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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
- In Canada: www.ford.ca
- In Australia: www.ford.com.au
- In Mexico: 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.

Introduction

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

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

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*.

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

Introduction

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.

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.

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.

Notice to owners of diesel-powered vehicles

Read the *6.0 Liter Power Stroke Direct Injection Turbo Diesel Owner's Guide* Supplement for information regarding correct operation and maintenance of your Diesel-powered light truck.

Introduction

Notice to owners of pickup trucks and utility type vehicles



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

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

Be sure to read *Driving off road* in the *Driving* chapter.

Snowplowing

The Excursion is not recommended for snowplow installation. Ford makes no representation as to the suitability of the Excursion for snowplowing, in particular regarding the potential for exceeding vehicle weight limits, airbag (SRS) deployment sensitivity, vehicle crash integrity, or powertrain durability. The Snowplow Package Option is not available.

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	

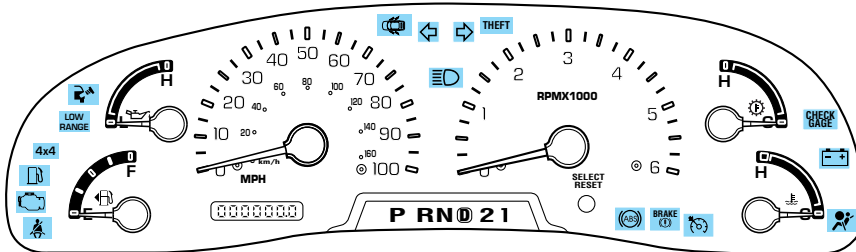
Introduction

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

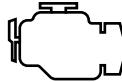
WARNING LIGHTS AND CHIMES



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

If your vehicle is equipped with a Diesel engine, it has a unique cluster, refer to *Starting the engine in your 6.0 Liter Power Stroke Direct Injection Turbo Diesel Owner's Guide Supplement*.

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.

Instrument Cluster

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.



Check gage: Illuminates when any of the following conditions has occurred:

- The engine coolant temperature is high.
- The engine oil pressure is low.
- The fuel gauge is at or near empty.

**CHECK
GAGE**

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.

BRAKE
(!)



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.

Anti-lock brake system: 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.



Instrument Cluster

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.



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



Speed control: Illuminates when the speed control is activated. Turns off when the speed control system is deactivated.



Transmission Tow/Haul Feature (5R0110W 5-speed automatic transmission) (if equipped-Diesel engines only):

Illuminates when the Tow/Haul feature has been activated. Refer to the *Driving* chapter for transmission function and operation. If the light flashes steadily, have the system serviced immediately, damage to the transmission could occur.

TOW
HAUL

Four wheel drive low (if equipped): Illuminates when four-wheel drive low is engaged.

LOW
RANGE

Four wheel drive indicator (if equipped): Illuminates when four-wheel drive is engaged.

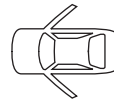
4x4

Instrument Cluster

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

THEFT

Door ajar: Illuminates when the ignition is in the ON position and any door is open.



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.

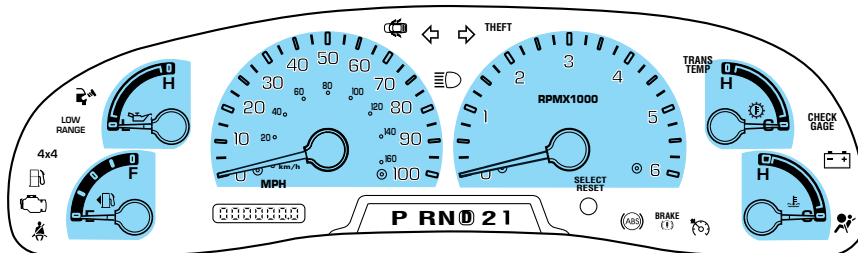


Key-in-ignition warning chime: Sounds when the key is left in the ignition in the OFF/LOCK or ACCESSORY position and the driver's door is opened.

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.

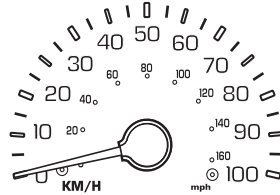
Parking brake ON warning chime: Sounds when the parking brake is set, the engine is running and the vehicle is driven more than 3 mph (5 km/h).

GAUGES

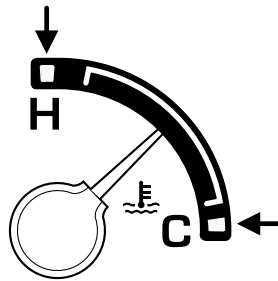


Instrument Cluster

Speedometer: Indicates the current vehicle speed.



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.

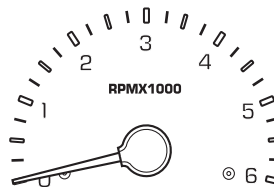
Odometer: Registers the total miles (kilometers) of the vehicle.



Trip odometer: Registers the miles (kilometers) of individual journeys. Press the control once to switch from the odometer to the trip odometer. To reset the trip, press the control again until the trip reading is 0.0 miles (kilometers).



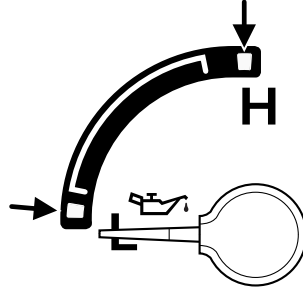
Tachometer: Indicates the engine speed in revolutions per minute. Driving with your tachometer pointer continuously at the top of the scale may damage the engine.



Instrument Cluster

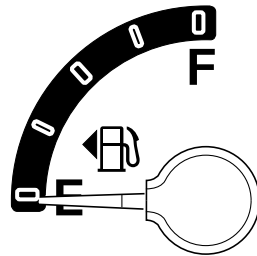
Engine oil pressure gauge:

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, have your vehicle checked at your authorized dealer.



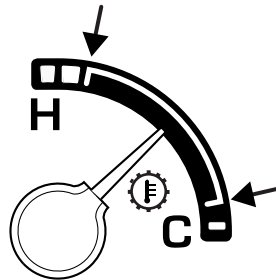
Fuel gauge: Indicates approximately how much fuel is left in the fuel tank (when the ignition is in the ON position). The fuel gauge may vary slightly when the vehicle is in motion or on a grade.

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



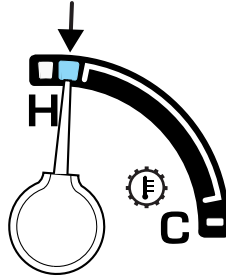
Transmission fluid temperature gauge: If the gauge is in the:

White area (normal) - the transmission fluid is within the normal operating temperature (between “H” and “C”).



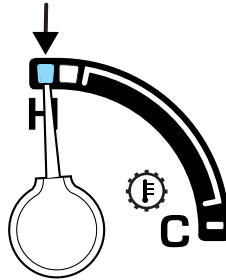
Instrument Cluster

Yellow area (warning) — the transmission fluid is higher than normal operating temperature. This can be caused by special operation conditions (i.e. towing or off road use). Refer to *Special Operating Conditions* in the *Scheduled Maintenance Guide* for instructions. Operating the transmission for extended periods of time with the gauge in the yellow area may cause internal transmission damage.



Altering the severity of the driving conditions is recommended to lower the transmission temperature into the normal range.

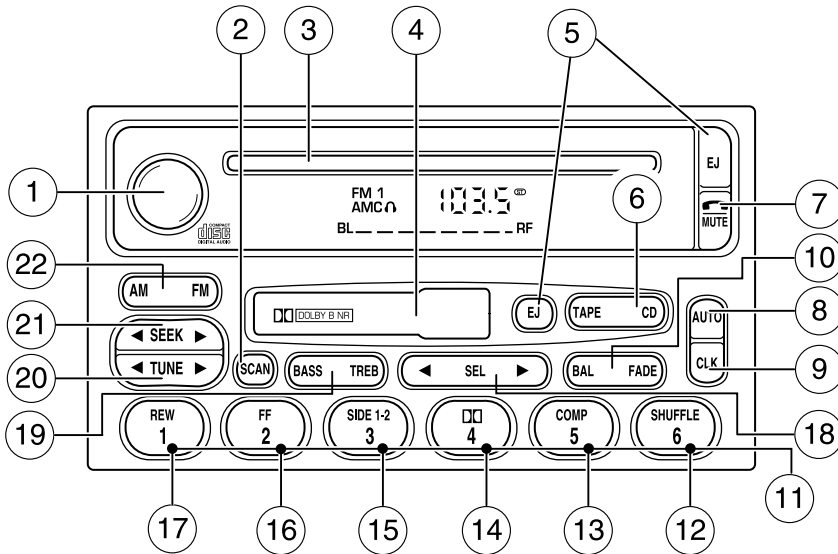
Red area (over temperature) — the transmission fluid is overheating. Stop the vehicle to allow the temperature to return to normal range.



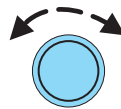
If the gauge is operating in the Yellow or Red area, stop the vehicle and verify the airflow is not restricted such as snow or debris blocking airflow through the grill. If the gauge continues to show high temperatures, see your authorized dealer.

Entertainment Systems

PREMIUM AM/FM STEREO/CASSETTE/SINGLE CD (IF EQUIPPED)



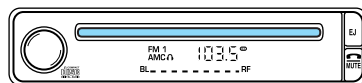
1. **Power/volume:** Press to turn ON/OFF; turn to increase/decrease volume.



2. **SCAN:** Press to hear a brief sampling of all listenable stations, tape selections or CD tracks. Press again to stop.



3. **CD slot:** Insert a CD with the label side up.

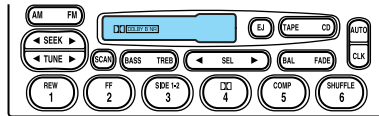


CD units are designed to play commercially pressed 4.75 in (12 cm) audio compact discs only. Due to technical incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford CD players. Irregular shaped CDs, CDs with a scratch protection film attached, and CDs with homemade paper (adhesive) labels should

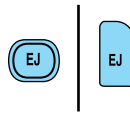
Entertainment Systems

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. Ballpoint pens may damage CDs. Please contact your dealer for further information.

4. **Cassette door:** Insert the cassette with the opening to the right.



5. **EJ (Eject):** Press to eject the cassette/CD. The radio will resume playing.



6. **TAPE:** Press to start tape play. Press to stop tape during rewind/fast forward.



CD: Press to start CD play. With the dual media audio, press CD to toggle between single CD and CD changer play (if equipped).



7. **MUTE:** Press to MUTE playing media; press again to return to the playing media.



8. **AUTO:** Press to set first six strongest stations (if available) into AM, FM1 or FM2 memory buttons; press again to return to normal stations.



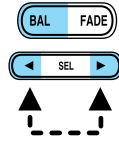
9. **CLK (Clock):** Press to toggle between station mode and clock mode. Press and hold to set the clock. Press the ◀ SEEK to decrease hours or SEEK ▶ to increase hours. Press the ◀ TUNE



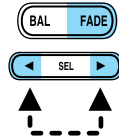
Entertainment Systems

to decrease minutes or TUNE ► to increase minutes. If your vehicle has a stand alone clock this control will not function.

10. **BAL (Balance):** Press BAL; then press SEL ◀ / ▶ to shift sound to the left/right speakers.



FADE: Press FADE; then press SEL ◀ / ▶ to shift sound to the rear/front speakers.



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



12. **SHUFFLE:** Works in CD mode. Press to play tracks in random order. Press again to disable.



13. **COMP (Compression):** Works in CD mode. Press to bring soft and loud passages together for a more consistent listening level. A small “c” will appear in the display to indicate that compression is enabled. Press again to disable.



14. **DCI Dolby® noise reduction:** Works in tape mode only. Reduces tape noise and hiss; press to activate/deactivate.



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

Entertainment Systems

15. **SIDE 1-2:** Works in tape mode only. Press to play reverse side of the tape.



16. **FF (Fast Forward):** In CD mode, press for a slow advance, press and hold for a fast advance. In TAPE mode, press FF to enable Fast Forward feature. Press FF or TAPE to resume tape play.



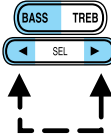
17. **REW (Rewind):** In CD mode, press for a slow reverse, press and hold for a fast reverse. In TAPE mode, press REW to enable the rewind feature. Press REW or TAPE to resume tape play.



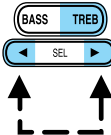
18. **SEL (Select):** Use with Bass, Treble, Balance and Fade controls.



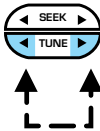
19. **BASS:** Press BASS; then press SEL ◀ / ▶ to decrease/increase the bass output.



TREB (Treble): Press TREB; then press SEL ◀ / ▶ to decrease/increase the treble output.

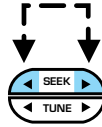


20. **TUNE:** Works in radio mode only. Press TUNE ◀ / ▶ to change frequency down/up.



Entertainment Systems

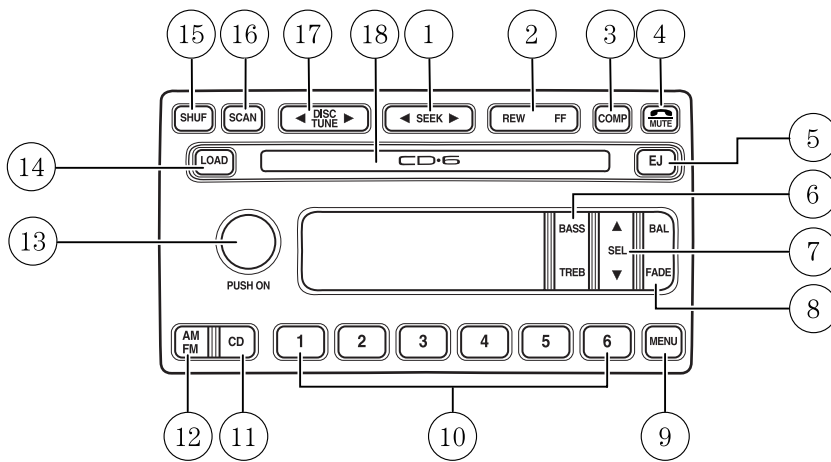
21. **SEEK:** Press and release SEEK ◀ / ▶ for previous/next strong station, selection or track.



22. **AM/FM:** Press to select AM/FM1/FM2 frequency band.



PREMIUM IN-DASH SIX CD SOUND SYSTEM (IF EQUIPPED)



1. **Seek:** Press and release SEEK ◀ / ▶ for previous/next strong station, or track of current disc.



2. **Rewind:** Press for a slow rewind, press and hold for a fast rewind.



Fast forward: Press for a slow advance, press and hold for a fast advance.



Entertainment Systems

3. **Comp** (Compression): In CD mode, press to adjust the soft and loud passages together for a more consistent listening level. Press the COMP control until COMP ON is displayed.

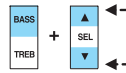
4. **Mute**: Press to MUTE playing media; press again return to playing media. In CD mode, MUTE acts as a pause feature.



5. **Eject**: Press to eject a CD. EJECTING # (desired selection) will appear on the display. When the CD appears in the CD slot for removal, the display reads REMOVE CD # (desired selection). Press and hold to eject all loaded discs.



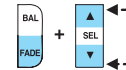
6. **Bass**: Press BASS; then press SEL ▼ / ▲ to decrease/increase the bass output.



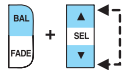
Treble: Press TREB; then press SEL ▼ / ▲ to decrease/increase the treble output.



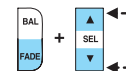
7. **Select**: Use with Bass, Treble, Balance and Fade controls to adjust levels. Use with MENU to set the clock and engage RDS.



8. **Balance**: Press BAL; then press SEL ▼ / ▲ to shift sound to the left/right speakers.



Fade: Press FADE; then press SEL ▼ / ▲ to shift sound to the rear/front speakers.



9. **Menu**: Press MENU and SEL to access clock mode, RDS on/off, Traffic, Program type, and Show type modes.



RDS on/off (Radio Data System): Allows traffic, program type and station information from RDS-equipped FM stations.

Traffic: In FM mode with RDS ON, this feature allows you to hear traffic broadcasts. With the feature ON, press SEEK or SCAN to find a station

Entertainment Systems

broadcasting a traffic report (if it is broadcasting RDS data). *Traffic information is not available in most U.S. markets.*

FIND Program type: In FM mode with RDS ON, this feature allows you to search RDS-equipped stations for a certain category of music format: Classic, Country, Info, Jazz, Oldies, R&B, Religious, Rock, Soft, Top 40.

Show TYPE: In FM mode with RDS ON, this feature displays the station's call letters and format.

Setting the clock: Press MENU until SELECT HOUR or SELECT MINS is displayed. Use SEL to manually increase (▲) or decrease (▼) the hours/minutes. Press MENU again to disengage clock mode.

10. **Memory presets:** To set a station: Select frequency band AM/FM; tune to a station, press and hold a preset button until sound returns. In CD mode, press to move between CDs.



This radio is equipped with six station memory preset controls which allow you to set up to six AM stations and 12 FM stations (six in FM1 and six in FM2).

11. **CD:** Press to select CD mode.



Seamless play: In CD mode, the transition between the end of one CD and the beginning of another will not contain delay time unless SEEK or a preset control is pressed.

12. **AM/FM:** Press to select a frequency band in radio mode.



Autoset: Allows you to set the strongest local radio stations without losing your original manually set preset stations for AM/FM1/FM2. Press and momentarily hold AM/FM. AUTOSET will flash on the display. 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. Press again to disengage.

13. **Power/volume:** Press to turn ON/OFF; turn to increase or decrease volume levels.



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14. **Load:** Press to load a CD. SELECT SLOT will appear in the display. Select from 1–6 on the memory presets. MOVING TO # and then LOAD CD# will appear in the display. Insert the CD into the system, label side up. Press and hold to load up to six discs.



15. **Shuffle:** In CD mode, press to play tracks in random order. Press SHUF to cycle through SHUF TRAC, SHUF DISC or SHUF OFF.



16. **Scan:** Press to hear a brief sampling of all listenable stations or CD tracks. Press again to stop.



17. **Disc/Tune:** Radio: Press ◀ or ▶ to manually tune down or up the frequency band.



CD: Press ◀ or ▶ to select the previous or next CD.

18. **CD door:** Insert a CD label side up.

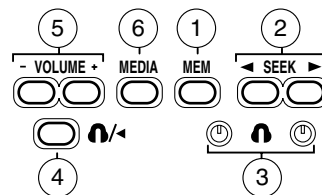


REAR AUDIO CONTROLS (IF EQUIPPED)

The rear seat controls allow the middle seat passengers to operate the radio, tape, CD or CD changer (if equipped).

To engage, simultaneously press the memory preset controls 3 and 5. Press again to disengage.

1. **Memory:** Push successively to allow rear seat passengers to scroll through memory presets. Push in CD changer mode (if equipped) to advance to the next disc.



2. **Seek:** Press ◀ or ▶ to access the previous or next station, selection or track.

3. **Headphone jack:** Plug a 3.5 mm headphone into the jack.

4. **Headphone/speaker:** Press to turn all speakers off (headphone mode). Press again to deactivate the headphone and activate system speakers.

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5. **Volume:** Press + to increase and — to decrease volume levels. From the rear seat controls, volume cannot be set higher than the front seat setting.

6. **Media:** Push to toggle between AM, FM1, FM2, tape, CD or CD changer mode (if equipped).

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, 540–1700, 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.

CASSETTE/PLAYER CARE

Do:

- Use only cassettes that are 90 minutes long or less.
- Tighten very loose tapes by inserting a finger or pencil into the hole and turning the hub.
- Remove loose labels before inserting tapes.
- Allow tapes which have been subjected to extreme heat, humidity or cold to reach a moderate temperature before playing.
- Clean the cassette player head with a cassette cleaning cartridge after 10–12 hours of play to maintain good sound/operation.

Don't:

- Expose tapes to direct sunlight, extreme humidity, heat or cold.
- Leave tapes in the cassette player for a long time when not being played.

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CD/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.

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. Ballpoint pens may damage CDs. Please contact your dealer for further information.

AUDIO SYSTEM WARRANTY AND SERVICE

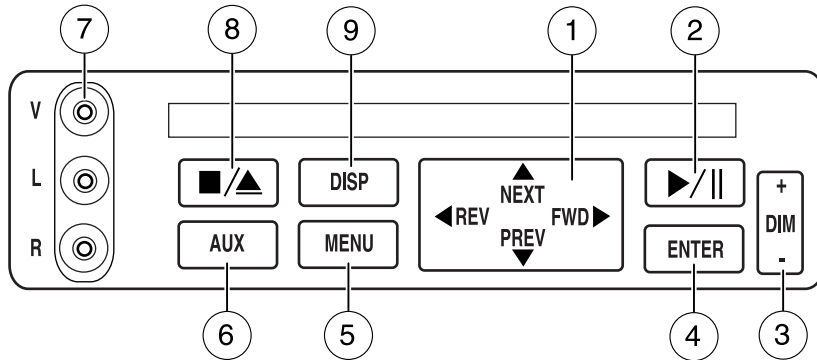
Refer to the *Warranty Guide* for audio system warranty information. If service is necessary, see your dealer or qualified technician.

REAR SEAT ENTERTAINMENT DVD SYSTEM (IF EQUIPPED)

Your vehicle may be equipped with a Rear Seat Entertainment DVD System which allows you to watch DVDs, play music CDs and to plug in and play video game systems. Please review this material to become familiar with the system features and safety information.

Entertainment Systems

DVD player controls



1. **MAIN** control

- **NEXT** — Press to access the next track on the CD, the next chapter on the DVD, or to go up in cursor mode.
- **PREV** — Press to access the previous track on the CD, the previous chapter on the DVD, or to go down in cursor mode.
- **REV** — Press to reverse in CD and DVD play modes or to move the cursor left in the menu active mode.
- **FWD** — Press to advance in CD and DVD play modes or to move the cursor right in the menu active mode.

2. **PLAY/PAUSE** control

Press to playback or pause the DVD.

3. **DIM** control

Adjust to increase (+) or decrease (-) the amount of brightness on the screen.

4. **ENTER** control

Press to select the function pointed to within the active menu. May also be used by some user interactive discs during movie play.

5. **MENU** control

Press to bring up the disc menu.

6. **AUX** control

Press to switch DVD player from play mode to auxiliary mode.

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7. Auxiliary jacks

Insert lines for standard video game players.

8. STOP/EJECT control

Press once to stop DVD play. Press again to eject the DVD.

9. DISPLAY (DISP) control

Press to enable on screen display of player menu and user display adjustments.

DVD control features

Menu control

Press the MENU control to enter into MENU mode. This allows you to move and choose within the DVD generated menu structure. Once in MENU mode:



- Press the NEXT control to move the cursor one position upward



- Press the PREV control to move the cursor one position downward



- Press the REV control to move the cursor left one position



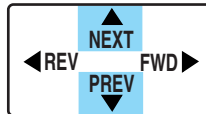
Entertainment Systems

- Press the FWD control to move the cursor right one position



Next/Previous control

The NEXT (up) and PREV (down) controls allow you to access the next or previous track on a CD or chapter on a DVD. When pressed, the playing audio will mute momentarily while the next chapter is accessed. Press and hold to advance or reverse multiple tracks or chapters.



REV/FWD control

Press the REV/FWD control during playback mode to reverse or advance at a normal speed. Press the REV/FWD control again to disengage the reverse/advance action and return to normal playback mode



Enter control

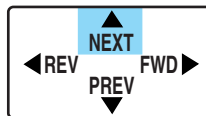
The ENTER control allows you to select items when in MENU mode.

Press the ENTER control to select the desired highlighted item.



CD play mode

Press NEXT during CD play to advance to the next track. If you press NEXT during the last track, the system will wrap around to the first track and begin play.



Slow play mode

To enter slow play mode, press the PLAY/PAUSE control. Once the system is in pause mode, press the



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FWD or REV control for slow motion playback. Three different speeds are available depending on how long the control is held. Press the control once for slow motion playback. Press the control again to disengage slow motion playback. Press the PLAY/PAUSE control to return to normal playback mode.

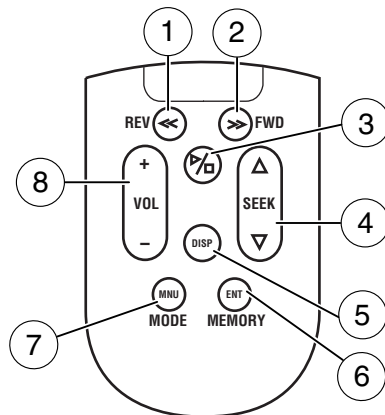
User menu mode

To adjust the display setting, press DISP once and the player menu will appear. Press DISP again to adjust the display setting. Use the arrow controls and the ENTER controls to select the various screen settings. (Available screen selections are 16x9, Normal, 4x3 and Zoom).



The DVD player will read the disc type and configure the display accordingly. Some movies have a wide screen movie format to fit a normal 4x3 screen. In this case, the movie will have black bars on the top and bottom. When shown on the screen, it may appear as a small screen within the wide screen. It may be desirable to view this type of movie in zoom mode. To enter zoom mode, press DISP once for the player menu and again to adjust the display setting. Select zoom from the screen settings by using the arrow and ENTER controls.

Remote control



1. **REWIND** control

Press to reverse the direction of the DVD movie.

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2. **FAST FORWARD** control

Press to advance the direction of the DVD movie.

3. **PLAY/STOP** control

Press to play or stop the DVD movie.

4. **SEEK** control

Press to reverse or advance the chapter of the DVD or the track of the CD.

5. **DISPLAY (DISP)** control

Press to enable on screen display of player menu and user display adjustments. Once the display is on, use SEEK to choose the desired screen setting.

6. **ENTER (ENT) MEMORY** control

In DVD playback mode, press the control to select a designated item in menu mode.

In stop mode, press the control to select the next radio memory preset.

7. **MNU/MODE** control

In DVD playback mode, press to access the disc menu.

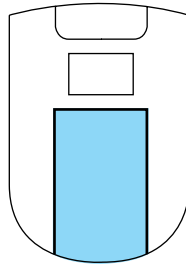
In stop mode, press to change to a different playing media (e.g. AM, FM, CD . . .)

8. **VOLUME** control

Press to increase (+) or decrease (-) volume level.

Battery replacement

Batteries are supplied with the remote control unit. Since all batteries have a limited shelf life, replace them when the unit fails to control the DVD player. There is a LED indicator light on the remote control that will illuminate when any control is pressed.



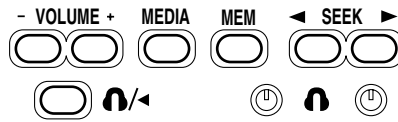
Slide the battery cover off as shown on the remote control to access the batteries.

The remote control unit uses two AAA batteries.

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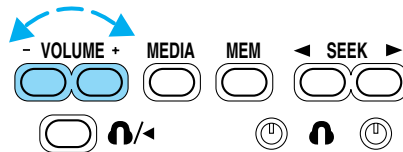
Rear seat controls

The rear seat controls allow the rear seat passengers to operate the radio, tape, CD, DVD or AUX (if equipped).



Adjusting the volume from the rear seat controls

The volume control allows the rear seat passengers to adjust the volume level of the desired selection.



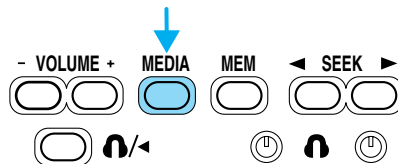
Press the + control to increase the volume.

Press the - control to decrease the volume.

When in single play mode, the speaker volume cannot be set higher than the current volume radio setting. When using wired headphones, (dual play mode), the rear seat controls can change the volume setting to any desired level.

Mode select

Press MEDIA to toggle between AM, FM1, FM2, TAPE, CD, DVD and AUX modes (if equipped). When selected, the media source will illuminate in the radio display.



- AM

AM radio frequency band

- FM1, FM2

FM radio frequency bands

- TAPE

cassette tape (if equipped)

- CD

single CD player (if equipped)

in-dash six CD player (if equipped)

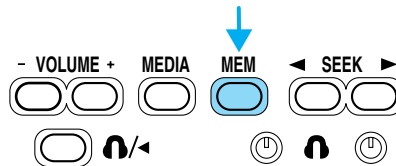
Entertainment Systems

- DVD/AUX

DVD player / Auxiliary line input (if equipped)

Memory preset control

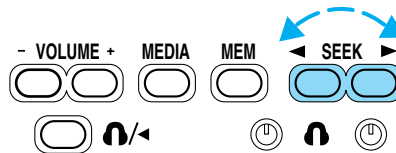
In radio mode, press the MEMORY control successively to scroll through the memory presets in AM, FM1 or FM2.



If your vehicle is equipped with an in-dash six CD player, press the MEMORY control to select the next disc in the compact disc changer. Play will begin with the first track.

Seek function

The SEEK control has varying functions depending on which mode is enabled.



In radio mode (AM, FM1, FM2):

Press the ◀ control to find the next station down the frequency band.

Press the ▶ control to find the next station up the frequency band.

In tape mode (if equipped), press the ◀ control to access the previous selection or ▶ for the next selection.

In single CD mode (if equipped), press the ◀ control to access the previous track or ▶ for the next track.

If equipped with an in-dash six CD player, press the ◀ control to access the previous track or ▶ to select the next track of the current disc.

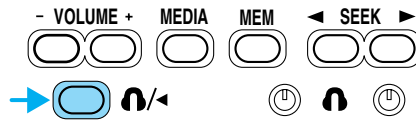
In AUX/DVD mode, the SEEK control is not operational.



Entertainment Systems

Using wired headphones/Personal Audio Feature

Single play mode will allow all passengers to listen to the same media source through all speakers.



The Personal Audio Feature (dual play) allows the front seat passengers to listen to one source (radio, TAPE, CD, DVD, or AUX) while the rear seat passengers listen to another. However, front and rear seat passengers cannot listen to two different radio stations simultaneously.




To activate from the rear seat controls, press the  /  control and plug a 3.5mm headphone into the headphone jack. With the headphones ON, the rear speakers will not operate. In this mode, the headphones are enabled (dual play mode). The rear seat passengers have control over the desired volume levels.

Press the MEDIA control to toggle to the desired media source.

Use the SEEK, VOLUME and MEM controls to make any desired adjustments.

Press the  /  control again to engage the rear speakers and deactivate the Personal Audio Feature. In this mode, you can adjust the audio output to all system speakers — front and rear together. The rear seat passengers cannot raise the volume of the system above the level on the front radio bezel.

Parental control

Your Entertainment System allows you to have control over the rear seat controls. The DVD system is automatically activated when the ignition is ON. This enables rear seat passengers to utilize the Rear Seat Controls (RSC). Once the headphone mode is activated, the  symbol will appear in the radio display.

Press the memory preset controls 3 and 5 simultaneously on the front audio controls to disable the rear seat controls. They will remain disabled until the front seat passengers “enable” them again by simultaneously pressing the 3 and 5 preset controls. The settings of the front seat controls will always override those of the rear seat controls.



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Press the memory preset controls 2 and 4 simultaneously to toggle between single play and the Personal Audio Feature.



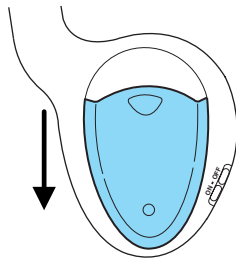
Wireless headphones (for DVD system only)

Your system is equipped with 2 sets of wireless headphones. (Two AAA batteries are needed to operate the headphones.) Batteries are included.



To install the batteries, lightly press down on the top of the left earpiece and slide the cover off.

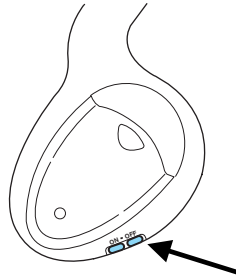
When replacing the batteries, use two new batteries (alkaline recommended) and install them with the correct (+) and (-) orientation.



Wireless headphone operation

To operate the headphones:

- Press the ON/OFF button on the left-hand earpiece. The LED light on the right-hand earpiece will illuminate. Press again to turn off.
- Adjust the headphones to comfortably fit your head.
- Adjust the volume control to a comfortable listening level.

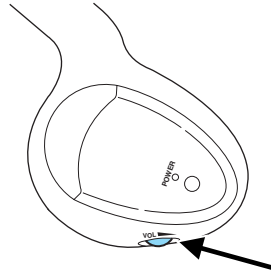


Note: The volume level of the wireless headphones can only be controlled by the thumbwheel. Neither the remote control nor the rear seat controls will affect the volume output of the wireless headphones.

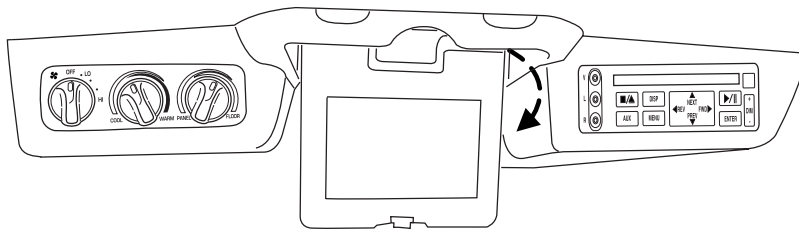
Entertainment Systems

When not using the headphones, shut them off to preserve battery power. The headphones will automatically turn off after five minutes if they have not received an infrared audio signal from the overhead pod.

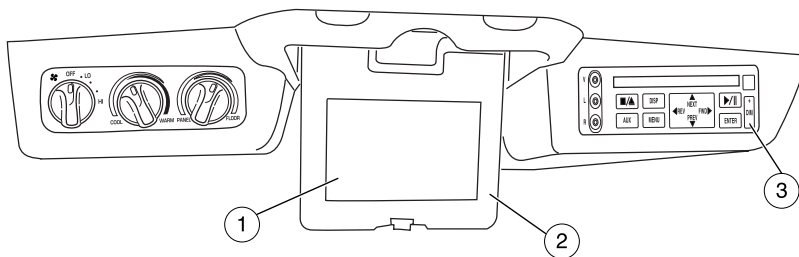
Ensure that the line of sight between the headphone and infrared transmitter (mounted on the DVD housing) is not obstructed.



Liquid Crystal Display (LCD) flip-down screen



The screen rotates down to view and into the housing to store when not in use. Be sure the screen is latched into the housing when being stored.



1. 7.0" (diagonal) active matrix liquid crystal display (LCD) screen.
2. Screen housing.
3. Dimmer switch. Press +/- to increase/decrease the brightness of the screen.

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Playback and format

- The DVD player of your Rear Seat Entertainment DVD System can only be used in the “playback” mode. (The DVD player does not offer a record feature.)
- The system plays standard CDs or DVDs.
- The DVD player is only capable of playback of DVDs and CDs. The player is not compatible with CDR/RW media.

Rear Seat Entertainment DVD System protection circuits

High temperature sensor circuit

- Excessively high temperatures may cause damage to the DVD player.
- When the temperature of the DVD player becomes too hot, the high temperature sensor circuit stops machine operation. DVD/CD HOT will illuminate in the radio display.
- The DVD player will remain inactive until it cools to a normal operating temperature. Length of time to cool will vary depending on conditions.

General operating tips

- When the engine is not running, use the system sparingly. Otherwise, it will run the battery down.
- When the ignition is turned to OFF, the Rear Seat Entertainment DVD System is also turned OFF. When the ignition is turned ON, the system will begin playback from the last selected media source when the play control is pressed.
- To disable the DVD player, simultaneously press the 3 and 5 memory presets on the radio face. To enable the DVD player again, press the 3 and 5 presets simultaneously.
- The DVD player is only capable of reading the bottom side of a disc. When inserting a single sided disc, the label should be up. For a multi-sided disc, the desired play side should be down when the disc is inserted into the player.
- The DVD player is only capable of playback of DVDs and CDs. The player is not compatible with CDR/RW media.
- DVDs are formatted by regions. This DVD system can only play region 1 DVDs (DVDs manufactured for U.S. and Canada).

This unit is designed to play commercially pressed 12 cm (4.75 in) audio compact discs and DVDs only. Due to technical

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incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford DVD/CD players. Irregular shaped discs, discs with a scratch protection film attached, and discs with homemade paper (adhesive) labels should not be inserted into the player. The label may peel and cause the disc to become jammed. It is recommended that homemade discs be identified with permanent felt tip marker rather than adhesive labels. Ball point pens may damage discs. Please contact your dealer for further information.

Inserting a CD/DVD

Partially insert the CD/DVD into the slot and the system will fully pull in the disc. Inserting the disc too far could cause the disc to jam in the system.

Inserting a CD/DVD into the DVD player automatically turns the power ON and playback should begin.

The counter is automatically reset to 0:00:00.

Removing a CD/DVD

1. Press the STOP/EJECT control to stop playback.
2. Press the STOP/EJECT control again to eject the CD/DVD.

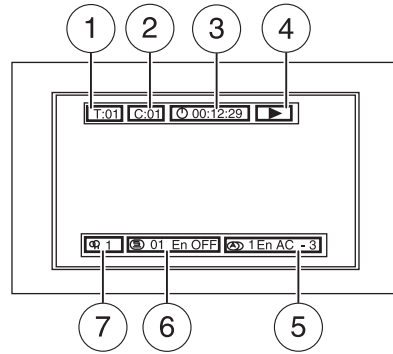
If the CD/DVD is not removed within the allotted time, the system will pull the CD/DVD back into the system for safety purposes. If the CD/DVD will not eject from the system, press and hold the EJECT control for approximately 2 seconds. The disc should eject whether the vehicle ignition is ON or OFF.

Playing a video game/auxiliary device

1. Connect the video line from your video game device to the YELLOW auxiliary input jack.
2. Connect the left and right audio lines to the WHITE and RED auxiliary input jacks respectively.
3. Press the MODE control until DVD/CD AUX (no disc in player) or DVD/CD play (disc in player) illuminates in the radio display. If a disc is in the system, playback should begin. To enable the aux inputs, press the STOP control or press the AUX control on the DVD player.

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On-screen indicators



Each time a control is pressed, the operational status of the DVD player is shown on the screen. The following are some possible indicators:

1. CD track
2. DVD chapter
3. SYSTEM COUNTER — displays current viewing time of desired media. (HOURS:MINUTES:SECONDS)
4. DVD/ CD STATUS (PLAY/FF/REW/PAUSE)
5. AUDIO OUTPUT (not changeable)
6. Subtitles (specific language type - English, Spanish or French, dependent on disc capability and ON/OFF selection.)
7. Camera angle (of picture) - Adjustable with cursor controls and ENTER control.

Safety information

Read all of the safety and operating instructions before operating the system and retain for future reference.

Do not attempt to service, repair or modify the Rear Seat Entertainment DVD System. See your Ford or Lincoln Mercury dealer.

Do not insert foreign objects into the DVD compartment.



The front glass on the liquid crystal display (LCD) flip-down screen may break when hit with a hard surface. If the glass breaks, do not touch the liquid crystalline material. In case of contact with skin, wash immediately with soap and water.

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Do not expose the liquid crystal display (LCD) flip-down screen to direct sunlight or intensive ultraviolet rays for extensive periods of time. Ultraviolet rays deteriorate the liquid crystal.

Be sure to review user manuals for video games and video game equipment when used as auxiliary inputs for your Rear Seat Entertainment DVD System.

Do not operate video games or video equipment if the power cords and/or cables are broken, split or damaged. Carefully place cords and/or cables where they will not be stepped on or interfere with the operation of seats and/or compartments.

Disconnect video games and video equipment power cords and/or cables when not in use.

Avoid touching auxiliary input jacks with your fingers. Do not blow on them or allow them to get wet or dirty.

Do not clean any part of the DVD player with benzene, paint thinner or any other solvent.

Federal Communication Commission (FCC) Compliance

Changes or modifications not approved by Ford Lincoln Mercury could void user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.

Care and service of the DVD player

Environmental extremes

DVD players that are subjected to harsh environmental conditions may be damaged or perform at less than maximum capability. To avoid these outcomes, whenever possible avoid exposing your DVD player to:

- extremely hot or cold temperatures.
- direct sunlight.

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- high humidity.
- a dusty environment.
- locations where strong magnetic fields are generated.

Temperature extremes

When the vehicle is parked under direct sunlight or in an extremely cold place for a long period of time, wait until the cabin temperature of the vehicle is at normal temperature before operating the system.

Humidity and moisture condensation

Moisture in the air will condense in the DVD player under extremely humid conditions or when moving from a cold place to a warm one. If moisture condensation occurs, do not insert a CD or DVD into the player. If one is already in the player, remove it. Turn the DVD player ON to dry the moisture before inserting a DVD. This could take an hour or more.

Cleaning the liquid crystal display (LCD) flip-down screen

Clean the display screen by applying a small amount of water or any ammonia-based household glass cleaner directly to a soft cloth. Rub the screen gently until the dust, dirt or fingerprints are removed. Do not spray the screen directly with water or glass cleaning solvents. Overspray from these fluids could drip down into the internal electronics of the screen and cause damage. Do not apply excessive pressure while cleaning the screen.

Foreign substances

Exercise care to prevent dirt and foreign objects from entering the DVD player compartment. If liquid is accidentally spilled onto the system, immediately turn the system OFF and consult a qualified service technician.

Cleaning CDs and DVDs

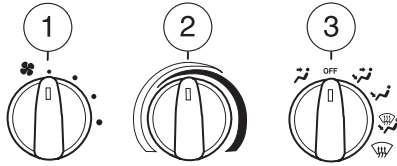
Inspect all discs for contamination before playing. If necessary, clean discs only with an approved CD cleaner and wipe from the center out to the edge. Do not use circular motion.

Cleaning the DVD player exterior

Clean the exterior of the DVD player with a damp cloth. Do not use CD cleaning kits or CDs intended to clean the interior of your DVD player. Use of these products may damage your system.

Climate Controls

HEATER ONLY SYSTEM (IF EQUIPPED)




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


2. **Temperature selection:** Controls the temperature of the airflow in the vehicle.

3. **Air flow selections:** Controls the direction of the airflow in the vehicle. See the following for a brief description on each control:


 : Distributes outside air through the instrument panel vents.

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


O (OFF): Outside air is shut out and the fan will not operate.

 : Distributes outside air through the floor vents.


 : Distributes outside air through the windshield defroster vents, floor vents and demister vents.

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

Operating tips

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the  position.
- To reduce humidity build up inside the vehicle during cold or warm weather, do not drive with the air flow selector in the OFF position.
- Do not put objects under the front seats that will interfere with the air flow to the rear seats.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.

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

1. Select .
2. Adjust the temperature control to maintain comfort.

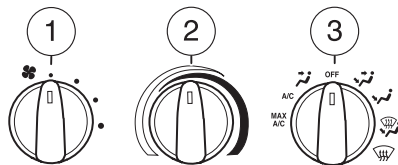
Climate Controls

3. Set the fan speed to the highest setting.
 4. Direct the outer instrument panel vents toward the side windows.
- 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.

MANUAL HEATING AND AIR CONDITIONING SYSTEM (IF EQUIPPED)



1. **Fan speed adjustment:** Controls the volume of air circulated in the vehicle.
2. **Temperature selection:** Controls the temperature of the airflow in the vehicle.
3. **Air flow selections:** Controls the direction of the airflow in the vehicle. See the following for a brief description on each control.

MAX A/C: Distributes recirculated air through the instrument panel vents and center console vents (if equipped) 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. The temperature selection control will not adjust airflow temperature when in MAX A/C mode.

: Distributes outside air through the instrument panel vents and center console vents (if equipped).


: Distributes outside air through the instrument panel vents, floor vents and center console vents (if equipped).

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


: Distributes outside air through the floor vents.

: Distributes outside air through the windshield defroster vents, floor vents and demister vents.

Climate Controls

 : Distributes outside air through the windshield defroster vents and demister vents.


Operating tips

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the  position.
- To reduce humidity build up inside the vehicle, do not drive with the air flow selector in the O (OFF) position.
- Do not put objects under the front seats that will interfere with the airflow to the rear seats.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.
- 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 (MAX A/C) in MAX A/C mode:

- Move the temperature control to the coolest setting.
- Set the fan to the highest speed initially, then adjust in order to maintain comfort.

To aid in side window defogging and demisting in cold weather:

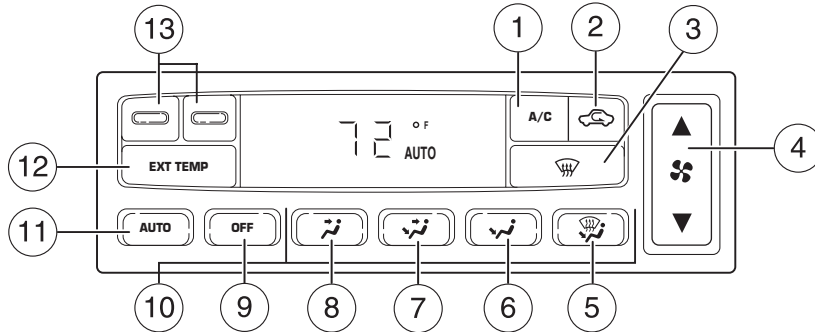
1. Select .
2. Select A/C.
3. Set the temperature control to maintain comfort.
4. Set the fan speed to highest setting.
5. Direct the outer instrument panel vents towards the side windows.





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

Climate Controls


AUTOMATIC TEMPERATURE CONTROL SYSTEM (IF EQUIPPED)




Press the AUTO and  (floor/defrost) controls at the same time and hold for one second to switch between Fahrenheit and Celsius.

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



2. **Recirculated air:** 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 odors from reaching the interior of the vehicle. Recirculation can be engaged manually in any other airflow selection except  (defrost). Recirculation may turn off automatically in all airflow selections.




3. **Defrost:**  Distributes outside air through the windshield defroster vents and demister vents. Can be used to clear windshield of fog and thin ice.






4. **Fan speed:** Press the respective control in order to manually increase or decrease the fan speed. To return to automatic fan operation, press AUTO.



5.  (Floor/defrost): Distributes air through the instrument panel vents, floor vents and demister vents.

Climate Controls

6.  (Floor): Distributes air through the floor vents.
7.  (Panel/floor): Distributes air through the instrument panel vents, floor vents and center console vents (if equipped).
8.  (Panel): Distributes air through the instrument panel vents and center console vents (if equipped).

9. **OFF:** Outside air is shut out and the climate control system is turned off.



10. **Manual override controls:**

The manual override controls allow you to change the system operation. To return to full automatic control, press AUTO. Refer to controls 5–8 for a brief description of each mode.



11. **AUTO:** Press to engage full automatic operation, and select the desired temperature using the



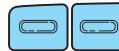
temperature control. The system will automatically determine fan speed, airflow location, A/C on or off, and outside or recirculated air, to heat or cool the vehicle to reach the desired temperature.

12. **EXT Control (if equipped):**

Press **EXT TEMP** to display outside temperature. Press again to display cabin temperature settings.




13. **Temperature controls:** Press to increase or decrease the temperature in the vehicle cabin.



Note: The recommended vehicle cabin setting is between 72°F (22°C) and 75°F (24°C).

Operating tips

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the  position.
- To reduce humidity build up inside the vehicle, do not drive with the air flow selector in the OFF or with recirculated air engaged.
- Do not put objects under the front seats that will interfere with the airflow to the rear seats.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.


Climate Controls

- 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 AUTO mode:

- Press AUTO control and set to desired temperature.

For maximum cooling performance using manual override modes:

- Press  (panel), A/C, with recirculated air. Set the temperature to 60°F (16°C) and the fan to the highest setting.

To aid in side window defogging and demisting in cold weather:

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

To increase airflow to the outer instrument panel vents, close the vents located in the middle of the instrument panel.



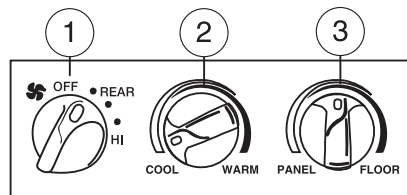
Do not place objects on top of the instrument panel as these objects may become projectiles in a collision or sudden stop.

AUXILIARY SYSTEM (IF EQUIPPED)

Your vehicle may be equipped with auxiliary controls. These allow the front or rear seat passengers to control airflow direction, temperature and fan level of the rear compartment to quickly heat or cool the entire vehicle.

Front auxiliary controls:

1. **Fan control:** Controls the volume of air circulated in the vehicle. Turn to REAR to give rear seat passengers control of the auxiliary system. When set to OFF the auxiliary system is turned off.
2. **Temperature control:** Controls the temperature of the airflow in the



Climate Controls

vehicle. If the main climate control system is in Max A/C mode (for manual controls) or in full cooling (for automatic controls) the auxiliary temperature selection will not adjust airflow temperature.

3. **Airflow control:** FLOOR directs air to the floor of the third row seating. PANEL directs air to the overhead registers of the second and third row seating. To blend the airflow direction, select any position between FLOOR and PANEL.

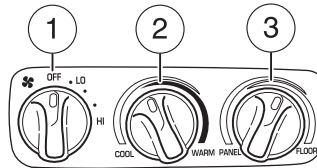
Rear auxiliary controls:

When the front auxiliary control is set to REAR, the control in the rear seat overhead console must be used to make the desired adjustments. If the front auxiliary control is not set to REAR, the rear seat control will not operate.

1. **Fan control:** Controls the volume of air circulated in the vehicle.

2. **Temperature control:** Controls the temperature of the airflow in the vehicle. If the main climate control system is in Max A/C mode for manual controls or in full cooling for automatic controls, the auxiliary temperature selection will not adjust airflow temperature.

3. **Airflow control:** FLOOR directs air to the floor of the third row seating. PANEL directs air to the overhead registers of the second and third row seating. To blend the airflow direction, select any position between FLOOR and PANEL.



REAR WINDOW DEFROSTER

The rear window defroster control is located on the instrument panel and works to clear the rear window of fog and thin ice.



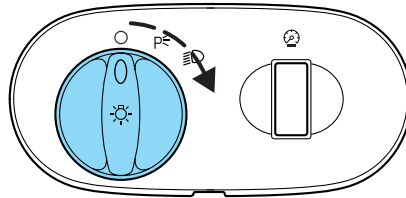
Ensure the ignition is in the 4 (ON) position. Press to activate/deactivate rear window defroster.

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.

Lights

HEADLAMP CONTROL ☀

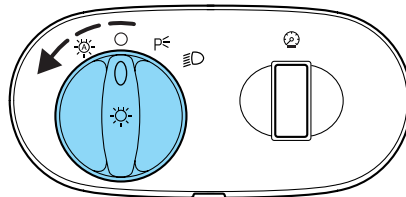
- Turns the lamps off.
- P☀ Turns on the parking lamps, instrument panel lamps, license plate lamps and tail lamps.
- ☀ Turns the headlamps on.



Autolamp control (if equipped) ☀

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

The autolamp system also keeps the lights on for approximately 20 seconds after the ignition switch is turned to OFF.






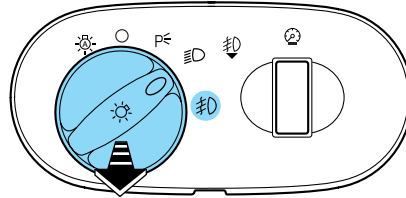
To change the delay time of the autolamp feature, do the following:

1. Start with the ignition in OFF and the autolamps selected.
2. Deselect the autolamps.
3. Put the ignition in RUN.
4. Put the ignition in OFF.
5. Select the autolamps. Steps 2 through 5 must be performed within a 10 second period. At this point, the headlamps and parking lamps will turn on.
6. Deselect the autolamps after the desired autolamp delay time (maximum of 3 minutes). At this point, the headlamps and parking lamps will turn off.


Lights

Foglamp control (if equipped)

The headlamp control also operates the foglamps. The foglamps can be turned on only when the headlamp control is in the ,  or  position and the high beams are not turned on.



In autolamp mode, the foglamps won't be operational until lighting conditions warrant the activation of the headlamp/parklamp lighting.

Pull headlamp control towards you to turn foglamps on. The foglamp indicator light  will illuminate when the switch is pulled and the parklamps are on.

Daytime running lamps (DRL) (if equipped)

Turns the headlamps on with a reduced output.

To activate:

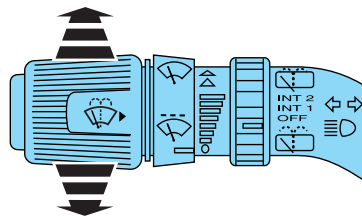
- the ignition must be in the ON position,
- the headlamp control is in the OFF or parking lamp position and
- the parking brake must be disengaged.



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.

High beams

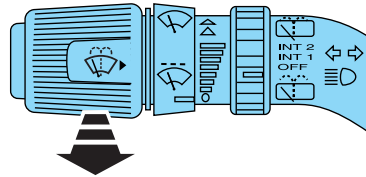
Push the lever toward the instrument panel to activate. Pull the lever towards you to deactivate.



Lights

Flash to pass

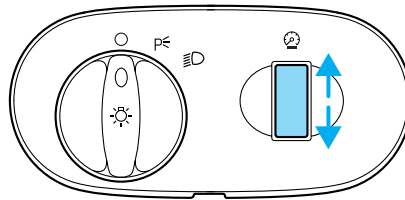
Pull toward you slightly to activate and release to deactivate.



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.



HEADLAMP AIM ADJUSTMENT

The headlamps on your vehicle can only be vertically adjusted. Your vehicle does not require horizontal aim adjustments.

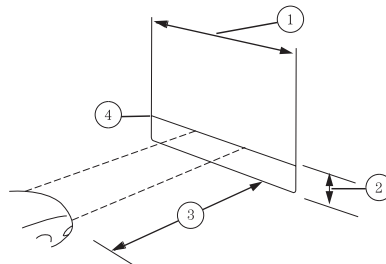
To adjust the headlamps:

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

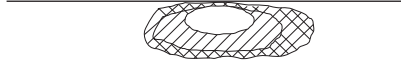
2. Measure the height from the center of your headlamp (indicated by a 3.0 mm circle on the bulb shield inside the lamp) to the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height (a piece of masking tape works well).

3. Turn on the low beam headlamps to illuminate the wall or screen and open the hood. Cover one of the headlamps so no light hits the wall.

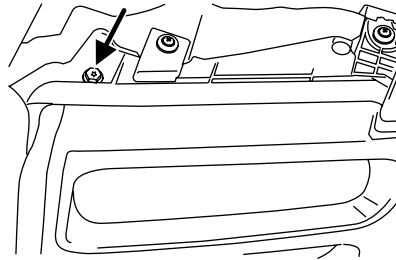


Lights

4. On the wall or screen you will observe a light pattern with a distinct horizontal edge towards the right. If this edge is not at the horizontal reference line, the beam will need to be adjusted so the edge is at the same height as the horizontal reference line.



5. Locate the vertical adjuster on each headlamp, then use an E5 socket/wrench to turn the adjuster either counterclockwise (to adjust down) or clockwise (to adjust up) aligning the upper edge of the light pattern up to the horizontal line.

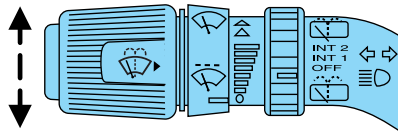


6. Repeat step 3–5 for the other headlamp.

7. Close the hood and turn off the lamps.

TURN SIGNAL CONTROL ⇐⇒

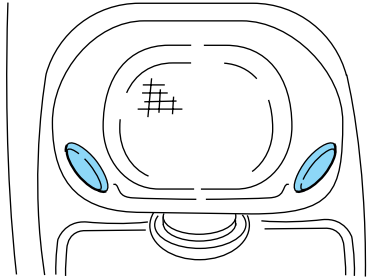
- Push down to activate the left turn signal.
- Push up to activate the right turn signal.



INTERIOR LAMPS

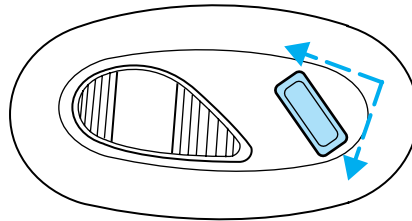
Dome/Map lamps (if equipped)

The map lamps and controls are located on the dome lamp. Press the controls on either side of each map lamp to activate the lamps.

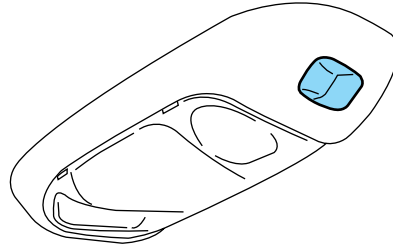


Rear courtesy/reading lamps

- Second row courtesy/reading lamp



- Third row courtesy/reading lamp



The courtesy lamps light when:

- any door is opened.
- the instrument panel dimmer switch is pushed past the detent.
- any of the remote entry controls are pressed and the ignition is OFF.

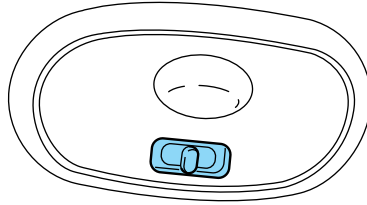
The reading lamps can be turned on by pressing the rocker control.

Lights

Rear dome lamp

The dome lamp lights when:

- any door is opened (and switch is in middle position).
- the instrument panel dimmer switch is held up until the courtesy lamps come on.
- any of the remote entry controls are pressed and the ignition is OFF (and switch is in the middle position).



With the ignition key in the ACC or ON position, the rear dome lamp can be turned ON or OFF by sliding the control.

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.

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 assure lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb burn time.

Function	Number of bulbs	Trade number
Headlamps	2	H13/9008
Park/turn lamp	2	3157 AK
Sidemarkers lamp	2	194
Foglamp	2	9145
Tail/stop lamp	2	3457K
Backup lamp	2	3156 or 3156K
High-mount brakelamp	3	912
Rear dome lamp	1	921
Map/dome lamp	2	578
Second row reading lamp	2	578
Third row reading lamp	2	211-2
License lamp	2	194
All replacement bulbs are clear in color except where noted.		
To replace all instrument panel lights - see your authorized dealer		

Interior bulbs

Check the operation of all bulbs frequently.

Replacing headlamp bulbs

1. Make sure that the headlamp control is in the OFF position and open the hood.

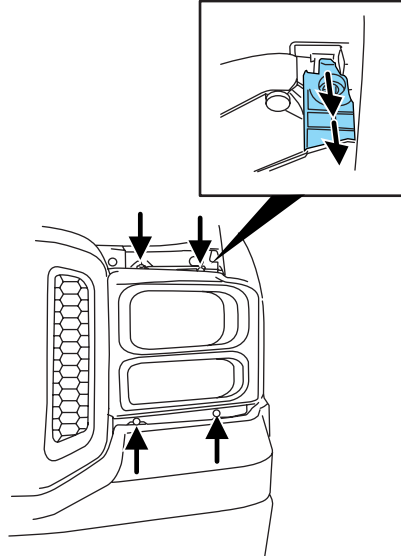
Lights

2. Remove the four screws from the top and bottom front of the headlamp assembly.

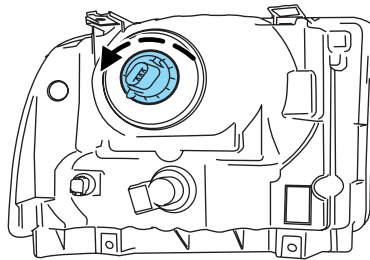
3. Press the retaining clip at the top of the headlamp assembly while pulling the assembly straight out.

If removing the lamp is difficult, removing the four screws along the top of the grill will help provide more clearance.

4. Disconnect the electrical connector by squeezing the release tab and pushing the connector forward and then pulling it reward.



5. Remove the bulb assembly by turning it counterclockwise and pulling it straight out.



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.

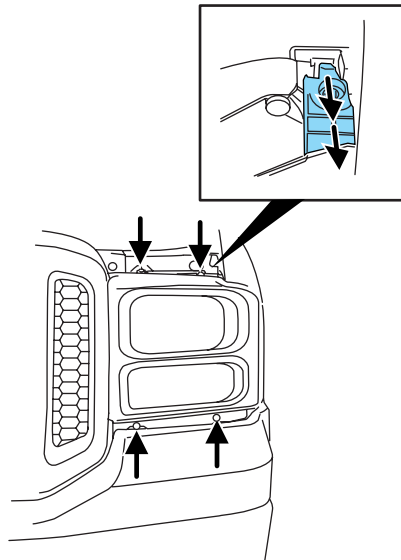
Install the new bulb(s) in reverse order.

Lights

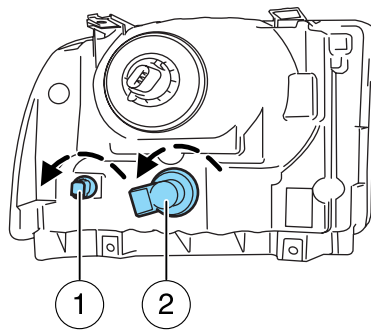
Replacing park/turn and sidemarker lamp bulbs

1. Make sure that the headlamp control is in the OFF position and open the hood.
2. Remove the four screws from the top and bottom front of the headlamp assembly.
3. Press the retaining clip at the top of the headlamp assembly while pulling the assembly straight out.

If removing the lamp is difficult, removing the four screws along the top of the grill will help provide more clearance.



4. Remove the bulb assembly, (1) sidemarker or (2) park/turn, by turning it counterclockwise and pulling it straight out.
5. Pull the old bulb out from the socket.

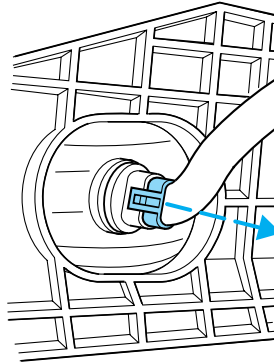


Install the new bulb(s) in reverse order.

Lights

Replacing foglamp bulbs

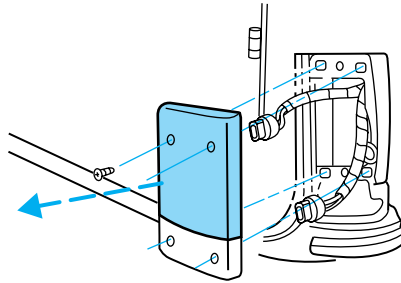
1. Make sure the headlamp switch is in the OFF position and then rotate the foglamp bulb counterclockwise and remove from foglamp (the rear side of the foglamp is shown).
2. Disconnect the electrical connector from the foglamp bulb.



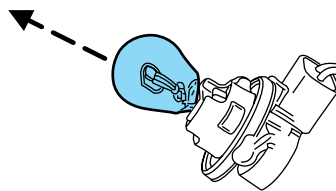
Install the new bulb in reverse order.

Replacing tail lamp/turn/backup lamp bulbs

1. Make sure the headlamp switch is in the OFF position and remove the four screws and the lamp assembly from vehicle.



2. Rotate bulb socket counterclockwise and remove from lamp assembly.
3. Carefully pull the bulb straight out of the socket.



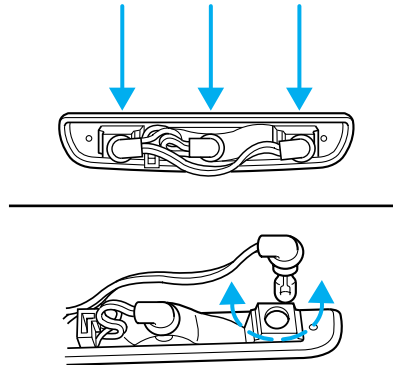
Install the new bulb(s) in reverse order.

Lights

Replacing high-mount brakelamp bulbs

1. Make sure the headlamp switch is in the OFF position and remove the two screws and then the lamp assembly.

2. Remove the bulb socket from lamp assembly and pull the bulb straight out.



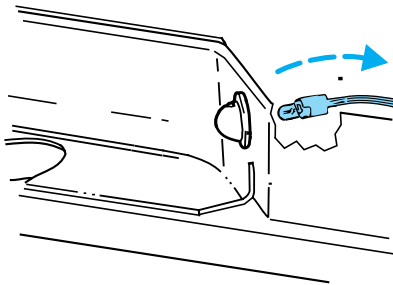
Install the new bulb(s) in reverse order.

Replacing license plate lamp bulbs

1. Make sure the headlamp switch is in the OFF position and reach behind the rear bumper to locate the bulb socket.

2. Twist the socket counterclockwise and remove.

3. Pull the old bulb straight out.



Install the new bulb in reverse order.

Driver Controls

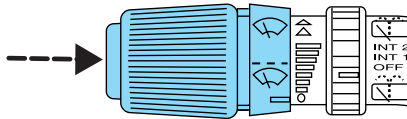
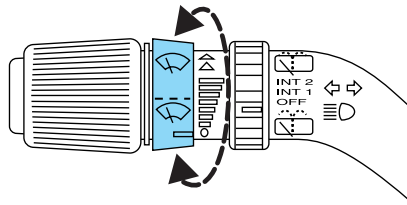
MULTI-FUNCTION LEVER

Windshield wiper: Rotate the end of the control away from you to increase the speed of the wipers; rotate towards you to decrease the speed of the wipers.

Speed dependent wipers: When the wiper control is on, the speed of the wipers will automatically adjust with the vehicle speed. The faster your vehicle is travelling the faster the wipers will go.

Windshield washer: Push the end of the stalk:

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




Rear window wiper/washer controls

For rear wiper operation, rotate the rear window wiper and washer control to the desired position. Select:

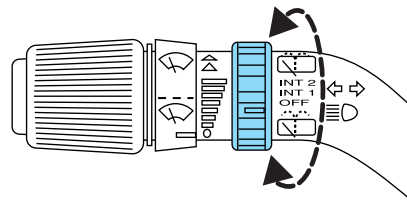
INT 1 — 3.5 second interval rear wiper.

INT 2 — 10.5 second interval rear wiper.

OFF — Rear wiper and washer off.

For rear wash cycle, rotate (and hold as desired) the rear wiper/washer control to either  position.

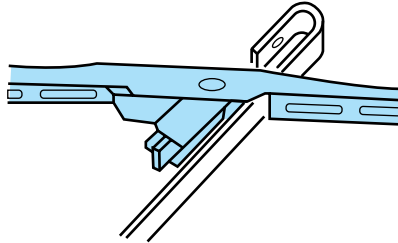
From either position, the control will automatically return to the INT2 or OFF position.



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.

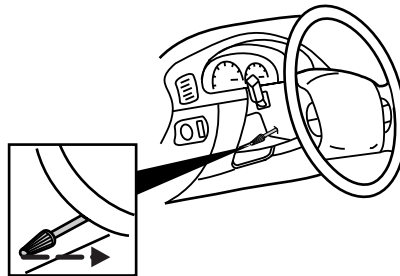
Poor wiper quality can be improved by cleaning the wiper blades and the windshield, refer to *Windows and wiper blades* in the *Cleaning* chapter.

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

To adjust the steering wheel:

1. Pull and hold the steering wheel release control toward you.
2. Move the steering wheel up or down until you find the desired location.
3. Release the steering wheel release control. This will lock the steering wheel in position.



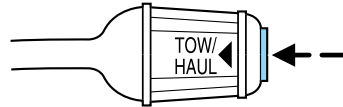
Never adjust the steering wheel when the vehicle is moving.

Driver Controls

TRANSMISSION CONTROL

Tow/Haul feature (5-speed automatic transmission) (if equipped)

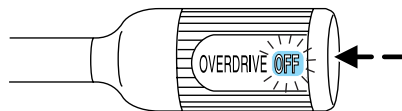
To activate, press the transmission control switch (TCS) located on the gearshift. The TOW/HAUL indicator light will illuminate on the gearshift lever or in the instrument cluster, depending on how your vehicle is



equipped. The transmission will operate in all gears. Press the transmission control switch again to deactivate Tow/Haul mode. When you shut off and re-start your vehicle, the transmission will automatically return to normal mode with Tow/Haul feature deactivated, refer to the *Driving* chapter for more information.

Overdrive cancel (4-speed automatic transmission) (if equipped)

To deactivate overdrive, press the transmission control switch (TCS) located on the gearshift. The OFF indicator light will illuminate on the gearshift. The transmission will

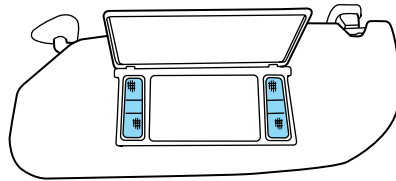


operate in all gears except overdrive. Press the transmission control switch again to return to normal overdrive mode. When you shut off and re-start your vehicle, the transmission will automatically return to normal (Overdrive) mode.

For additional information about the gearshift and the transmission control switch operation refer to the *Driving* chapter.

ILLUMINATED VISOR MIRROR

Lift the mirror cover to turn on the visor mirror lamps.



OVERHEAD CONSOLE

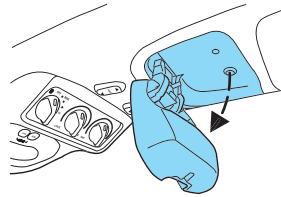
The appearance of your vehicle's overhead console will vary according to your option package.

Driver Controls

Forward storage bin (if equipped)

Press the release control to open the storage compartment. The door will open slightly and can be moved to full open.

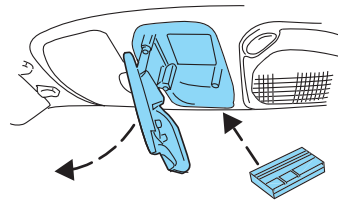
The storage compartment may be used to secure sunglasses or a similar object.




Installing a garage door opener (if equipped)

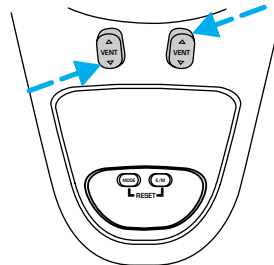
The storage compartment can be converted to accommodate a variety of aftermarket garage door openers:

- Place VELCRO® hook onto back side of aftermarket transmitter opposite of actuator control.
- Place transmitter into storage compartment, control down.
- Place the provided height adaptors onto the back of the storage bin door as needed.
- Press the storage compartment door to activate the transmitter.



Power quarter rear windows (if equipped)

 When closing the power quarter rear 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 the ▲ portion of the VENT control to open the power rear quarter windows.

Press the ▼ portion of the VENT control to close the power rear quarter windows.

Driver Controls

AUXILIARY POWER POINT (12VDC)

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

Do not plug optional electrical accessories into the cigarette lighter. Use the power point.

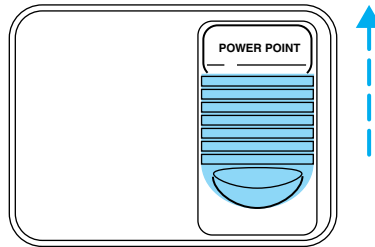
Do not use the power point for operating the cigarette lighter element.

The maximum power each power point can supply depends on the fuse rating. For example: a 20A fuse should supply a maximum of 240 Watts, a 15A fuse should supply a maximum of 180 Watts and a 10A fuse should supply a maximum of 120 Watts. Exceeding these limits will result in a blown fuse.

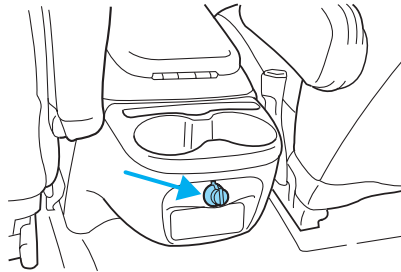
Always keep the power point caps closed when not being used.

There are up to four auxiliary power points in the following locations:

- Located on the instrument panel.

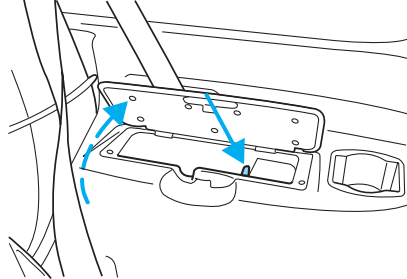


- Located on the back side of the center console (Accessible from the second row seats).

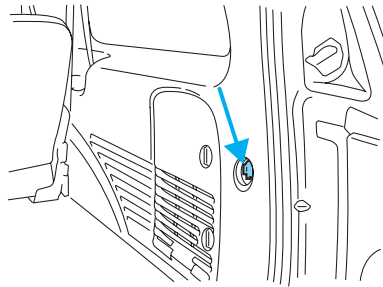


Driver Controls

- Located in the left side storage compartment in the third row seating position.



- Located on the right trim panel in the rear cargo area.



POWER WINDOWS

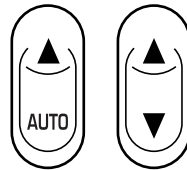


Do not leave children unattended in the vehicle and do not let children play with the power windows. They may seriously injure themselves.



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.

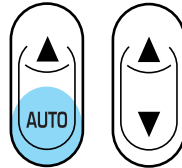
Press and hold the bottom part of the rocker switch to open the window. Press and hold the top part of the rocker switch to close the window.



Driver Controls

One touch down

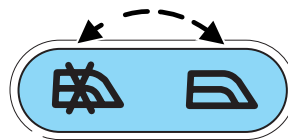
Allows the driver's window to open fully without holding the control down. Press completely down on AUTO and release quickly. Press again to stop.



Window lock

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

To lock out all the window controls except for the driver's press the left side of the control. Press the right side to restore the window controls.



Accessory delay (if equipped)

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

MIRRORS

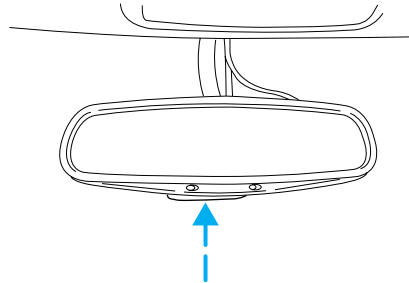
Automatic dimming inside rear view mirror (if equipped)

Your vehicle is equipped with an inside rear view mirror with an auto-dimming function. The electronic day/night mirror will change from the normal state to the non-glare state when bright lights (glare) reach the mirror. When the mirror detects bright light from front or behind, it will automatically adjust to minimize glare.

Driver Controls

Press the control located on the bottom of the mirror to turn the mirror on or off. The mirror will automatically return to the normal state whenever the vehicle is placed in R (Reverse)(when the mirror is on) to ensure a bright clear view when backing up.

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



Power side view mirrors (if equipped)

To adjust your mirrors:

1. Select **L** to adjust the left mirror or **R** to adjust the right mirror.
2. Move the control in the direction you wish to tilt the mirror.
3. Return to the center position to disable the adjust function.



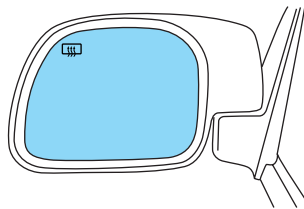
Heated outside mirrors (if equipped)

The main mirror glass is heated automatically to remove ice, mist and fog and activates when the vehicle is started.

Note: The mirrors may be **hot** to the touch but will not burn. This is a normal condition.

Type A

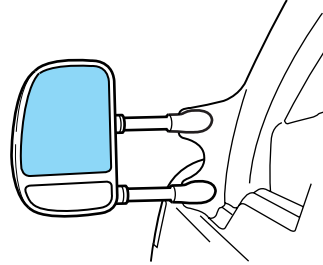
The mirror heating elements are designed to operate regardless of the geographic location of the vehicle. There is no switch to turn on, or other operator involvement required other than to start the vehicle.



Driver Controls

Type B

The spotter mirror, below the main mirror, is not heated and must be adjusted manually.



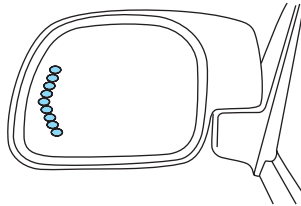
Do not remove ice from the mirrors with a scraper or attempt to readjust the mirror glass if it is frozen in place. These actions could cause damage to the glass and mirrors.

Mirror mounted side turn signal indicator (if equipped)

Type A

When the vehicle turn signals are activated, the mirrors will show a blinking red arrow.

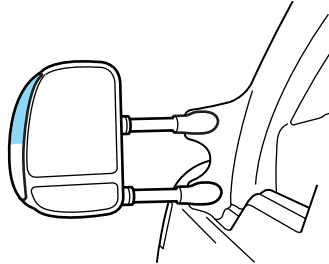
The turn signal provides an additional warning to other drivers that your vehicle is about to turn.



Type B

When the vehicle turn signals are activated, the outer portion of the mirror housing will blink amber.

The turn signal feature can be seen by other drivers who may approach from the rear of the vehicle.

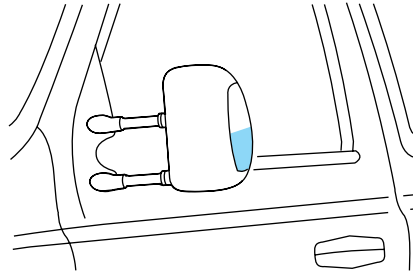


Driver Controls

Clearance lamps (if equipped)

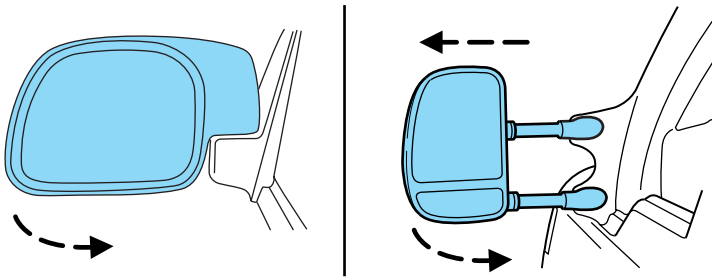
Illuminates when the headlamps or parking lamps are switched on.

This provides additional visibility of your vehicle to other drivers on the road.



Fold-away mirrors

The mirrors can be manually folded forward or backwards for narrow spaces like driving through an automatic car wash or backing out of a garage with the trailer tow mirror.



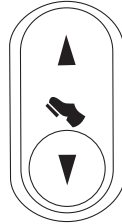
The telescoping feature (if equipped) allows the mirror to extend approximately 3.15 inches (80 mm). This feature is especially useful to the driver when towing a trailer.

Driver Controls

POWER ADJUSTABLE FOOT PEDALS

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

Press and hold the rocker control to adjust accelerator and brake pedal toward you or away from you.



The adjustment allows for approximately 3 inches (71–76 mm) of maximum travel.



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

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).

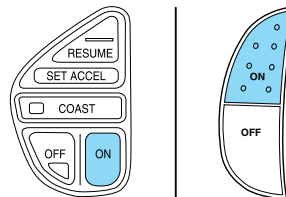


Do not use the speed control in heavy traffic or on roads that are winding, slippery or unpaved.


Setting speed control

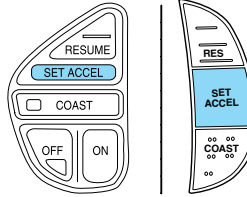
The controls for using your speed control are located on the steering wheel for your convenience.

1. Press the ON control and release it.
2. Accelerate to the desired speed.



Driver Controls

3. Press the SET ACCEL control and release it.
4. Take your foot off the accelerator pedal.
5. The indicator  light on the instrument cluster will turn on.

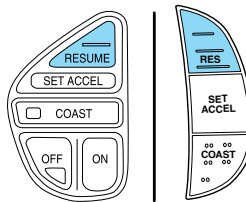


Note:

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

Resuming a set speed

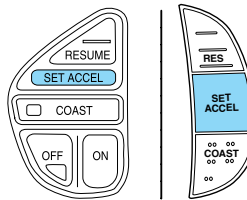
Press the RES/RESUME control and release it. This will automatically return the vehicle to the previously set speed. The RES/RESUME control will not work if the vehicle speed is not faster than 30 mph (48 km/h).



Increasing speed while using speed control

There are two ways to set a higher speed:

- Press and hold the SET ACCEL control until you get to the desired speed, then release the control. You can also use the SET ACCEL control to operate the Tap-Up function. Press and release this control to increase the vehicle set speed in small amounts 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 ACCEL control.

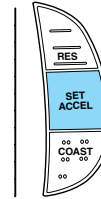
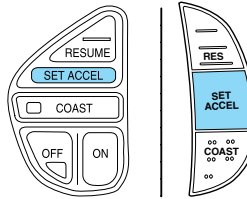
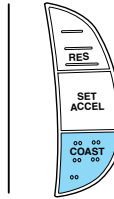
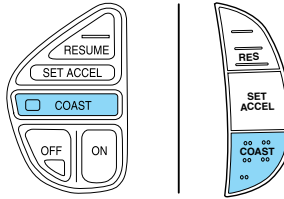


Driver Controls

Reducing speed while using speed control

There are two ways to reduce a set speed:

- Press and hold the COAST control until you get to the desired speed, then release the control. You can also use the COAST control to operate the Tap-Down function. Press and release this control to decrease the vehicle set speed in small amounts by 1 mph (1.6 km/h).
- Depress the brake pedal until the desired vehicle speed is reached, press the SET ACCEL control.

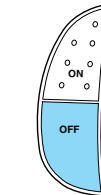
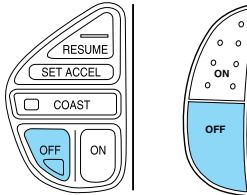


Turning off speed control

There are two ways to turn off the speed control:

- Depress the brake pedal or the clutch pedal (if equipped). This will not erase your vehicle's previously set speed.
- Press the speed control OFF control.

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



Indicator light

This light comes on when either the SET ACCEL or RES controls are pressed. The vehicle speed must be at or above 48 km/h (30 mph). It turns off when the speed control OFF control is pressed, the brake is applied, or the ignition is turned to the OFF position.



Driver Controls

STEERING WHEEL CONTROLS (IF EQUIPPED)

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

Radio control features

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

In Radio mode:

- Press NEXT to select a preset station from memory.

In Tape mode:

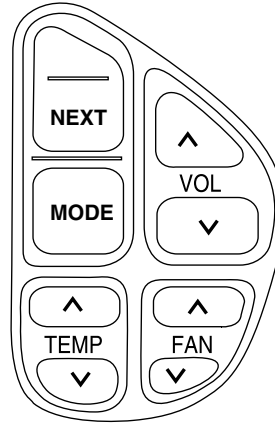
- Press NEXT to listen to the next selection on the tape.

In CD mode:

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

In any mode:

- Press VOL up or down to adjust the volume.



Climate control features

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

TRIP COMPUTER (IF EQUIPPED)

The trip computer tells you about the condition of your vehicle through a constant monitor of vehicle systems. You may select display features on the trip computer for a display of status.

The appearance of your vehicle's trip computer may differ depending on your vehicle's option package, but the functions are the same.

The trip computer only operates with the ignition in the ON position.

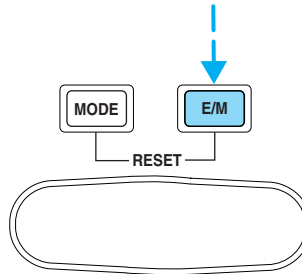
Trip computer features are as follows:

Driver Controls

Selectable features

English/metric display

Press this control to change the trip computer display between metric and English units.



Mode control

Each press of the MODE control will display a different feature as follows:

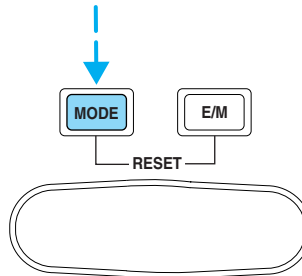
Average fuel economy. The display will indicate the vehicle's average fuel economy in miles/gallon or liters/100 km since the average fuel economy was last reset.

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

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

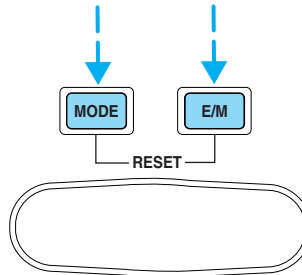
To reset the average fuel economy:

1. Press the MODE control repeatedly until average fuel economy is displayed (this is the only resettable display).



Driver Controls

2. Press the E/M and MODE controls simultaneously. The display will illuminate the “AVG” indicator. While the indicator is lit, release both controls to reset the average fuel economy.



Fuel range. This function estimates approximately how far you can drive with the fuel remaining in your tank under normal driving conditions. Remember to turn the ignition OFF when refueling to allow this feature to correctly detect the added fuel.

The DTE function will flash for 5 seconds when you have approximately:

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

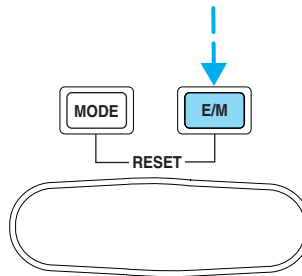
DTE is calculated using a running average fuel economy, which is based on your recent driving history of 500 miles (800 km). This value is not the same as the average fuel economy display. The running average fuel economy is reinitialized to a factory default value if the battery is disconnected.

Outside air temperature (if equipped)

The temperature can be displayed in Centigrade or Fahrenheit by pressing the E/M control.

If the outside temperature falls below 38°F (3°C), the display will alternate from “ICE” to the outside temperature at a two second rate for one minute.

Off. In this mode the display is off.



Compass

The compass display is contained in the overhead console. The vehicle heading is displayed as one of N, NE, E, SE, S, SW, W and NW.

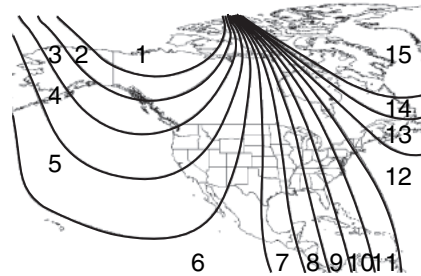
Driver Controls

The compass heading is displayed in average fuel economy modes, fuel range modes and temperature modes.

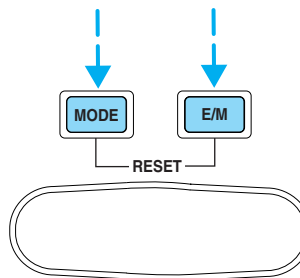
The compass reading may be affected when you drive near large buildings, bridges, power lines and powerful broadcast antenna. Magnetic or metallic objects placed in or on the vehicle may also affect compass accuracy. Adjustments may need to be made to the zone and calibration of the compass.

Compass zone adjustment

1. Determine which magnetic zone you are in for your geographic location by referring to the zone map.
2. Locate the trip computer on the overhead console.
3. Turn ignition to the ON position.



4. Press and hold both trip computer controls. After approximately four seconds, the trip computer will enter zone setting mode. Zone setting mode is indicated when the display lights the "ZONE" indicator.



5. Release both controls. Subsequent pressing of either control will increment the zone. Press the control repeatedly until the correct zone setting for your geographic location is displayed on the trip computer.
6. To exit the zone setting mode and save the displayed zone in memory, release both controls for greater than five seconds.

Compass calibration adjustment

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

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

Driver Controls

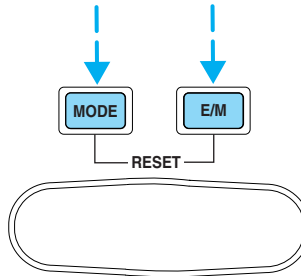
1. Locate the trip computer located in the overhead console.
2. Start the vehicle.

3. Press and hold both trip computer controls. After approximately eight seconds, the trip computer will enter CAL mode. CAL mode is indicated when the display lights the “CAL” indicator.

4. Release both controls. The display will return to normal, except that the CAL indicator will remain lit until the compass is successfully calibrated.

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

6. The compass is now calibrated.



HOMELINK® WIRELESS CONTROL SYSTEM (IF EQUIPPED)

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



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

Do not use the HomeLink® Wireless Control System with any garage door opener that lacks safety stop and reverse features as required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door which cannot detect an object, signaling the door to stop and reverse, does not meet current U.S. federal safety standards. For more information, contact HomeLink® at: **www.homelink.com** or **1-800-355-3515**.

Retain the original transmitter for use in other vehicles as well as for future programming procedures (i.e. new HomeLink® equipped vehicle purchase). It is also suggested that upon the sale of the vehicle, the programmed Homelink® buttons be erased for security purposes, refer to *Programming* in this section.

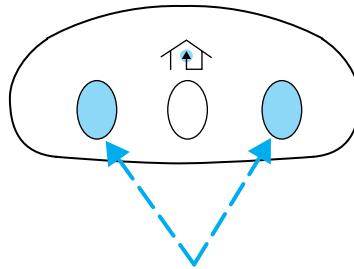
Driver Controls

Programming

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

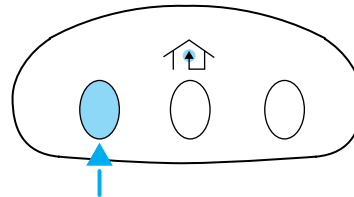
Note: Your vehicle may require the ignition switch to be turned to the ACC position for programming and/or operation of the HomeLink®. It is also recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink® for quicker training and accurate transmission of the radio-frequency signal.

1. Press and hold the two outside buttons releasing only when the indicator light begins to flash after 20 seconds. **Do not** repeat Step 1 to program additional hand-held transmitters to the remaining two HomeLink® buttons. This will erase previously programmed hand-held transmitter signals into HomeLink®.



2. Position the end of your hand-held transmitter 1–3 inches (2–8 cm) away from the HomeLink® button you wish to program (located on your visor) while keeping the indicator light in view.

3. Simultaneously press and hold both the HomeLink® and hand-held transmitter button. **Do not release the buttons until Step 4 has been completed.**



Some entry gates and garage door openers may require you to replace Step 3 with procedures noted in the “Gate Operator and Canadian Programming” in this section for Canadian residents.

4. The indicator light will flash slowly and then rapidly. Release both buttons when the indicator light flashes rapidly. (The rapid flashing light indicates acceptance of the hand-held transmitters’ radio frequency signals.)

5. Press and hold the just-trained HomeLink® button and observe the indicator light. If the light is constant, programming is complete and your device should activate when the HomeLink® button is pressed and released. **Note:** To program the remaining two HomeLink® buttons, begin with Step 2 in the “Programming” section — **do not** repeat Step 1.

Driver Controls

Note: If the indicator light blinks rapidly for two seconds and then turns to a continuous red, proceed with Steps 6 through 8 to complete programming of a rolling code equipped device.

6. At the garage door opener receiver (motor-head unit) in the garage, locate the “learn” or “smart” button (usually near where the hanging antenna wire is attached to the unit).

7. Press and release the “learn” or “smart” button. (The name and color of the button may vary by manufacturer.)

Note: There are 30 seconds in which to initiate Step 8.

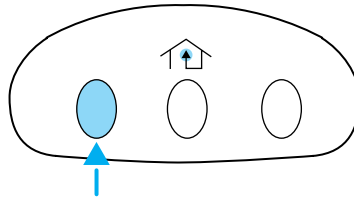
8. Return to the vehicle and firmly press, hold for two seconds and release the HomeLink® button. Repeat the press/hold/release sequence again, and, depending on the brand of the garage door opener (or other rolling code equipped device), repeat this sequence a third time to complete the programming.

HomeLink® should now activate your rolling code equipped device. To program additional HomeLink® buttons begin with Step 2 in the “Programming” section. For questions or comments, please contact HomeLink at www.homelink.com or 1-800-355-3515.

Gate Operator & Canadian Programming

During programming, your hand-held transmitter may automatically stop transmitting — not allowing enough time for HomeLink® to accept the signal from the hand-held transmitter.

After completing Steps 1 and 2 outlined in the “Programming” section, replace Step 3 with the following:



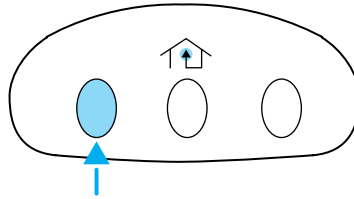
Note: If programming a garage door opener or gate operator, it is advised to unplug the device during the “cycling” process to prevent overheating.

- Continue to press and hold the HomeLink® button (note Step 3 in the “Programming” section) while you press and release — **every two seconds** (“cycle”) your hand-held transmitter until the frequency signal has been accepted by the HomeLink®. The indicator light will flash slowly and then rapidly after HomeLink® accepts the radio frequency signal.
- Proceed with Step 4 in the “Programming” section.

Driver Controls

Operating the HomeLink® Wireless Control System

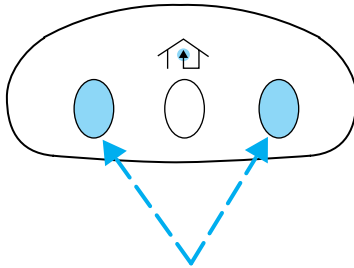
To operate, simply press and release the appropriate HomeLink® button. Activation will now occur for the trained product (garage door, gate operator, security system, entry door lock, or home or office lighting etc.). For convenience, the hand-held transmitter of the device may also be used at any time. In the event that there are still programming difficulties, contact HomeLink® at www.homelink.com or **1-800-355-3515**.



Erasing HomeLink® buttons

To erase the three programmed buttons (individual buttons cannot be erased):

- Press and hold the two outer HomeLink® buttons until the indicator light begins to flash-after 20 seconds. Release both buttons. Do not hold for longer than 30 seconds.



HomeLink® is now in the train (or learning) mode and can be programmed at any time beginning with Step 2 in the “Programming” section.

Reprogramming a single HomeLink® button

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

1. Press and hold the desired HomeLink® button. **Do NOT** release the button.
2. The indicator light will begin to flash after 20 seconds. Without releasing the HomeLink® button, follow Step 2 in the “Programming” section.


For questions or comments, contact HomeLink® at www.homelink.com or **1-800-355-3515**.

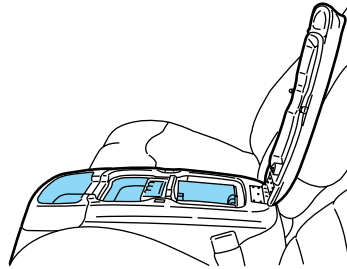
Driver Controls

CENTER CONSOLE

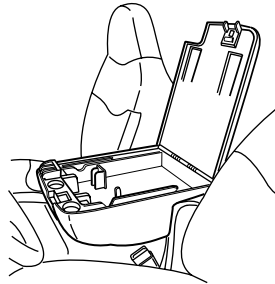
Your vehicle may be equipped with a variety of console features. These include:

- Utility compartment
- Coin holder slots
- Pen holder

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




- Utility compartment
- Pen holder
- Space for lap-top computer



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.

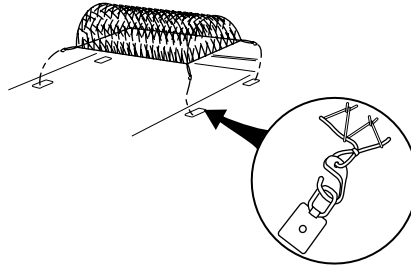
Driver Controls

CARGO NET (IF EQUIPPED)

The cargo net secures lightweight objects in the cargo area. Attach the net to the anchors provided.



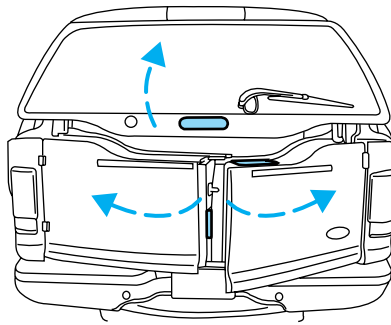
This net is not designed to restrain objects during a collision.



TRIDOOR

The TriDoor area is intended for cargo storage only, not for passengers. You can open and close the TriDoors from outside the vehicle only. You cannot open the liftgate or cargo doors from inside the vehicle.


- To open the liftgate, unlock the liftgate (with the key, the remote entry transmitter by pressing the UNLOCK button twice or power door locks) and pull up on the liftgate handle.
- To open the cargo doors, open the liftgate, then open right cargo door first, using the handle on top of the door, then open the left cargo door using the handle on the side of the door.



For wider loads, the cargo doors can be opened wider by unhooking the check straps from the door hinge. Make sure the check straps are reattached after loading and before closing the cargo doors.

- To close and lock the liftgate and cargo doors, close the left cargo door first, then the right cargo door, then pull down and close the liftgate. Lock the TriDoor with the key, remote entry transmitter or the power door lock button.

Driver Controls

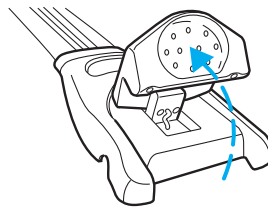
 The cargo doors and liftgate should be closed before driving your vehicle. Make sure the liftgate and/or the cargo doors are closed to prevent exhaust fumes from being drawn into the vehicle. Leaving the liftgate and/or the cargo doors open could cause serious damage to the TriDoors and its components. If you must drive with the cargo doors and liftgate window open, keep the vents open so outside air comes into the vehicle.

LUGGAGE RACK

Maximum load is 200 lb (90 kg) on the roof rack structure, or 100 lbs (45 kg) on the roof panel rails. Distribute the load equally on the cross-bars.

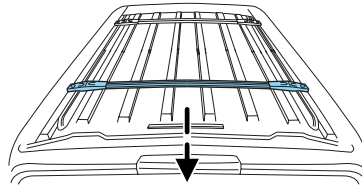
To adjust the cross-bar position:

1. Release the latch at both ends of the cross-bar (both cross-bars are adjustable).
2. Slide cross-bar to the desired location.
3. Tighten the latch at both ends of the cross-bar.



To remove the cross-bar assembly from the roof rack side rails:

1. Loosen the latch at both ends of the cross-bar (both cross-bars are adjustable).
2. Slide cross-bar to the end of the rail.
3. Press down on the locking feature inside the side rail and slide the cross-bar over it.
4. Slide the assemblies off the end.



Driver Controls



Vehicles with a higher center of gravity such as utility and four-wheel drive vehicles handle differently than vehicles with a lower center of gravity. Utility and four-wheel drive vehicles are not designed for cornering at speeds as high as passenger cars any more than low-slung sport cars are designed to perform satisfactorily under off-road conditions. Avoid sharp turns, excessive speed and abrupt maneuvers in these vehicles. Failure to drive cautiously could result in an increase risk of loss of vehicle control, vehicle rollover, personal injury and death.

Locks and Security

KEYS

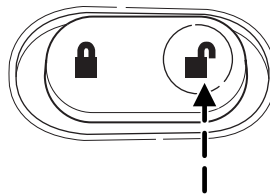
The key operates all locks on your vehicle. In case of loss, replacement keys are available from your dealer.

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

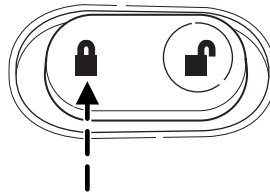
Refer to the *SecuriLock[™] passive anti-theft system* section in this chapter for more information.

POWER DOOR LOCKS

Press control to unlock all doors.



Press control to lock all doors.



Smart locks (if equipped)

This feature prevents 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 locks, 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, by simultaneously pressing the 7 • 8 and the 9 • 0 controls on the remote keyless entry keypad (if equipped), or using the lock button on the remote keyless entry transmitter (if equipped).

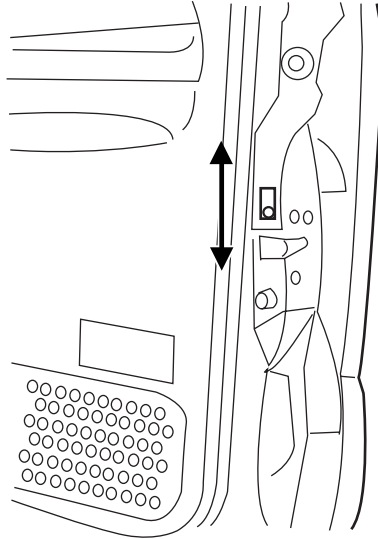
Locks and Security

Childproof door locks

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

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

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



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.

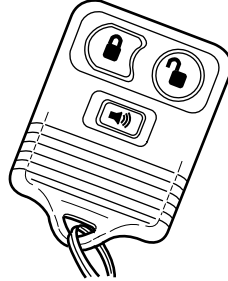
The typical operating range for your remote entry transmitter is approximately 33 feet (10 meters). A decrease in operating range could be caused by:

- 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:



Locks and Security

- unlock the vehicle doors without a key.
- lock all the vehicle doors without a key.
- activate the personal alarm.





If there are problems with the remote entry system, make sure to take **ALL remote entry transmitters** with you to your 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 and running board lamps (if equipped) will illuminate.
2. Press  and release again within three seconds to unlock all doors and the liftgate.

Locking the doors

1. Press  and release to lock all the doors and liftgate. The parking lamps will flash once if all doors, the liftgate and the hood are closed and locked.
2. Press  and release again within three seconds to confirm that all the doors and liftgate are closed and locked. **Note:** The doors will lock again, the horn will chirp once, and the parking lamps will flash once more.

If any of the doors, the liftgate or the hood are not properly closed, the horn will make two quick chirps.


Power door lock disable feature (if equipped)

The UNLOCK  feature on your power door locks will not work from inside the vehicle when:

- the ignition has been turned to the 3 (OFF) position, and
- 20 seconds elapse after all vehicle doors are closed and locked using the remote entry transmitter, or the power door lock control (while the accompanying door is open).

Locks and Security

The UNLOCK  feature will work again after:

- a door has become ajar,
- the ignition is turned to the 4 (ON) position,
- unlocking the vehicle using the keyless entry keypad,
- or using the UNLOCK  control on your remote entry transmitter (if equipped).

This feature is initially deactivated, but may be activated by taking your vehicle to an authorized dealer.

Sounding a panic alarm

Press  to activate the alarm. Press again or turn the ignition to 4 (ON) to deactivate.

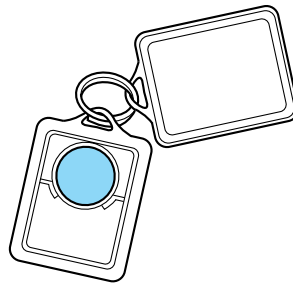
Note: The panic alarm will only operate when the ignition is in the 2 (LOCK) or 3 (OFF) position.

Replacing the battery

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

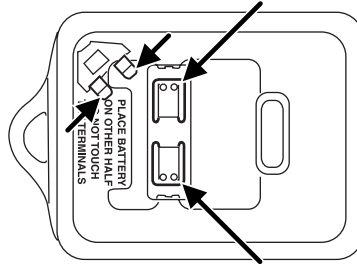
To replace the battery:

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.



Locks and Security

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.

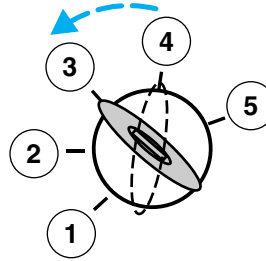
How to reprogram your remote entry transmitters

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

Locks and Security

To reprogram the remote entry transmitters:

1. Ensure the vehicle is electronically unlocked.
2. Put the key in the ignition.
3. Turn the key from the 2 (LOCK) position to 3 (OFF).
4. Cycle eight times rapidly (within 10 seconds) between the 3 (OFF) position and 4 (ON). **Note:** The eighth turn must end in the 4 (ON) position.
5. The doors will lock, then unlock, to confirm that the programming mode has been activated.
6. 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.
7. The doors will lock, then unlock, to confirm that this remote entry transmitter has been programmed.
8. Repeat Step 6 to program each additional remote entry transmitter.
9. Turn the ignition to the 3 (OFF) position after you have finished programming all of the remote entry transmitters. **Note:** After 20 seconds, you will automatically exit the programming mode.
10. 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) or liftgate.

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

- the ignition switch is turned to the 4 (ON) position, or
- the remote transmitter lock control is pressed, or
- the 7 • 8 and the 9 • 0 controls on the keyless entry keypad are 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.

Locks and Security

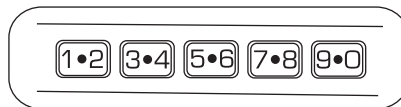
The inside lights will not turn off if:

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

The battery saver will shut off the interior lamps 30 minutes after the ignition has been turned to the 3 (OFF) position, 10 minutes after if the dome lamp is off, and 30 minutes after if the dome lamp switch is left on.

KEYLESS ENTRY SYSTEM

You can use the keyless entry keypad to lock or unlock the doors without using a key.



The keypad can be operated with the factory set 5–digit entry code; this code is located on the owner's wallet card in the glove box, is marked on the computer module, and is available from your authorized dealer. You can also create your own 5–digit personal entry code.

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

Programming a personal entry code

To create your own personal entry code:

1. Enter the factory set code.
2. Within five seconds press the 1 • 2 on the keypad.
3. Enter your personal 5–digit code. Each number must be entered within five seconds of each other.
4. The doors will again lock then unlock to confirm that your personal keycode has been programmed to the module.

Tips:

- Do not set a code that uses five of the same number.
- Do not use five numbers in sequential order.
- The factory set code will work even if you have set your own personal code.
- If you set a second personal code it will erase your first personal code.

Erasing personal code

1. Enter the factory set 5–digit code.
2. Within five seconds, press the 1 • 2 on the keypad and release.

Locks and Security


3. Press and hold the 1 • 2 for two seconds. This must be done within five seconds of completing Step 2.

Your personal code is now erased and only the factory set 5–digit code will work.

Anti-scan feature

If an incorrect code has been entered 7 times (35 consecutive button presses), the keypad will go into an anti-scan mode. This mode disables the keypad for one minute and the keypad lamp will flash during this time.

The anti-scan feature will turn off after:

- one minute of keypad inactivity.
- pressing the  control on the remote entry transmitter.
- the ignition is turned to the 4 (ON) position.

Unlocking and locking the doors using keyless entry

To unlock the driver's door, enter the factory set 5-digit code or your personal code. Each number must be pressed within five seconds of each other. The interior lamps will illuminate after entering a valid keypad entry code.

To unlock all doors, press the 3 • 4 control within five seconds.

To lock all doors, press the 7 • 8 and the 9 • 0 at the same time. You **do not** need to enter the keypad code first. **Note:** The interior lamps will turn off.

Autolock (if equipped)

This feature automatically locks all vehicle doors when the following conditions are met:

- the ignition key is in the 4 (ON) position,
- all the doors are closed,
- the brake is pressed before reaching 5 mph (8 km/h), and
- the vehicle is traveling more than 5 mph (8 km/h).

Relock

The autolock feature repeats when the following conditions are met:

- the vehicle's speed is less than 5 mph (8 km/h),
- any door is opened then closed while the ignition is in the 4 (ON) position,

Locks and Security

- the brake is pressed before reaching 5 mph (8 km/h), and
- the vehicle is traveling more than 5 mph (8 km/h).

To deactivate/reactivate the autolock feature using the keypad

Your vehicle comes with the autolock feature activated. To deactivate/reactivate this feature:

1. Ensure that the anti-theft system is not armed.
2. Turn the ignition to the 3 (OFF) position.
3. Close all the doors, liftgate and cargo doors.
4. Enter the 5-digit entry code.
5. Press and hold the 7 • 8. While holding the 7 • 8, press and release the 3 • 4.
6. Release the 7 • 8.

The horn will chirp once when the system has been successfully deactivated.

The horn will chirp twice (one short and one long chirp) when the system has been successfully reactivated.

To deactivate/reactivate the autolock feature using the power door unlock control

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. Insert the key and turn the ignition to the 4 (ON) position.
2. Press the power door unlock control three times.
3. Turn the ignition from the 4 (ON) position to the 3 (OFF) position.
4. Press the power door unlock control three times.
5. Turn the ignition back to the 4 (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. **Note:** Pressing the power door UNLOCK/LOCK button again will toggle between activating and deactivating the autolock feature.
7. Turn the ignition to the 3 (OFF) position. The horn will chirp once to confirm the procedure is complete.

Locks and Security

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 2 (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 4 (ON) position, the indicator will glow for 3 seconds, then turn off to indicate normal system functionality.

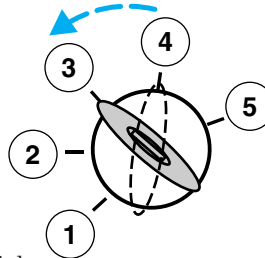
If a problem occurs with the SecuriLock™ system, the indicator will flash rapidly or glow steadily when the ignition is in the 4 (ON) position. If this occurs, the vehicle should be taken to an authorized dealer for service.

Locks and Security

Automatic arming

The vehicle is armed immediately after switching the ignition to the 3 (OFF) position.

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



Automatic disarming

Switching the ignition to the 4 (ON) position with a **coded key** disarms the vehicle.

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

Programming spare keys

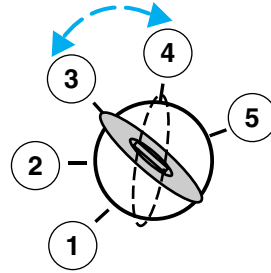
You can program your own coded keys to your vehicle. Please read and understand the entire procedure before you begin.

Tips:

- A maximum of eight keys can be coded to your vehicle.
- Only use Securilock[®] 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 two previously programmed coded keys are not available, you must take your vehicle to your authorized dealer to have the spare key(s) programmed.

Locks and Security

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



2. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second, but no more than 10 seconds.

3. Turn the ignition to the 3 (OFF) position.

4. Remove the previously programmed coded key from the ignition.

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

6. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second but not more than 10 seconds.

7. Turn the ignition to the 3 (OFF) position.

8. Remove the previously programmed coded key from the ignition.

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

10. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second, but no more than 10 seconds.

11. Your new, unprogrammed key is now programmed.

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

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

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

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.



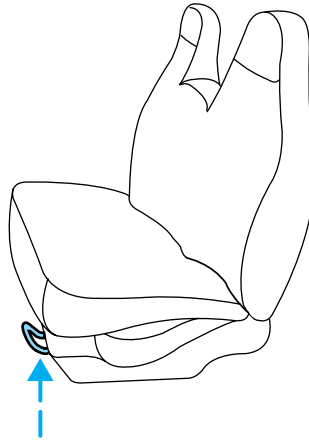
Do not pile cargo higher than the seatbacks to reduce the risk of injury in a collision or sudden stop.



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.

40/20/40 seat (if equipped)

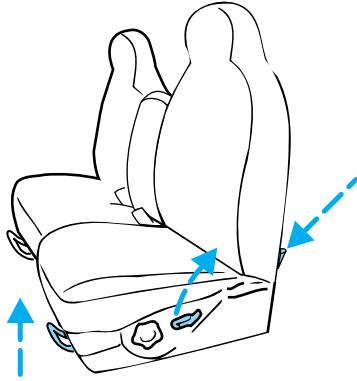
- Lift the track release bar to move the seat forward or backward. Ensure that the seat is relatched into place.



Seating and Safety Restraints

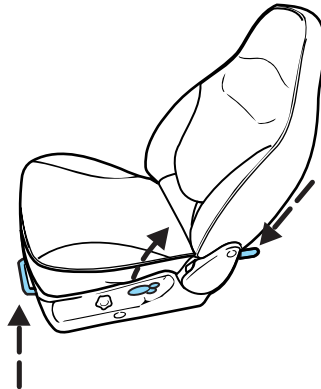
60/40 split bench seat (if equipped)

- Lift the release bar to move the seat forward or backward. Ensure the seat is relatched into place.
- Pull the seatback handle up to recline the seat.



Captain's chair (if equipped)

- Lift the track release bar to move the seat forward or rearward. Make sure that the seat is relatched into place.
- Pull the seatback handle up to recline the seat.
- Push down the lever (if equipped) located at the bottom of the seatback to quickly fold the seatback forward.



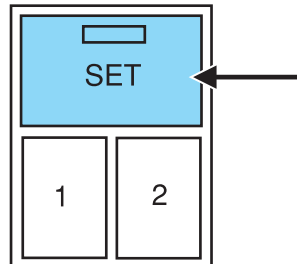
Seating and Safety Restraints

Memory seats and adjustable pedals (if equipped)

This system allows automatic positioning of the driver seat and adjustable pedals to two programmable positions.

The memory seat control is located on the driver door.

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

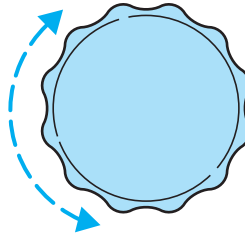


A position can only be recalled when the transmission gearshift is in Park or Neutral. A memory seat position may be programmed at any time.

Using the manual lumbar support

For more lumbar support, turn the lumbar support control toward the front of vehicle.

For less lumbar support, turn the lumbar support control toward the rear of vehicle.

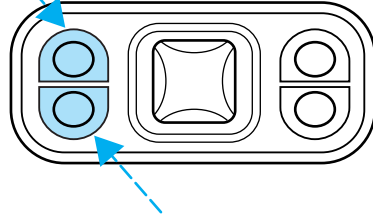


Seating and Safety Restraints

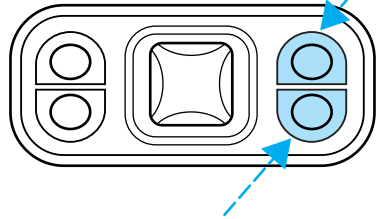
Adjusting the front power seat (if equipped)

The control is located on the outboard side of the seat cushion.

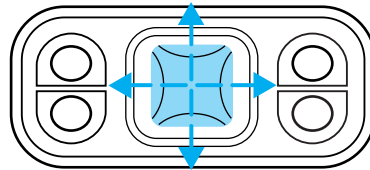
Press to raise or lower the front portion of the seat cushion.



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



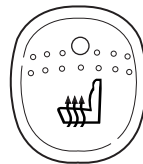
Press the control to move the seat forward, backward, up or down.



Heated seats (if equipped)

To operate the heated seats, do the following:

- Push control to activate.
- Push again to deactivate.



The indicator light on the control will illuminate when activated.

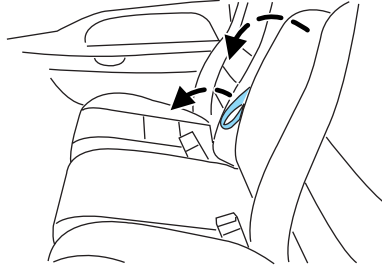
100

Seating and Safety Restraints

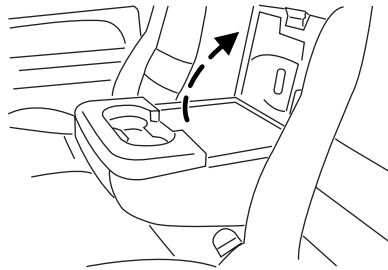
The system will not automatically shutoff unless control is pushed to deactivate. If system is not manually terminated at last use, then system will remain active at next ignition key cycle.

40/20/40 front seat armrest and console (if equipped)

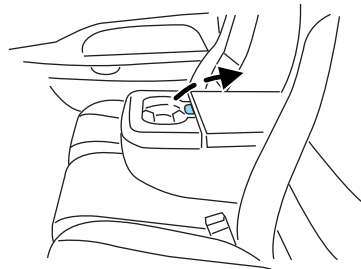
To release the armrest, pull forward on the strap and pull the armrest down.



To gain access to the storage compartment in your armrest, lift the latch to open the lid. The lid cannot be opened in the upright position.



Lift up armrest to return it to a center seatback.



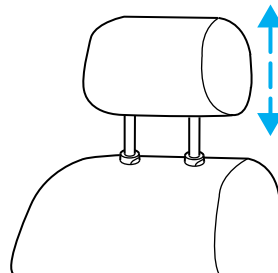
Seating and Safety Restraints

REAR SEATS

Head restraints

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.

Push or pull the head restraint to the desired position.



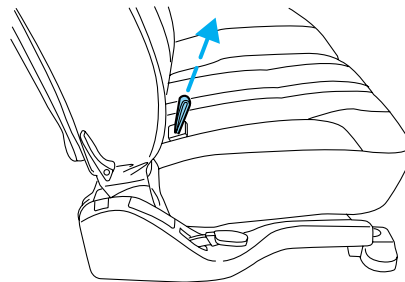
Rear folding seats (if equipped)

Folding down rear seats into load floor

Ensure that no objects such as books, purses or briefcases are on the floor in front of the second row seats before folding them down and insure the seat is fully latched rearward.

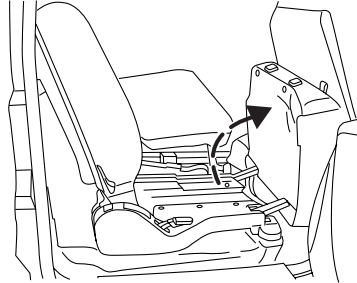
For assistance, refer to the label located on the seat side shield.

1. Lift strap to release seat cushion.

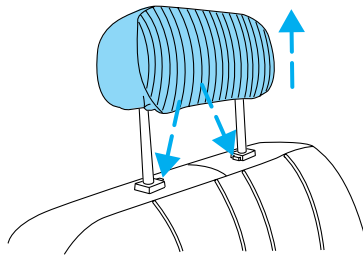


Seating and Safety Restraints

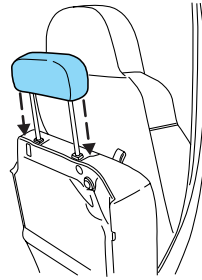
2. Lift seat cushion up and rotate forward.



3. The headrest must be removed in order to fold the seatback down. Remove 2nd row seat headrest by pushing in both tabs while pulling up on headrest simultaneously.

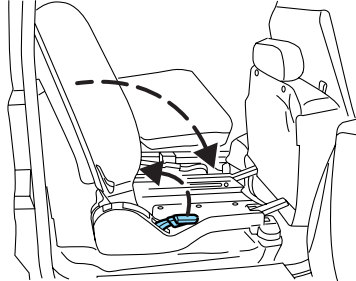


4. Stow headrest into the green caps found on the top of the seat cushion.

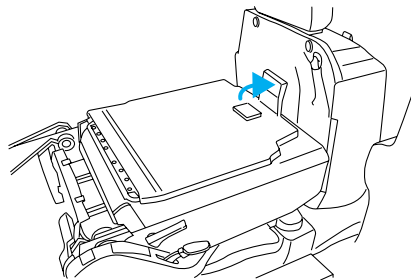


Seating and Safety Restraints

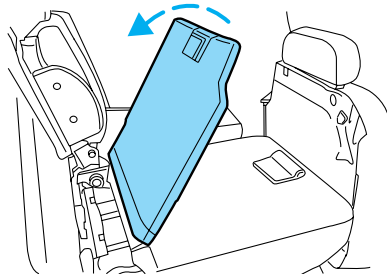
5. Lift the lower seat control and flip the seatback down.



6. For bench seats only, lift up flap on seatback to release closeout panel.



7. For bench seats only, rotate panel to closeout the space between the seatback and the floor.



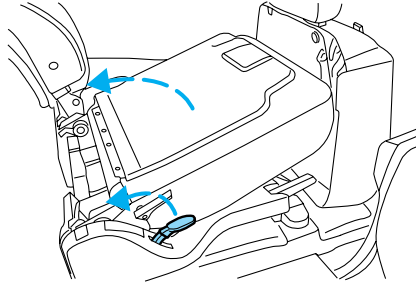
Returning the seat to upright



Before returning the seatback to its original position, make sure that cargo or any objects are not trapped underneath 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.

Seating and Safety Restraints

1. For bench seats, rotate the closeout panel onto the seatback and secure with the retaining flap.
2. Lift the lower seat control.
3. Pull up on the seatback while lifting the handle to lift the seatback into the upright position.

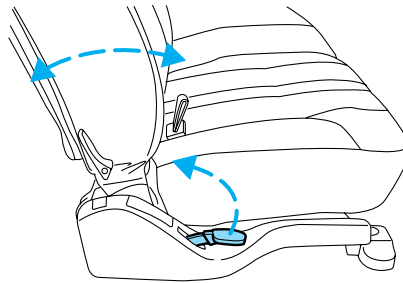


Note: The front seat may need to be moved forward to ease operation.

4. Remove headrest from storage position and return to 2nd row seatback. Push down headrest completely to secure.

Reclining the second row seatback

Locate the release handle located on the outboard side of the seat cushion and lift gently to allow the seatback to be adjusted to the desired location.



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.

Third row seat (if equipped)


The third row seat is equipped with combination lap and shoulder belts in the outboard seating positions and a manual adjust tongue lap belt in the center seating position. For information on the proper operation of the safety restraints, refer to *Safety restraints* in this chapter.

The third row seat may be removed from the vehicle for additional cargo space.

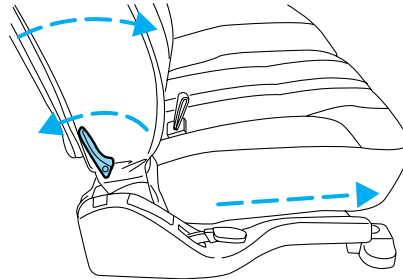
Seating and Safety Restraints


Accessing the third row seat

Your vehicle is equipped with an easy entry second row seat feature which allows ready access to the third row seat. You may enter the third row seat through either rear side door.

 To reduce the risk of personal injury, the second row seat should not be left in the forward, E-Z entry position while the vehicle is in motion. Please ensure that the seat is in the upright, fully latched rearward position before putting the vehicle in motion. Refer to the warning label on the seat side shield.

1. Rotate the upper seat lever rearward while pushing the seatback toward the front of the vehicle.
2. Push the seatback toward the front of the vehicle. This releases the seat track and the seat will move forward.
3. After entering the 3rd row seat, pull back the 2nd row seatback until it latches at full rearward position. This will latch and lock the seatback and the seat track.

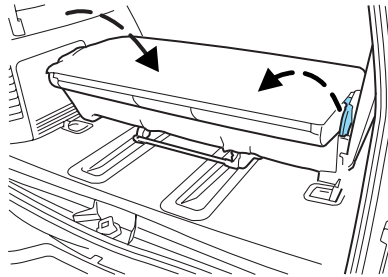


 Insure the seat is pulled back to the locked position, whether the seat is occupied or empty. If not latched, the seat may cause injury during a sudden stop.

Folding down the third row seat

Pull the seat release lever located on the lower right side of the seatback while pushing the seatback down into the seat cushion. The seatback will latch into place.

Pull the seat release lever to return the seatback into the upright seating position.



Seating and Safety Restraints

Removing the third row seat

From the rear of the vehicle, with the liftgate window and cargo doors open:

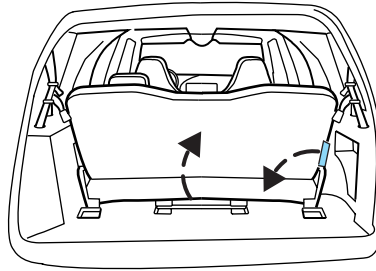
1. Pull the seat release lever located on the lower right side of the seatback while pushing the seatback down onto the seat cushion.

- The seatback will latch onto the cushion.

2. Lift the seat release bar located at the center of the seat near the floor to release the floor latches.

3. While pulling up on the release bar, lift the seat up and out of the floor tubs and roll seat rearward.

4. With assistance, lift the seat out of the vehicle.



Installing the third row seat



Always latch the vehicle seat to the floor, whether the seat is occupied or empty. If not latched, the seat may cause injury during a sudden stop.



When reinstalling a rear seat in your vehicle it must be placed in its original position. Improper installation of the seat will prevent correct use of the safety belts and could increase the risk of injury. Refer to the warning label on the seat belt.

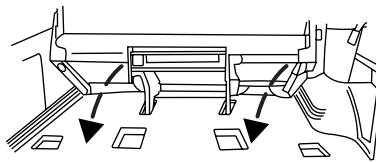
For proper latching, ensure that the floor tubs are clear of debris.

From the rear of the vehicle, with the liftgate open:

1. With assistance, lift the seat into the rear of the vehicle. Roll the seat forward and guide the front locators over the seat locator pins of the front floor tubs.

- When the rear of the seat is 4–5 in (10–13 cm) above the rear pins, let the seat drop. This will ensure that the seat will properly latch into the floor.

2. Push up on the seat to verify that it is latched into the floor.



Seating and Safety Restraints

3. Verify that the safety belts can move freely on either side of the seat.
4. Lift the lever and pull up the seatback to drive position.

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.

Seating and Safety Restraints



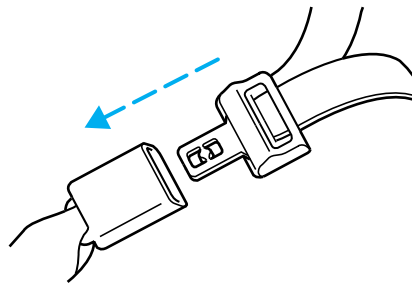
Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints.



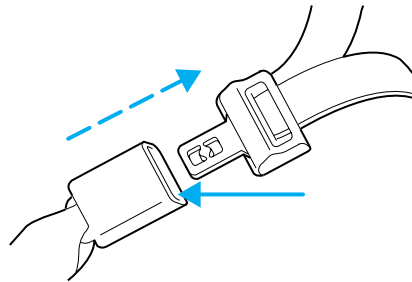
Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check seat covers and buckles before you place a child anywhere near them.

Combination lap and shoulder belts

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



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



The front outboard and rear outboard safety restraints in the vehicle are combination lap and shoulder belts. The front passenger outboard and rear outboard 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 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)

Seating and Safety Restraints

or more, the combination safety belts will lock to help reduce forward movement of the driver and passengers.

Automatic locking mode

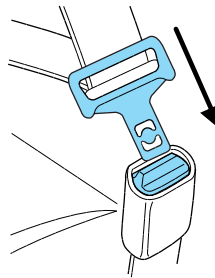
When to use the automatic locking mode

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 (if equipped). Children 12 years old and under should be properly restrained in the rear seat whenever possible. Refer to *Safety restraints for children* or *Safety seats for children* later in this chapter.

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

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 safety belt systems at all outboard seating positions (except the driver position, which doesn't have this 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 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.

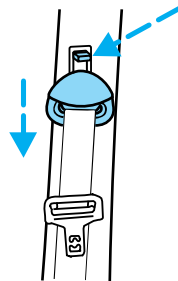
Energy Management Feature

- This vehicle has a seat belt system with an energy management feature at the front outboard seating positions to help further reduce the risk of injury in the event of a head-on collision.
- The front outboard seat belt systems have 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.


Outboard safety belt height adjustment

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

To adjust the shoulder belt height, push the button and slide the height adjuster up or down. Release the button and pull down on the height adjuster to make sure it is locked in place.




Seating and Safety Restraints

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

Lap belts

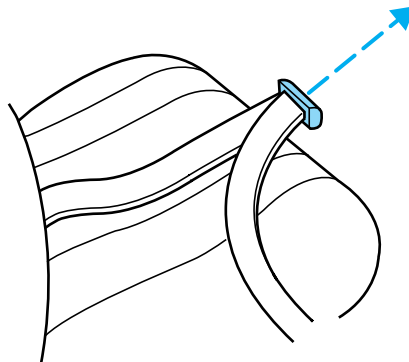
Adjusting the lap belt

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

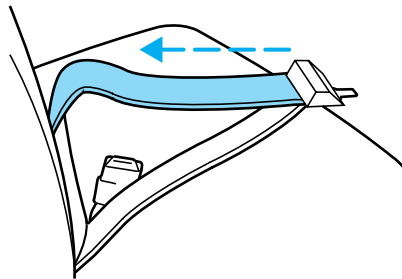
• 1st row and 3rd row center seating positions

The lap belt does not adjust automatically.

Insert the tongue into the correct buckle (the buckle closest to the direction the tongue is coming from). To lengthen the belt, turn the tongue at a right angle to the belt and pull across your lap until it reaches the buckle. To tighten the belt, pull the loose end of the belt through the tongue until it fits snugly across the hips.



Shorten and fasten the belt when not in use.



Seating and Safety Restraints

• 2nd row center seating position (if equipped)

The lap belt will not adjust automatically. To fasten, grasp the tongue, and with a continuous motion, pull out enough webbing to buckle the tongue into the correct buckle. If you did not pull out enough webbing to reach the buckle, allow the tongue to retract fully before trying to pull it out again.

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.

Conditions of operation

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

BeltMinder™

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

Seating and Safety Restraints


If...	Then...
The driver's safety belt is not buckled before 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 [™] feature is activated - the safety belt warning light illuminates and the warning chime sounds for 6 seconds every 30 seconds, repeating for approximately 5 minutes or until safety belt is buckled.
The driver's safety belt is buckled while the safety belt indicator light is illuminated and the safety belt warning chime is sounding...	The BeltMinder [™] feature will not activate.
The driver's safety belt is buckled before the ignition switch is turned to the ON position...	The BeltMinder [™] feature will not activate.

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

Reasons given...	Consider...
"Crashes are rare events"	36700 crashes occur every day. 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"	3 of 4 fatal crashes occur within 25 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.

Seating and Safety Restraints

Reasons given...	Consider...
"I was in a hurry"	Prime time for an accident. BeltMinder™ reminds us to take a few seconds to buckle up.
"Safety belts don't work"	Safety belts , when used properly, reduce risk of death to front seat occupants by 45% in cars , and by 60% in light trucks .
"Traffic is light"	Nearly 1 of 2 deaths occur in single-vehicle crashes , 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.
"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. People who are ejected are 40 times more likely to DIE . 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.

Seating and Safety Restraints

One time disable

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

Deactivating/activating the BeltMinder™ feature

Read Steps 1 - 5 thoroughly before proceeding with the deactivation/activation programming procedure.

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

Before following the procedure, make sure that:

- the parking brake is set
- the gearshift is in P (Park) (automatic transmission)
- the ignition switch is in the OFF position
- all vehicle doors are closed
- the driver's safety belt is unbuckled
- the parklamps/headlamps are in OFF position



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

1. Turn the ignition switch to the RUN (or ON) position. (DO NOT START THE ENGINE)
2. Wait until the safety belt warning light turns off. (Approximately 1 minute)
 - Step 3 must be completed within 60 seconds after the safety belt warning light turns off.
3. At a moderate speed, buckle then unbuckle the safety belt 9 times, ending with the safety belt in the unbuckled state.
 - After Step 3 is complete, the safety belt warning light will be turned on for 3 seconds.
 - If Step 4 does not occur within 10 seconds at the end of Step 3, Beltminder™ will automatically exit programming mode without changing its enable status.
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 if it is currently enabled. As confirmation, the safety belt warning light will flash 4 times per second for 3 seconds.

Seating and Safety Restraints

- This will enable the BeltMinder[™] feature if it is currently disabled. As confirmation, the safety belt warning light will flash 4 times per second for 3 seconds, followed by 3 seconds with the light off, then followed by the safety belt warning light flashing 4 times per second for 3 seconds again.
5. After receiving confirmation, the deactivation/activation procedure is complete.

Safety belt extension assembly

If the safety belt is too short when fully extended, there is a 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.



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.

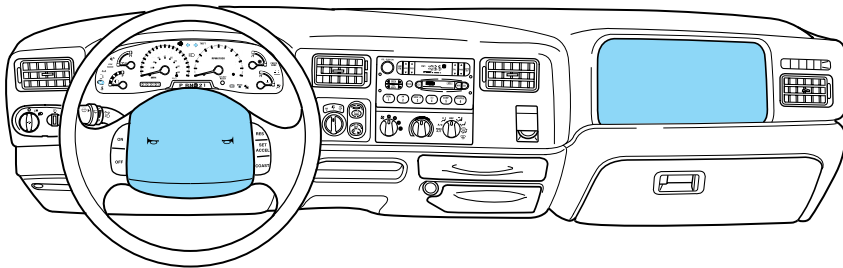


Failure to inspect and if necessary replace the safety belt assembly under the above conditions could result in severe personal injuries in the event of a collision.

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

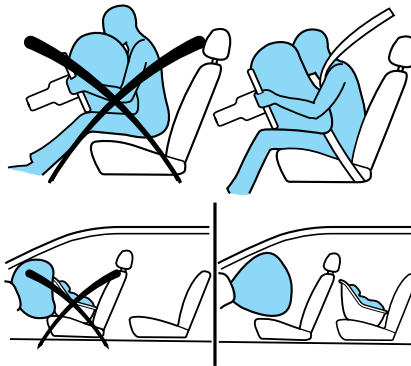
Seating and Safety Restraints


AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)





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.

Seating and Safety Restraints



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.



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



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



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.

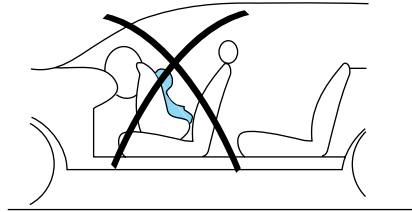


Additional equipment may affect the performance of the airbag sensors increasing the risk of injury. Please refer to the *Body Builders Layout Book* for instructions about the appropriate installation of additional equipment.

Seating and Safety Restraints

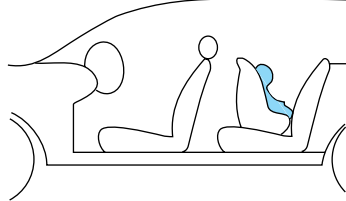
Children and airbags

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.



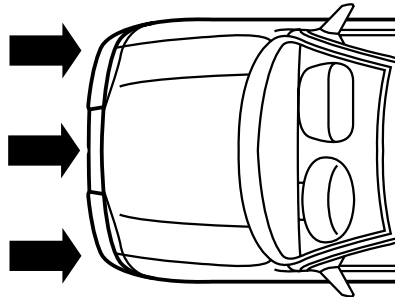
Airbags can kill or injure a child in a child seat.

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.



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.



Seating and Safety Restraints

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
- 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.

Seating and Safety Restraints

Determining if the system is operational

The SRS uses a readiness light in the instrument cluster or a tone to indicate the condition of the system. Refer to *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 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.

Seating and Safety Restraints



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.

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.

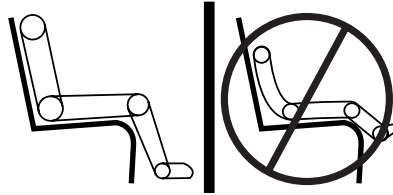
When children should use booster seats

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).

Seating and Safety Restraints

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.



- 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).

Seating and Safety Restraints

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.

SAFETY SEATS FOR CHILDREN

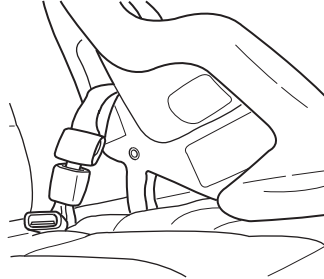
Child and infant or child safety seats

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:

Seating and Safety Restraints

- 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 pounds (22 kg) in a child restraint. Top tether anchors can be used for children up to 60 pounds (27 kg) in a child restraint, and to provide upper torso restraint for children up to 80 pounds (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 a tether anchor. For more information on top tether straps and anchors, refer to *Attaching safety seats with tether straps* in this chapter.




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




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

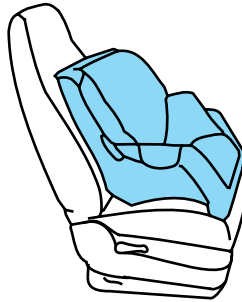
Seating and Safety Restraints

Installing child safety seats with combination lap and shoulder belts

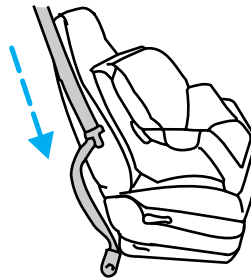
 Airbags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

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

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

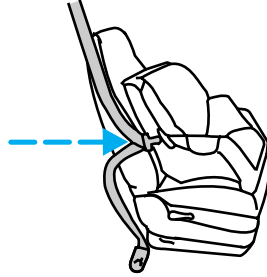


2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.

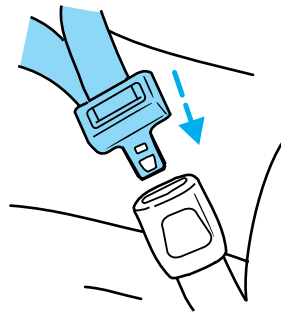


Seating and Safety Restraints

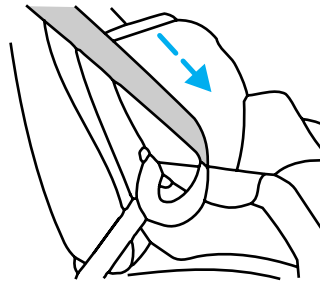
3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



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



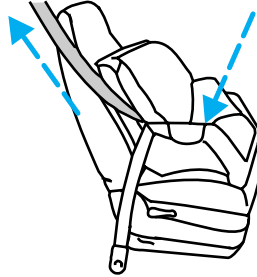
5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out and a click is heard.



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

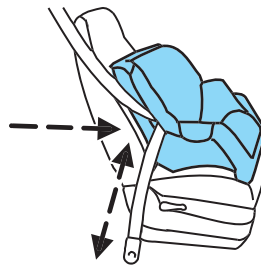
Seating and Safety Restraints

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



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

9. Before placing the child in the seat, forcibly 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.

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.

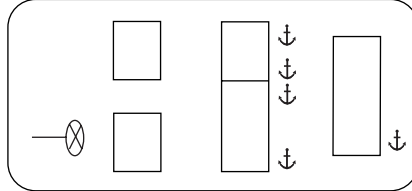
The second row seats of your vehicle are equipped with built-in tether strap anchors located behind the seats as described below.

The tether anchors in your vehicle are along the bottom of the seatback marked with the tether anchor symbol (shown with title).

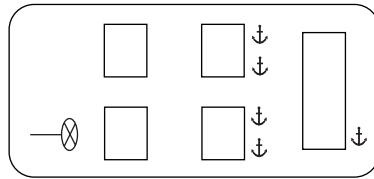
The tether strap anchors in your vehicle are in the following positions (shown from top view):


Seating and Safety Restraints

- Second row 60/40 bench seat



- Second row bucket seats



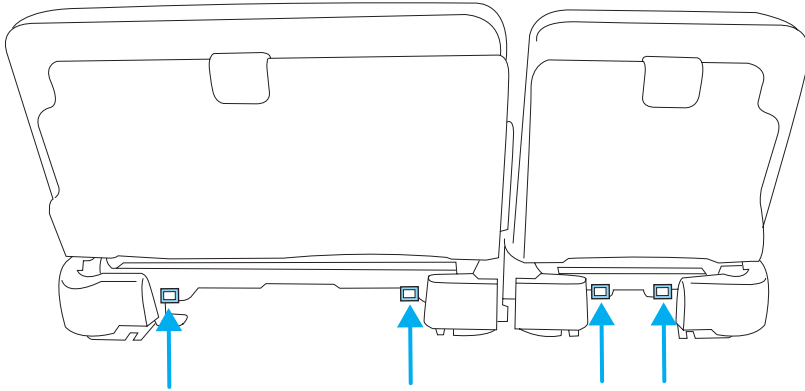
 Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.

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.

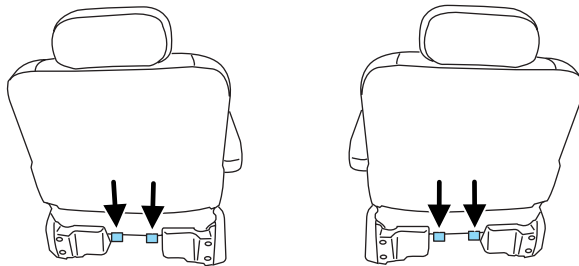
3. Locate the correct anchor for the selected seating position.

Seating and Safety Restraints



- Second row 60/40 bench seat

Note: In the right seating position, use either tether anchor.

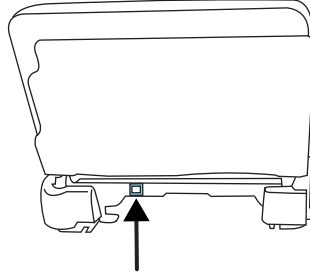


- Second row bucket seats

Note: For each seat, use either tether anchor.


Seating and Safety Restraints

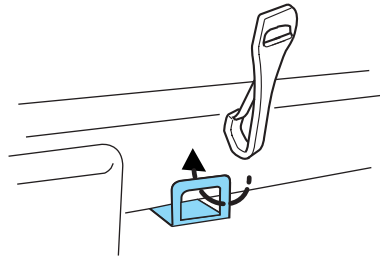
- Third row



- The anchors are on the back of the seat frame.

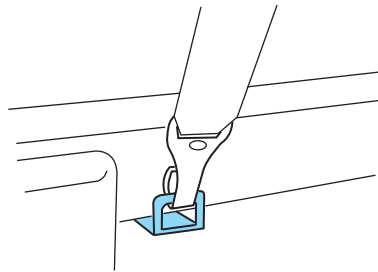
4. Clip the tether strap hook to the anchor.


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



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

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

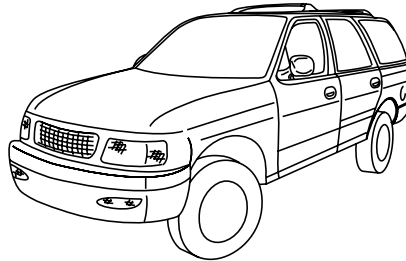



 If the safety seat is not anchored properly, the risk of a child being injured in a collision greatly increases.

Tires, Wheels and Loading


NOTICE TO UTILITY VEHICLE AND TRUCK OWNERS

Utility vehicles and trucks handle differently than passenger cars in the various driving conditions that are encountered on streets, highways and off-road. Utility vehicles and trucks are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.



 Utility vehicles have a significantly higher rollover rate than other types of vehicles. To reduce the risk of serious injury or death from a rollover or other crash you must:

- Avoid sharp turns and abrupt maneuvers;
- Drive at safe speeds for the conditions;
- Keep tires properly inflated;
- Never overload or improperly load your vehicle; and
- Make sure every passenger is properly restrained.

 In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. All occupants must wear safety belts and children/infants must use appropriate restraints to minimize the risk of injury or ejection.

Study your *Owner's Guide* and any supplements for specific information about equipment features, instructions for safe driving and additional precautions to reduce the risk of an accident or serious injury.

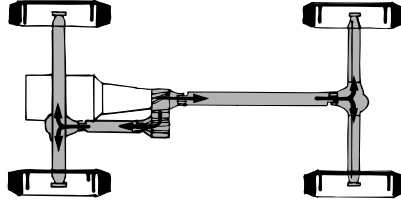
VEHICLE CHARACTERISTICS

4WD and AWD Systems (if equipped)

A vehicle equipped with AWD or 4WD (when selected) has the ability to use all four wheels to power itself. This increases traction which may enable you to safely drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

Tires, Wheels and Loading

Power is supplied to all four wheels through a transfer case or power transfer unit. 4WD vehicles allow you to select different drive modes as necessary. Information on transfer case operation and shifting procedures can be found in the *Driving* chapter. Information on



transfer case maintenance can be found in the *Maintenance and Specifications* chapter. You should become thoroughly familiar with this information before you operate your vehicle.

On some 4WD models, the initial shift from two-wheel drive to 4WD while the vehicle is moving can cause a momentary clunk and ratcheting sound. These sounds are normal as the front drivetrain comes up to speed and is not cause for concern.

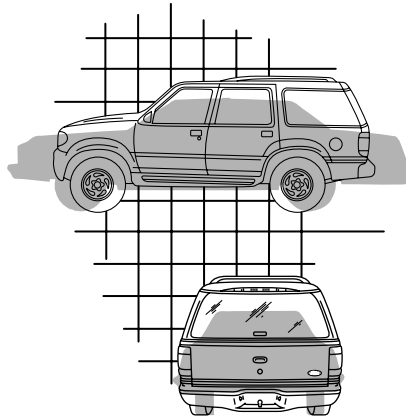


Do not become overconfident in the ability of 4WD and AWD vehicles. Although a 4WD or AWD vehicle may accelerate better than two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive vehicles. Always drive at a safe speed.

How your vehicle differs from other vehicles

SUV and trucks can differ from some other vehicles in a few noticeable ways. Your vehicle may be:

- Higher – to allow higher load carrying capacity and to allow it to travel over rough terrain without getting hung up or damaging underbody components.
- Shorter – to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. All other things held equal, a shorter wheelbase may make your vehicle quicker to respond to steering inputs than a vehicle with a longer wheelbase.

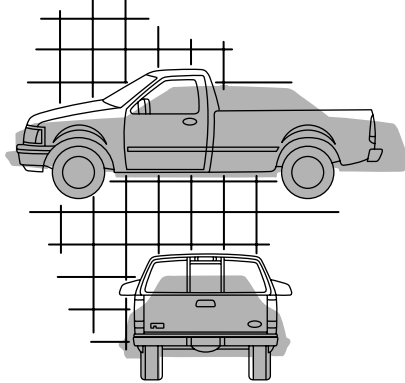


Tires, Wheels and Loading

- Narrower — to provide greater maneuverability in tight spaces, particularly in off-road use.

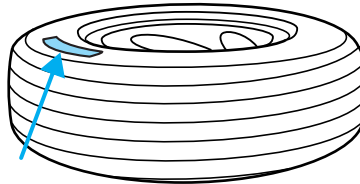
As a result of the above dimensional differences, SUV's and trucks often will have a higher center of gravity and a greater difference in center of gravity between the loaded and unloaded condition.

These differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.



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

Tires, Wheels and Loading

government test course. For example, a tire graded 150 would wear one and one-half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

Traction AA A B C

The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.



The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

Temperature A B C

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.



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.

Tires, Wheels and Loading

- **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]. 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.

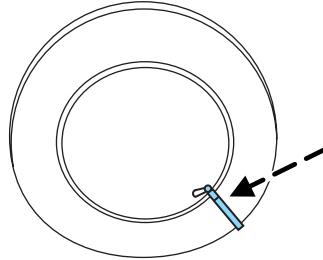
INSPECTING AND INFLATING YOUR TIRES

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.

Tires, Wheels and Loading

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.



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!

Tires, Wheels and Loading

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.

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.

Tires, Wheels and Loading

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

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

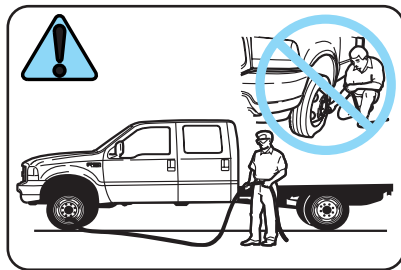
6. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.

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

Tire inflation information

All tires with Steel Carcass Plies (if equipped):

This type of tire utilizes steel cords in the sidewalls. As such, they cannot be treated like normal light truck tires. Tire service, including adjusting tire pressure, must be performed by personnel trained, supervised and equipped according to Federal Occupational Safety and Health Administration (OSHA) regulations. For example, during any procedure involving tire inflation, the technician or individual must utilize a remote inflation device, and ensure that all persons are clear of the trajectory area.



! WARNING An inflated tire and rim can be very dangerous if improperly used, serviced or maintained. To avoid serious injury, never attempt to re-inflate a tire which has been run flat or seriously under-inflated without first removing the tire from the wheel assembly for inspection. Do not attempt to add air to tires or replace tires or wheels without first taking precautions to protect persons and property.

TIRE REPLACEMENT REQUIREMENTS

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

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Tires, Wheels and Loading



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.

Dissimilar spare tire/wheel information (if equipped)



Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

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

Tires, Wheels and Loading

different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare tire/wheel, then it is intended for temporary use only. This means that if you need to use it, you should replace it as soon as possible with a road tire/wheel that is the same size and type as the road tires and wheels that were originally provided by Ford. If the dissimilar spare tire or wheel is damaged, it should be replaced rather than repaired.

When driving with the dissimilar spare tire/wheel, **do not:**

- Exceed 70 mph (113 km/h)
- Use more than one dissimilar spare tire/wheel at a time
- Use commercial car washing equipment
- Use snow chains on the end of the vehicle with the dissimilar spare tire/wheel

The usage of a dissimilar spare tire/wheel can lead to impairment of the following:

- Handling, stability and braking performance
- Comfort and noise
- Ground clearance and parking at curbs
- Winter weather driving capability
- Wet weather driving capability
- All-Wheel driving capability (if applicable)
- Load leveling adjustment (if applicable)

When driving with the dissimilar spare tire/wheel additional caution should be given to:

- Towing a trailer
- Driving vehicles equipped with a camper body
- Driving vehicles with a load on the cargo rack

Drive cautiously when using a dissimilar spare tire/wheel and seek service as soon as possible.

Tire change procedure



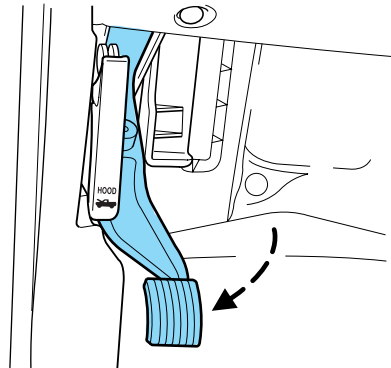
To help prevent the vehicle from moving when you change a tire, be sure the parking brake is set, then block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.

Tires, Wheels and Loading



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

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

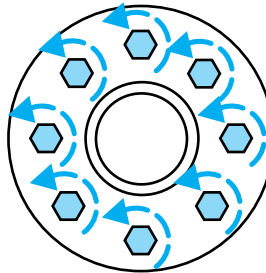
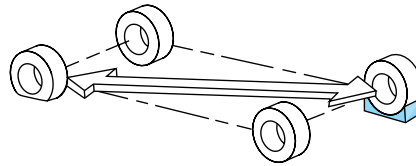


2. Turn engine OFF and block the diagonally opposite wheel (block not provided).


3. Remove the jack, jack handle, lug wrench and spare tire from the stowage locations.

4. Use the tip of the lug wrench to remove any wheel trim.

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



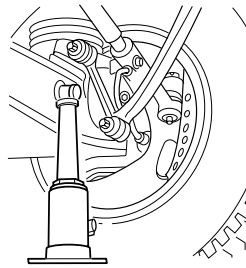
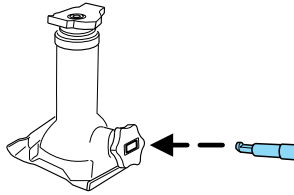
Tires, Wheels and Loading

 When one of the rear wheels is off the ground, the transmission alone will not prevent the vehicle from moving or slipping off the jack, even if the transmission is in P (Park) (automatic transmission). To prevent the vehicle from moving when you change the tire, be sure that the parking brake is set and the diagonally opposite wheel is blocked.

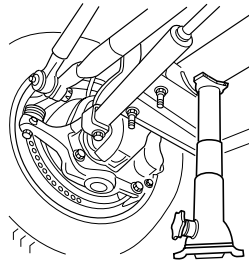
6. Insert the hooked end of the jack handle into the jack and use the handle to slide the jack under the vehicle.

7. Position the jack according to the following guides:

- Front (4x2)



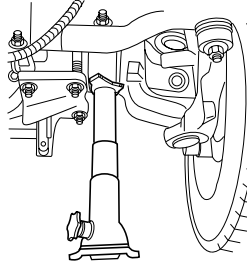
- Front passenger side (4x4)



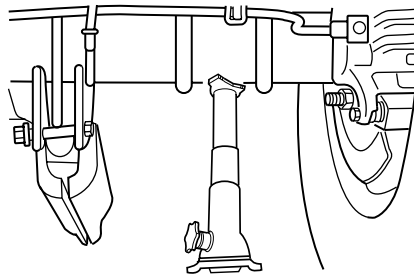
Tires, Wheels and Loading

- Front driver side (4x4)

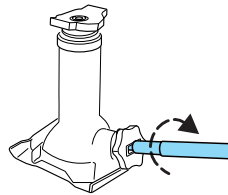
Make sure the jack fits into the notched area on the differential housing.




- Rear



8. Turn the jack handle clockwise until the wheel is completely off the ground and high enough to install the spare tire.



 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.

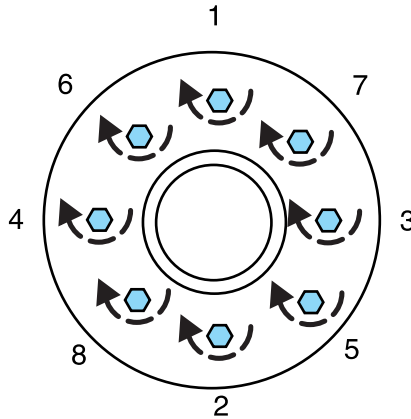
- **Never use the front or rear differential as a jacking point.**

9. Remove the lug nuts with the lug wrench.

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

Tires, Wheels and Loading

11. Lower the wheel by turning the jack handle counterclockwise.
12. 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.
13. Stow the flat tire, jack, jack handle and lug wrench. Make sure the jack is securely fastened so it does not rattle when driving.
14. Unblock the wheels.



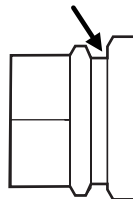
WHEEL LUG NUT TORQUE SPECIFICATIONS

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

Bolt size	Wheel lug nut torque*	
	lb.ft.	N•m
M14 x 1.5	150	200

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

On all two-piece flat wheel nuts, apply one drop of motor oil between the flat washer and the nut. Do not apply motor oil to the wheel nut threads or the wheel stud threads.



Tires, Wheels and Loading



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.

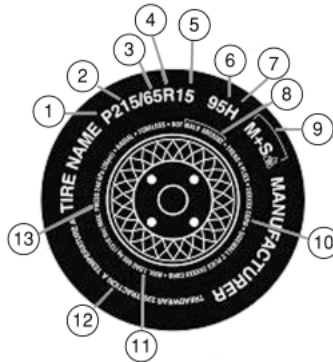
Information on “P” type tires

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.



Tires, Wheels and Loading

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.

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.

Tires, Wheels and Loading

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.

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

Tires, Wheels and Loading

Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

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

Additional information contained on the tire sidewall for "LT" type tires

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

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

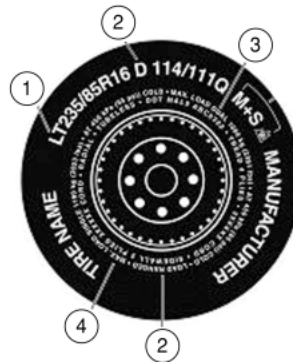
2. Load Range/Load Inflation

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.

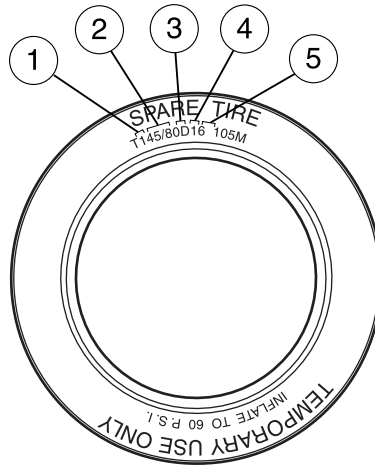
2. **145:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

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.

Tires, Wheels and Loading

TIRE CARE

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

Tire wear

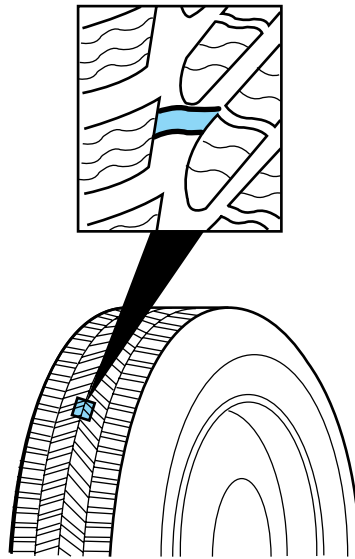
Measure and inspect the tire tread on all your tires periodically. Advanced and unusual tire wear can reduce the ability of tread to grip the road in adverse (wet, snowy, etc.) conditions. Visually check your tires for uneven wear, looking for high and low areas or unusually smooth areas. Also check 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.



Tires, Wheels and Loading

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



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.

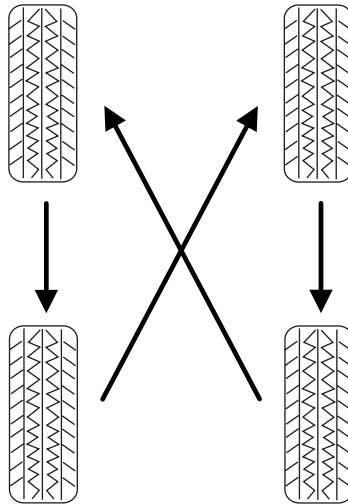
The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

Tires, Wheels and Loading

Tire rotation

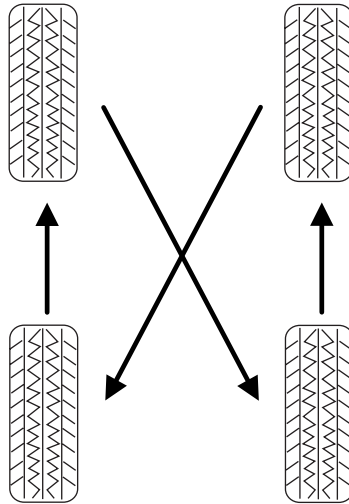
Rotating your tires at the recommended interval (as indicated in the *scheduled maintenance information* that comes with your vehicle) will help your tires wear more evenly, providing better tire performance and longer tire life. Unless otherwise specified, rotate the tires approximately every 5,000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

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



Tires, Wheels and Loading

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



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



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

The tires on your vehicle have all weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow

Tires, Wheels and Loading

tires and chains. If you need to use chains, it is recommended that steel wheels (of the same size and specifications) be used, as chains may chip aluminum wheels.

Follow these guidelines when using snow tires and chains:

- Use only SAE Class S chains.
- Install chains securely, verifying that the chains do not touch any wiring, brake lines or fuel lines.
- Drive cautiously. If you hear the chains rub or bang against your vehicle, stop and re-tighten the chains. If this does not work, remove the chains to prevent damage to your vehicle.
- If possible, avoid fully loading your vehicle.
- Remove the tire chains when they are no longer needed. Do not use tire chains on dry roads.
- The suspension insulation and bumpers will help prevent vehicle damage. Do not remove these components from your vehicle when using snow tires and chains.

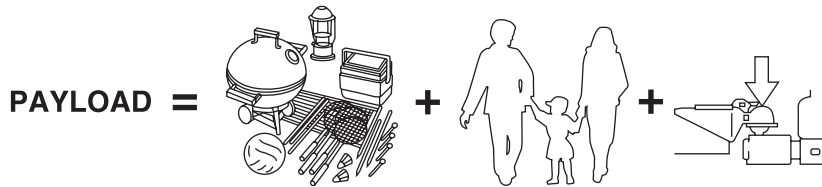
VEHICLE LOADING – WITH AND WITHOUT A TRAILER

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.

Tires, Wheels and Loading



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.

 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.

Tires, Wheels and Loading

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	

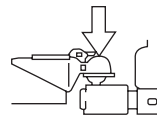
TIRE AND LOAD INFORMATION			
SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION			
RENSEIGNEMENTS RELATIFS AUX PNEUS ET À LA CHARGE			
CONSULTER LE GUIDE DU PROPRIÉTAIRE POUR DE PLUS AMPLES RENSEIGNEMENTS			
The combined weight of occupants and cargo should never exceed ^{kg or} PM, ^{kg ou} P.M. ^{lbs.} L.			
La charge du véhicule (occupants et bagages) ne doit jamais dépasser ^{kg ou} P.M. ^{kg ou} P.M. ^{lbs.} L.			
SEATING CAPACITY	TOTAL	FRONT	REAR
NOMBRE DE PLACES	TOTAL	AVANT	ARRIÈRE
	TS	FS	RS
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	

CARGO

=



+



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.


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2005 Excursion (hdw)
 Owners Guide (post-2002-fmt)
 USA (fus)

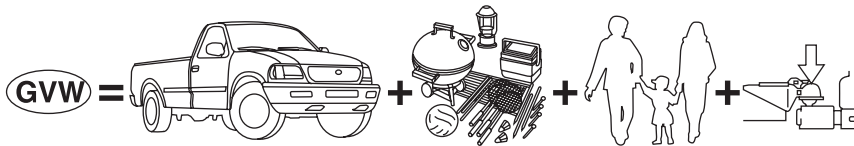
Tires, Wheels and Loading

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.




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

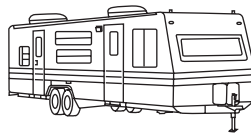
Tires, Wheels and Loading

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	
MFD. BY FORD MOTOR CO. IN U.S.A.			
DATE: 06/95	GVWR: 6250 LB/2834 KG		
FRONT GAWR: 3450 LB	REAR GAWR: 3777 LB		
1584KG	1713KG		
P265/75R15SL	WITH TIRES	P265/75R15SL	WITH 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: 1FTEX14H 0 SKB 00000		F0018	
TYPE: XXXXXXXXXXXXXXXXX		TC183	
			
EXT PNT: XXXXXX XXXXXX			
WD	TYPE-GVW	BODY	TRANS
155	REM	E	HB
			DSO
			M4

 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.

$$\text{GCW} = \text{GVW} +$$



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 vehicle's 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

Tires, Wheels and Loading

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.**

Tongue Load or Fifth Wheel King Pin Weight – refers to the amount of the weight that a trailer pushes down on a trailer hitch.

Examples: For a 5,000 lb. (2,268 kg) conventional trailer, multiply 5,000 by 0.10 and 0.15 to obtain a proper tongue load range of 500 to 750 lb. (227 to 340 kg). For an 11,500 lb. (5,216 kg) fifth wheel trailer, multiply by 0.15 and 0.25 to obtain a proper king pin load range of 1,725 to 2,875 lb. (782 to 1,304 kg)



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.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the “XXX” amount equals 1,400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400–750 (5 x 150) = 650 lb.). In metric units (635–340 (5 x 68) = 295 kg.)
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

Tires, Wheels and Loading

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:
 $1400 - (5 \times 220) - (5 \times 30) = 1400 - 1100 - 150 = 150 \text{ lb.}$ Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be:
 $635 \text{ kg} - (5 \times 99 \text{ kg}) - (5 \times 13.5 \text{ kg}) = 635 - 495 - 67.5 = 72.5 \text{ kg.}$
- 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: $1400 - (2 \times 220) - (12 \times 100) = 1400 - 440 - 1200 = -240 \text{ lb.}$ No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would be: $635 \text{ kg} - (2 \times 99 \text{ kg}) - (12 \times 45 \text{ kg}) = 635 - 198 - 540 = -103 \text{ kg.}$ You will need to reduce the load weight by at least 240 lb. (104 kg). If you remove 3-100 lb. (45 kg) cement bags, then the load calculation would be:
 $1400 - (2 \times 220) - (9 \times 100) = 1400 - 440 - 900 = 60 \text{ lb.}$ 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.

Tires, Wheels and Loading

Special loading instructions for owners of pickup trucks and utility-type vehicles

 For important information regarding safe operation of this type of vehicle, see the *Preparing to drive your vehicle* section in the *Driving* chapter of this *Owner's Guide*.

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

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

TRAILER TOWING

Your vehicle may tow a Conventional/Class IV trailer provided the maximum trailer weight is less than or equal to the maximum trailer weight listed for your engine and rear axle ratio on the following charts.

Your vehicle's load capacity is designated by weight, not by volume, so you cannot necessarily use all available space when loading a vehicle.

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

The hitch receiver was designed not to be removed. Any modification or removal of the hitch receiver compromises the safety benefit it was designed to provide.

4x2 w/automatic transmission			
Engine	Rear axle ratio	Maximum GCWR-lb. (kg)	Maximum trailer weight-lb. (kg)
5.4L	3.73	13000 (5897)	6100 (2766)
5.4L	4.10	14500 (6350)	7600 (3466)
6.8L	3.73	17000 (7711)	10000 (4536)
6.8L	4.30	20000 (9072)	11000 (4988)

Tires, Wheels and Loading

4x4 w/automatic transmission			
Engine	Rear axle ratio	Maximum GCWR-kg (lb.)	Maximum trailer weight-kg (lb.)
5.4L	4.10	14500 (6350)	7100 (3220)
6.8L	3.73	17000 (7711)	9600 (4354)
6.8L	4.30	20000 (9072)	11000 (4988)

The frame mounted hitch receiver is non-removable.

Towing a Class IV trailer (extra heavy duty) 5,001–11,000 lb. (2,268–4,536 kg) trailer weight requires a weight-distributing hitch.



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.

Load equalizing hitch

When hooking up a trailer using a load equalizing hitch, always use the following procedure:

1. Park the unloaded vehicle on a level surface. With the ignition on and all doors closed, allow the vehicle to stand for several minutes so that it can level.
2. Measure the height of a reference point on the front and rear bumpers at the center of the vehicle.
3. Attach the trailer to the vehicle and adjust the hitch equalizers so that the front bumper height is within $\frac{1}{2}$ " (13 mm) of the reference point. After proper adjustment, the rear bumper should be no higher than in Step 2.

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Tires, Wheels and Loading

Note: Adjusting an equalizing hitch so the rear bumper of the vehicle is higher than it was unloaded will defeat the function of the load equalizing hitch and may cause unpredictable handling.

Safety chains

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

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

Do not attach safety chains to the bumper.

Trailer brakes

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



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

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

Trailer lamps

Trailer lamps are required on most towed vehicles. Make sure all running lights, brake lights, turn signals and hazard lights are working. See your authorized dealer or trailer rental agency for proper instructions and equipment for hooking up trailer lamps.

Using a step bumper (if equipped)

The rear bumper is equipped with an integral hitch and only requires a ball with a one inch (25.4 mm) shank diameter. The bumper has a 5,000 lb. (2,270 kg) trailer weight and 500 lb. (227 kg) tongue weight capacity.

If it is necessary to relocate the trailer hitch ball position, a frame-mounted trailer hitch must be installed.

Tires, Wheels and Loading

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.
- To eliminate excessive transmission shifting, activate the Tow/Haul (if equipped) feature. This will also assist in transmission cooling. (For additional information, refer to the *Understanding the positions of the 5-speed automatic transmission* section in this chapter.
- Anticipate stops and brake gradually.
- Do not exceed the GCWR rating or transmission damage may occur.
- Your vehicle may be equipped with a temporary or conventional spare tire. If the spare tire is different in size (diameter and/or width), tread type (All-Season or All-Terrain) or is from a different manufacturer other than the road tires on your vehicle, your spare tire is considered “temporary”. Consult information on the spare tire label for limitations when using.

Servicing after towing

If you tow a trailer for long distances, your vehicle will require more frequent service intervals. Refer to your *Scheduled Maintenance Guide* for more information.

Trailer towing tips

- Practice turning, stopping and backing up before starting on a trip to get the feel of the vehicle trailer combination. When turning, make wider turns so the trailer wheels will clear curbs and other obstacles.
- Allow more distance for stopping with a trailer attached.
- If you are driving down a long or steep hill, shift to a lower gear. Do not apply the brakes continuously, as they may overheat and become less effective.
- The trailer tongue weight should be 10–15% 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).
- 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.

Tires, Wheels and Loading

Launching or retrieving a boat

When backing down a ramp during boat launching or retrieval,

- Do not allow the static water level to rise above the bottom edge of the rear bumper.
- Do not allow waves to break higher than 6 inches (15 cm) above the bottom edge of the rear bumper.
- Disconnect the trailer tow electrical connector to prevent blown fuses caused by water entering into your trailer's electrical wiring.

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

Replace front and rear axle lubricants any time the axles have been submerged in water. Axle lubricant quantities are not to be checked unless a leak is suspected.

RECREATIONAL TOWING (ALL WHEELS ON THE GROUND)

An example of recreational towing would be towing your vehicle behind a motorhome. Follow these guidelines if you have the need for recreational towing your vehicle with all four wheels on the ground. These guidelines are designed to ensure that your transmission is not damaged.

2WD vehicles:

- Place the transmission in N (Neutral)
- Maximum speed is 35 mph (56 km)
- Maximum distance is 50 miles (80 km)

If a distance of 50 miles (80 km) or a speed of 35 mph (56 km) must be exceeded, the drive shaft will have to be removed before the vehicle is towed.

Ford recommends the driveshaft be removed/installed only by 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.

4WD vehicles electronic shift transfer case:

4x4 vehicles with electronic shift on the fly cannot be towed with any wheels on the ground.

Driving

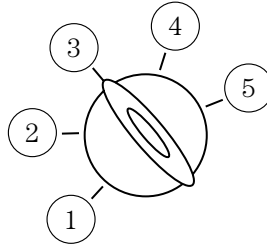
STARTING

Positions of the ignition

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

2. LOCK, locks the steering wheel, automatic transmission gearshift lever and allows key removal.

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



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

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

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

Preparing to start your vehicle


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


When starting a fuel-injected engine, 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.

Driving

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

 Do not start your vehicle in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine. See *Guarding against exhaust fumes* in this chapter for more instructions.

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

Important safety precautions

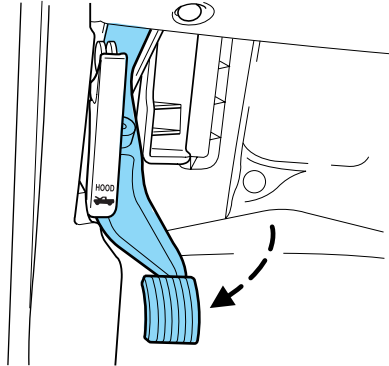
When the engine starts, the idle RPM runs faster to warm the engine. If the engine idle speed does not slow down automatically, have the vehicle checked. If your vehicle is operated in a heavy snow storm or blowing snow conditions, the engine air induction may become partially clogged with snow and/or ice. If this occurs, the engine may experience a significant reduction in power output. At the earliest opportunity, clear all the snow and/or ice away from the air induction inlet. The following starting instructions are for vehicles equipped with a gasoline engine; if your vehicle is equipped with a Diesel engine, refer to *Starting the engine* in your *6.0 Liter Power Stroke Direct Injection Turbo Diesel Owner's Guide Supplement*.

Before starting the vehicle:

1. Make sure all occupants buckle 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 electrical accessories are off.

Driving

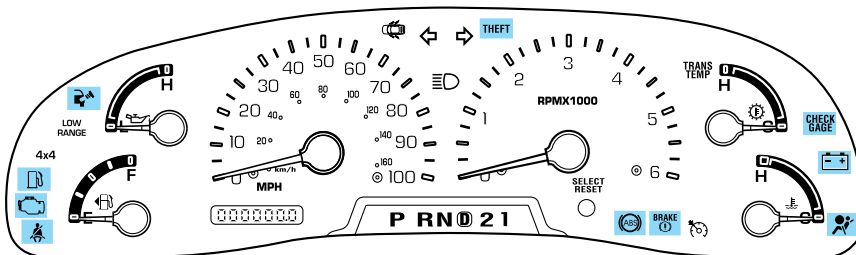
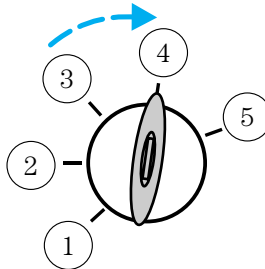
- Make sure the parking brake is set.



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



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



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

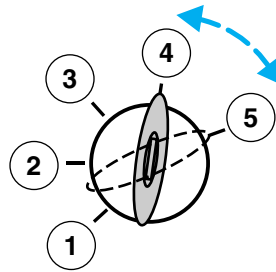
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Driving

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

Starting the engine

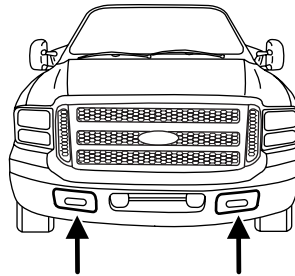
1. Turn the key to 4 (ON) without turning the key to 5 (START).
2. Turn the key to 5 (START), then release the key as soon as the engine starts. Excessive cranking could damage the starter.



Note: If the engine does not start within five seconds on the first try, turn the key to 3 (OFF), wait 10 seconds and try again. If the engine still fails to start, press 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)

Use of an engine block heater is strongly recommended if you live in a region where temperatures reach -10°F (-23°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. The plug for the block heater is exposed in the front of the vehicle, beneath the grille. Vehicles equipped with a gasoline engine have the plug exposed on the driver side of the vehicle; vehicles equipped with a Diesel engine have the plug exposed on the passenger side of the vehicle.



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

Driving

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)

Your vehicle is 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 and the brake pedal may suddenly travel a little farther as soon as ABS braking is done and normal brake operation resumes. These are normal characteristics of the ABS and should be no reason for concern.

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.)

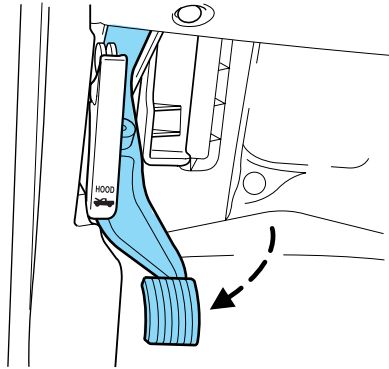
BRAKE
(!)

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.

Parking brake

To set the parking brake, press the parking brake pedal down until the pedal stops.

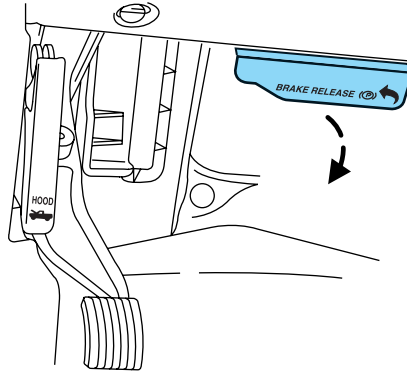


The BRAKE warning lamp in the instrument cluster illuminates and remains illuminated until the parking brake is released.

BRAKE
(!)

Driving

Pull the right side of the release lever to release the parking brake; the release lever pulls at an angle toward the driver's door. To prevent the pedal from releasing too quickly, place your left foot on the parking brake pedal, then pull the release lever, making sure the pedal fully releases. You may want to pull the release lever again to make sure the parking brake is fully released.



Always set the parking brake fully and make sure that the gearshift is securely latched in P (Park).

If you're parking your vehicle on a grade or with a trailer, press and hold the brake pedal down, then set the parking brake. There may be a little vehicle movement as the parking brake sets to hold the vehicle's weight. This is normal and should be no reason for concern. If needed, press and hold the service brake pedal down, then try reapplying the parking brake. Chock the wheels if required. If the parking brake cannot hold the weight of the vehicle, the parking brake may need to be serviced or the vehicle may be overloaded.

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 fluid level (below the FULL COLD mark on the dipstick).

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

Driving

- loose or worn steering components
- improper steering alignment

If any steering components are serviced or replaced, install new fasteners (many are coated with thread adhesive or have prevailing torque features which may not be re-used). Never re-use a bolt or nut. Torque fasteners to specifications in *Workshop Manual*.

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

TRACTION-LOK AXLE (IF EQUIPPED)

This axle provides added traction on slippery surfaces, particularly when one wheel is on a poor traction surface. Under normal conditions, the Traction-Lok axle functions like a standard rear axle. The axle may exhibit a slight noise or vibration in tight turns with low vehicle speed. This is normal behavior and indicates the axle is working.

PREPARING TO DRIVE YOUR VEHICLE



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



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

Your vehicle has larger tires and increased ground clearance, giving the vehicle a higher center of gravity than a passenger car.



Vehicles with a higher center of gravity such as utility and four-wheel drive vehicles handle differently than vehicles with a lower center of gravity. Utility and four-wheel drive vehicles are **not** designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. Avoid sharp turns, excessive speed and abrupt maneuvers in these vehicles. Failure to drive cautiously could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.



Loaded vehicles, with a higher center of gravity, may handle differently than unloaded vehicles. Extra precautions such as slower speeds and increased stopping distance should be taken when driving a heavily loaded vehicle.

Driving

AUTOMATIC TRANSMISSION OPERATION

Brake-shift interlock

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

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

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



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

3. Start the vehicle.

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



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



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 as soon as possible.

Understanding the gearshift positions of the 4-speed automatic transmission (if equipped-gasoline engines only)



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

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).

Driving

N (Neutral)

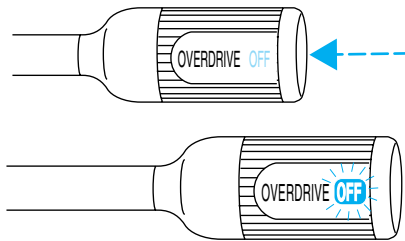
With the gearshift lever in N (Neutral), the vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

D (Overdrive)

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



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



This transmission control indicator light (TCIL) will illuminate on the end of the gearshift.

Note: If the Overdrive OFF light flashes steadily at any time, have the system serviced immediately.

Drive (not shown)

Drive is activated when the transmission control switch is pressed.

- This position allows for all forward gears except overdrive.
- O/D OFF lamp is illuminated.
- 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 O/D (overdrive mode), press the transmission control switch. The O/D OFF lamp will not be illuminated.
- O/D (Overdrive) is automatically returned each time the key is turned off regardless of last mode of operation.

2 (Second)

This position allows for second gear only.

- Provides engine braking.
- Use to start-up on slippery roads.
- To return to **D** (Overdrive), move the gearshift lever into the **D** (Overdrive) position.

Driving

- Selecting 2 (Second) at higher speeds will cause the transmission to downshift to second gear at the appropriate vehicle speed.

1 (First)

- Provides maximum engine braking.
- Allows upshifts by moving gearshift lever.
- Will not downshift into 1 (First) at high speeds; allows for 1 (First) when vehicle reaches slower speeds.

Forced downshifts

- Allowed in **D** (Overdrive) or Drive.
- Depress the accelerator to the floor.
- Allows transmission to select an appropriate gear.

Understanding the shift positions of the 5-speed automatic transmission (if equipped-Diesel engines only)



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.

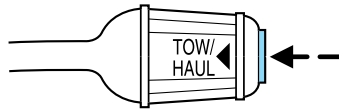
D (Overdrive) with Tow/Haul OFF

D (Overdrive) with Tow/Haul OFF is the normal driving position for the best fuel economy. The overdrive function allows automatic upshifts and downshifts through gears one through five.

D (Overdrive) with Tow/Haul ON

The Tow/Haul feature improves transmission operation when towing a trailer or a heavy load. All transmission gear ranges are available when using Tow/Haul.

To activate Tow/Haul, press the button on the end of the gearshift lever.



**TOW
HAUL**

The TOW HAUL indicator light will illuminate in the instrument cluster.

Tow/Haul delays upshifts to reduce frequency of transmission shifting. Tow/Haul also provides engine braking in all forward gears when the transmission is in the D (Overdrive) position; this engine braking will slow the vehicle and assist the driver in controlling the vehicle when descending a grade. Depending on driving conditions and load conditions, the transmission may downshift, slow the vehicle and control

Driving

the vehicle speed when descending a hill, without the accelerator pedal being pressed. The amount of downshift braking provided will vary based upon the amount the brake pedal is depressed.

To deactivate the Tow/Haul feature and return to normal driving mode, press the button on the end of the gearshift lever. The TOW HAUL light will no longer be illuminated.

When you shut-off and restart the engine, the transmission will automatically return to normal D (Overdrive) mode (Tow/Haul OFF).



Do not use the Tow/Haul feature when driving in icy or slippery conditions as the increased engine braking can cause the rear wheels to slide and the vehicle to swing around with the possible loss of vehicle control.

3 (Third)

Transmission starts and operates in third gear only.

Used for improved traction on slippery roads. Selecting 3 (Third) provides engine braking.

2 (Second)

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

1 (First)

- Provides maximum engine braking.
- Allows upshifts by moving gearshift lever.
- The transmission will not downshift into 1 (First) at high speeds; it will downshift to a lower gear and then shift into 1 (First) when the vehicle reaches slower speeds.

Forced downshifts

- Allowed in **D** (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.

Driving

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

REVERSE SENSING SYSTEM (IF EQUIPPED)

The Reverse Sensing System (RSS) sounds a tone to warn the driver of obstacles near the rear bumper when the R (Reverse) is selected and the vehicle is moving at speeds less than 3 mph (5 km/h). The system is not effective at speeds above 3 mph (5 km/h) and may not detect certain angular or moving objects.



To help avoid personal injury, please read and understand the limitations of the reverse sensing system as contained in this section. Reverse sensing is only an aid for some (generally large and fixed) objects when moving in reverse on a flat surface at “parking speeds”. Inclement weather may also affect the function of the RSS; this may include reduced performance or a false activation.



To help avoid personal injury, always use caution when in R (Reverse) and when using the RSS.



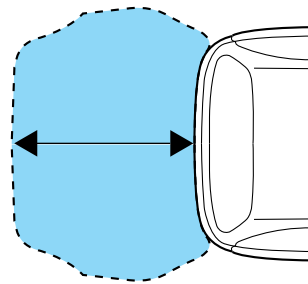
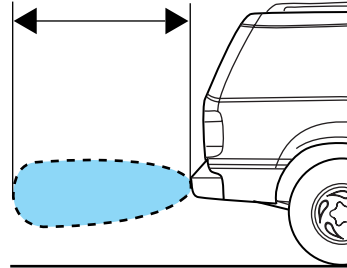
This system is not designed to prevent contact with small or moving objects. The system is designed to provide a warning to assist the driver in detecting large stationary objects to avoid damaging the vehicle. The system may not detect smaller objects, particularly those close to the ground.



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

Driving

The RSS detects obstacles up to six feet (two meters.) from the rear bumper with a decreased coverage area at the outer corners of the bumper, (refer to the figures for approximate zone coverage areas). As you move closer to the obstacle, the rate of the tone increases. When the obstacle is less than 10 inches (25.0 cm) away, the tone will sound continuously. If the RSS detects a stationary or receding object further than 10 inches (25.0 cm) from the side of the vehicle, the tone will sound for only three seconds. Once the system detects an object approaching, the tone will sound again.



The RSS automatically turns on when the gear selector is placed in R (Reverse) and the ignition is ON. An RSS control on the instrument panel allows the driver to turn the RSS on and off. To turn the RSS off, the ignition must be ON, and the gear selector in R (Reverse). An indicator light on the control will illuminate when the system is turned off. If the indicator light illuminates when the RSS is not turned off, it may indicate a failure in the RSS. The RSS will remain off until either the RSS control is pushed again or the ignition switch is recycled.

Keep the RSS sensors (located on the rear bumper/fascia) free from snow, ice and large accumulations of dirt (do not clean the sensors with sharp objects). If the sensors are covered, it will affect the accuracy of the RSS.

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

Driving

FOUR-WHEEL DRIVE (4WD) OPERATION (IF EQUIPPED)



For important information regarding safe operation of this type of vehicle, see **Preparing to drive your vehicle** in this chapter.

When four-wheel drive (4WD) is engaged, power is supplied to all four wheels through a transfer case. 4WD can be selected when additional driving power is desired.

4WD operation is not recommended on dry pavement. Doing so could result in difficult disengagement of the transfer case, increased tire wear and decreased fuel economy.

Electronic shift on the fly (ESOF) 4x4 system (if equipped)

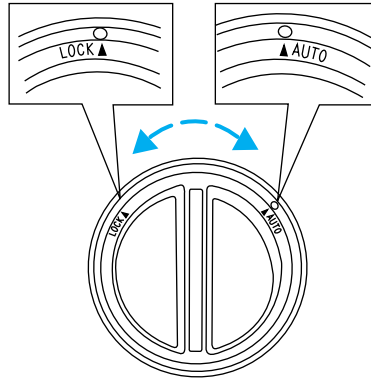
If equipped with the Electronic Shift 4WD System, and 4WD Low is selected while the vehicle is moving, the 4WD system will not engage. This is normal and should be no reason for concern. Before 4WD Low can be engaged, the vehicle must be brought to a complete stop, the brake pedal depressed and the transmission placed in N (Neutral).

The 4WD system:

- provides 4x4 High engagement and disengagement while the vehicle is moving.
- is operated by a rotary control located on the instrument panel that allows you select 2WD, 4x4 High or 4x4 Low operation.
- uses auto-manual hub locks that can be engaged and disengaged automatically based on the 4x4 mode selected.

Driving

- auto-manual hub locks can be manually overridden by rotating the hub lock control from AUTO to LOCK if desired.
- **automatic operation of the hub locks is recommended**, and will increase fuel economy
- **For proper operation, make sure that the arrow and the indicator dot on the hub are aligned, and that both hub locks are set the same (both set to AUTO or both set to LOCK).**



4WD system indicator lights

The 4WD system indicator lights illuminate only under the following conditions. If these lights illuminate when driving in 2WD, contact your authorized dealer as soon as possible.

- **4x4** - momentarily illuminates after the engine is started. Illuminates when 4H (4x4 High) or 4L (4x4 Low) is engaged.
- **LOW RANGE** – momentarily illuminates when the ignition is turned to the ON position. Illuminates when 4L (4x4 Low) is engaged.

4x4

**LOW
RANGE**

Using the electronic shift 4WD system (if equipped)

Positions of the electronic shift system

The electronic shift 4WD system is designed to allow up to 45 seconds before a shift command is performed. In the event that conflicting shift commands are selected, allow up to 45 seconds for the shift command to be performed prior to reporting any shift concerns to your authorized dealer.

Note: Some noise may be heard as the 4WD system shifts or engages. This is normal.

Driving

2H (2WD High) – For general on-road driving. Sends power to the rear wheels only.

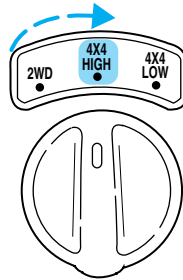
4H (4WD High) – For winter and off-road conditions. Sends power to front and rear wheels.

4L (4WD Low)– For low-speed off-road applications that require extra power such as steep grades, deep sand or pulling a boat out of the water. Sends power to front and rear wheels.

Shifting from 2WD (2WD High) to 4x4 HIGH (4WD High)

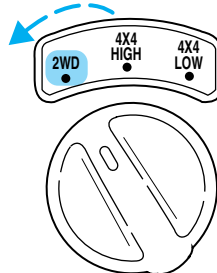
Rotate the 4WD control to the 4x4 HIGH position at speeds up to 55 mph (88 km/h).

- **The electronic shift 4WD system is designed to engage 4x4 HIGH (4WD High) when the vehicle is moving. If shifted to 4x4 HIGH (4WD HIGH) while at complete stop, 4x4 may not engage and the 4x4 indicator may not illuminate until the vehicle is driven above 5 mph (8 km/h).**
- **Do not shift into 4x4 HIGH with the rear wheels slipping.**



Shifting from 4x4 HIGH (4WD High) to 2WD (2WD High)

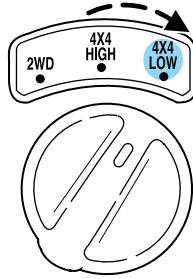
Rotate the 4WD control to 2WD at any forward speed. Disengagement of the transfer case and front hubs may be delayed due to torque bind which is caused by driving on dry hard surfaces or performing tight turns while using the 4WD system.



- You **do not** need to operate the vehicle in R (Reverse) to disengage your front hubs, but it will eliminate any torque bind and allow the system to immediately disengage.

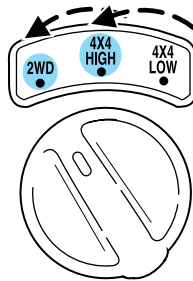
Shifting from 4x4 HIGH (4WD High) to 4x4 LOW (4WD Low)

1. Bring the vehicle to either a complete stop or vehicle speed below 3 mph (5 km/h).
2. Depress the brake.
3. Place the gearshift in N (Neutral).
4. Move the 4WD control to the 4x4 LOW position.
5. Hold the shift conditions until the LOW RANGE indicator light illuminates.
6. If the LOW RANGE indicator light **does not** illuminate within 15 seconds, drive the vehicle above 5 mph (8 km/h), then repeat steps 1 through 5 before reporting any shift concerns to your authorized dealer.



Shifting from 4x4 LOW (4WD Low) to 4x4 HIGH (4WD High) or 2WD (2WD High)

1. Bring the vehicle to either a complete stop or vehicle speed below 3 mph (5 km/h).
2. Depress the brake.
3. Place the gearshift in N (Neutral).
4. Move the 4WD control to the 4x4 HIGH (4WD High) or 2WD (2WD High) position.
5. Hold the shift conditions until the LOW RANGE indicator light shuts off.
6. If the LOW RANGE indicator light **does not** shut off within 15 seconds, drive the vehicle above 5 mph (8 km/h), then repeat steps 1 through 5 before reporting any shift concerns to your authorized dealer.



Driving off-road with truck and utility vehicles

4WD vehicles are specially equipped for driving on sand, snow, mud and rough terrain and have operating characteristics that are somewhat different from conventional vehicles, both on and off the road.

Driving

How your vehicle differs from other vehicles

Truck and utility vehicles can differ from some other vehicles. Your vehicle may be higher to allow it to travel over rough terrain without getting hung up or damaging underbody components.

The differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

Maintain steering wheel control at all times, especially in rough terrain. Since sudden changes in terrain can result in abrupt steering wheel motion, make sure you grip the steering wheel from the outside. Do not grip the spokes.

Drive cautiously to avoid vehicle damage from concealed objects such as rocks and stumps.

You should either know the terrain or examine maps of the area before driving. Map out your route before driving in the area. To maintain steering and braking control of your vehicle, you must have all four wheels on the ground and they must be rolling, not sliding or spinning.

Basic operating principles


- Do not use 4WD on dry, hard surfaced roads. Doing so will produce excessive noise, increase tire wear and may damage drive components. 4WD modes are only intended for consistently slippery or loose surfaces.
- Drive slower in strong crosswinds which can affect the normal steering characteristics of your vehicle.
- Be extremely careful when driving on pavement made slippery by loose sand, water, gravel, snow or ice.

If your vehicle goes off the edge of the pavement

- If your vehicle goes off the edge of the pavement, slow down, but avoid severe brake application, ease the vehicle back onto the pavement only after reducing your speed. Do not turn the steering wheel too sharply while returning to the road surface.
- It may be safer to stay on the apron or shoulder of the road and slow down gradually before returning to the pavement. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.
- It often may be less risky to strike small objects, such as highway reflectors, with minor damage to your vehicle rather than attempt a sudden return to the pavement which could cause the vehicle to slide

Driving

sideways out of control or roll over. Remember, your safety and the safety of others should be your primary concern.


 Vehicles with a higher center of gravity such as utility and four-wheel drive vehicles handle differently than vehicles with a lower center of gravity. Utility and four-wheel drive vehicles are **not** designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. Avoid sharp turns, excessive speed and abrupt maneuvers in these vehicles. Failure to drive cautiously could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

If your vehicle gets stuck

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 few minutes or damage to the transmission and tires may occur or the engine may overheat.

 Do not spin the wheels at over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

Refer to *Transmission temperature gauge* in the *Instrument Cluster* chapter for transmission fluid temperature information.

Emergency maneuvers

- In an unavoidable emergency situation where a sudden sharp turn must be made, remember to avoid “over-driving” your vehicle, i.e., turn the steering wheel only as rapidly and as far as required to avoid the emergency. Excessive steering will result in less vehicle control, not more. Additionally, smooth variations of the accelerator and/or brake pedal pressure should be utilized if changes in vehicle speed are called for. Avoid abrupt steering, acceleration or braking which could result in an increased risk of loss of vehicle control, vehicle rollover and/or personal injury. Use all available road surface to return the vehicle to a safe direction of travel.
- In the event of an emergency stop, avoid skidding the tires and do not attempt any sharp steering wheel movements.

Driving



Vehicles with a higher center of gravity such as utility and four-wheel drive vehicles handle differently than vehicles with a lower center of gravity. Utility and four-wheel drive vehicles are **not** designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. Avoid sharp turns, excessive speed and abrupt maneuvers in these vehicles. Failure to drive cautiously could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

- If the vehicle goes from one type of surface to another (i.e., from concrete to gravel) there will be a change in the way the vehicle responds to a maneuver (steering, acceleration or braking). Again, avoid these abrupt inputs.

Parking

On some 4WD vehicles, when the transfer case is in the N (Neutral) position, the engine and transmission are disconnected from the rest of the driveline. Therefore, the vehicle is free to roll even if the automatic transmission is in P (Park). Do not leave the vehicle unattended with the transfer case in the N (Neutral) position. Always set the parking brake fully and turn off the ignition when leaving the vehicle.



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.



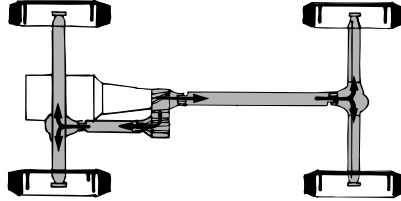
If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. See your authorized dealer.

4WD Systems

4WD (when you select a 4WD mode), uses all four wheels to power the vehicle. This increases traction, enabling you to drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

Driving

Power is supplied to all four wheels through a transfer case. On 4WD vehicles, the transfer case allows you to select 4WD when necessary. Information on transfer case operation and shifting procedures can be found in the *Driving* chapter. Information on transfer case maintenance can be found in the *Maintenance and Specifications* chapter. You should become thoroughly familiar with this information before you operate your vehicle.



Normal characteristics

On some 4WD models, the initial shift from two-wheel drive to 4x4 while the vehicle is moving can cause some momentary clunk and ratcheting sounds. This is the front drivetrain coming up to speed and the automatic locking hubs engaging and is not cause for concern.

Sand

When driving over sand, try to keep all four wheels on the most solid area of the trail. Avoid reducing the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid spinning the wheels.

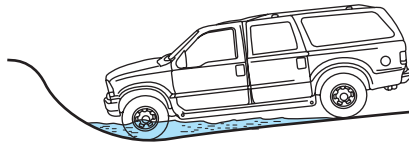
If you must reduce the tire pressure for whatever reason in sand, make sure you re-inflate the tires as soon as possible.

Avoid excessive speed because vehicle momentum can work against you and cause the vehicle to become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

Mud and water

If you must drive through high water, drive slowly. Traction or brake capability may be limited.

When driving through water, determine the depth; avoid water higher than the bottom of the hubs (if possible) and proceed slowly. If the ignition system gets wet, the vehicle may stall.



Driving

Once through 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.

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even 4WD vehicles can lose traction in slick mud. As when you are driving over sand, apply the accelerator slowly and avoid spinning your wheels. If the vehicle does slide, steer in the direction of the slide until you regain control of the vehicle.

If the transmission, transfer case or front axle are submerged in water, their fluids should be checked and changed, if necessary.

Driving through deep water may damage the transmission.

Refer to *Transmission temperature gauge* in the *Instrument Cluster* chapter for transmission fluid temperature information.

If the front or rear axle is submerged in water, the axle lubricant should be replaced.

After driving through mud, clean off residue stuck to rotating driveshafts and tires. Excess mud stuck on tires and rotating driveshafts causes an imbalance that could damage drive components.

“Tread Lightly” is an educational program designed to increase public awareness of land-use regulations and responsibilities in our nation’s wilderness areas. Ford Motor



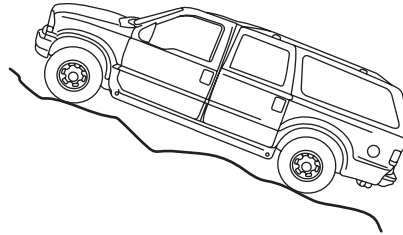
Company joins the U.S. Forest Service and the Bureau of Land Management in encouraging you to help preserve our national forest and other public and private lands by “treading lightly.”

Driving on hilly or sloping terrain

Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, you should always try to drive straight up or straight down. **Avoid driving crosswise or turning on steep slopes or hills.** A danger lies in losing traction, slipping sideways and possibly rolling over. Whenever driving on a hill, determine beforehand the route you will use. Do not drive over the crest of a hill without seeing what conditions are on the other side. Do not drive in reverse over a hill without the aid of an observer.

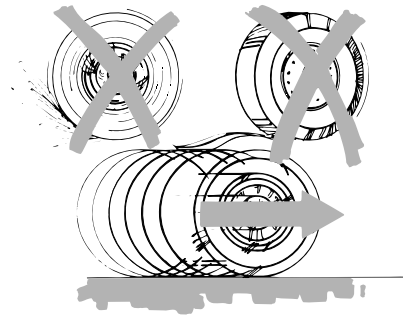
When climbing a steep slope or hill, start in a lower gear rather than downshifting to a lower gear from a higher gear once the ascent has started. This reduces strain on the engine and the possibility of stalling.

If you do stall out, do not try to turn around because you might roll over. It is better to back down to a safe location.



Apply just enough power to the wheels to climb the hill. Too much power will cause the tires to slip, spin or lose traction, resulting in loss of vehicle control.

Descend a hill in the same gear you would use to climb up the hill to avoid excessive brake application and brake overheating. Do not descend in neutral; instead, disengage overdrive or manually shift to a lower gear. When descending a steep hill, avoid sudden hard braking as you could lose control. When you brake hard, the front wheels can't turn and if they aren't turning, you won't be able to steer. The front wheels have to be turning in order to steer the vehicle. Rapid pumping of the brake pedal will help you slow the vehicle and still maintain steering control.



Apply the brakes steadily. Do not “pump” the brakes.

Driving on snow and ice

4WD vehicles have advantages over 2WD vehicles in snow and ice but can skid like any other vehicle.

Should you start to slide while driving on snowy or icy roads, turn the steering wheel in the direction of the slide until you regain control.

Avoid sudden applications of power and quick changes of direction on snow and ice. Apply the accelerator slowly and steadily when starting from a full stop.

Avoid sudden braking as well. Although a 4WD vehicle may accelerate better than a two-wheel drive vehicle in snow and ice, it won't stop any

Driving

faster, because as in other vehicles, braking occurs at all four wheels. Do not become overconfident as to road conditions.

Make sure you allow sufficient distance between you and other vehicles for stopping. Drive slower than usual and consider using one of the lower gears. In emergency stopping situations, avoid locking of the wheels. Use a “squeeze” technique, push on the brake pedal with a steadily increasing force which allows the wheels to brake yet continue to roll so that you may steer in the direction you want to travel. If you lock the wheels, release the brake pedal and repeat the squeeze technique. Apply the brake steadily. Do not “pump” the brakes. Refer to the *Brakes* section of this chapter for additional information on the operation of the anti-lock brake system.

Never drive with chains on the front tires of 4WD vehicles without also putting them on the rear tires. This could cause the rear to slide and swing around during braking.

Maintenance and Modifications

The suspension and steering systems on your vehicle have been designed and tested to provide predictable performance whether loaded or empty and durable load carrying capability. For this reason, Ford Motor Company strongly recommends that you do not make modifications such as adding or removing parts (such as lift kits or stabilizer bars) or by using replacement parts not equivalent to the original factory equipment.

Any modifications to a vehicle that raise the center of gravity can make it more likely the vehicle will roll over as a result of a loss of control. Ford Motor Company recommends that caution be used with any vehicle equipped with a high load or device (such as ladder racks or pickup box cover).

Failure to maintain your vehicle properly may void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities and adversely affect driver and passenger safety. Frequent inspection of vehicle chassis components is recommended if the vehicle is subjected to heavy off-road usage.

DRIVING THROUGH WATER

If driving through deep or standing water is unavoidable, proceed very slowly especially when the depth is not known. Never drive through water that is higher than the bottom of the hubs (for trucks) or the bottom of the wheel rims (for cars). When driving through water, traction or brake capability may be limited. Also, water may enter your engine's air intake and severely damage your engine or your vehicle may stall. **Driving through deep water where the transmission vent tube is submerged may allow water into the transmission and cause internal transmission damage.**

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

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

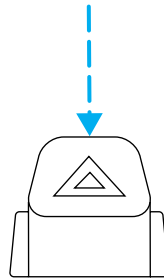
In the United States, you may purchase additional roadside assistance coverage beyond this period through the Ford Auto Club by contacting your authorized dealer.

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.

HAZARD FLASHER

The hazard flasher is located on the steering column, just behind the steering wheel. 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

This device stops the electric fuel pump from sending fuel to the engine when your vehicle has had a substantial jolt.

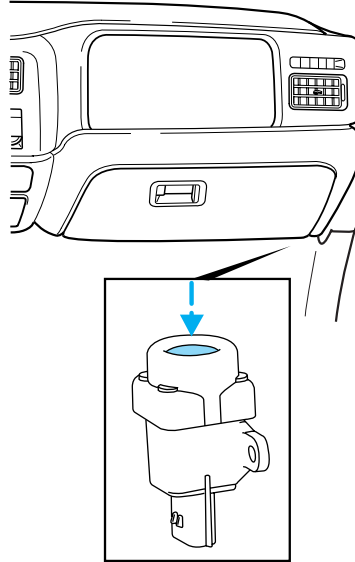
After an accident, if the engine cranks but does not start, this switch may have been activated.

Roadside Emergencies

This switch is located in the front passenger's footwell, behind the kick panel access cover.

To reset the switch:

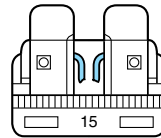
1. Turn the ignition OFF.
2. Check the fuel system for leaks.
3. If no leaks are apparent, reset the switch by pushing in on the reset button.
4. Turn the ignition ON.
5. Wait a few seconds and return the key to OFF.
6. Make another check for leaks.



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.

Roadside Emergencies

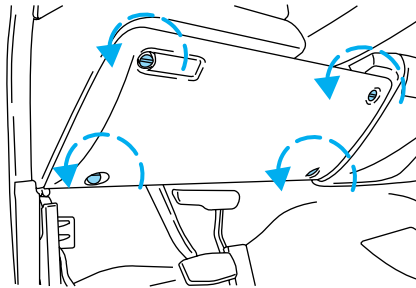
Standard fuse amperage rating and color

Fuse rating	COLOR				
	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
2A	Grey	Grey	—	—	—
3A	Violet	Violet	—	—	—
4A	Pink	Pink	—	—	—
5A	Tan	Tan	—	—	—
7.5A	Brown	Brown	—	—	—
10A	Red	Red	—	—	—
15A	Blue	Blue	—	—	—
20A	Yellow	Yellow	Yellow	Blue	Blue
25A	Natural	Natural	—	—	—
30A	Green	Green	Green	Pink	Pink
40A	—	—	Orange	Green	Green
50A	—	—	Red	Red	Red
60A	—	—	Blue	—	Yellow
70A	—	—	Tan	—	Brown
80A	—	—	Natural	—	Black

Passenger compartment fuse panel / power distribution box

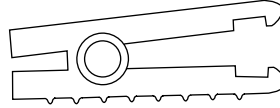
The fuse panel is located below and to the left of the steering wheel by the brake pedal. Remove the panel cover to access the fuses.

To remove the fuse panel cover, turn the panel fasteners counterclockwise.



Roadside Emergencies

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

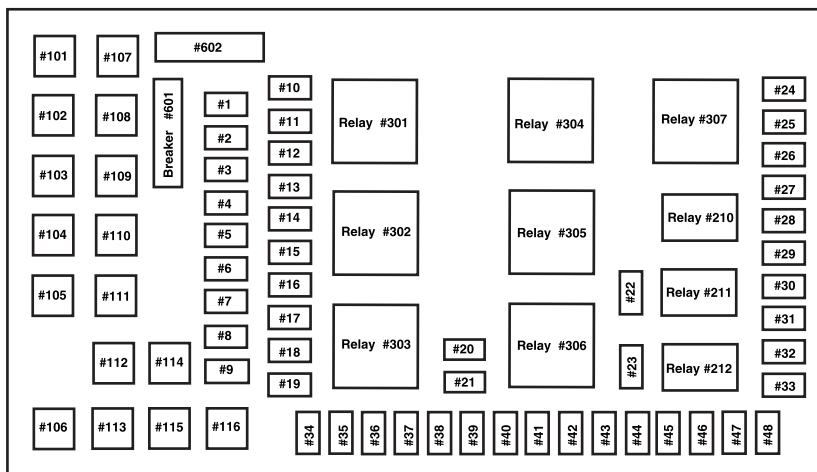


Always disconnect the battery before servicing high current fuses.



To reduce the risk of electrical shock, always replace the cover to the passenger compartment fuse panel/power distribution box before reconnecting the battery.

If the battery has been disconnected and reconnected, refer to the *Battery* section of the *Maintenance and Specifications* chapter.



The fuses are coded as follows.

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
1	15A*	Adjustable pedals
2	20A*	Power point - floor console

Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
3	20A*	Power point – 3rd row
4	20A*	Power point - I/P
5	20A*	Power point - right rear quarter
6	20A*	Trailer tow turn/stop relay
7	30A*	High beam headlamps / Flash to pass
8	15A*	Backup lamps (Diesel engine only)
9	20A*	Heated mirrors
10	10A*	A/C clutch
11	20A*	Radio (main)
12	20A*	Cigar lighter/OBD II
13	5A*	Power mirrors/switches
14	15A*	Daytime running lamps (DRL)
15	10A*	Driver's seat module memory
16	15A*	Rear seat controller
17	15A*	Exterior lamps
18	20A*	Turn lamps/Brake on-off switch (high)
19	10A*	Body Security Module (BSM)/4x4 module
20	10A*	Fuel Injection Control Module (FICM) relay (Diesel engine only)
21	25A*	Rear smart wiper motor
22	20A*	Engine control
23	20A*	Engine control (gasoline engine only), Climate control (Diesel engine only)
24	2A*	Brake pressure switch/Speed control
25	10A*	4-Wheel Anti-Lock Brake System (4WABS) module, Variable Fan Control (VFC) (Diesel engine only)
26	10A*	Airbags
27	15A*	Ignition switch Run feed
28	10A*	EATC module/Front blower relay coil
29	10A*	Customer access

Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
30	15A*	Highbeam headlamps
31	15A*	Transmission range sensor (then to starter relay coil), 4x4
32	5A*	Radio (start)
33	15A*	Front wiper
34	10A*	Brake on-off switch
35	10A*	Instrument cluster
36	10A*	PCM Memory
37	15A*	Horn
38	20A*	Trailer tow park lamps
39	15A*	Trailer tow back-up lamps
40	20A*	Fuel pump
41	10A*	Instrument cluster
42	15A*	Delayed accessory
43	10A*	Fog lamps
44	10A*	PATS module, Transceiver
45	10A*	Ignition switch Run/Start feed
46	10A*	Left-hand lowbeam
47	10A*	Right-hand lowbeam
48	10A*	Rear smart wiper motor
101	30A**	Trailer tow electric brake
102	30A**	Door locks, BSM
103	50A**	Ignition switch (gasoline engine only), FICM power (Diesel engine only)
104	40A**	Heated backlight
105	30A**	Fuel heater (Diesel engine only)
106	30A**	Front wiper main
107	40A**	Front blower motor
108	40A**	Auxiliary blower motor
109	30A**	Heated seats
110	50A**	Ignition switch

Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
111	30A**	4WD/Shift on the fly
112	30A**	Left-hand power seats
113	30A**	Starter motor
114	30A**	Right-hand power seats
115	20A**	Trailer tow battery charge
116	30A**	Ignition switch
601	30A CB	Window motors, Moonroof
602	60A**	4WABS module
210	—	Not used
211	—	Backup lamps relay (Diesel engine only)
212	—	Not used
301	—	Front blower motor relay
302	—	Powertrain Control Module (PCM) relay
303	—	Fuel heater relay (Diesel engine only)
304	—	Heated backlight relay
305	—	Trailer tow battery charge relay
306	—	Delayed accessory relay
307	—	Starter relay

* Mini Fuses ** Maxi Fuses ***Circuit Breaker

Note: (Diesel engine only) The Fuel Injection Control Module (FICM) logic 15A mini-fuse is located in the underhood relay block.

JUMP STARTING YOUR VEHICLE



The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in injury or vehicle damage.



Batteries contain sulfuric acid which can burn skin, eyes and clothing, if contacted.

Roadside Emergencies

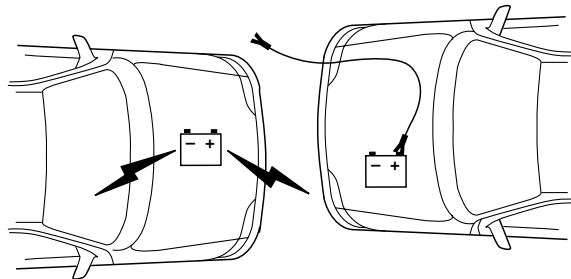
Do not attempt to push-start your vehicle. Automatic transmissions do not have push-start capability; doing so may damage the catalytic converter.

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.

1. **Use only a 12-volt supply to start your vehicle.**
2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.
3. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles **do not** touch. Set the parking brake on both vehicles and stay clear of the engine cooling fan and other moving parts.
4. Check all battery terminals and remove any excessive corrosion before you attach the battery cables. Ensure that vent caps are tight and level.
5. Turn the heater fan on in both vehicles to protect any electrical surges. Turn all other accessories off.

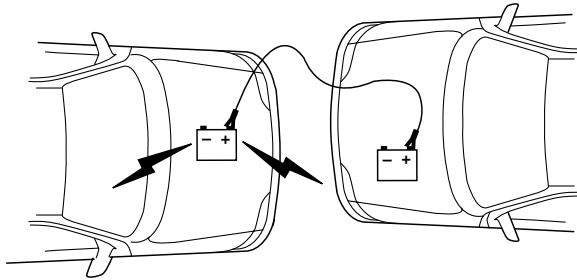
Connecting the jumper cables



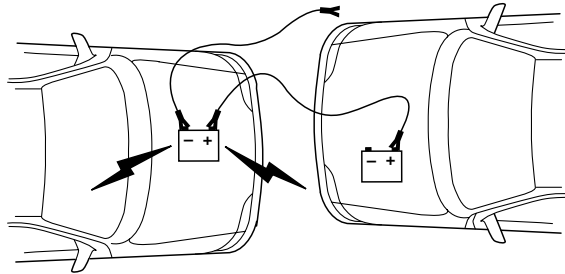
1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

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

Roadside Emergencies

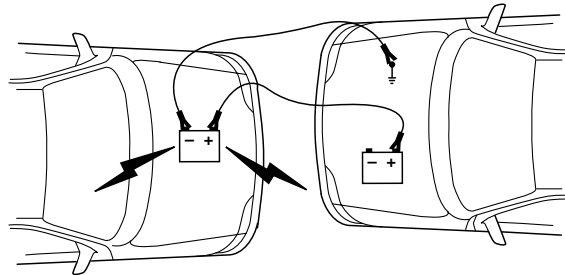


2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.



3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.

Roadside Emergencies



4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the carburetor/fuel injection system. **Do not** use fuel lines, engine rocker covers or the intake manifold as *grounding* points.



Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

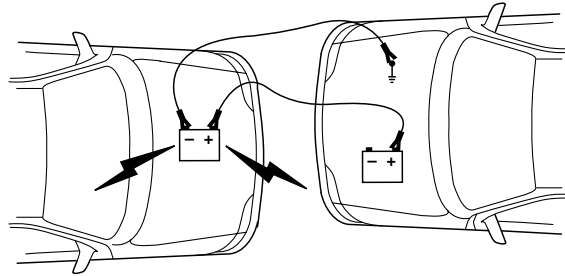
5. Ensure that the cables are clear of fan blades, belts, moving parts of both engines, or any fuel delivery system parts.

Jump starting

1. Start the engine of the booster vehicle and run the engine at moderately increased speed.
2. Start the engine of the disabled vehicle.
3. Once the disabled vehicle has been started, run both engines for an additional three minutes before disconnecting the jumper cables.

Roadside Emergencies

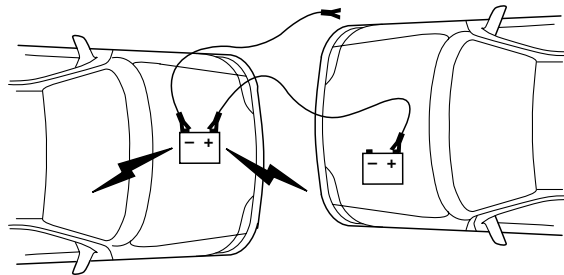
Removing the jumper cables



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

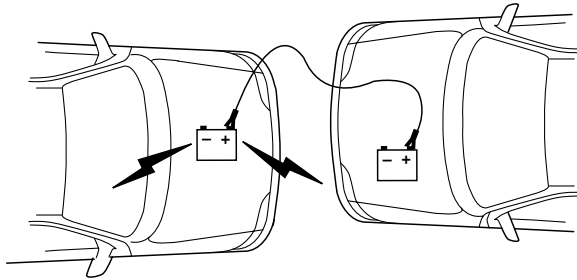
1. Remove the jumper cable from the *ground* metal surface.

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

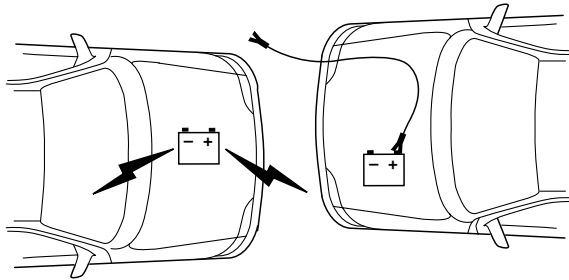


2. Remove the jumper cable on the negative (-) connection of the booster vehicle's battery.

Roadside Emergencies



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

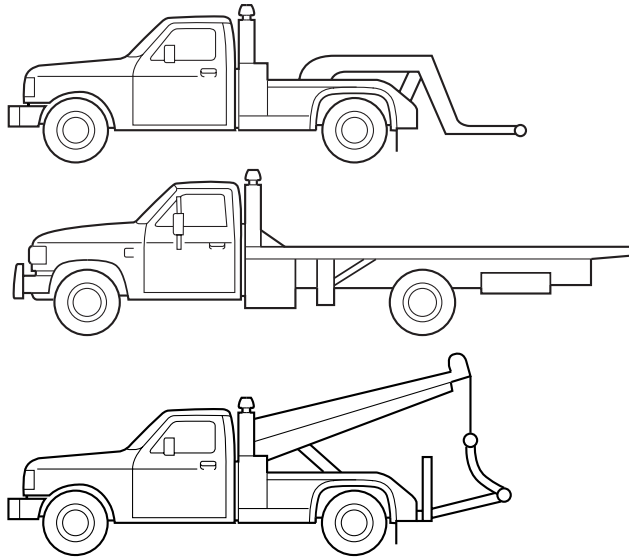


4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

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

Roadside Emergencies

WRECKER TOWING



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

On 4x2 vehicles, it is acceptable to tow the vehicle with the front wheels on the ground and the rear wheels off the ground using a wheel lift.

On 4x4 vehicles, it is recommended that your vehicle be towed with flatbed equipment with all the wheels off the ground. However, if flatbed equipment is not available, a wheel lift may be used to lift the rear of the vehicle as long as the Electronic Shift-On-the-Fly (ESOF) 4WD control is in the 2WD position.

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

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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

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

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

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.

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

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

Customer Assistance

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.

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.

Customer Assistance

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:

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.

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

Customer Assistance

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.

(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.

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.**
- **If your vehicle is equipped with running boards, do not use rubber, plastic and vinyl protectant products on the running board surface, as the area may become slippery.**

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

Cleaning

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.

- 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

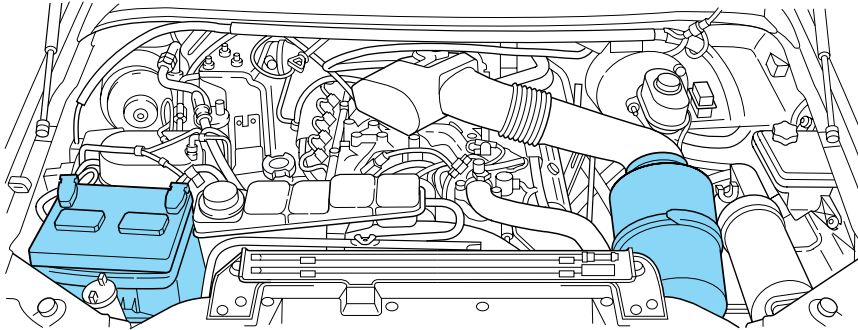
Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal. When washing:

- 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.

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Cleaning

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



- **5.4L V8/6.8L V10 gasoline engines**

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

Cleaning

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.

Do not use sharp objects, such as a razor blade, to clean the inside of the rear window or to remove decals, as it may cause damage to the rear window defroster's heated grid lines (if equipped).

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 TRIM

- Clean the interior trim areas with a damp cloth, then with a clean, dry cloth; you may also use Motorcraft Dash & Vinyl Cleaner (ZC-38-A).
- Do not use household or glass cleaners as these may damage the finish.

INTERIOR

For fabric, carpets, cloth seats and safety belts:

- 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).

Cleaning

- 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 seatbelts, as these actions may weaken the belt webbing.

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.

Note: Use care when using a power washer to clean the driveline, especially the driveshaft and interfacing components. The high-pressure fluid could penetrate the sealed parts and cause damage.

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:

Cleaning

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)
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

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

Working with the engine on

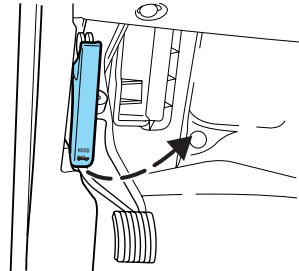
1. Set the parking brake and shift to P (Park).
2. Block the wheels.

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

Maintenance and Specifications

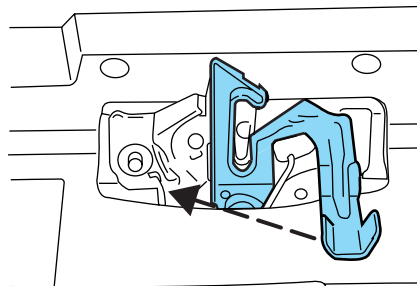
OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the bottom left corner of the instrument panel.



2. Go to the front of the vehicle and release the auxiliary latch located under the right center of the hood. Slide the handle to release the auxiliary latch.

3. Lift the hood until the lift cylinders hold it open.

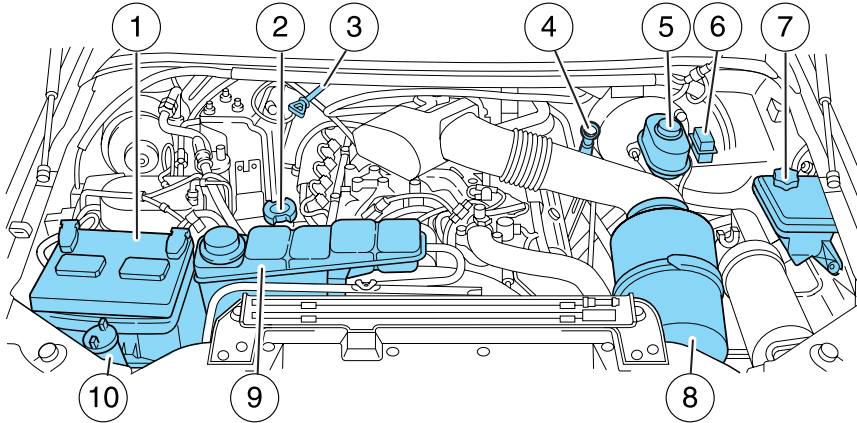


Maintenance and Specifications

IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

5.4L V8/6.8L V10 gasoline engines

Refer to the *6.0 Liter Power Stroke Direct Injection Turbo Diesel Owner's Guide Supplement* for diesel engine component locations.



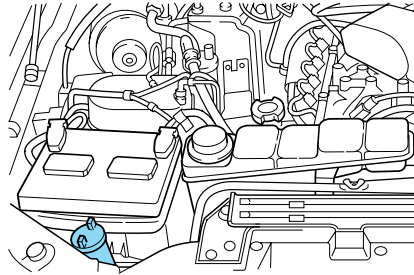
1. Battery
2. Engine oil filler cap
3. Transmission fluid dipstick
4. Engine oil dipstick
5. Brake fluid reservoir
6. Underhood relay box
7. Power steering fluid reservoir
8. Air filter assembly
9. Engine coolant reservoir
10. Windshield washer fluid reservoir

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.

Checking and adding washer fluid for the liftgate

Washer fluid for the liftgate is supplied by the same reservoir as the windshield.

ENGINE OIL

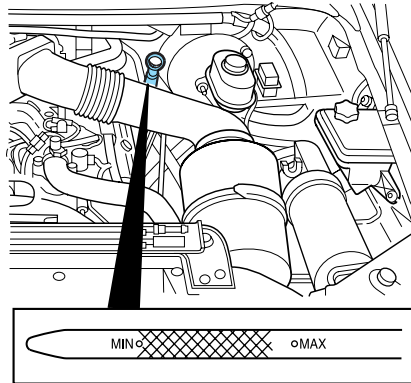
Checking the engine oil

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 a few minutes for the oil to drain into the oil pan.

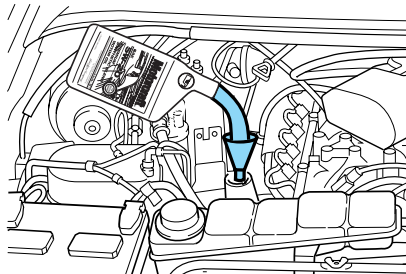
Maintenance and Specifications

3. Set the parking brake and ensure the gearshift is securely latched in P (Park).
4. Open the hood. Protect yourself from engine heat.
5. Locate and carefully remove the engine oil level indicator (dipstick).



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

- If the oil level is **between the MIN and MAX marks**, the oil level is acceptable. **DO NOT ADD OIL.**
- If the oil level is below the MIN mark, add enough oil to raise the level within the MIN-MAX range.



- Oil levels above the MAX mark may cause engine damage. Some oil must be removed from the engine by an authorized dealer.
7. Put the oil level 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.

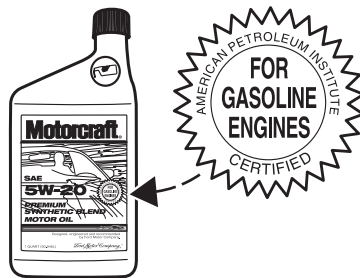
Maintenance and Specifications

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 and filter recommendations

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 and filter according to the appropriate schedule listed in *scheduled maintenance information*.

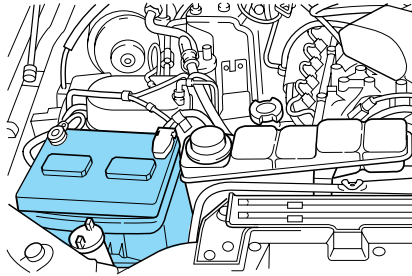
Maintenance and Specifications

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.

BATTERY

Your vehicle is equipped with a Motorcraft maintenance-free battery which normally does not require additional water during its life of service.



However, for severe usage or in high temperature climates, check the battery electrolyte level. Refer to the *scheduled maintenance 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.

When the battery is disconnected or a new battery installed, the transmission must learn its adaptive strategy. As a result of this, the transmission may shift firmly. This operation is considered normal and will fully update transmission operation to its optimum shift feel.

Maintenance and Specifications

Note: Electrical or electronic accessories or components added to the vehicle by the dealer or the owner may adversely affect battery performance and durability.



Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide proper ventilation.



When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and/or damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.



Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.



Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.**

For information on transmission operation after the battery has been disconnected, refer to *Shift strategy* in the *Driving* chapter.

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

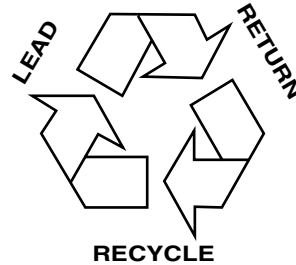
1. With the vehicle at a complete stop, set the parking brake.
2. Put the gearshift in P (Park), turn off all accessories and start the engine.
3. Run the engine until it reaches normal operating temperature.
4. Allow the engine to idle for at least one minute.

Maintenance and Specifications

5. Turn the A/C on and allow the engine to idle for at least one minute.
6. Release the parking brake. With your foot on the brake pedal and with the A/C on, put the vehicle in D (Drive) and allow the engine to idle for at least one minute.
7. Drive the vehicle to complete the relearning process.
 - The vehicle may need to be driven 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.**

If the battery has been disconnected or a new battery has been installed, the clock and radio settings must be reset once the battery is reconnected.

- 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

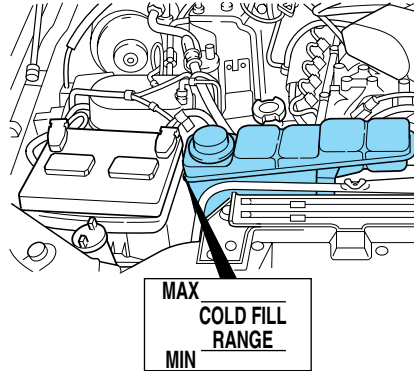
The concentration and level of engine coolant should be checked at the intervals listed in *scheduled maintenance information*. The coolant concentration should be maintained at 50/50 coolant and distilled water, which equates to a freeze point of -34°F (-36°C). Coolant concentration testing is possible 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:**

Maintenance and Specifications

- **Freeze protection down to -34°F (-36°C).**
- **Boiling protection up to 265°F (129°C).**
- **Protection against rust and other forms of corrosion.**
- **Enables calibrated gauges to work properly.**

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.

Maintenance and Specifications



Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.



Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

- **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

Maintenance and Specifications

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.



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° F/ -36° C), drain some coolant and adjust the concentration. It may take several drains and additions to obtain a 50/50 coolant concentration.

Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add 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.

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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°F [-36°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

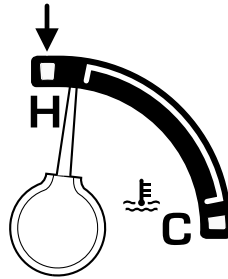
What you should know about fail-safe cooling (if equipped)

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

How fail-safe cooling works

If the engine begins to overheat:

- The engine coolant temperature gauge will move to the red (hot) area.
- The  and  symbol 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 and the engine will completely shut down, causing steering and braking effort to increase.

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

When fail-safe mode is activated

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

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

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

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

WHAT YOU SHOULD KNOW ABOUT AUTOMOTIVE FUELS

Important safety precautions



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



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 1/8 turn on/off feature.

When fueling your vehicle:

1. Turn the engine off.
2. Carefully turn the filler cap counterclockwise 1/8 of a turn until it stops.
3. Pull to remove the cap from the fuel filler pipe.
4. To install the cap, align the tabs on the cap with the notches on the filler pipe.
5. Turn the filler cap clockwise 1/8 of a turn until it stops.

If the “Service Engine Soon/Check Engine” 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.

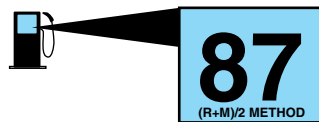
Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based additives. Studies indicate that these additives can cause your vehicle's emission control system to deteriorate more rapidly. In Canada, premium grade fuel generally contains more metallic 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.

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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.

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- 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.

Maintenance and Specifications

- Four-wheel-drive operation (if equipped) is less fuel efficient than two-wheel-drive operation.
- Close windows for high speed driving.

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.

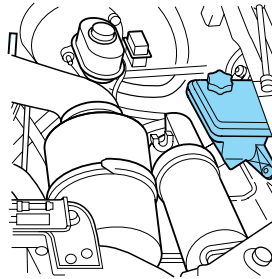
If the vehicle's powertrain system or its battery has just been serviced, the on-board diagnostics system is reset to a "not ready for I/M test" condition. To ready the on-board diagnostics system for I/M testing, a minimum of 30 minutes of city and highway driving is necessary as described below:

- 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.



Check the fluid level when it is at ambient temperature, 20° – 80° F (-7° – 25° C):

1. Check the fluid level on the dipstick. It should be between the arrows in the FULL COLD range. Do not add fluid if the level is within this range.
2. If the fluid level is low. Add fluid to bring fluid level up to be between the arrows in the FULL COLD range.
3. Start the engine.
4. While the engine idles, turn the steering wheel left and right several times.
5. Turn the engine off.

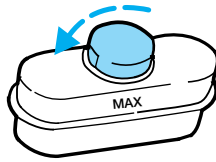
Maintenance and Specifications

6. Recheck the fluid level on the dipstick. Do not add fluid if the level is between the arrows in the FULL COLD range.

7. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the FULL COLD range. Be sure to put the dipstick back in the reservoir.

BRAKE FLUID

The fluid level will drop slowly as the brakes wear, and will rise when the brake components are replaced. Fluid levels below the “MAX” line that do not trigger the brake system warning lamp 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 (if equipped)

Refer to your *scheduled maintenance information* for scheduled intervals for fluid checks and changes. Your transmission does not consume fluid. However, the fluid level should be checked if the transmission is not working properly, i.e., if the transmission slips or shifts slowly or if you notice some sign of fluid leakage.

Automatic transmission fluid expands when warmed. To obtain an accurate fluid check, drive the vehicle until it is at normal operating temperature (approximately 20 miles [30 km]). If your vehicle has been operated for an extended period at high speeds, in city traffic during hot weather or pulling a trailer, the vehicle should be turned off for about 30 minutes to allow fluid to cool before checking.

1. Drive the vehicle 20 miles (30 km) or until it reaches normal operating temperature.
2. Park the vehicle on a level surface and engage the parking brake.
3. With the parking brake engaged and your foot on the brake pedal, start the engine and move the gearshift lever through all of the gear ranges. Allow sufficient time for each gear to engage.
4. Latch the gearshift lever in P (Park) and leave the engine running.
5. Remove the dipstick, wiping it clean with a clean, dry lint free rag. If necessary, refer to *Identifying components in the engine compartment* in this chapter for the location of the dipstick.

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Maintenance and Specifications

6. Install the dipstick making sure it is fully seated in the filler tube.
7. Remove the dipstick and inspect the fluid level. The fluid should be in the designated area for normal operating temperature or ambient temperature.

Low fluid level

Do not drive the vehicle if the fluid level is at the bottom of the dipstick and the ambient temperature is above 50°F (10°C).



Correct fluid level

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



You can check the fluid without driving if the ambient temperature is above 50°F (10°C). However, if fluid is added at this time, an overfill condition could result when the vehicle reaches normal operating temperature.

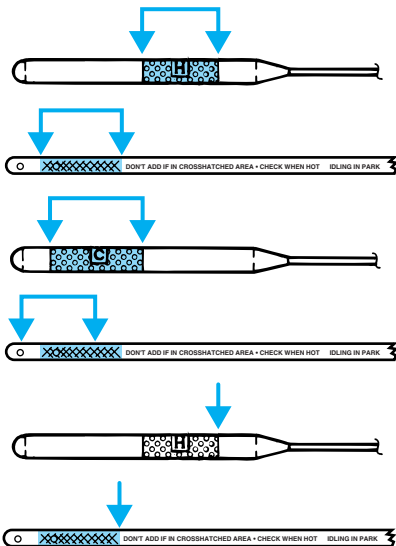
The transmission fluid should be in this range if at normal operating temperature (150°F-170°F [66°C-77°C]).

The transmission fluid should be in this range if at ambient temperature (50°F-95°F [10°C-35°C]).

High fluid level

Fluid levels above the safe range may result in transmission failure. An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

High fluid levels can be caused by an overheating condition.



Maintenance and Specifications

Adjusting automatic transmission fluid levels

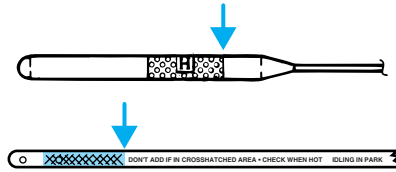
Before adding any fluid, make sure the correct type is used. The type of fluid used is normally indicated on the dipstick and also in the *Lubricant specifications* section in this chapter.

Use of a non-approved automatic transmission fluid may cause internal transmission component damage.

If necessary, add fluid in 1/2 pint (250 ml) increments through the filler tube until the level is correct.

If an overfill occurs, excess fluid should be removed by an authorized dealer.

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

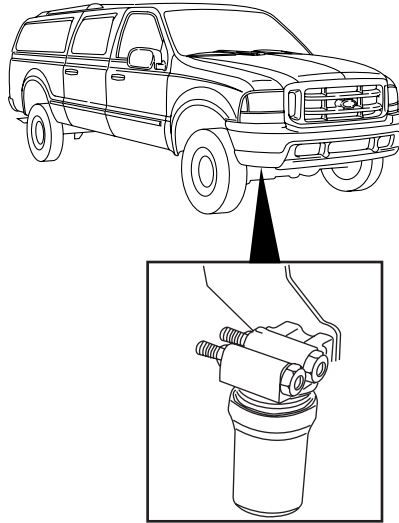


Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

Maintenance and Specifications

Automatic transmission fluid filter (if equipped)

The TorqShift automatic transmission is equipped with a serviceable external fluid filter mounted on the frame rail. Refer to *scheduled maintenance information* for service intervals.



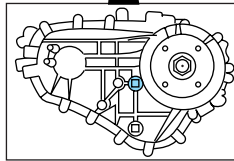
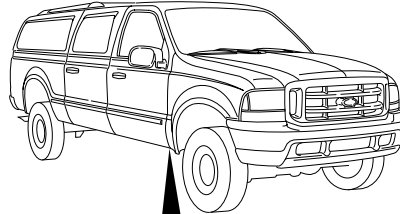
To replace the transmission filter:

1. Shut off the engine.
2. Unscrew filter housing.
3. Replace filter with a new authorized Motorcraft filter element. Refer to the *Motorcraft part numbers* chart in this chapter.
4. Reinstall housing and check transmission fluid level using procedure in this section.

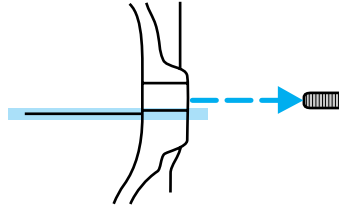
Maintenance and Specifications

Transfer case fluid (if equipped)

1. Clean the filler plug.
2. Remove the filler plug and inspect the fluid level.



3. Add only enough fluid through the filler opening so that the fluid level is at the bottom of the opening.



Use only fluid that meets Ford specifications. Refer to *Lubricant specifications* in this chapter.

AIR FILTER

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

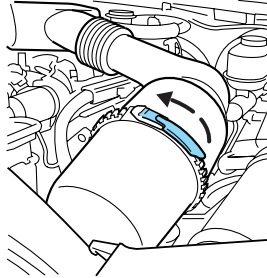
When changing the air filter element, use only the Motorcraft air filter element listed. Refer to *Motorcraft part numbers* in this chapter.

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

Maintenance and Specifications

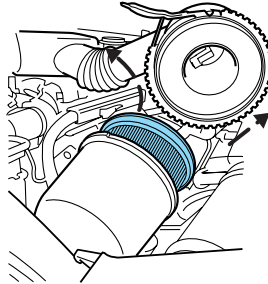
Changing the air filter element

1. Loosen the clamp that secures the air filter element in place.



2. Carefully separate the two halves of the air filter housing.

3. Remove the air filter element from the open end of the air filter housing.



4. Install a new air filter element, ensuring the arrow on the top half of the air filter housing lines up with the notch on the bottom half of air filter housing. Be careful not to crimp the filter element edges between the air filter housing. This could cause filter damage and allow unmeasured air to enter the engine if not properly seated.

5. Replace the two halves of the air filter housing and secure the clamp.

Maintenance and Specifications

MOTORCRAFT PART NUMBERS

Component	5.4L V8 engine	6.8L V10 engine
Air filter element ¹	FA-1634	FA-1634
Fuel filter	FG-986B	FG-986B
Oil filter	FL-820-S	FL-820-S
PCV valve	²	
Battery	BXT-65-750	BXT-65-750
Spark plugs	³	
Automatic Transmission Filter ⁴	—	—

¹Always use the authorized Motorcraft air filter listed. **Failure to use the correct air filter may result in severe engine damage.**

²The 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.

³For 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.

⁴Only available with 6.0L Diesel engine/TorqShift transmission. Part number is FT-145.

Maintenance and Specifications

REFILL CAPACITIES

Fluid	Ford Part Name	Application	Capacity
Front axle	Motorcraft SAE 80W-90 Premium Rear Axle Lubricant	4X4 vehicles	3.6 pints (1.8L)
Rear axle ¹	Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant	All	6.9 pints (3.3L) ²
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	All	Fill to line on reservoir
Engine coolant-Gasoline engines ³	Motorcraft Premium Gold Engine Coolant (yellow-colored)	5.4L V8 engine	26.4 quarts (25L) ⁴
		6.8L V10 engine	27.5 quarts (26.0L) ⁴
Engine coolant-Diesel engine	Refer to your 6.0L Diesel Supplement		
Engine oil (includes filter change)-Gasoline engines ⁷	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	5.4L V8/6.8L V10 engine	6.0 quarts (5.7L)
Engine oil (includes filter change)-Diesel engine	Refer to your 6.0L Diesel Supplement		

Maintenance and Specifications

Fluid	Ford Part Name	Application	Capacity
Fuel tank	N/A	All	44.0 gallons (166.6L)
Power steering fluid	Motorcraft MERCON® ATF	All	Fill to FULL COLD range on dipstick
Transfer case fluid (if equipped)	Motorcraft MERCON® ATF	4x4 vehicles	2.0 quarts (1.9L)
Transmission fluid ⁵	Motorcraft MERCON® ATF	4x2 4R100 (4-speed)	17.1 quarts (16.1L) ⁶
		4x4 4R100 (4-speed)	17.7 quarts (16.7L) ⁶
	Motorcraft MERCON® SP ATF	4x2/4x4 TorqShift (5-speed) – includes remote filter element change	17.5 qts (16.6L) ⁶
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	All	1.1 gallons (4.2L)

¹Your vehicle's rear axle is filled with a synthetic lubricant. Axle lubricant quantities should not need to be checked 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.

Service refill capacities are determined by filling the rear axle to the bottom of the filler hole with the specified lubricant.

²Add 236 ml (8 oz.) of Additive Friction Modifier XL—3 or equivalent meeting Ford Specification EST-M2C118-A for complete refill of limited slip axles.

Service refill capacities are determined by filling the rear axle to the bottom of the filler hole with the specified lubricant.

Maintenance and Specifications

³Add the coolant type originally equipped in your vehicle.

⁴If equipped with auxiliary rear heater, add an additional 1.4 L (1.5 quarts).

⁵Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the end of the dipstick. Check the container to verify the fluid being added is of the correct type. Refer to your *scheduled maintenance information* to determine the correct service interval.

Some transmission fluids may be labeled as dual usage, such as MERCON® and MERCON® V. These dual usage fluids are not to be used in an automatic transmission that requires use of the MERCON® type fluid. However, these dual usage fluids may be used in transmissions that require the MERCON® V type fluid.

MERCON®, MERCON® V and MERCON® SP are not interchangeable. DO NOT mix MERCON®, MERCON® V and MERCON® SP. Use of dual usage fluids in an automatic transmission application requiring MERCON® SP may cause transmission damage. Use of a transmission fluid other than the recommended fluid may cause transmission damage.

⁶Indicates only approximate dry-fill capacity. Some applications may vary based on cooler size and if equipped with an in-tank cooler. The amount of transmission fluid and fluid level should be set by the indication on the dipstick's normal operating range.

⁷Use of synthetic or synthetic blend motor oil is not mandatory. Engine oil need only meet the requirements of Ford specification WSS-M2C930-A and the API Certification mark.

Maintenance and Specifications

LUBRICANT SPECIFICATIONS

Item	Ford part name or equivalent	Ford part number	Ford specification
Spindle bearing	High Temperature 4X4 Front Axle and Wheel Bearing Grease	E8TZ-19590-A	ESA-M1C198-A
Front axle	Motorcraft SAE 80W-90 Premium Rear Axle Lubricant	XY-80W-90-QL	WSP-M2C197-A
Rear axle	Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant (10.5 inch) ¹	XY-75W140-QL	WSL-M2C192-A
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	PM-1	ESA-M6C25-A
Engine coolant-Gasoline engines	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
Engine coolant-Diesel engine	Refer to your 6.0L Diesel Supplement		

Maintenance and Specifications

Item	Ford part name or equivalent	Ford part number	Ford specification
Engine oil-Gasoline engines	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	XO-5W20-QSP CXO-5W20-LSP12 (Canada)	WSS-M2C930-A and API Certification Mark
Engine oil-Diesel engine	Refer to your 6.0L Diesel Supplement		
Hinges, latches, striker plates, fuel filler door hinge and seat tracks	Multi-Purpose Grease	XG-4 or XL-5	ESR-M1C159-A or ESB-M1C93-B
Transmission /steering/parking brake linkages and pivots, brake pedal shaft	Premium Long-Life Grease	XG-1-C or XG-1-K	ESA-M1C75-B
Power steering fluid and transfer case fluid (if equipped)	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Automatic transmission 4R100 (4-speed)	Motorcraft MERCON® ATF ²	XT-2-QDX	MERCON®

Maintenance and Specifications

Item	Ford part name or equivalent	Ford part number	Ford specification
Automatic transmission TorqShift (5-speed)	Motorcraft MERCON® SP ATF ²	XT-6-QSP	WSS-M2C919-D MERCON® SP
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	ZC-32-A	WSB-M8B16-A2

¹ Add 8 oz. (236 ml) of Additive Friction Modifier XL-3 or equivalent meeting Ford specification EST-M2C118-A for complete refill of limited slip axles. Ford design rear axles contain a synthetic lubricant that does not require changing unless the axle has been submerged in water.

²Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the end of the dipstick. Check the container to verify the fluid being added is of the correct type. Refer to your *scheduled maintenance information* to determine the correct service interval.

Some transmission fluids may be labeled as dual usage, such as MERCON® and MERCON® V. These dual usage fluids are not to be used in an automatic transmission that requires use of the MERCON® type fluid. However, these dual usage fluids may be used in transmissions that require the MERCON® V type fluid.

MERCON®, MERCON® V and MERCON® SP are not interchangeable. DO NOT mix MERCON®, MERCON® V and MERCON® SP. Use of dual usage fluids in an automatic transmission application requiring MERCON® SP may cause transmission damage. Use of a transmission fluid other than the recommended fluid may cause transmission damage.

Maintenance and Specifications

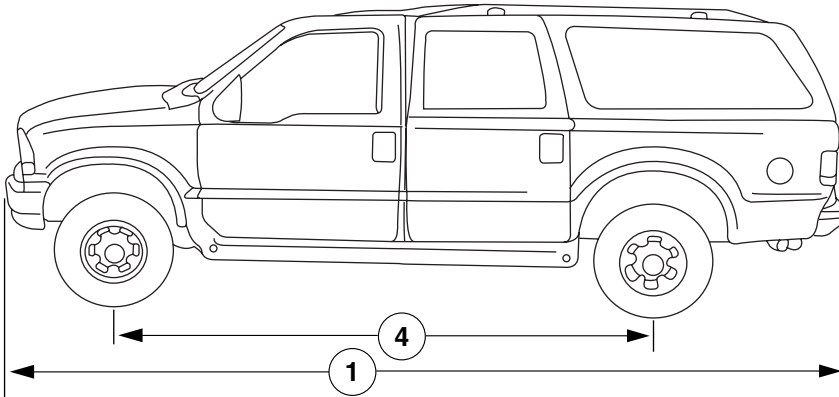
ENGINE DATA

Engine	5.4L V8 engine	6.8L V10 engine
Cubic inches	330	415
Required fuel	87 octane	87 octane
Firing order	1-3-7-2-6-5-4-8	1-6-5-10-2-7-3-8-4-9
Spark plug gap	1.32-1.42mm (0.052-0.056 inch)	1.32-1.42mm (0.052-0.056 inch)
Ignition system	Coil on plug	Coil on plug
Compression ratio	9.0:1	9.0:1

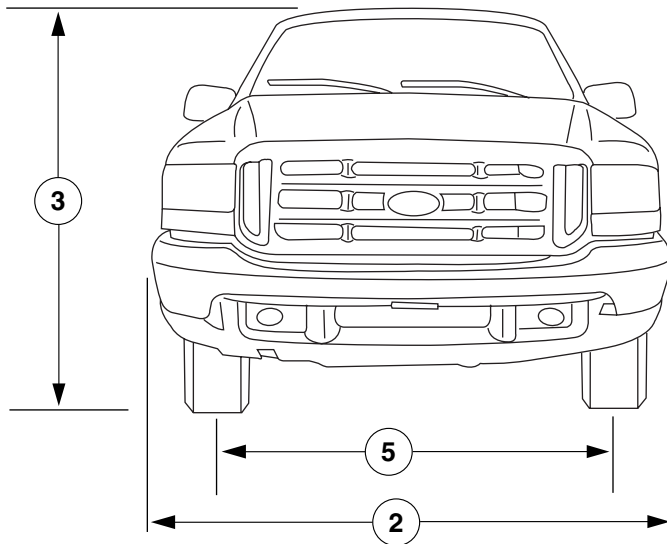
VEHICLE DIMENSIONS

EXCURSION

Dimension	4x2 - inches (mm)	4x4 - inches (mm)
(1) Overall length	226.4 (5751)	226.4 (5751)
(2) Overall width	79.9 (2029)	79.9 (2029)
(3) Overall height	77.4 (1966)	80.4 (2042)
(4) Wheelbase	137.0 (3480)	137.0 (3480)
(5) Track (Front / Rear)	1734 (68.3) / 1730 (68.1)	1734 (68.3) / 1730 (68.1)



Maintenance and Specifications



IDENTIFYING YOUR VEHICLE

Certification label

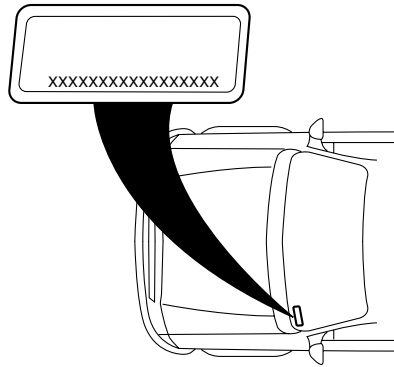
The National Highway Traffic Safety Administration Regulations require that a Safety Compliance Certification Label be affixed to a vehicle and prescribe where the Safety Compliance Certification Label may be located. The Safety Compliance Certification Label is located on the structure by the trailing edge of the driver's door or the edge of the driver's door.

MFD. BY FORD MOTOR CO. IN U.S.A.	
DATE: XXXXX	GVWR: XXXXX LB/ XXXXX KG
FGAWR: XXXXXX/XXXXXXXX	RGAWR: XXXXXX/XXXXXXXX
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.	
VIN: XXXXXXXXXXXXXXXXX	TYPE: XXXXXXXXXXXXXXXXX
	
MAXIMUM LOAD=OCCUPANTS + LUGGAGE=XXXKG/XXXLB	
OCCUPANTS: X TOTAL X FR X 2ND X RR OCCUPANTS LUGGAGE	
	XX XXXKG/XXXLB
TIRE: XXXX/XXXXX XXX	X XXXKG/XXXLB
PRESSURE (FR) XXX kPa/ XX PSI COLD	
PRESSURE (RR) XXX kPa/ XX PSI COLD	
<small>TRAILER TOWING - SEE OWNER GUIDE</small>	
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

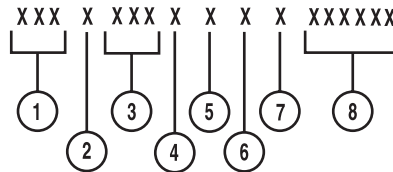
Vehicle identification number (VIN)

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



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 ' X ' X ' X ' X ' XXX					
XXXXXXXXXXXXX UTC V2USA-1520472-AA					

Code	Description
B	Five-speed automatic, TorqShift
E	Four-speed automatic (4R100)

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.

Exterior style

Bug shields

Deflectors

Fender flares

Front end covers

Headlamps, fog lights and Daytime Running Lamps (DRLs)

Running boards

Splash guards

Step Bars

Wheels

Accessories

Interior style

Electrochromatic compass/temperature interior mirrors

Floor mats

Leather wrapped steering wheels

Lifestyle

Bike racks

Cargo organization and management

Smoker's package

Rear seat entertainment systems

Towing mirrors

Trailer hitches, wiring harnesses and accessories

Peace of mind

First aid and highway safety kits

Full vehicle covers

Locking gas cap

Keyless entry keypad

Remote start

Mobile-ease hands-free communication system

Vehicle security systems

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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