automatic transmission:
  1. Set the parking brake and shift to P (Park).

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## Maintenance and Specifications

2. Block the wheels.

- Manual transmission:

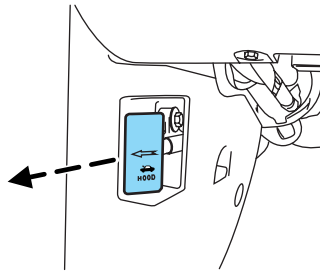
1. Set the parking brake, depress the clutch and place the gearshift in N (Neutral).

2. Block the wheels.

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

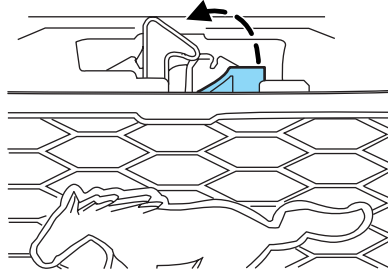
### OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located on the driver's side kick panel.



2. Go to the front of the vehicle and release the auxiliary latch that is located under the front center of the hood.

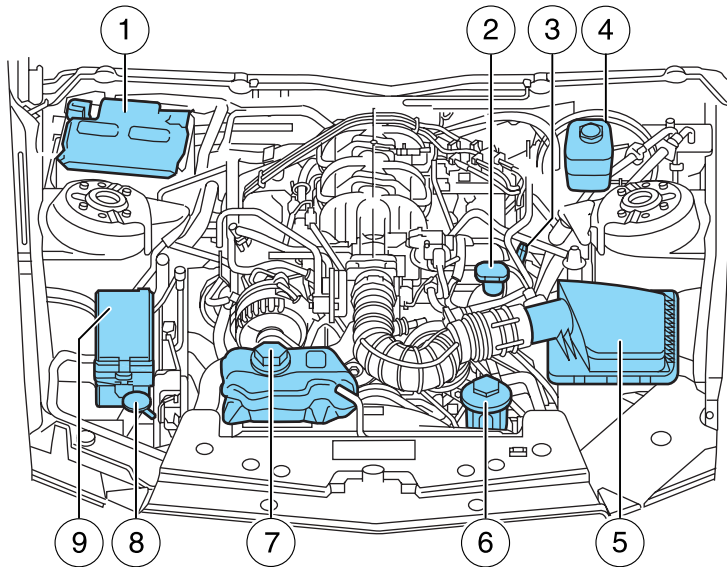
3. Lift the hood and secure it with the prop rod.



## Maintenance and Specifications

### IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

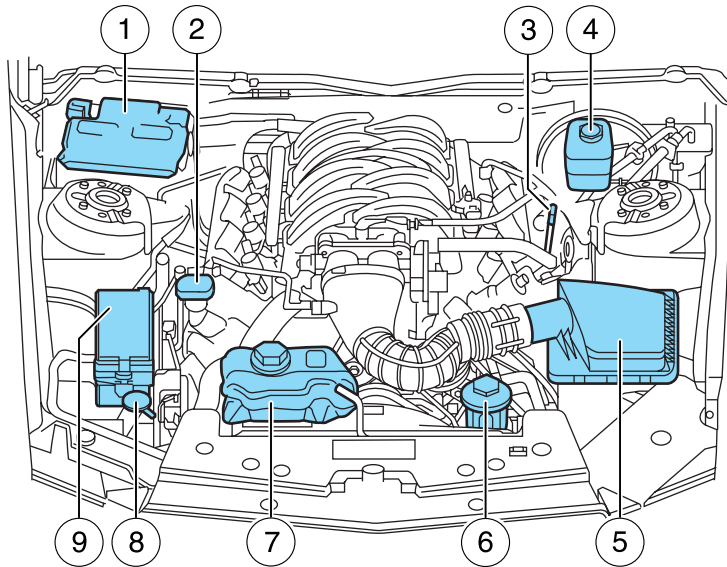
#### 4.0L SOHC V6 engine



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

## Maintenance and Specifications

### 4.6L 3V SOHC V8 engine



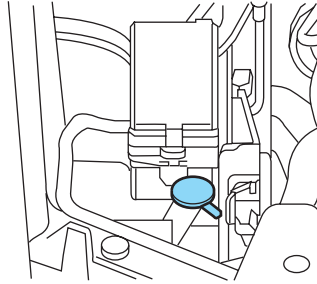
1. Battery
2. Engine oil filler cap
3. Engine oil dipstick
4. Brake fluid reservoir
5. Air filter assembly
6. Power steering fluid reservoir
7. Engine coolant reservoir
8. Windshield washer fluid reservoir
9. Power distribution box

## Maintenance and Specifications

### WINDSHIELD WASHER FLUID

Add fluid to fill the reservoir if the level is low. In very cold weather, do not fill the reservoir completely.

Only use a washer fluid that meets Ford specification WSB-M8B16-A2. Do not use any special washer fluid such as windshield water repellent type fluid or bug wash. They may cause squeaking, chatter noise, streaking and smearing. Refer to *Lubricant specifications* in this chapter.



State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.



If you operate your vehicle in temperatures below 40° F (4.5°C), use washer fluid with antifreeze protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

**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

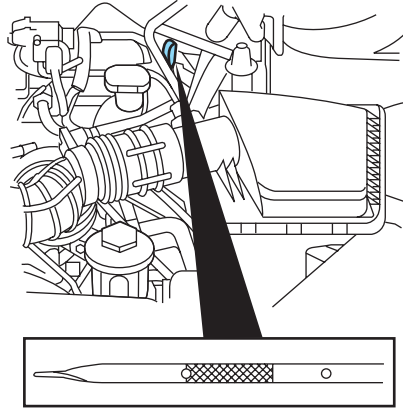
Refer to the *scheduled maintenance information* for the appropriate intervals for checking the engine oil.

1. Make sure the vehicle is on level ground.
2. Turn the engine off and wait 5 to 10 minutes for the oil to drain into the oil pan.
3. Set the parking brake and ensure the gearshift is securely latched in P (Park) (automatic transmissions) or 1 (First) (manual transmissions).
4. Open the hood. Protect yourself from engine heat.

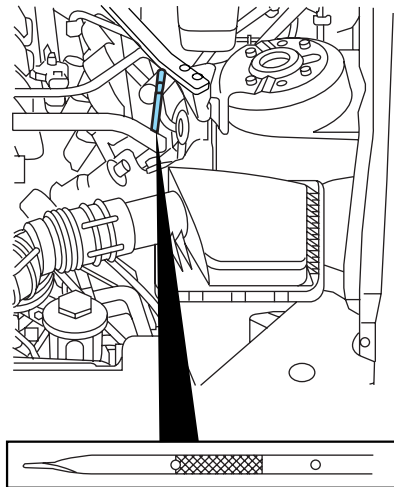
## Maintenance and Specifications

5. Locate and carefully remove the engine oil level indicator (dipstick).

- 4.0L V6 engine



- 4.6L 3V V8 engine

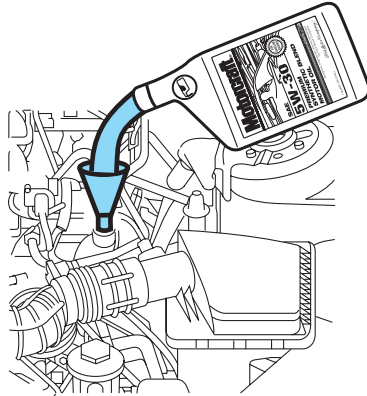


6. Wipe the indicator clean. Insert the indicator fully, then remove it again.

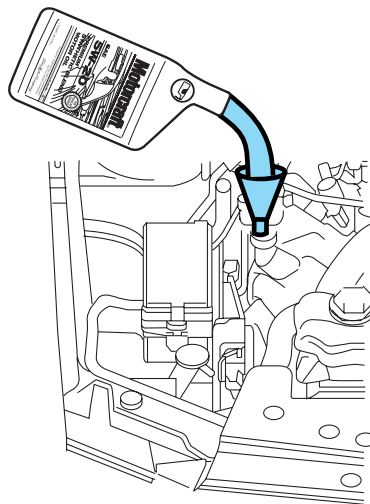
- If the oil level is **between the lower and upper holes**, the oil level is acceptable. **DO NOT ADD OIL.**
- If the oil level is below the lower hole, add enough oil to raise the level within the lower and upper holes.

## Maintenance and Specifications

- 4.0L V6 engine



- 4.6L 3V SOHC V8 engine



- Oil levels above the upper hole may cause engine damage. Some oil must be removed from the engine by an authorized dealer.

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.

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## Maintenance and Specifications

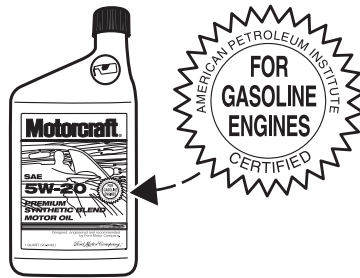
2. If the engine oil level is not within the normal range, add only certified engine oil of the recommended viscosity. Remove the engine oil filler cap and use a funnel to pour the engine oil into the opening.
3. Recheck the engine oil level. Make sure the oil level is not above the normal operating 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 1/4 of a turn until three clicks are heard or until the cap is fully seated.

**To avoid possible oil loss, DO NOT operate the vehicle with the engine oil level indicator and/or the engine oil filler cap removed.**

### Engine Oil Recommendations

#### 4.6L 3V V8 Engine

Look for this certification trademark.



#### **Use SAE 5W-20 engine oil.**

Only use oils “Certified For Gasoline Engines” by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricant Standardization and Approval Committee (ILSAC), comprised of U.S. and Japanese automobile manufacturers.

To protect your engine’s warranty use Motorcraft SAE 5W-20 or an equivalent 5W-20 oil meeting Ford specification WSS-M2C930-A. **SAE 5W-20 oil provides optimum fuel economy and durability performance meeting all requirements for your vehicle’s engine.**

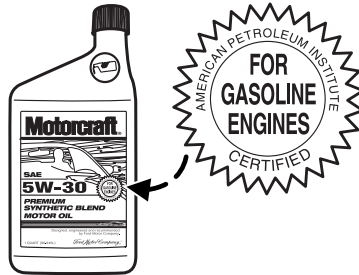
Do not use supplemental engine oil additives, cleaners or other engine treatments. They are unnecessary and could lead to engine damage that is not covered by Ford warranty.

Change your engine oil according to the appropriate schedule listed in the *scheduled maintenance information*.

## Maintenance and Specifications

### 4.0L V6 Engine

Look for this certification trademark.



### **Use SAE 5W-30 engine oil.**

Only use oils “Certified For Gasoline Engines” by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricant Standardization and Approval Committee (ILSAC), comprised of U.S. and Japanese automobile manufacturers.

To protect your engine’s warranty use Motorcraft SAE 5W-30 or an equivalent 5W-30 oil meeting Ford specification WSS-M2C929-A.

Do not use supplemental engine oil additives, cleaners or other engine treatments. They are unnecessary and could lead to engine damage that is not covered by Ford warranty.

Change your engine oil according to the appropriate schedule listed in the *scheduled maintenance information*.

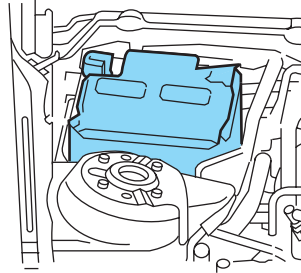
Ford production and aftermarket (Motorcraft) oil filters are designed for added engine protection and long life. If a replacement oil filter is used that does not meet Ford material and design specifications, start-up engine noises or knock may be experienced.

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 *scheduled maintenance information* 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) (automatic transmission) or the neutral position (manual transmission), turn off all accessories and start the engine.
  3. Run the engine until it reaches normal operating temperature.
  4. Allow the engine to idle for at least one minute.
  5. Turn the A/C on and allow the engine to idle for at least one minute.
  6. Drive the vehicle to complete the relearning process.
- The vehicle may need to be driven 10 miles (16 km) or more to relearn the idle and fuel trim strategy.
  - **If you do not allow the engine to relearn its idle trim, the idle quality of your vehicle may be adversely affected until the idle trim is eventually relearned.**

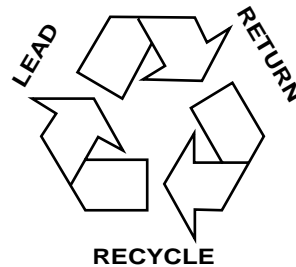
When the battery is disconnected or a new battery installed, the transmission must relearn its adaptive strategy. As a result of this, the transmission may shift firmly. This operation is considered normal and

## Maintenance and Specifications

will not affect function or durability of the transmission. Over time the adaptive learning process will fully update transmission operation to its optimum shift feel.

If the battery has been disconnected or a new battery has been installed, the clock and the preset radio stations must be reset once the battery is reconnected.

- Always dispose of automotive batteries in a responsible manner. Follow your local authorized standards for disposal. Call your local authorized recycling center to find out more about recycling automotive batteries.



### ENGINE COOLANT

#### Checking engine coolant

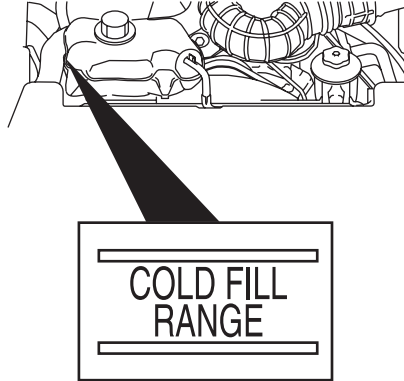
The concentration and level of engine coolant should be checked at the intervals listed in *scheduled maintenance information*. The coolant concentration should be maintained at 50/50 coolant and distilled water, which equates to a freeze point of  $-34^{\circ}\text{F}$  ( $-36^{\circ}\text{C}$ ). Coolant 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 "FULL COLD" level or within the "COLD FILL RANGE" 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  $-34^{\circ}\text{F}$  ( $-36^{\circ}\text{C}$ ).**
- **Boiling protection up to  $265^{\circ}\text{F}$  ( $129^{\circ}\text{C}$ ).**
- **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 “FULL COLD” level or within the “COLD FILL RANGE” as listed on the engine coolant reservoir (depending upon application).
- Refer to *scheduled maintenance information* for service interval schedules.
- Be sure to read and understand *Precautions when servicing your vehicle* in this chapter.

If the engine coolant has not been checked at the recommended interval, the engine coolant reservoir may become low or empty. If the reservoir is low or empty, add engine coolant to the reservoir. Refer to *Adding engine coolant* in this chapter.

**Note:** Automotive fluids are not interchangeable; do not use engine coolant, antifreeze or windshield washer fluid outside of its specified function and vehicle location.

### Adding engine coolant

When adding coolant, make sure it is a 50/50 mixture of engine coolant and distilled water. Add the mixture to the coolant reservoir, **when the engine is cool**, until the appropriate fill level is obtained.



Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

## Maintenance and Specifications



Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

- **Add Motorcraft Premium Gold Engine Coolant (yellow-colored), VC-7-A (U.S., except CA, OR and NM), VC-7-B (CA, OR and NM), meeting Ford Specification WSS-M97B51-A1.**

**Note:** Use of Motorcraft Cooling System Stop Leak Pellets, VC-6, may darken the color of Motorcraft Premium Gold Engine Coolant from yellow to golden tan.

- **Do not add/mix an orange-colored, extended life coolant such as Motorcraft Specialty Orange Engine Coolant, VC-2 and VC-3 (US) or CXC-209 (Canada), meeting Ford specification WSS-M97B44-D with the factory-filled coolant.** Mixing Motorcraft Specialty 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, 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.

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 "FULL COLD" 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 reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.

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 (a translucent 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 “FULL COLD” 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 (refer to *Checking engine coolant*). 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 quart (1.0 liter) of engine coolant per month, have your authorized dealer check the engine cooling system. Your cooling system may have a leak. Operating an engine with a low level of coolant can result in engine overheating and possible engine damage.

### Recycled engine coolant

Ford Motor Company 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.



## Maintenance and Specifications



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 section.

Fill your engine coolant reservoir as outlined in *Adding engine coolant* in this section.

### Severe climates

If you drive in extremely cold climates (less than  $-34^{\circ}\text{F}$  [ $-36^{\circ}\text{C}$  ]):

- **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%.**
- **NEVER decrease the coolant concentration below 40%.**
- **Decreased engine coolant concentrations below 40% will decrease the corrosion protection characteristics of the engine coolant and may cause engine damage.**
- **Decreased engine coolant concentrations below 40% will decrease the freeze protection characteristics of the engine coolant and may cause engine damage.**
- **Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate protection at the temperatures in which you drive.**

Vehicles driven year-round in non-extreme climates should use a 50/50 mixture of engine coolant and distilled water for optimum cooling system and engine protection.

## Maintenance and Specifications

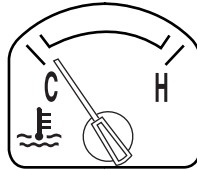
### What you should know about fail-safe cooling (4.6L V8 engine only)

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 red (hot) area.
- The “engine coolant temperature” indicator will illuminate.
- 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.

Continued operation will increase the engine temperature:

- The engine will completely shut down.
- Steering and braking effort will increase.

Once the engine temperature cools, the engine can be re-started. Take your vehicle to 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.

## Maintenance and Specifications

4. Check the coolant level and replenish if low.



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

5. Restart 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.



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:

## Maintenance and Specifications

- Extinguish all smoking materials and any open flames before refueling your vehicle.
- Always turn off the vehicle before refueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed, call a physician immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.
- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin and/or clothing, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking “Antabuse” or other forms of disulfiram for the treatment of alcoholism. Breathing gasoline vapors, or skin contact could cause an adverse reaction. In sensitive individuals, serious personal injury or sickness may result. If fuel is splashed on the skin, promptly wash skin thoroughly with soap and water. Consult a physician immediately if you experience an adverse reaction.



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

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

## Maintenance and Specifications

### Refueling



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

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

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 1/4 turn on/off feature.


When fueling your vehicle:


1. Turn the engine off.
2. Carefully turn the filler cap counterclockwise 1/4 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 1/4 of a turn until it clicks at least once.

If the  indicator comes on and stays on after you start the engine, the fuel filler cap may not be properly installed. Turn off the engine, remove the fuel filler cap, align the cap properly and reinstall it.

## Maintenance and Specifications

**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.

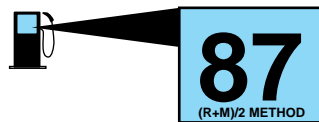
Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based additives. Studies indicate that these additives can cause your vehicle's emission control system to deteriorate more rapidly. In Canada, premium grade fuel generally contains more metallic additives than regular fuel. We recommend using regular grade fuel. In Canada, many fuels contain metallic additives, but fuels free of such additives may be available; check with your local fuel dealer.

Do not use fuel containing methanol. It can damage critical fuel system components.

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.



## Maintenance and Specifications

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

### Fuel quality

If you are experiencing starting, rough idle or hesitation driveability problems, try a different brand of unleaded gasoline. "Premium" unleaded gasoline is not recommended for vehicles designed to use "Regular" unleaded gasoline because it may cause these problems to become more pronounced. If the problems persist, see your authorized dealer.

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 approved 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.

### 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 effect on powertrain components.

If you have run out of fuel:

- You may need to cycle the ignition from OFF to ON several times after refueling, to allow the fuel system to pump the fuel from the tank to the engine.
- 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 authorized dealer. Refer to *scheduled maintenance information* for the appropriate intervals for changing the fuel filter.

## Maintenance and Specifications

**Replace the fuel filter with an authorized Motorcraft part. The customer warranty may be void for any damage to the fuel system if an authorized Motorcraft fuel filter is not used.**

### ESSENTIALS OF GOOD FUEL ECONOMY

#### Measuring techniques

Your best source of information about actual fuel economy is you, the driver. You must gather information as accurately and consistently as possible. Fuel expense, frequency of fill-ups or fuel gauge readings are NOT accurate as a measure of fuel economy. We do not recommend taking fuel economy measurements during the first 1,000 miles (1,600 km) of driving (engine break-in period). You will get a more accurate measurement after 2,000 miles-3,000 miles (3,000 km-5,000 km).

#### Filling the tank

The advertised fuel capacity of the fuel tank on your vehicle is equal to the rated refill capacity of the fuel tank as listed in the *Refill capacities* section of this chapter.

The advertised capacity is the amount of the indicated capacity and the empty reserve combined. Indicated capacity is the difference in the amount of 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 two 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.



## Maintenance and Specifications

- 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 miles or kilometers).
2. Each time you fill the tank, record the amount of fuel added (in gallons or liters).
3. After at least three to five tank fill-ups, fill the fuel tank and record the current odometer reading.
4. Subtract your initial odometer reading from the current odometer reading.
5. Follow one of the simple calculations in order to determine fuel economy:

Calculation 1: **Divide total miles traveled by total gallons used.**

Calculation 2: **Multiply liters used by 100, then divide by total kilometers traveled.**

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 55 mph [88 km/h] uses 15% less fuel than traveling at 65 mph [105 km/h]).

## Maintenance and Specifications

- 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**

- 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 *scheduled maintenance information*.

### **Conditions**

- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Carrying unnecessary weight may reduce fuel economy (approximately 1 mpg [0.4 km/L] is lost for every 400 lb [180 kg] 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 8–10 miles (12–16 km) 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.

## Maintenance and Specifications

### EPA window sticker

Every new vehicle should have the EPA window sticker. Contact your authorized 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 MPG (L/100 km) expected on the vehicle under optimum conditions. Your fuel economy may vary depending upon the method of operation and conditions.


### EMISSION CONTROL SYSTEM

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

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

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

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

 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.

## Maintenance and Specifications





Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment.


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


Please consult your *Warranty Guide* for complete emission warranty information.

### On board diagnostics (OBD-II)

Your vehicle is equipped with a computer that monitors the engine's emission control system. This system is commonly known as the On Board Diagnostics System (OBD-II). This OBD-II system protects the environment by ensuring that your vehicle continues to meet government emission standards. The OBD-II system also assists your authorized dealer in properly servicing your vehicle. When the  indicator illuminates, the OBD-II system has detected a malfunction. Temporary malfunctions may cause your  indicator to illuminate. Examples are:

1. The vehicle has run out of fuel—the engine may misfire or run poorly.
2. Poor fuel quality or water in the fuel.
3. The fuel cap may not have been securely tightened. See *Fuel filler cap* in this chapter.

These temporary malfunctions can be corrected by filling the fuel tank with good quality fuel and/or properly tightening the fuel cap. After three driving cycles without these or any other temporary malfunctions present, the  indicator 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  indicator remains on, have your vehicle serviced at the first available opportunity.

### 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*

## Maintenance and Specifications

*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.

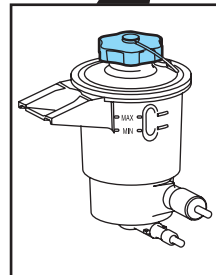
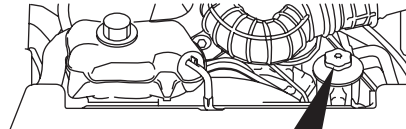
If the vehicle's powertrain system or its battery has just been serviced, the on-board diagnostics system is reset to a "not ready for I/M test" condition. To ready the on-board diagnostics system for I/M testing, a minimum of 30 minutes of city and highway driving is necessary as described below:

- 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.

### 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.**

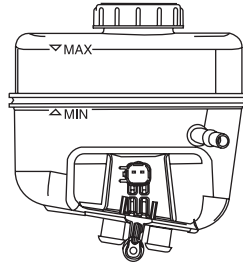


1. Start the engine and let it run until it reaches normal operating temperature (the engine coolant temperature gauge indicator will be near the center of the normal area between H and C).
2. While the engine idles, turn the steering wheel to its furthest point (until it stops) left and right several times.
3. Turn the engine off.
4. Check the fluid level in the reservoir. It should be between the MIN and MAX lines. Do not add fluid if the level is 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.

## Maintenance and Specifications

### BRAKE FLUID

The fluid level will drop slowly as the brakes wear, and will rise when the brake components are replaced. Fluid levels between the “MIN” and “MAX” lines are within the normal operating range; there is no need to add fluid. If the fluid levels are outside of the normal operating range the performance of your brake system could be compromised; seek service from your authorized dealer immediately.



### TRANSMISSION FLUID

#### Checking automatic transmission fluid

The 5R55S transmission does not have a transmission fluid dipstick.

Refer to your *scheduled maintenance information* for scheduled intervals for fluid checks and changes. Your transmission does not consume fluid. However, the fluid level should be checked if the transmission is not working properly, i.e., if the transmission slips or shifts slowly or if you notice some sign of fluid leakage.

**Transmission fluid should be checked and, if required, fluid should be added by an authorized dealer.**

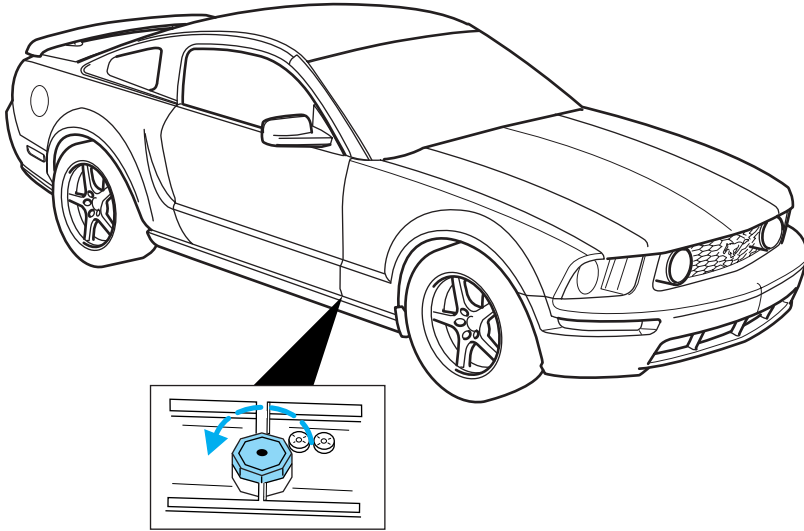
Before adding any fluid, make sure the correct type is used. Use only MERCON® V automatic transmission fluid. The type of fluid used is indicated on the transmission fluid pan, extension housing and also in the *Lubricant specifications* section in this chapter.

**Use of a non-approved automatic transmission fluid may cause internal transmission component damage and void the warranty.**

Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

## Maintenance and Specifications

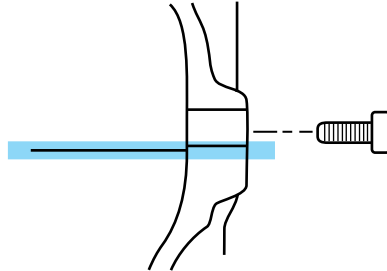
### Checking and adding manual transmission fluid (if equipped)



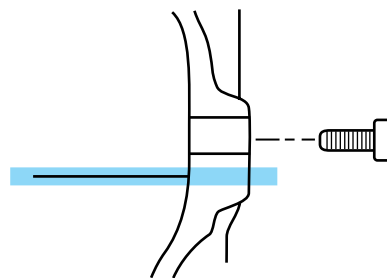
1. Clean the filler plug.
2. Remove the filler plug and inspect the fluid level.
3. Note: There are two different manual transmissions used in this vehicle and they have different fluid levels. For vehicles equipped with a V6 engine the correct manual transmission fill level is at the lower edge of the filler hole. For vehicles equipped with a V8 engine the correct manual transmission fill level is 1/2 inch (1.3 cm) below the edge of the filler hole.

## Maintenance and Specifications

- Fill level for V6



- Fill level for V8



4. Add enough fluid through the filler opening to bring the fluid up to the recommended levels.

5. Install and tighten the fill plug securely.

Use only fluid that meets Ford specifications. Refer to *Lubricant specifications* in this chapter.



## Maintenance and Specifications

### MOTORCRAFT PART NUMBERS

Component	4.0L V6 engine	4.6L V8 engine
Air filter element	FA-1773	FA-1773
Fuel filter	FG-1083	FG-1083
Battery	BXT-96R	BXT-96R
Battery - (with High Electrical content)	BXT-40R	BXT-40R
Oil filter	FL-820-S	FL-820-S
PCV valve	<sup>1</sup>	(non-serviceable)
Spark Plugs	<sup>2</sup>	

<sup>1</sup>The PCV valve is a critical emission component. It is one of the items listed in *scheduled maintenance information* and is essential to the life and performance of your vehicle and to its emissions system.

For PCV valve replacement, see your authorized dealer. Refer to *scheduled maintenance information* for the appropriate intervals for changing the PCV valve.

**Replace the PCV valve with one that meets Ford material and design specifications for your vehicle, such as a Motorcraft or equivalent replacement part. The customer warranty may be void for any damage to the emissions system if such a PCV valve is not used.**

<sup>2</sup>For spark plug replacement, see your authorized dealer. Refer to *scheduled maintenance information* for the appropriate intervals for changing the spark plugs.

**Replace the spark plugs with ones that meet Ford material and design specifications for your vehicle, such as Motorcraft or equivalent replacement parts. The customer warranty may be void for any damage to the engine if such spark plugs are not used.**

## Maintenance and Specifications

### REFILL CAPACITIES

Fluid	Ford Part Name	Application	Capacity
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	All	Between MIN and MAX lines on reservoir
Engine oil (includes filter change) <sup>6</sup>	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	4.6L V8 engine	6.0 quarts (5.7 L)
	Motorcraft SAE 5W-30 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-30 Super Premium Motor Oil (Canada)	4.0L V6 engine	5.0 quarts (4.7L)
Engine coolant <sup>1</sup>	Motorcraft Premium Gold Engine Coolant (yellow-colored)	4.0L V6 engine	12.5 quarts (11.8L)
		4.6L V8 engine	13.6 quarts (12.9L)
Power steering fluid	Motorcraft MERCON® ATF	4.0L V6 engine	Fill to between MIN and MAX lines on reservoir
		4.6L V8 engine	
Rear axle lubricant <sup>2</sup>	Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant	7.5 inch axle (V6)	3.25 pints (1.5L)
		8.8 inch axle (V8)	4.25 pints (2.0L)
Fuel tank	N/A	All	16.0 gallons (60.6L)

## Maintenance and Specifications

Fluid	Ford Part Name	Application	Capacity
Automatic Transmission fluid <sup>3</sup>	Motorcraft MERCON®V ATF	All	11.9 quarts (11.2L) <sup>4</sup>
Manual Transmission fluid <sup>3</sup>	Motorcraft MERCON® ATF	4.0L V6 engine	2.75 quarts (2.6L) <sup>5</sup>
		4.6L V8 engine	3.2 quarts (3.0L) <sup>5</sup>
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	All	4.0 quarts (3.8L)

<sup>1</sup>Add the coolant type originally equipped in your vehicle.

<sup>2</sup>Rear axle lubricants do not need to be checked or changed unless a leak is suspected, service is required or the axle assembly has been submerged in water. The axle lubricant should be changed any time the rear axle has been submerged in water. Fill 1/4 inch to 9/16 inch (6 mm to 14 mm) below bottom of fill hole. Add 4 oz. (118 ml) of Additive Friction Modifier XL-3 or equivalent meeting Ford specification EST-M2C118-A for complete refill of Traction-Lok axles.

<sup>3</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 your *scheduled maintenance information* to determine the correct service interval.

<sup>4</sup>Approximate dry capacity, includes cooler and tubes. Fluid level should be checked by an authorized dealer.

<sup>5</sup>Service refill capacity is determined by filling the transmission to the bottom of the filler hole with the vehicle on a level surface.

<sup>6</sup>Use of synthetic or synthetic blend motor oil is not mandatory. Engine oil need only meet the requirements of Ford specification WSS-M2C929-a (4.0L) or WSS-M2C930-A (4.6L) and the API Certification mark.

## Maintenance and Specifications

### LUBRICANT SPECIFICATIONS

Item	Ford part name	Ford part number	Ford specification
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	PM-1	ESA-M6C25-A
Door weatherstrips	Silicone Spray Lubricant	XL-6	ESR-M13P4-A
Door latch, hood latch, auxiliary hood latch, striker plates, seat tracks and fuel filler door hinge	Multi-Purpose Grease	XG-4 or XL-5	ESB-M1C93-B
Engine coolant	Motorcraft Premium Gold Engine Coolant (yellow-colored)	VC-7-A (U.S., except CA, OR and NM), VC-7-B (CA, OR and NM)	WSS-M97B51-A1

## Maintenance and Specifications

Item	Ford part name	Ford part number	Ford specification
Engine oil	<b>4.6L engine</b> Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	XO-5W20-QSP (US) CXO-5W20-LSP12 (Canada)	WSS-M2C 930-A with API Certification Mark
	<b>4.0L V6 engine</b> Motorcraft SAE 5W-30 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-30 Super Premium Motor Oil (Canada)	XO-5W30-QSP (US) CXO-5W30-LSP12 (Canada)	WSS-M2C 929-A and API Certification Mark
Lock cylinders	Motorcraft Penetrating and Lock Lubricant	XL-1	none
Power steering fluid	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Rear Axle Lubricant	Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant <sup>1</sup>	XY-75W140-QL	WSP-M2C192-A
Automatic transmission fluid	Motorcraft MERCON®V ATF <sup>2</sup>	XT-5-QM	MERCON®V

## Maintenance and Specifications

Item	Ford part name	Ford part number	Ford specification
Manual transmission fluid – 4.0L V6/4.6L V8	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Disc brake caliper rails	Motorcraft Silicone Brake Caliper Grease and Dielectric Compound	XG-3-A	ESE-M1C171-A
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	ZC-32-A	WSB-M8B16-A2

<sup>1</sup>Add 4 oz. (118 ml) of Additive Friction Modifier XL-3 or equivalent meeting Ford specification EST-M2C118-A for complete refill of Traction-Lok axles.

Ford design rear axles contain a synthetic lubricant that does not require changing unless the axle has been submerged in water.

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

### ENGINE DATA

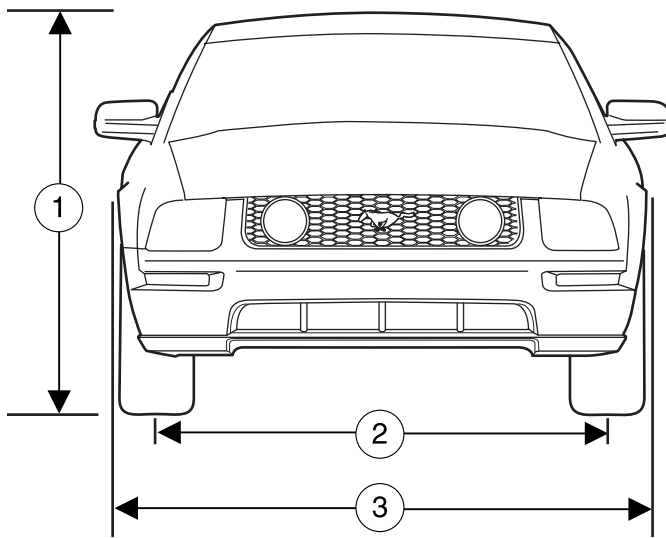
Engine	4.0L V6 engine	4.6L V8 engine
Cubic inches	245	281
Required fuel	87 octane	87 octane
Firing order	1-4-2-5-3-6	1-3-7-2-6-5-4-8
Ignition system	EDIS	Coil on plug
Spark plug gap	0.052–0.054 inch (1.32–1.42 mm)	0.040–0.050 inch (1.02–1.27 mm) <sup>1</sup>
Compression ratio	9.7:1	9.8:1

<sup>1</sup>The spark plug gap is not adjustable on the 4.6L V8.

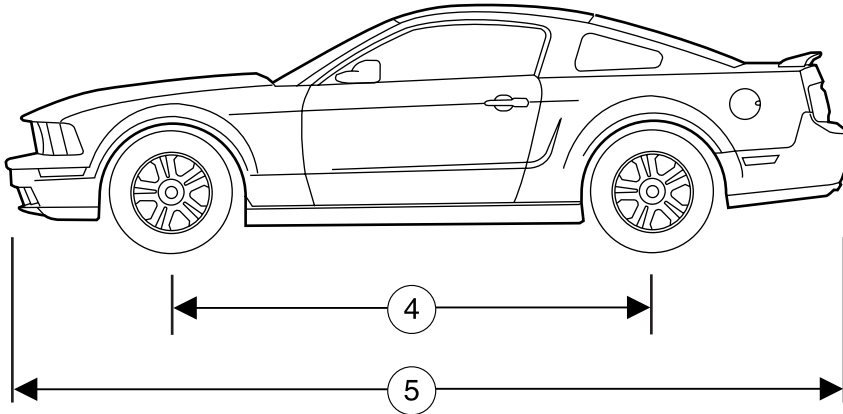
## Maintenance and Specifications

### VEHICLE DIMENSIONS

Vehicle dimensions	Base - inches (mm)	GT - inches (mm)
(1) Vehicle height	55.4 (1407)	55.4 (1407)
(2) Track Width- Front	62.8 (1594)	62.3 (1582)
(2) Track Width- Rear	63.0 (1600)	62.5 (1588)
(3) Vehicle width	73.9 (1877)	73.9 (1877)
(4) Wheelbase	107.1 (2720)	107.1 (2720)
(5) Overall length	187.6 (4765)	188.0 (4775)



## Maintenance and Specifications



### IDENTIFYING YOUR VEHICLE

#### Certification label

The National Highway Traffic Safety Administration Regulations require that a Safety Compliance Certification Label be affixed to a vehicle and prescribe where the Safety Compliance Certification Label may be located. The Safety Compliance Certification Label is located on the structure by the trailing edge of the driver's door or the edge of the driver's door.

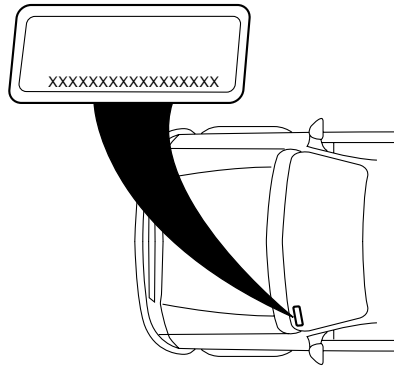
<b>MFD. BY FORD MOTOR CO. IN U.S.A.</b>	
DATE: XXXXX	GVWR: XXXXX LB/ XXXXX KG
FGAWR: XXXXXX/XXXXXXXX	RGAWR: XXXXXX/XXXXXXXX
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.	
VIN: XXXXXXXXXXXXXXXX TYPE: XXXXXXXXXXXXXXXX	
MAXIMUM LOAD=OCCUPANTS + LUGGAGE=XXXKG/XXXLB	
OCCUPANTS: X TOTAL X FR X 2ND X RR OCCUPANTS LUGGAGE	
XX XXXKG/XXXLB	
X XXXKG/XXXLB	
TIRE: XXXX/XXXXX XXX X XXXKG/XXXLB	
PRESSURE (FR) XXX kPa/ XX PSI COLD	
PRESSURE (RR) XXX kPa/ XX PSI COLD	
TRAILER TOWING - SEE OWNER GUIDE	
EXT PNT: XXXXX XXXXX	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	



## Maintenance and Specifications

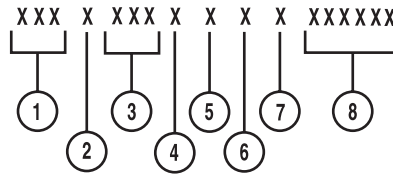
### Vehicle identification number (VIN)

The vehicle identification number is attached to a metal tag and is located on the driver side instrument panel. (Please note that in the graphic XXXX is representative of your vehicle identification number.)



The Vehicle Identification Number (VIN) contains the following information:

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 and transmission.

## Maintenance and Specifications

### Transmission/Transaxle code designations

You can find a transmission/transaxle code on the Safety Compliance Certification Label. The following table tells you which transmission or transaxle each code represents.

MFD. BY FORD MOTOR CO. IN U.S.A.					
DATE: XX/XX	GVWR: XXXXXLB/ XXXXXKG				
FRONT GAWR: XXXXL	REAR GAWR: XXXXLB				
XXXXKG	WITH	XXXXKG	WITH		
XXXX/XXXXXXXX	TIRES	XXXX/XXXXXXXX	TIRES		
XXXX.XX	RIMS	XXXX.XX	RIMS		
AT XXX kPa/XX	PSI COLD	AT XXX kPa/XX	PSI COLD		
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.					
VIN: XXXXXXXXXXXXXXXXX	XXXXX		XXXXX		
TYPE: XXX					
					
EXT PNT: XX	RC: XX	DSO:			
WB ' BRK ' INT TR ' TP/PS ' R ' AXLE ' TR ' SPR ' XXXXX					
XXX X XX X XX X XX					
XXXXXXXXXXXXX UTC V2USA-1520472-AA					



Code	Description
F	Five-speed manual (T5)
K	Five-speed manual (TR3650)
L	Five-speed automatic (5R55S)

## Accessories

### **GENUINE FORD ACCESSORIES FOR YOUR VEHICLE**

A wide selection of Genuine Ford Accessories are available for your vehicle through your local authorized Ford or Ford of Canada dealer. These quality accessories have been specifically engineered to fulfill your automotive needs; they are custom designed to complement the style and aerodynamic appearance of your vehicle. In addition, each accessory is made from high quality materials and meets or exceeds Ford's rigorous engineering and safety specifications. Ford Motor Company will repair or replace any properly dealer-installed Genuine 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 12,000 miles (20,000 km) (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 authorized dealer are covered for the full length of your New Vehicle's Limited Warranty — 3 years or 36,000 miles (60,000 km) (whichever occurs first). Contact your authorized dealer for details and a copy of the warranty.

### **Not all accessories are available for all models.**

The following is a list of several Genuine Ford Accessory products. Not all accessories are available for all models. For a complete listing of the accessories that are available for your vehicle, please contact your authorized dealer or visit our online store at: [www.fordaccessoriesstore.com](http://www.fordaccessoriesstore.com).

#### **Exterior style**

Bug shields  
Chrome exhaust tip  
Deflectors  
Exterior trim kits  
Front end covers  
Grille inserts  
Fog lights  
Splash guards  
Spoiler  
Wheels

## Accessories

### Interior style

Electrochromatic compass/temperature interior mirrors

Floor mats

### Lifestyle

Bike racks

Cargo organization and management

### Peace of mind

First aid and highway safety kits

Full vehicle covers

Locking gas cap

Keyless entry

Keyless entry keypad

Remote start

Vehicle security systems

Mobile-ease hands-free communication system

Wheel locks

For maximum vehicle performance, keep the following information in mind when adding accessories or equipment to your vehicle:

- When adding accessories, equipment, passengers and luggage to your vehicle, do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Consult your authorized dealer for specific weight information.
- The Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulate the use of mobile communications systems — such as two-way radios, telephones and theft alarms - that are equipped with radio transmitters. Any such equipment installed in your vehicle should comply with FCC or CRTC regulations and should be installed only by a qualified service technician.
- Mobile communications systems may harm the operation of your vehicle, particularly if they are not properly designed for automotive use.

## Accessories

- To avoid interference with other vehicle functions, such as anti-lock braking systems, amateur radio users who install radios and antennas onto their vehicle should not locate the Amateur Radio Antennas in the area of the driver's side hood.
- Electrical or electronic accessories or components that are added to the vehicle by the authorized dealer or the owner may adversely affect battery performance and durability.

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