Contents

Introduction

ICONS

Indicates a safety alert. Read the following section on *Warnings*.

Indicates vehicle information related to recycling and other environmental concerns will follow.

Correct vehicle usage and the authorized disposal of waste cleaning and lubrication materials are significant steps towards protecting the environment.

Indicates a message regarding child safety restraints. Refer to *Seating and safety restraints* for more information.

Indicates that this Owner Guide contains information on this subject. Please refer to the Index to locate the appropriate section which will provide you more information.

WARNINGS

Warnings provide information which may reduce the risk of personal injury and prevent possible damage to others, your vehicle and its equipment.

BREAKING-IN YOUR VEHICLE

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

If possible, you should avoid full use of the brakes for the first 1 600 km (1 000 miles).

INFORMATION ABOUT THIS GUIDE

The information found in this guide was in effect at the time of printing. Ford may change the contents without notice and without incurring obligation.

SPECIAL NOTICES

Notice to owners of utility type 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 control or an accident.

Be sure to read *Driving off road* in the *Driving* chapter as well as the "Four Wheeling" supplement included with 4WD and utility type vehicles.

Using your vehicle as a snowplow

Do not use this vehicle for snowplowing.

Using your vehicle as an ambulance

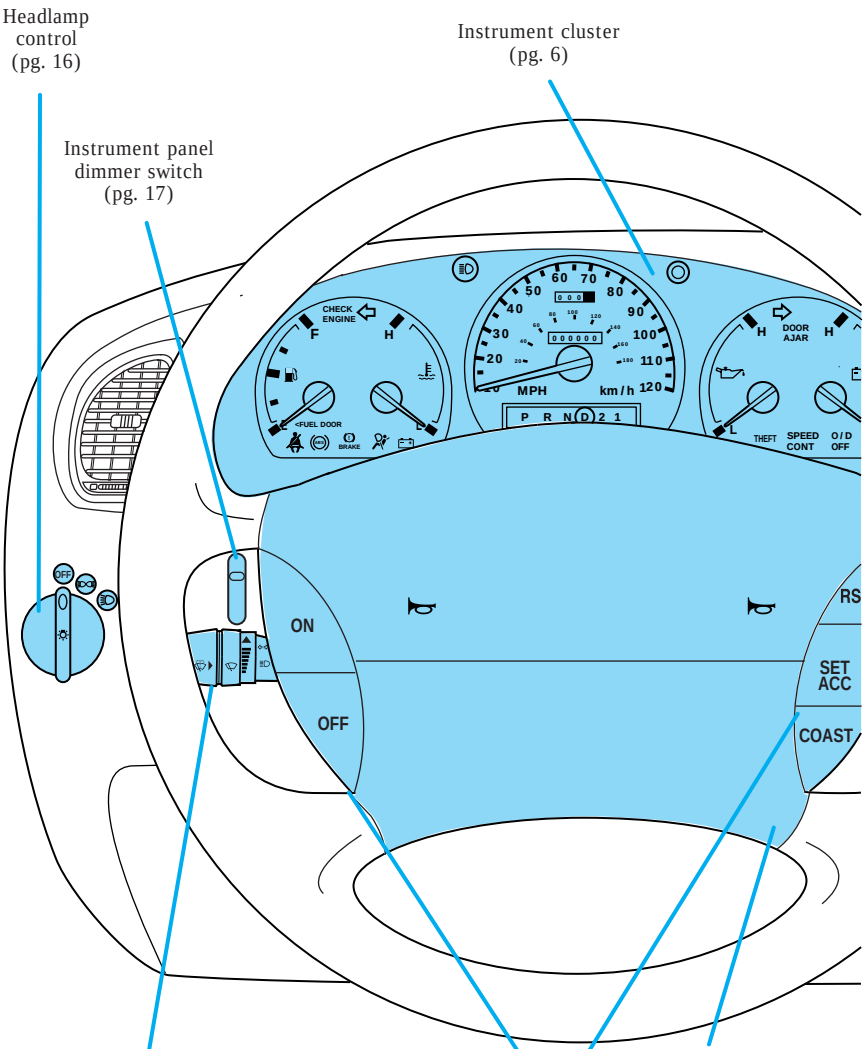
Do not use this vehicle as an ambulance.

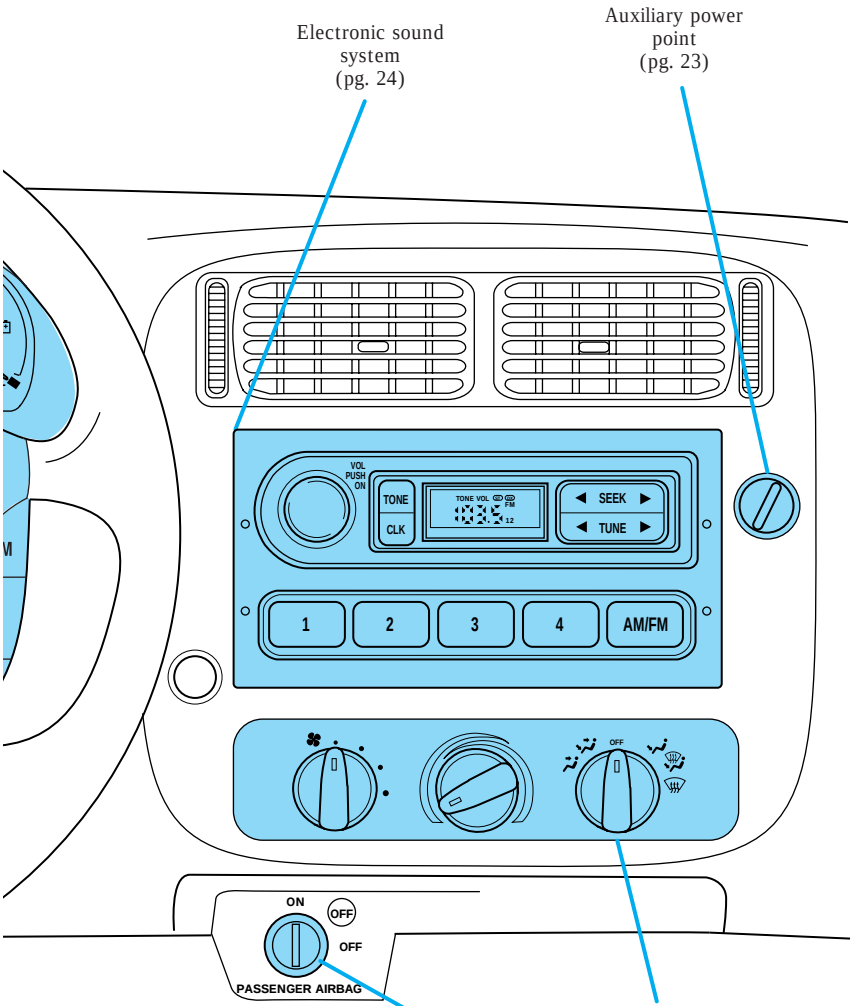
Your vehicle is not equipped with the Ford Ambulance Preparation package.

Electric vehicles

For information on operating your Electric Vehicle, also refer to the Electric Vehicle Owner's Guide Supplement.

Instrumentation

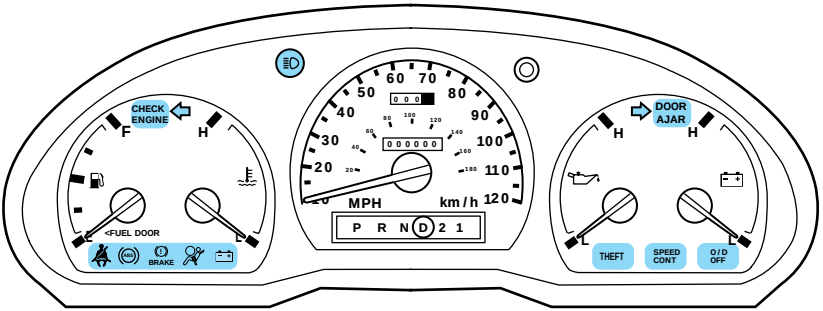



Electronic sound system (pg. 24)
Auxiliary power point (pg. 23)
VOL PUSH ON
TONE
CLK
SEEK
TUNE
1
2
3
4
AM/FM
ON
OFF
OFF
PASSENGER AIRBAG
Passenger air bag deactivate switch (pg. 86)
Climate control systems (pg. 17)

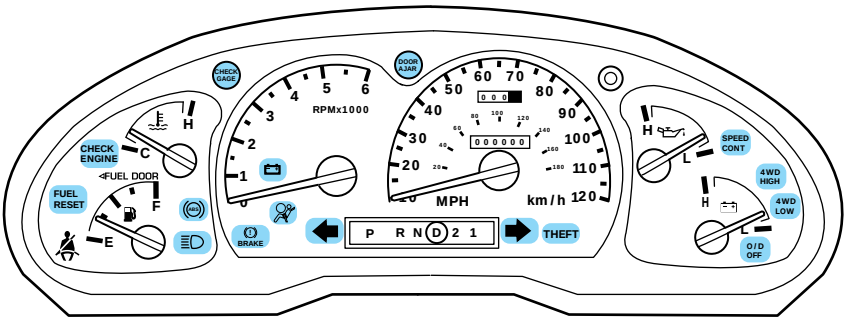
* if equipped

WARNING LIGHTS AND CHIMES

Standard instrument cluster



Optional instrument cluster



Check engine

CHECK ENGINE

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 the service technician in properly servicing your vehicle.

The *Check Engine* indicator light illuminates when the ignition is first turned to the ON position to check the bulb. If it comes on after the engine is started, one of the engine's emission control systems may be malfunctioning. The light may illuminate without a driveability concern being noted. The vehicle will usually be drivable and will not require towing.

What you should do if the check engine light illuminates

Light turns on solid:

This means that the OBD II system has detected a malfunction.

Temporary malfunctions may cause your *Check Engine* light 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 properly installed and securely tightened.

These temporary malfunctions can be corrected by filling the fuel tank with good quality fuel and/or properly installing and securely tightening the gas cap. After three driving cycles without these or any other temporary malfunctions present, the *Check Engine* light should turn off. (A driving cycle consists of a cold engine startup followed by mixed city/highway driving.) No additional vehicle service is required.

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

Light is blinking:

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

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

Fuel reset (if equipped)

Illuminates when the ignition key is turned to the ON position and the fuel pump shut-off switch has been triggered. For more information, refer to *Fuel pump shut-off switch* in the *Roadside emergencies* chapter.

FUEL
RESET

Air bag readiness

Momentarily illuminates when the ignition is turned ON. If the light fails to illuminate, continues to flash or remains on, have the system serviced immediately.

Safety belt

Momentarily illuminates when the ignition is turned to the ON position to remind you to fasten your safety belts. For more information, refer to the *Seating and safety restraints* chapter.

Brake system warning

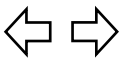
Momentarily illuminates when the ignition is turned to the ON position and the engine is off. If brake warning lamp does not illuminate at this time, seek service immediately. Also illuminates when the parking brake is engaged. Illumination after releasing the parking brake indicates low brake fluid level and the brake system should be inspected immediately.

(!)
BRAKE

Anti-lock brake system (ABS)

Momentarily illuminates when the ignition is turned to the ON position and the engine is off. If the light remains on, continues to flash or fails to illuminate, have the system serviced immediately. With the ABS light on, the anti-lock brake system is disabled and normal braking is still effective unless the brake warning light also remains illuminated with parking brake released.

Turn signal



Illuminates when the left or right turn signal or the hazard lights are turned on. If one or both of the indicators stay on continuously or flash faster, check for a burned-out turn signal bulb. Refer to *Exterior bulbs* in the *Maintenance and care* chapter.

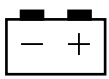
High beams

Illuminates when the high beam headlamps are turned on.

Anti-theft system (if equipped)

Refer to *SecuriLock™ passive anti-theft system* in the *Controls and features* chapter.

Charging system



Illuminates when the ignition is turned to the ON position and the engine is off. The light also illuminates when the battery is not charging properly, requiring electrical system service.

O/D off (if equipped)

Illuminates when the transmission control switch has been pushed. When the light is on, the transmission does not shift into overdrive. If the light does not come on when the transmission control switch is depressed or if the light flashes when you are driving, have your vehicle serviced.

O / D
OFF

Check gage (if equipped)

Illuminates when the engine coolant temperature is high, the engine oil pressure is low or the fuel gauge is at or near empty. The ignition must be in the ON position for this lamp to illuminate. The lamp will also illuminate for several seconds after the ignition is turned to the ON position. Refer to *Engine coolant temperature gauge, Engine oil pressure gauge* or *Fuel gauge* in this chapter for more information.

CHECK
GAGE

Four wheel drive low (if equipped)

This light momentarily illuminates when the ignition is turned to ON. Illuminates when four-wheel drive low is engaged. If the light continues to flash have the system serviced.

4WD
LOW

Four wheel drive high (if equipped)

This light momentarily illuminates when the ignition is turned to ON. Illuminates when four-wheel drive high is engaged. If the light continues to flash have the system serviced.

4WD
HIGH

Door ajar

Illuminates when the ignition is in the ON or START position and any door is open.

DOOR
AJAR

Speed control

This light comes on when either the SET/ACCEL or RESUME controls are pressed. It turns off when the speed control OFF control is pressed, the brake is applied or the ignition is turned to the OFF position.

SPEED CONT

Safety belt warning chime

Chimes to remind you to fasten your safety belts.

For information on the safety belt warning chime, refer to the *Seating and safety restraints* chapter.

Supplemental restraint system (SRS) warning chime

For information on the SRS warning chime, refer to the *Seating and safety restraints* chapter.

Key-in-ignition warning chime

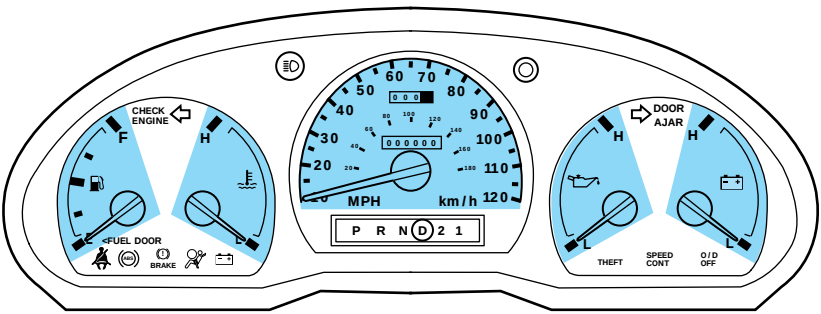
Sounds when the key is left in the ignition in the OFF/LOCK or ACC position and the driver's door is opened.

Headlamps on warning chime

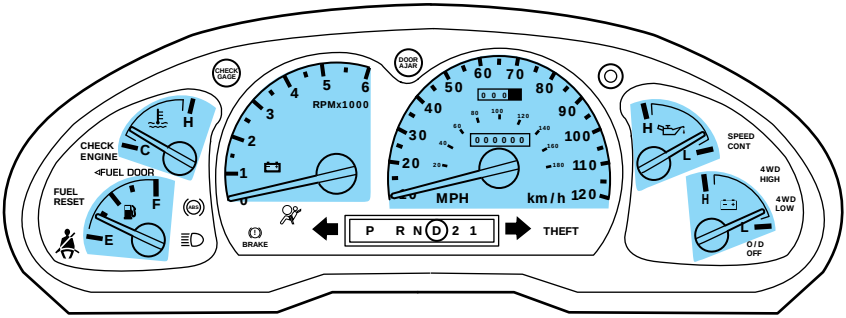
Sounds when the headlamps or parking lamps are on, the ignition is off (and the key is not in the ignition) and the driver's door is opened.

GAUGES

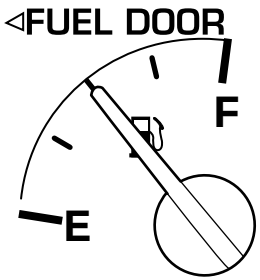
Standard instrument cluster gauges



Optional instrument cluster gauges



Fuel gauge

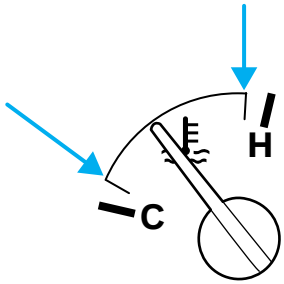


Displays approximately how much fuel is in the fuel tank (when the key is in the ON position). The fuel gauge may vary slightly when the vehicle is in motion. The ignition should be in the OFF position while the vehicle is being refueled. When the gauge first indicates empty, there is a small amount of reserve fuel in the tank. When refueling the vehicle from empty indication, the amount of fuel that can be added will be less than the advertised capacity due to the reserve fuel.

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

Engine coolant temperature gauge

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



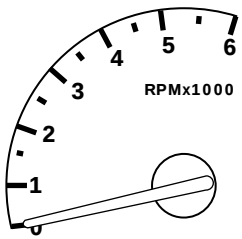
Never remove the coolant reservoir cap while the engine is running or hot.

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

Tachometer (if equipped)

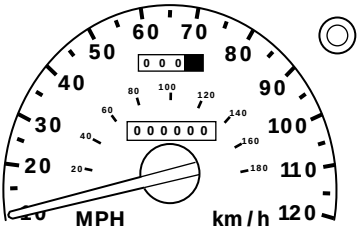
Indicates the engine speed in revolutions per minute.

Driving with your tachometer pointer continuously at the top of the scale may damage the engine.



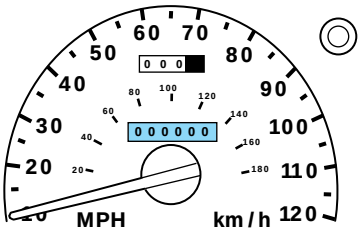
Speedometer

Indicates the current vehicle speed.



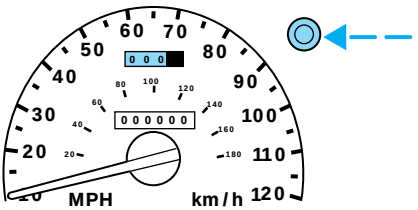
Odometer

Registers the total kilometers (miles) of the vehicle.

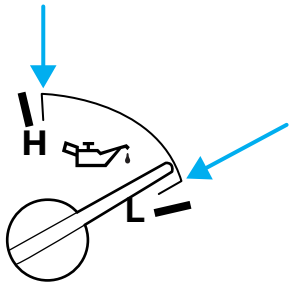


Trip odometer

Registers the kilometers (miles) of individual journeys. To reset, depress the control.



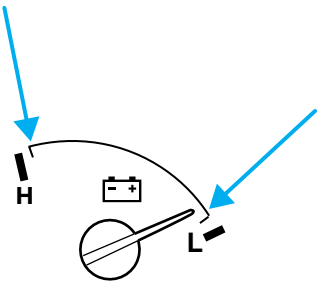
Engine oil pressure gauge



This shows the engine oil pressure in the system. Sufficient pressure exists as long as the needle remains in the normal range (the area between the “H” and “L”).

If the gauge indicates low pressure, stop the vehicle as soon as safely possible and switch off the engine immediately. Check the oil level. Add oil if needed (refer to *Engine oil* in the *Maintenance and care* chapter). If the oil level is correct, have your vehicle checked at your dealership or by a qualified technician.

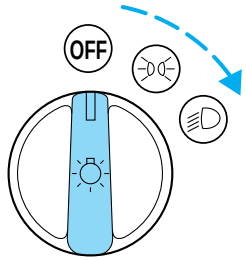
Battery voltage gauge



This gauge shows the battery voltage when the ignition is in the ON position. If the pointer moves and stays outside the normal operating range (as indicated), have the vehicle's electrical system checked as soon as possible.

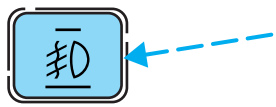
HEADLAMP CONTROL

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



Foglamp control (if equipped)

Turn on the low-beam headlamps and press the foglamp control to activate the foglamps. The foglamp control will illuminate when the foglamps are on.



Press the foglamp control a second time to deactivate the foglamps.

Daytime running lamps (DRL) (if equipped)

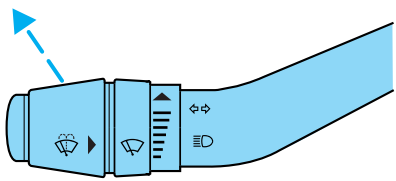
Turns the headlamps on with a reduced output. To activate:

- the engine must be running and
- the headlamp control is in the OFF or Parking lamps position.

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

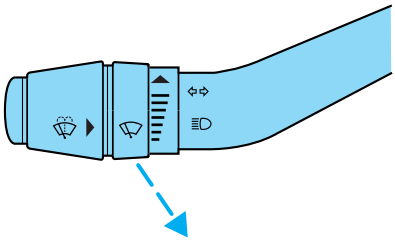
High beams

Push forward to activate.



Flash to pass

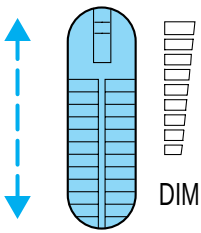
Pull toward you to activate and release to deactivate.



PANEL DIMMER CONTROL

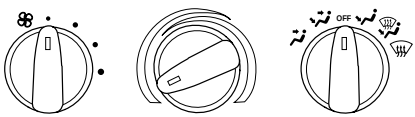
Use to adjust the brightness of the instrument panel during headlamp and parklamp operation.

- Rotate up to brighten.
- Rotate down to dim.
- Rotate to full down position to turn off.



CLIMATE CONTROL SYSTEM

Heater only system (if equipped)

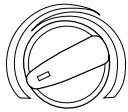


Fan speed control

Controls the volume of air circulated in the vehicle.

Temperature control knob

Controls the temperature of the airflow inside the vehicle. On heater-only systems, the air cannot be cooled below the outside temperature.



Mode selector control

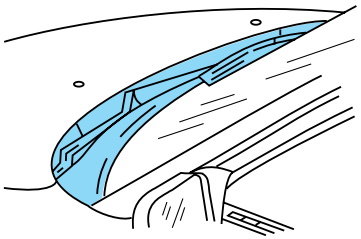
Controls the direction of the airflow to the inside of the vehicle.

- (Vent)-Distributes outside air through the instrument panel registers.
- (Panel and floor)-Distributes outside air through the instrument panel registers and the floor ducts.
- OFF-Outside air is shut out and the fan will not operate.
- (Floor)-Allows for maximum heating. Distributes outside air through the floor ducts.
- (Floor and defrost)-Distributes outside air through the floor ducts and the windshield defroster ducts.
- (Defrost)-Distributes outside air through the windshield defroster ducts. It can be used to clear ice or fog from the windshield.

Operating tips

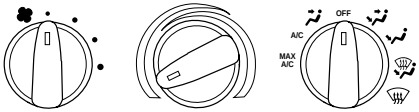
- In humid weather, select before driving. This will help to prevent your windshield from fogging. After a few minutes, select any desired position.
- To prevent humidity buildup inside the vehicle, don't drive with the climate control system in the OFF position.
- Don't put objects under the front seat that will interfere with the airflow to the back seats (if equipped).

- Remove any snow, ice or leaves from the air intake area (at the bottom of the windshield under the hood).



- When placing objects on top of your instrument panel, be careful to not place them over the defroster outlets. These objects can block airflow and reduce your ability to see through your windshield. Also, avoid placing small objects on top of your instrument panel. These objects can fall down into the defroster outlets and block airflow and possibly damage your climate control system.

Manual heating and air conditioning system (if equipped)

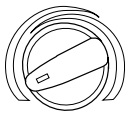


Fan speed control

Controls the volume of air circulated in the vehicle.

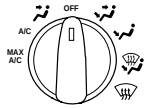
Temperature control knob

Controls the temperature of the airflow inside the vehicle.



Mode selector control

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



The air conditioning compressor will operate in all modes except and . However, the air conditioning will only function if the outside temperature is about 10°C (50°F) or above.

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

Under normal conditions, your vehicle's climate control system should be left in any position other than MAX A/C or OFF when the vehicle is parked. This allows the vehicle to "breathe" through the outside air inlet duct.

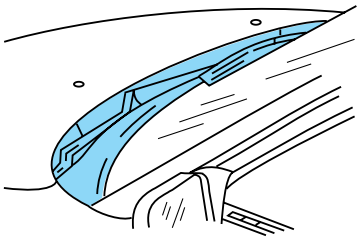
- MAX A/C-Uses recirculated air to cool the vehicle. MAX A/C is noisier than A/C but more economical and will cool the inside of the vehicle faster. Airflow will be from the instrument panel registers. This mode can also be used to prevent undesirable odors from entering the vehicle.
- A/C-Uses outside air to cool the vehicle. It is quieter than MAX A/C but not as economical. Airflow will be from the instrument panel registers.
- (Vent)-Distributes outside air through the instrument panel registers. However, the air will not be cooled below the outside temperature because the air conditioning does not operate in this mode.
- OFF-Outside air is shut out and the fan will not operate. For short periods of time only, use this mode to prevent undesirable odors from entering the vehicle.

- (Panel and floor)-Distributes outside air through the instrument panel registers and the floor ducts. Heating and air conditioning capabilities are provided in this mode. For added customer comfort, when the temperature control knob is anywhere in between the full hot and full cold positions, the air distributed through the floor ducts will be slightly warmer than the air sent to the instrument panel registers.
- (Floor)-Allows for maximum heating by distributing outside air through the floor ducts. However, the air will not be cooled below the outside temperature because the air conditioning does not operate in this mode.
- (Floor and defrost)-Distributes outside air through the windshield defroster ducts and the floor ducts. Heating and air conditioning capabilities are provided in this mode. For added customer comfort, when the temperature control knob is anywhere in between the full hot and full cold positions, the air distributed through the floor ducts will be slightly warmer than the air sent to the instrument panel registers. If the temperature is about 10°C (50°F) or higher, the air conditioner will automatically dehumidify the air to prevent fogging.
- -Distributes outside air through the windshield defroster ducts. It can be used to clear ice or fog from the windshield. If the temperature is about 10°C (50°F) or higher, the air conditioner will automatically dehumidify the air to prevent fogging.

Operating tips

- In humid weather, select before driving. This will prevent your windshield from fogging. After a few minutes, select any desired position.
- To prevent humidity buildup inside the vehicle, don't drive with the climate control system in the OFF position.
- Don't put objects under the front seat that will interfere with the airflow to the back seats (if equipped).

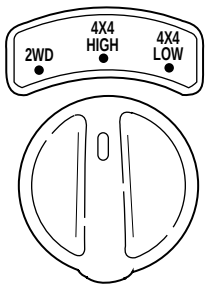
- Remove any snow, ice or leaves from the air intake area (at the bottom of the windshield under the hood).



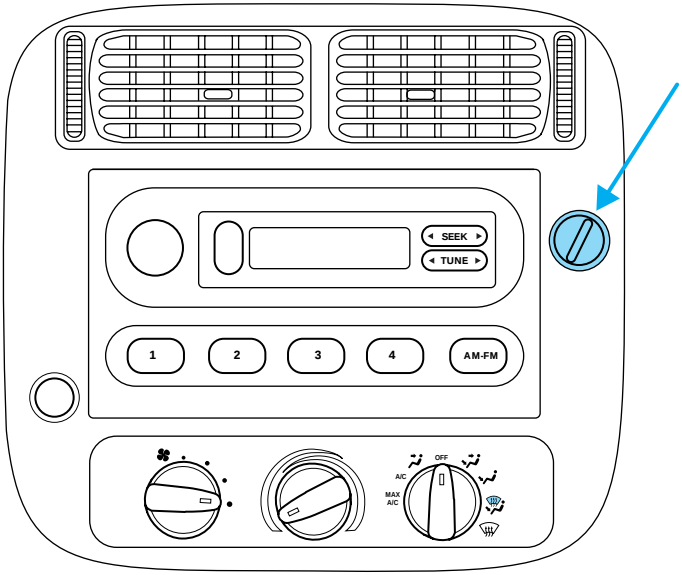
- If your vehicle has been parked with the windows closed during hot weather, the air conditioner will do a much faster job of cooling if you drive for two or three minutes with the windows open. This will force most of the hot, stale air out of the vehicle. Then operate your air conditioner as you would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

4WD CONTROL (IF EQUIPPED)

This control operates the 4WD. Refer to the *Driving* chapter for more information.



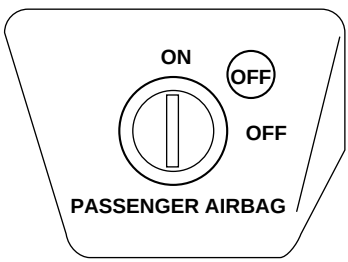
AUXILIARY POWER POINT



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

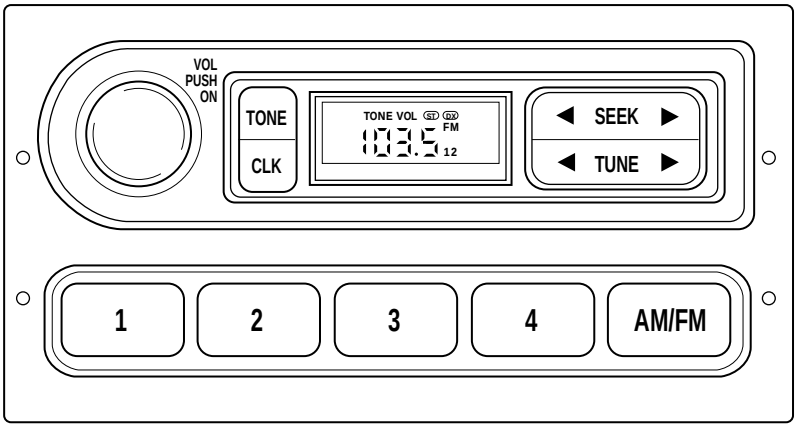
PASSENGER AIR BAG ON/OFF SWITCH

This switch must be used to deactivate the passenger air bag whenever a child seat is used in the right front or center front passenger seat position. Refer to *Passenger air bag ON/OFF switch* in the *Seating and safety restraints* chapter.



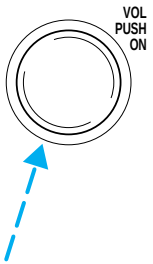
USING YOUR AUDIO SYSTEM

AM/FM Stereo

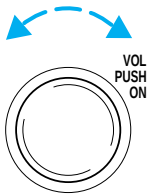


Volume/power control

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



Turn the control to raise or lower volume.



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

AM/FM select

The AM/FM select control works in radio mode.

AM/FM select in radio mode

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

Tune adjust

The tune control works in radio mode.

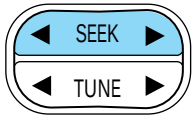
Tune adjust in radio mode

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

Seek function

The seek function control works in radio mode.

Seek function in radio mode



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

Radio station memory preset

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

Setting memory preset stations

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

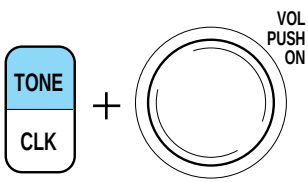
2. Select a station. Refer to *Tune adjust* or *Seek function* for more information on selecting a station.

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

Bass adjust

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

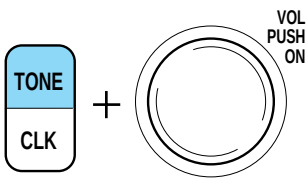
With the electronic stereo radio, press the TONE control once, then use the volume knob to adjust the level.



Treble adjust

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

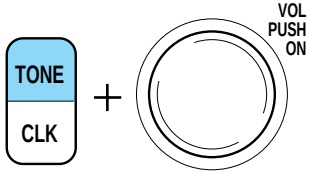
With the electronic stereo radio, press the TONE control twice, then use the volume knob to adjust the level.



Speaker balance adjust

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

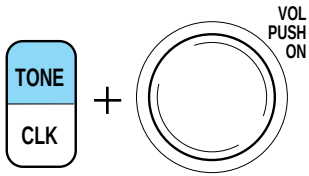
With the electronic stereo radio, press the TONE control three times, then use the volume knob to adjust the level.



Speaker fade adjust (if equipped)

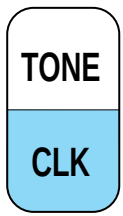
Speaker sound can be adjusted between the front and rear speakers.

With the electronic stereo radio, press the TONE control four times, then use the volume knob to adjust the level.

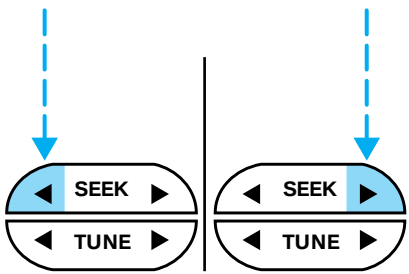


Setting the clock

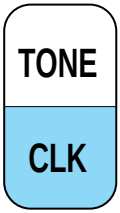
To set the hour, press and hold the CLK control and press:



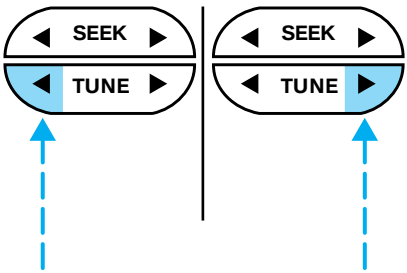
- ◀ to decrease hours and
- ▶ to increase hours.



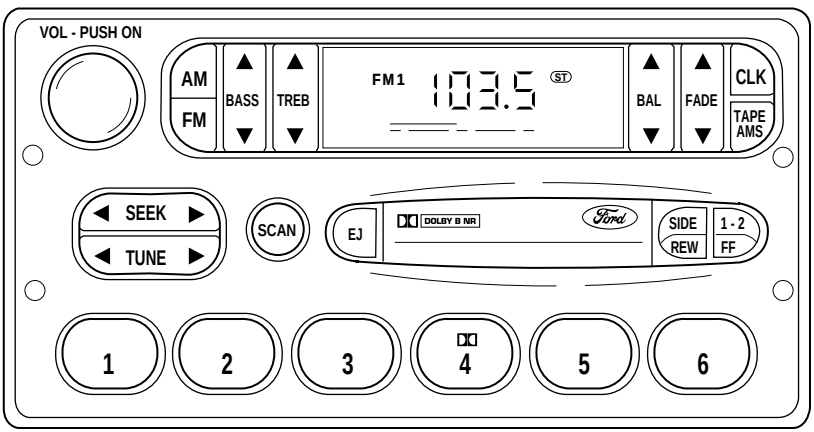
To set the minute, press and hold the CLK control and press:



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



AM/FM stereo cassette



Volume/power control

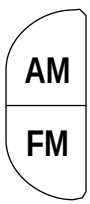
Press the control to turn the audio system on or off.

Turn the control to raise or lower volume.

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

AM/FM select

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



AM/FM select in radio mode

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

AM/FM select in tape mode

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

Tune adjust

The tune control works in radio mode.

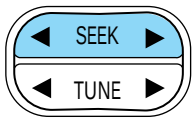
Tune adjust in radio mode

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

Seek function

The seek function control works in radio mode.

Seek function in radio mode



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

Scan function

The scan function works in radio mode.

Scan function in radio mode

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

Radio station memory preset

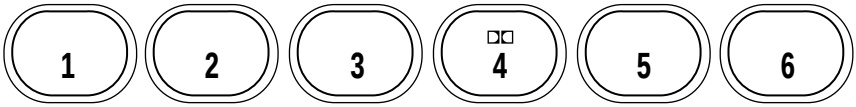
The radio is equipped with six station memory preset controls. These controls can be used to select up to six preset AM stations and twelve FM stations (six in FM1 and six in FM2).

Setting memory preset stations

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

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

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



Bass adjust

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

Treble adjust

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

Speaker balance adjust

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

Speaker fade adjust

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

Tape select

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

Automatic Music Search

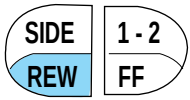
The Automatic Music Search feature allows you to quickly locate the beginning of the tape selection being played or to skip to the next selection.

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

In order to ensure proper operation of the AMS feature, the tape MUST have a blank section of at least 4 seconds duration between programs.

Rewind

The rewind control works in tape mode.

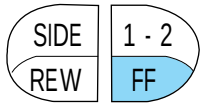


To rewind in tape mode, press the REW control. Radio play will continue until rewind is stopped (with the FF control or the AM/FM control) or the beginning of the tape is reached.

Fast forward

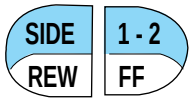
The fast forward control works in tape mode.

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



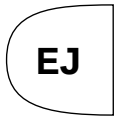
Tape direction select

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



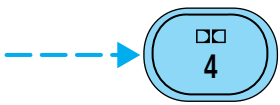
Eject function

Press the control to stop and eject a tape.



Dolby® noise reduction

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



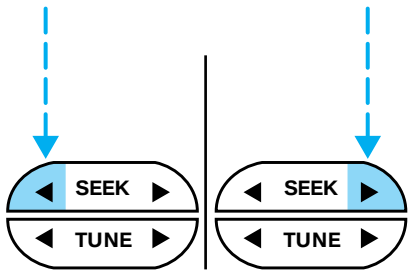
Press the DD control to activate (and deactivate) Dolby® noise reduction.

The noise reduction system is manufactured under license from Dolby Laboratories Licensing Corporation.

Setting the clock

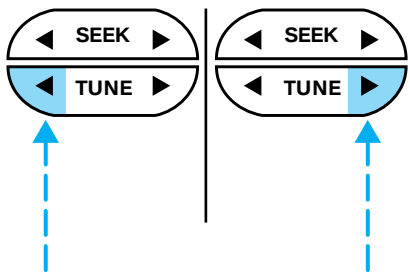
To set the hour, press and hold the CLK control and press:

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

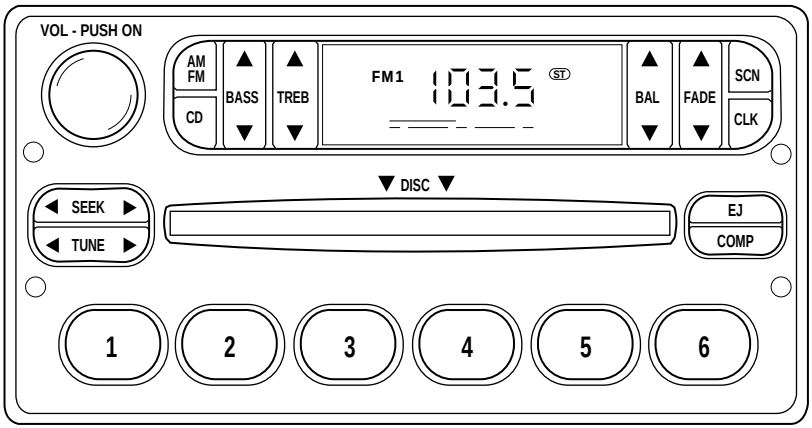


To set the minute, press and hold the CLK control and press:

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



AM/FM Stereo / Single CD Radio



Volume/power control

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

Turn the control to raise or lower volume.

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

AM/FM select

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

AM/FM select in radio mode

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

AM/FM select in CD mode

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

Tune adjust

The tune control works in radio mode.

Tune adjust in radio mode

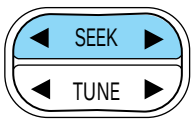
- Press ◀ to move to the next frequency down the band (whether or not a listenable station is located there). Hold the control to move through the frequencies quickly.
- Press ▶ to move to the next frequency up the band (whether or not a listenable station is located there). Hold for quick movement.

Seek function

The seek function control works in radio or CD mode.

Seek function in radio mode

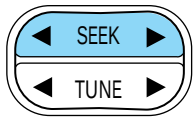
- Press ◀ to find the next listenable station down the frequency band.



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

Seek function in CD mode

- Press ◀ to listen to the next selection.
- Press ▶ to listen to the previous selection.



Scan function

The scan function works in radio or CD mode.

Scan function in radio mode

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

Scan function in CD mode

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

Radio station memory preset

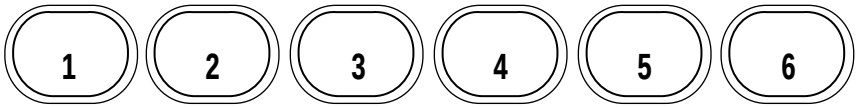
The radio is equipped with four or six station memory preset controls. These controls can be used to select up to four or six preset AM stations and eight or twelve FM stations (four to six in FM1 and four to six in FM2).

Setting memory preset stations

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

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

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



Bass adjust

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

Treble adjust

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

Speaker balance adjust

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

Speaker fade adjust

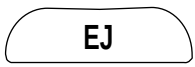
Speaker sound can be adjusted between the front and rear speakers.

CD select

- To begin CD play (if CD[s] are loaded), press the CD control. The first track of the disc will begin playing. After that, CD play will begin where it stopped last.

Eject function

Press the control to stop and eject a CD.



Compression feature

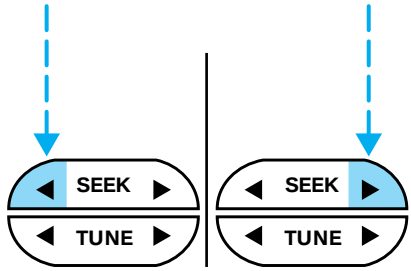
Compression adjust brings soft and loud CD passages together for a more consistent listening level.

Press the COMP control to activate and deactivate compression adjust.

Setting the clock

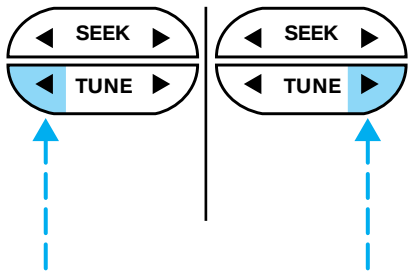
To set the hour, press and hold the CLK control and press:

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

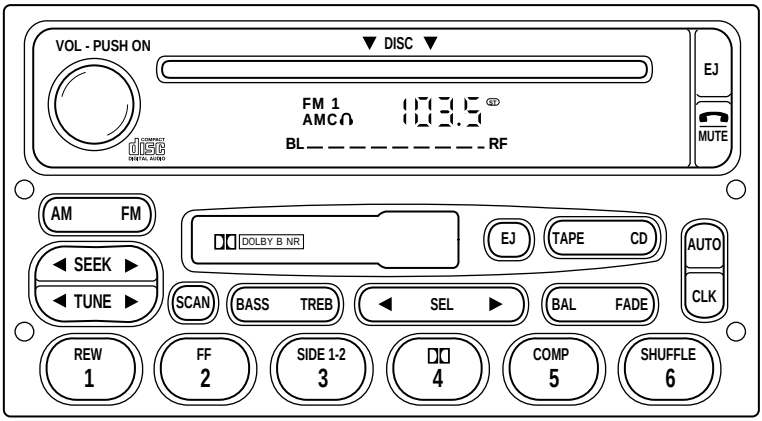


To set the minute, press and hold the CLK control and press:

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



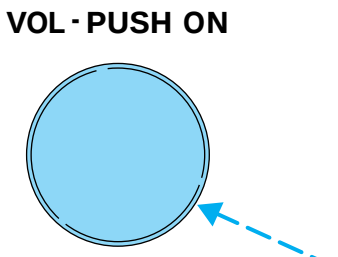
Premium AM/FM Stereo/Cassette/Single CD/Premium Sound



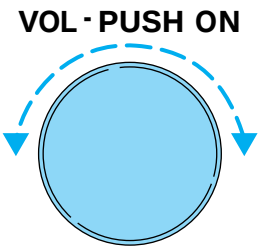
Volume/power control

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

Audio power can also be turned on by pressing the AM/FM select control or the tape/CD select control. Audio power is turned off by using the volume/power control.



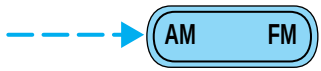
Turn control to raise or lower volume.



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

AM/FM select

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



AM/FM select in radio mode

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

AM/FM select in tape mode

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

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

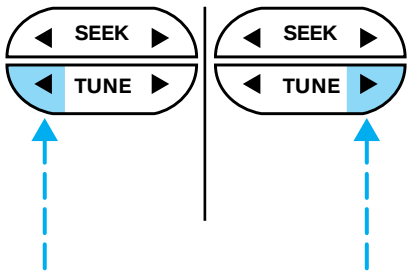
Press this control to stop CD play and begin radio play.

Tune adjust

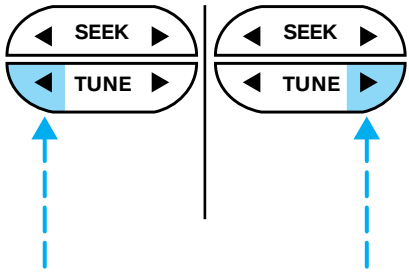
The tune control works in radio or CD changer mode.

Tune adjust in radio mode

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



Tune adjust for CD changer (if equipped)

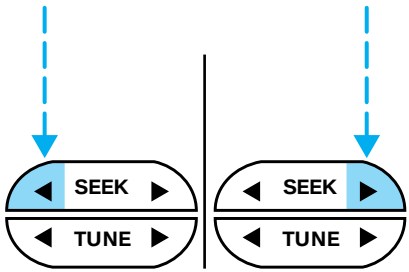


- Press ◀ to select the previous disc in the CD changer. (Play will begin on the first track of the disc unless the CD changer is in shuffle mode. Refer to *Shuffle feature* for more information. Hold the control to continue reversing through the remaining discs.
- Press ▶ to select the next disc in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

Seek function

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

Seek function in radio mode



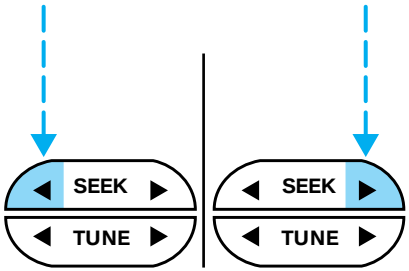
- Press ◀ to find the next listenable station down the frequency band.
- Press ▶ to find the next listenable station up the frequency band.

Seek function in tape mode

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

Seek function for CD or CD changer

- Press ◀ to seek to the previous track of the current disc. If a selection has been playing for three seconds or more and you press ◀ , the CD changer will replay that selection from the beginning.
- Press ▶ to seek forward to the next track of the current disc. After the last track has been completed, the first track of the current disc will automatically replay.



Scan function

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

Scan function in radio mode

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

Scan function in tape mode

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

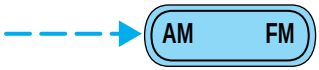
Scan function in CD or CD changer mode (if equipped)

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

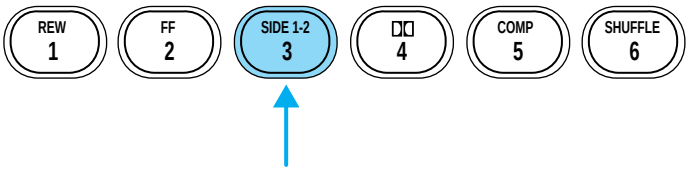
Radio station memory preset

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

Setting memory preset stations



1. Select the frequency band with the AM/FM select control.
2. Select a station. Refer to *Tune adjust* or *Seek function* for more information on selecting a station.



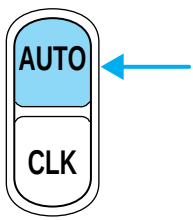
3. Press and hold a memory preset control until the sound returns, indicating the station is held in memory on the control you selected.

Autoset memory preset

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

Starting autoset memory preset

1. Select a frequency using the AM/FM select controls.
2. Press the AUTO control.



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

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

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

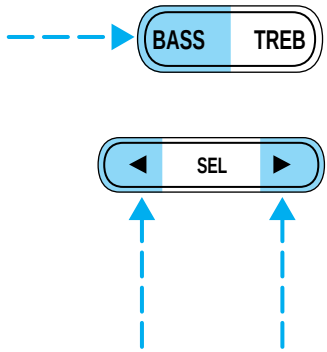
To deactivate autoset and return to your audio system's manually set memory stations, press the AUTO control again.

Bass adjust

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

Press the BASS control then press:

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

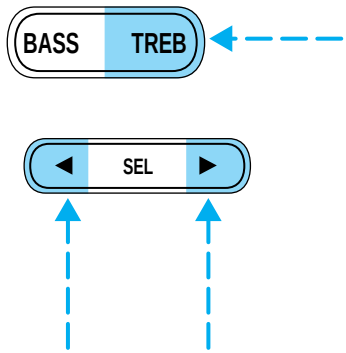


Treble adjust

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

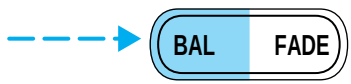
Press the TREB control then press:

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



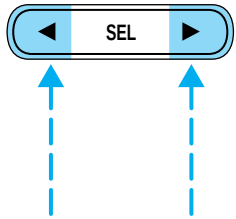
Speaker balance adjust

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



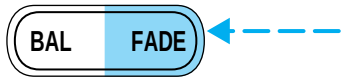
Press the BAL control then press:

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



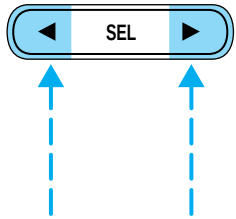
Speaker fade adjust

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



Press the FADE control then press:

- ◀ to shift the sound to the front and
- ▶ to shift the sound to the rear.



Tape/CD select

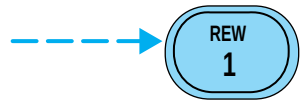
- To begin tape play (with a tape loaded into the audio system) while in the radio or CD mode, press the TAPE control. Press the button during rewind or fast forward to stop the rewind or fast forward function.

- To begin CD play (if CD(s) are loaded), press the CD control. The first track of the disc will begin playing. If returning from radio or tape mode, CD play will begin where it stopped last.

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

Rewind

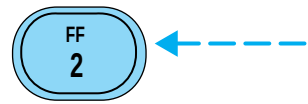
The rewind control works in tape and CD modes.



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

Fast forward

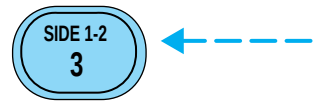
The fast forward control works in tape and CD modes.



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

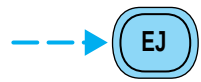
Tape direction select

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



Eject function

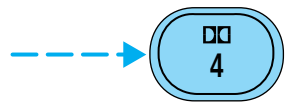
Press the EJ control to stop and eject a tape.



Press the EJ control to stop and eject a CD.

Dolby noise reduction

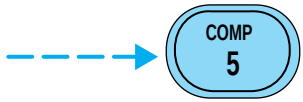
Dolby noise reduction reduces the amount of hiss and static during tape playback. Press the control to activate (and deactivate) the noise reduction.



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

Compression adjust

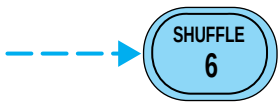
Compression adjust brings soft and loud CD passages together for a more consistent listening level.



Press the COMP control to activate and deactivate compression adjust.

Shuffle feature

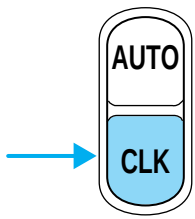
The shuffle feature operates in CD mode and plays all tracks on the current disc in random order. If equipped with the CD changer, the shuffle feature continues to the next disc after all tracks on the current disc are played.



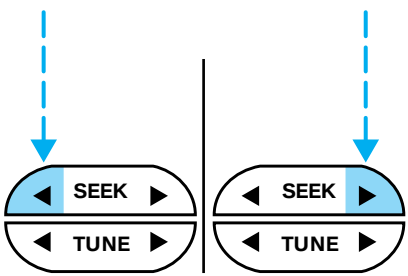
Press the SHUFFLE control to start this feature. Random order play will continue until the SHUFFLE control is pressed again.

Setting the clock

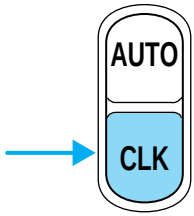
To set the hour, press and hold the CLK control and press SEEK:



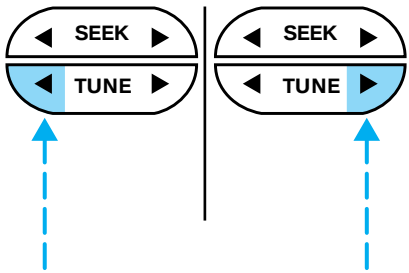
- ◀ to decrease hours and
- ▶ to increase hours.



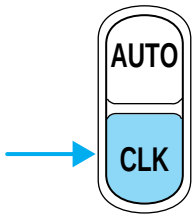
To set the minute, press and hold the CLK control and press TUNE:



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



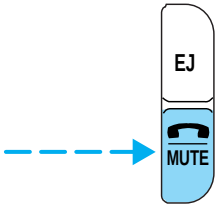
If your vehicle has a separate clock module, (other than the digital radio display), the CLK button will not function in the above manner.



The CLK button will allow you to switch between media display mode (radio station, stereo information, etc.) and clock display mode (time). When in clock mode, the media information will display for ten seconds, when the radio is turned on, and then revert to clock information. Anytime that the media is changed, (new radio station, etc.), the media information will again display for ten seconds before reverting back to the clock. In media mode, the media information will always be displayed.

Mute mode

Press the control to mute the

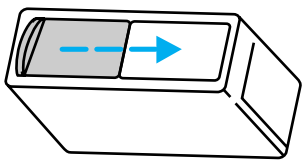


playing media. Press the control again to return to the playing media.

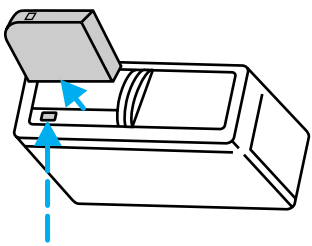
CD changer (if equipped)

The CD changer is located behind the driver's seat in your vehicle.

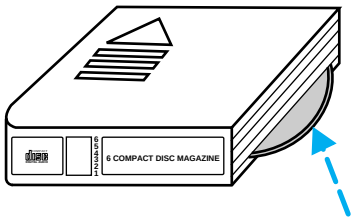
Slide the door to access the CD changer magazine.



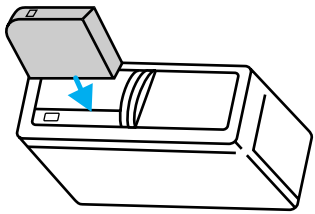
Press ⏏ to eject the magazine.



Make sure only one disc is inserted in each slot. Each disc must be inserted with the label surface upward. Depending on your system, you may insert up to six or ten CDs.



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



Radio power must be turned on to play the CDs in the changer. The magazine may be stored in the glove compartment when not being used.

The CD magazine may be inserted or ejected with the radio power off.

Troubleshooting the CD player

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

If sound skips:

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

If player does not work:

- The disc is inserted with the label surface downward.
- The disc is dusty or defective.

- The player's internal temperature is above 75°C (167°F). Allow the player to cool down before operating.
- A disc with format and dimensions not within industry standards is inserted.

Cleaning compact discs

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

CD and CD player care

- Handle discs by their edges only. Never touch the playing surface.
- Do not insert more than one disc at a time.
- Do not expose discs to direct sunlight or heat sources for extended periods of time.
- After playing, store the disc in its case.

Cleaning cassette player (if equipped)

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

Cassette and cassette player care

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

Radio frequency information

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

AM 530, 540–1600, 1610 kHz

FM 87.9, 88.1–107.1, 107.9 MHz

Not all frequencies are used in a given area.

Radio reception factors

Three factors can affect radio reception:

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

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

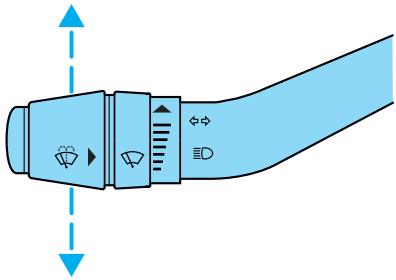
Audio system warranties and service

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

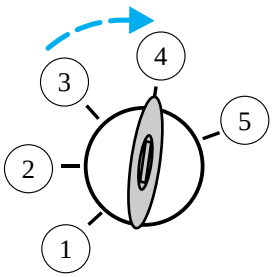
If service is necessary, see your dealer or a qualified technician.

TURN SIGNAL CONTROL

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



POSITIONS OF THE IGNITION



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

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

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

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

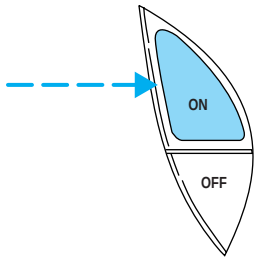
5. START, cranks the engine. Release the key as soon as the engine starts.

SPEED CONTROL (IF EQUIPPED)

To turn speed control on

- Press ON.

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

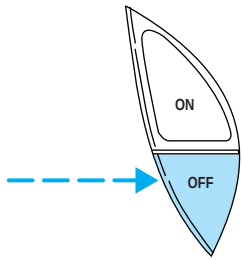


Do not use the speed control in heavy traffic or on roads that are winding, slippery, or unpaved.

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

To turn speed control off

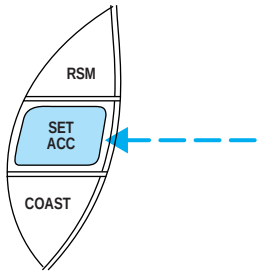
- Press OFF or
- Turn off the vehicle ignition.



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

To set a speed

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



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

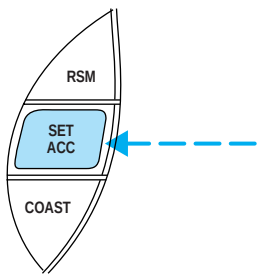
Speed control cannot reduce the vehicle speed if it increases above the set speed on a downhill. If your vehicle speed is faster than the set speed while driving on a downhill, you may want to shift to the next lower gear or apply the brakes to reduce your vehicle speed.

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

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

To set a higher set speed

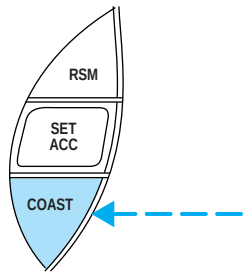
- Press and hold SET/SET ACC/SET ACCEL. Release the control when the desired vehicle speed is reached or
- Press and release SET/SET ACC/SET ACCEL. Each press will increase the set speed by 1.6 km/h (1 mph) or
- Accelerate with your accelerator pedal. When the desired vehicle speed is reached, press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



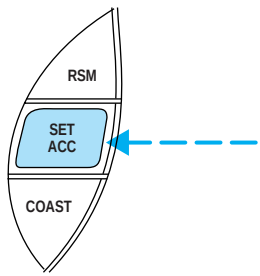
You can accelerate with the accelerator pedal at any time during speed control usage. Releasing the accelerator pedal will return your vehicle to the previously programmed set speed.

To set a lower set speed

- Press and hold CST/COAST. Release the control when the desired speed is reached or
- Press and release CST/COAST. Each press will decrease the set speed by 1.6 km/h (1 mph) or

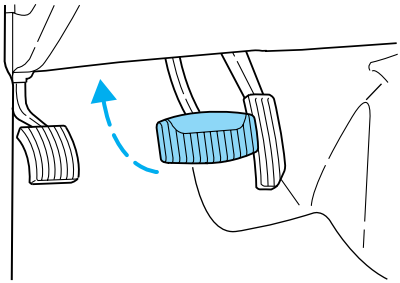


- Depress the brake pedal. When the desired vehicle speed is reached, press SET/SET ACC/SET ACCEL.

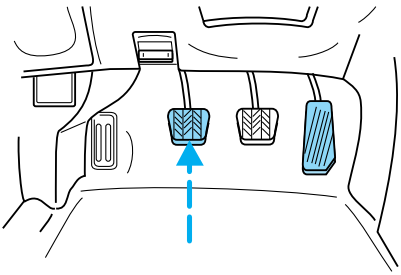


To disengage speed control

- Depress the brake pedal or

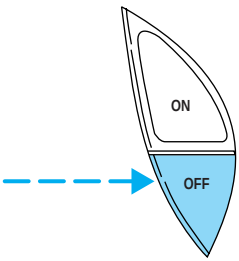


- Depress the clutch pedal (if equipped)



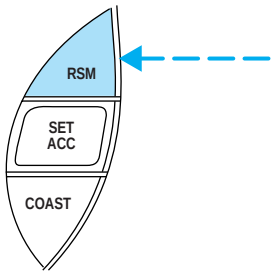
Disengaging the speed control will not erase the previously programmed set speed.

Pressing OFF will erase the previously programmed set speed.



To return to a previously set speed

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



Indicator light (if equipped)

This light comes on when either the SET ACC/SET ACCEL or RES/RSM/RESUME controls are pressed. It turns off when the speed control OFF control is pressed, the brake is applied or the ignition is turned to the OFF position.

SPEED CONT

OVERDRIVE CONTROL (IF EQUIPPED)

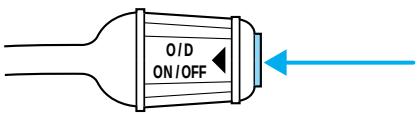
Activating overdrive

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

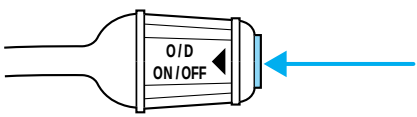
The overdrive function allows automatic upshifts to second, third and fourth gear.

Deactivating overdrive

Press the Transmission Control Switch (TCS) located on the end of the gearshift lever. The Transmission Control Indicator Light (TCIL) will illuminate on the instrument cluster.



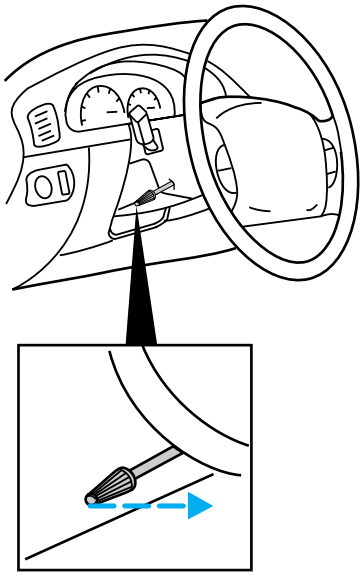
The transmission will operate in gears one through three. To return to normal overdrive mode, press the Transmission Control Switch again. The TCIL will no longer be illuminated.



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

TILT STEERING (IF EQUIPPED)

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



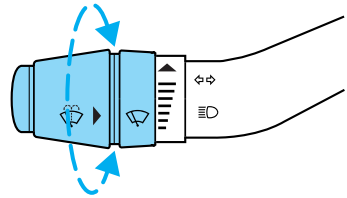
Never adjust the steering wheel when the vehicle is moving.

HAZARD FLASHER

For information on the hazard flasher control, refer to *Hazard flasher* in the *Roadside emergencies* chapter.

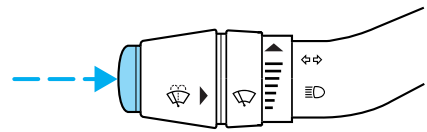
WINDSHIELD WIPER/WASHER CONTROLS

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



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

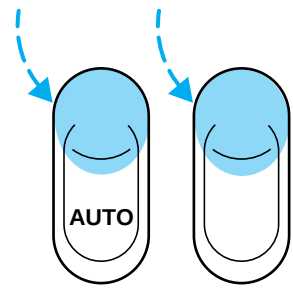
Push the control on the end of the stalk to activate washer. Push and hold for a longer wash cycle. The washer will automatically shut off after ten seconds of continuous use.



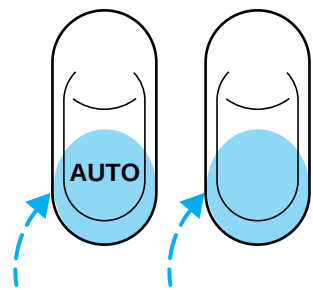
POWER WINDOWS (IF EQUIPPED)

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

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

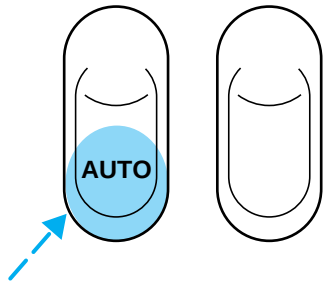


- Press the bottom portion of the rocker switch to open.



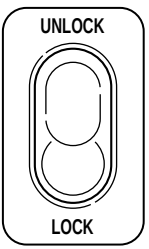
One touch down

- Press AUTO completely down and release quickly. The window will open fully. Depress again to stop window operation.



POWER DOOR LOCKS (IF EQUIPPED)

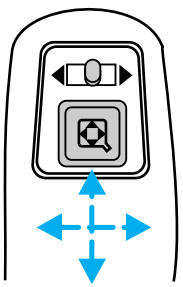
Press the top of the control to unlock all doors and the bottom to lock all doors.



POWER SIDE VIEW MIRRORS (IF EQUIPPED)

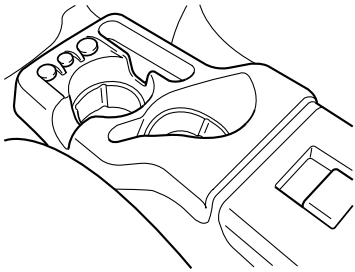
To adjust your mirrors:

1. Select ◀ to adjust the left mirror or ▶ 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 lock mirrors in place.

CENTER CONSOLE (IF EQUIPPED)



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

- utility compartment with cassette/compact disc storage
- cupholders
- coin holder slots
- flip up armrest
- removable utility bag (if equipped)

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

CARGO AREA FEATURES

Cargo area shade (if equipped)

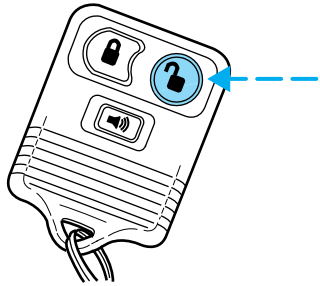
Your vehicle may be equipped with notches in the side trim panels that are used for a cargo area shade. See your dealer for more information.

REMOTE ENTRY SYSTEM (IF EQUIPPED)

The remote entry system allows you to lock or unlock all vehicle doors without a key.

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

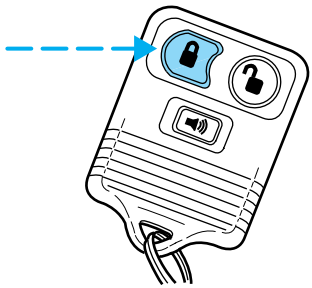
Unlocking the doors



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

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

Locking the doors

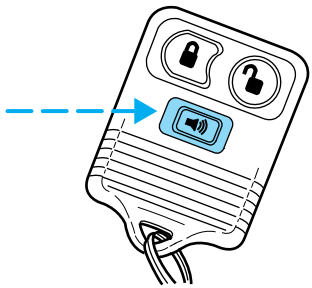


Press this control to lock all doors.

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

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

Sounding a panic alarm



Press this control to activate the alarm.

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

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.

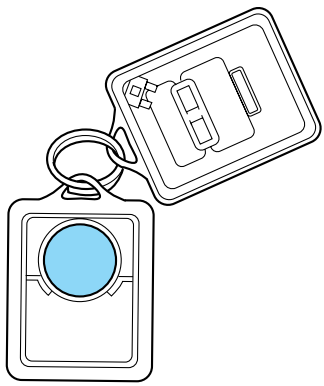
Replacing the battery

The transmitter is powered by one coin type three-volt lithium battery CR2032 or equivalent. Typical operating range will allow you to be up to 10 meters (33 feet) away from your vehicle. A decrease in operating range can be caused by:

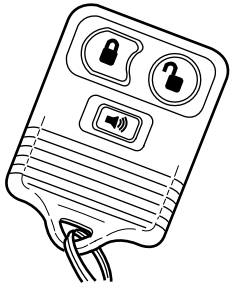
- weather conditions
- nearby radio towers
- structures around the vehicle
- other vehicles parked next to the vehicle

To replace the battery:

1. Twist a thin coin between the two halves of the transmitter near the key ring. DO NOT TAKE THE FRONT PART OF THE TRANSMITTER APART.
2. Place the positive (+) side of new battery in the same orientation. Refer to the diagram inside the transmitter unit.
3. Snap the two halves back together.



Replacing lost transmitters



Take all your vehicle's transmitters to your dealer if service is required.

If you purchase additional transmitters (up to four may be programmed), perform the following procedure:

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

All transmitters must be programmed at the same time.

Illuminated entry

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

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

The inside lights will not turn off if:

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

The battery saver will shut off the interior lamps 40 minutes after the ignition has been turned to the OFF position.

SECURILOCK™ PASSIVE ANTI-THEFT SYSTEM (IF EQUIPPED)

The SecuriLock™ passive anti-theft system provides an advanced level of vehicle theft protection. Your vehicle's engine can only be started with the two special SecuriLock™ electronically coded keys provided with your vehicle. Each time you start your vehicle, the SecuriLock™ key is read by the SecuriLock™ passive anti-theft system. If the SecuriLock™ key identification code matches the code stored in the SecuriLock™ passive anti-theft system, the vehicle's engine is allowed to start. If the SecuriLock™ key identification code does not match the code stored in the system or if a SecuriLock™ key is not detected (vehicle theft situation), the vehicle's engine will not operate.

The SecuriLock™ passive anti-theft system is not compatible with aftermarket remote start systems. Use of these systems may result in vehicle starting problems and a loss of security protection. Large metallic objects or devices such as the Mobil Speedpass™ on the same key ring as your SecuriLock™ key may cause vehicle starting problems. These objects and devices cannot damage the SecuriLock™ key, but can cause a momentary problem if they are too close to the key when starting the engine. If a problem occurs. turn ignition off and restart the engine with all other objects on the key ring held away from the SecuriLock™ ignition key.

Spare SecuriLock™ keys can be purchased from your dealership and programmed to your SecuriLock™ passive anti-theft system. Refer to *Programming spare SecuriLock™ keys* for more information.

If one or both of your SecuriLock™ keys are lost or stolen and you want to ensure the lost or stolen key will not operate your vehicle, bring your vehicle and all available SecuriLock™ keys to your dealership for reinitialization.

Theft indicator

The theft indicator on the instrument cluster will operate as follows:

- When the ignition is OFF, the theft indicator will flash briefly every 2 seconds to indicate the SecuriLock™ system is protecting your vehicle.
- When the ignition is turned to RUN or START, the theft indicator will light for 3 seconds and then go out. If the theft indicator stays on for an extended period of time or flashes rapidly, have the system serviced by your dealership or a qualified technician.

The Theft indicator is controlled by the *SecuriLock™ system*. During the 30 second prearm state, it is normal to see the theft indicator pulse brighter behind the constant glow.

Programming spare SecuriLock™ keys

Spare SecuriLock™ keys can be purchased from your dealership and programmed to your SecuriLock™ passive anti-theft system (up to a total of 8 keys). Your dealership can program your new SecuriLock™ key(s) to your vehicle or you can do it yourself using the following simple procedure. To program a new SecuriLock™ key yourself, you will need two previously programmed SecuriLock™ keys (keys that already operate your vehicle's engine). If two previously programmed SecuriLock™ keys are not available (one or both of your original keys were lost or stolen), you must bring your vehicle to your dealership to have the spare SecuriLock™ key(s) programmed.

Procedure to program spare SecuriLock™ keys to your vehicle

New SecuriLock™ keys must have the correct mechanical key cut for your vehicle.

Conventional (non-SecuriLock™) keys **cannot** be programmed to your vehicle.

You will need to have two previously programmed SecuriLock™ keys and the new unprogrammed SecuriLock™ key readily accessible for the procedure. Please read and understand the entire procedure before you begin.

1. Insert the first previously programmed SecuriLock™ key into the ignition and turn the ignition from OFF to RUN (maintain ignition in RUN for at least one second).

2. Turn ignition to OFF and remove the first SecuriLock™ key from the ignition.

3. Within five seconds of turning the ignition to OFF, insert the second previously programmed SecuriLock™ key into the ignition and turn the ignition from OFF to RUN (maintain ignition in RUN for at least one second but no more than 5 seconds).

4. Turn the ignition to OFF and remove the second SecuriLock™ key from the ignition.

5. Within 10 seconds of turning the ignition to OFF, insert the unprogrammed SecuriLock™ key (new key) into the ignition and turn the ignition from OFF to RUN (maintain ignition in RUN for at least one second). This step will program your new SecuriLock™ key.

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

If the programming procedure was successful, the new SecuriLock™ key(s) will start the vehicle's engine. The theft indicator (located on the instrument cluster) will light for three seconds and then go out.

If the programming procedure was not successful, the new SecuriLock™ key(s) will not operate the vehicle's engine. The theft indicator will flash on and off. Wait at least one minute and then repeat the procedure from step 1. If failure repeats, bring your vehicle to your dealership to have the spare SecuriLock™ key(s) programmed.

SEATING

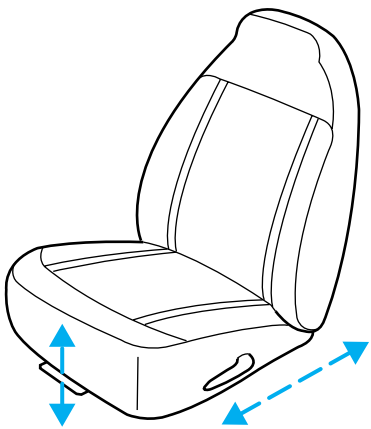
Adjusting the front manual seat

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

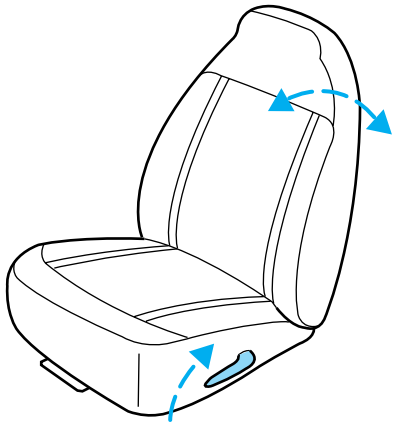
Do not pile cargo higher than the seatbacks to avoid injuring people in a collision or sudden stop.

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

Lift handle to move seat forward or backward.



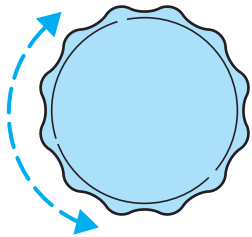
Pull lever up to adjust seatback.



Using the manual lumbar support

Turn the lumbar support control clockwise to increase firmness.

Turn the lumbar support control counterclockwise to increase softness.



REAR SEATS

Center facing jump seat (2 door SuperCab) (if equipped)

To open, pull inboard and down on the seat handle.

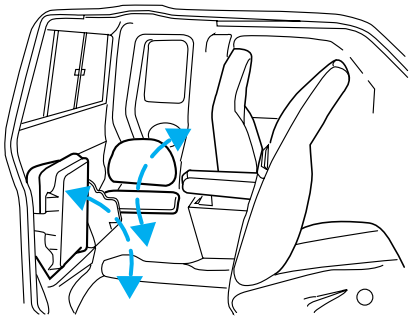
To stow the seat, pull seat bottom back to the fully upright position.

Do not install a child seat in a center facing jump seat.

Center facing jump seat (4 door SuperCab)(if equipped)

To open, pull seat assembly down, then raise seatback.

To stow the seat, fold seat back down and raise seat assembly to the fully upright position.



Do not install a child seat in a center facing jump seat.

SAFETY RESTRAINTS

Safety restraints precautions

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

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

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

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

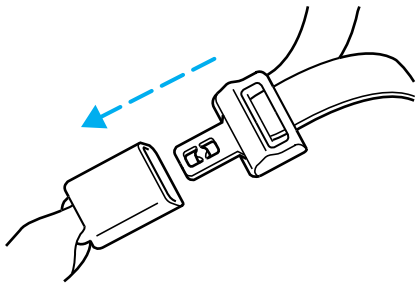
It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone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

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.

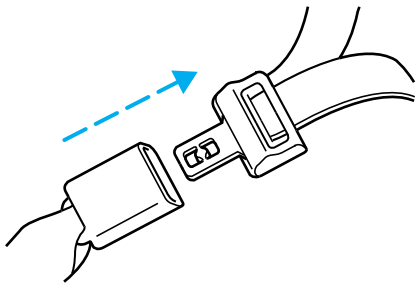
On four-door SuperCab vehicles, do not open the rear door when the rear seat belt is still buckled.

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

Vehicle sensitive mode

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

Automatic locking mode

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt.

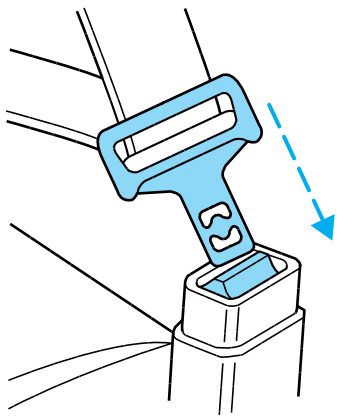
The automatic locking mode is not available on the driver safety belt.

When to use the automatic locking mode

- When a tight lap/shoulder fit is desired.
- **Anytime** a child safety seat is installed in a passenger front or outboard rear seating position (if equipped). 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 extracted.

- Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the automatic locking mode.

How to disengage the automatic locking mode

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.

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

After any vehicle collision, the seat belt system at all outboard seating positions (except driver, which has no “automatic locking retractor” feature) must be checked by a qualified technician to verify that the “automatic locking retractor” feature for child seats is still functioning properly, in addition to other checks for proper seat belt system function.

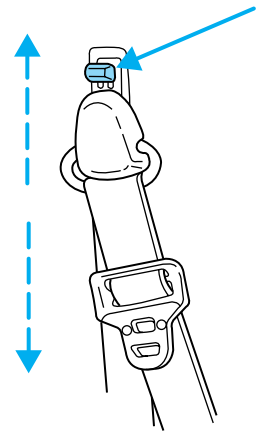
BELT AND RETRACTOR ASSEMBLY MUST BE REPLACED if the seat belt assembly “automatic locking retractor” feature or any other seat belt function is not operating properly when checked according to the procedures in Workshop Manual.

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

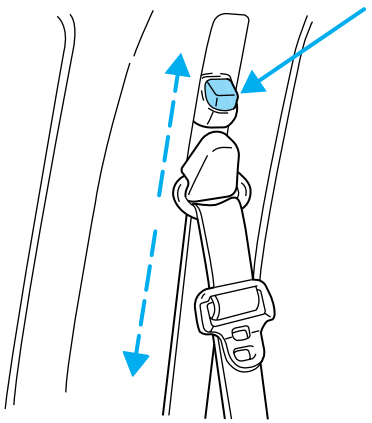
Front safety belt height adjustment

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

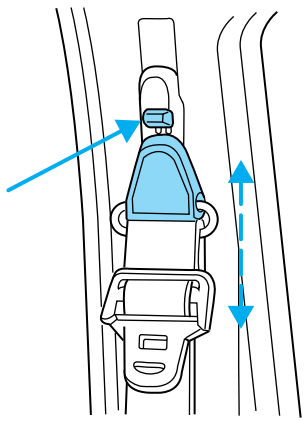
- Regular Cab and 4–door Super Cab



- 2–door SuperCab



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



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

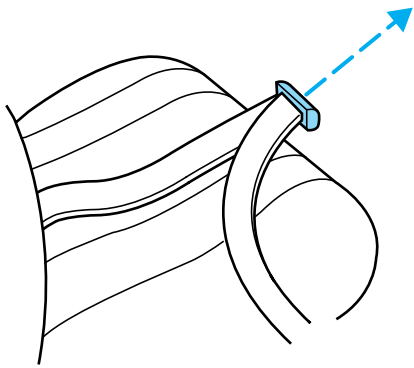
Lap belts

Adjusting the front center seat lap belt (if equipped)

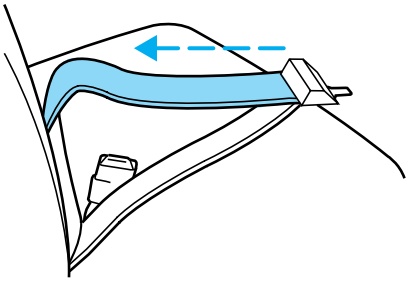
The lap belt does not adjust automatically.

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

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.



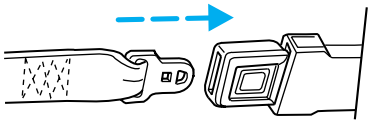
Shorten and fasten the belt when not in use.



Adjusting the rear center facing jump seat lap belt (if equipped)

The lap belts for rear center facing jump seat occupants have automatic retractors for the belt tongue and a fixed position buckle.

To fasten the belt, pull the belt all the way across your hips and insert the tongue into the buckle on your rear door until you hear a snap and feel it latch. Make sure the buckle is securely fastened by pulling on the tongue.



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

If you need to lengthen the belt, unfasten it and repeat the procedure above.

To unfasten the belt, push in the release button prior to opening the rear door.

Safety belt extension assembly

If the safety belt assembly is too short, even when fully extended, 20 cm (8 inches) can be added to the safety belt assembly by adding a safety belt extension assembly (part number 611C22). Safety belt extension assemblies can be obtained from your dealer at no cost.

Use only extensions manufactured by the same supplier as the safety belt. Manufacturer identification is located at the end of the webbing on the label. Also, use the safety belt extension only if the safety belt is too short for you when fully extended. Do not use extensions to change the fit of the shoulder belt across the torso.

Safety belt warning light and indicator chime

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

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 for one to two minutes and the warning chime sounds for four to eight 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.

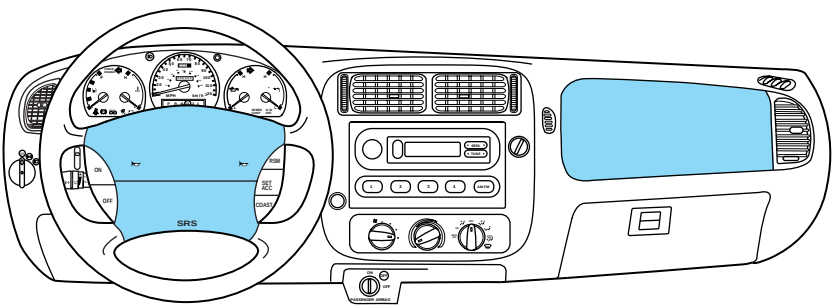
Safety belt maintenance

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, wears or cuts, replacing if necessary. All safety belt assemblies, including retractors, buckles, front seat belt buckle assemblies (slide bar)(if equipped), shoulder belt height adjusters (if equipped), child safety seat tether bracket assemblies (if equipped), and attaching hardware, should be inspected after a collision. Ford recommends that all safety belt assemblies used in vehicles involved in a collision be replaced. However, if the collision was minor and a qualified technician finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

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

Refer to *Cleaning and maintaining the safety belts* in the *Maintenance and care* section.

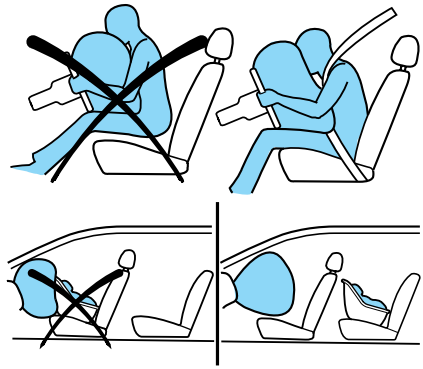
AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



Important supplemental restraint system (SRS) precautions

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

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



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

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

NHTSA recommends a minimum distance of at least 25 cm (ten [10] inches) between an occupant's chest and the air bag module.

Steps you can take 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 air bag module. Placing objects on or over the air bag inflation area may cause those objects to be propelled by the air bag into your face and torso causing serious injury.

Do not attempt to service, repair, or modify the Air Bag Supplemental Restraint System or its fuses. See your Ford or Lincoln-Mercury dealer.

Children and air bags

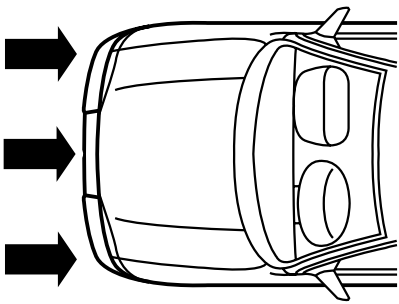
For additional important safety information, read all information on safety restraints in this guide.

Children must always be properly restrained. Failure to follow these instructions may increase the risk of injury in a collision.

An infant in a rear-facing seat faces a high risk of serious or fatal injuries from a deploying passenger air bag. Rear facing infant seats should NEVER be placed in the front seats, unless the passenger air bag is turned off. See *Passenger air bag ON/OFF switch*.

How does the air bag supplemental restraint system work?

The air bag SRS is designed to activate when the vehicle sustains sufficient longitudinal deceleration.



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

The air bags inflate and deflate rapidly upon activation. After air bag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (e.g., baking soda) that result from the combustion process that inflates the air bag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic.

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

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

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

The SRS consists of:

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

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

Determining if the system is operational

The SRS uses readiness lights in the instrument cluster and the passenger air bag deactivate switch or a tone to indicate the condition of the system. Refer to the *Air bag readiness* section in the *Instrumentation* chapter or *Passenger air bag deactivate switch* section in this chapter. Routine maintenance of the air bag is not required.

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

- The readiness lights will either flash or stay lit.
- The readiness lights will not illuminate immediately after ignition is turned on.

- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem and light are repaired.

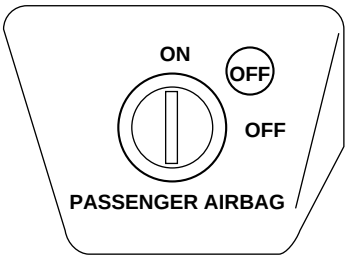
If any of these things happen, even intermittently, have the SRS serviced at your dealership or by a qualified technician immediately. Unless serviced, the system may not function properly in the event of a collision.

Disposal of air bags and air bag equipped vehicles

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

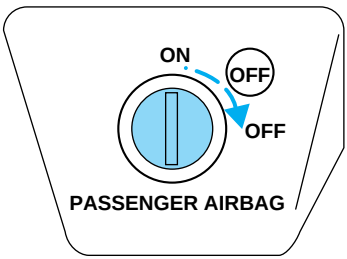
Passenger air bag ON/OFF switch

An air bag ON/OFF switch has been installed in this vehicle. Before driving, *always* look at the face of the switch to be sure the switch is in the proper position in accordance with these instructions and warnings. Failure to put the switch in a proper position can increase the risk of serious injury or death in a collision.



Turning the passenger air bag off

1. Insert the ignition key, turn the switch to OFF and remove the key.
2. When the ignition is turned to the ON position the OFF light illuminates briefly, momentarily shuts off and then turns back on. This indicates that the passenger air bag is deactivated.



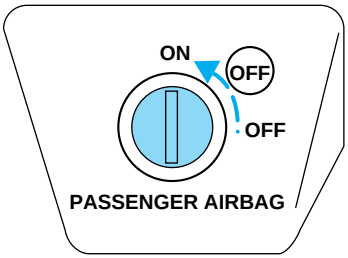
If the light fails to illuminate when the passenger air bag ON/OFF switch is in the OFF position and the ignition switch is in ON, have the passenger air bag switch serviced at your Ford or Lincoln-Mercury dealer immediately.

In order to avoid inadvertent deployment of the passenger air bag, always remove the ignition key from the passenger air bag ON/OFF switch.

Turning the passenger air bag back on

The passenger air bag remains OFF until you turn it back ON.

1. Insert the ignition key and turn the switch to ON.
2. The OFF light will briefly illuminate when the ignition is turned to ON. This indicates that the passenger air bag is operational.



If the light is illuminated when the passenger air bag ON/OFF switch is in the ON position and the ignition switch is in ON, have the passenger air bag ON/OFF switch serviced at your Ford or Lincoln-Mercury dealer immediately.

The passenger side air bag should always be ON (the air bag OFF light should *not* be illuminated) unless the passenger is a person who meets the requirements stated either in Category 1, 2 or 3 of the NHTSA/Transport Canada deactivation criteria which follows.

The safety belts for the driver and right front passenger seating positions have been specifically designed to function together with the air bags in certain types of crashes. When you turn OFF your air bag, you not only lose the protection of the air bag, you also may reduce the effectiveness of your safety belt system, which was designed to work with the air bag. If you are not a person who meets the requirements stated in the NHTSA/Transport Canada deactivation criteria turning OFF the air bag can increase the risk of serious injury or death in a collision.

Always transport children who are 12 and younger in the rear seat. Always use safety belts and child restraints properly. If a child in a rear facing infant seat must be transported in front, the passenger air bag *must* be turned OFF. This is because the back of the infant seat is too close to the inflating air bag and the risk of a fatal injury to the infant when the air bag inflates is substantial.

The vast majority of drivers and passengers are much safer with an air bag than without. To do their job and reduce the risk of life threatening injuries, air bags must open with great force, and this force can pose a potentially deadly risk in some situations, particularly when a front seat occupant is not properly buckled up. The most effective way to reduce the risk of unnecessary air bag injuries without reducing the overall safety of the vehicle is to make sure all occupants are properly restrained in the vehicle, especially in the front seat. This provides the protection of safety belts and permits the air bags to provide the additional protection they were designed to provide. If you choose to deactivate your air bag, you are losing the very significant risk reducing benefits of the air bag and you are also reducing the effectiveness of the safety belts, because safety belts in modern vehicles are designed to work as a safety system with the air bags.

Read all air bag Warning labels in the vehicle as well as the other important air bag instructions and Warnings in this Owner's Guide.

NHTSA deactivation criteria (excluding Canada)

1. **Infant.** An infant (less than 1 year old) must ride in the front seat because:

- the vehicle has no rear seat;
- the vehicle has a rear seat too small to accommodate a rear-facing infant seat; or
- the infant has a medical condition which, according to the infant's physician, makes it necessary for the infant to ride in the front so that the driver can constantly monitor the child's condition.

2. **Child age 1 to 12.** A child age 1 to 12 must ride in the front seat because:

- the vehicle has no rear seat;
- although children ages 1 to 12 ride in the rear seat(s) whenever possible, children ages 1 to 12 sometimes must ride in the front because no space is available in the rear seat(s) of the vehicle; or
- the child has a medical condition which, according to the child's physician, makes it necessary for the child to ride in the front seat so that the driver can constantly monitor the child's condition.

3. **Medical condition.** A passenger has a medical condition which, according to his or her physician:

- causes the passenger air bag to pose a special risk for the passenger; and
- makes the potential harm from the passenger air bag in a crash greater than the potential harm from turning OFF the air bag and allowing the passenger, even if belted, to hit the dashboard or windshield in a crash.

This vehicle has special energy management safety belts for the driver and/or right front passenger. These particular belts are specifically designed to work with air bags to help reduce the risk of injury in a collision. The energy management safety belt is designed to give or release additional belt webbing in some accidents to reduce concentration of force on an occupant's chest and reduce the risk of certain bone fractures and injuries to underlying organs. In a crash, if the air bag is turned OFF, this energy management safety belt might permit the person wearing the belt to move forward enough to incur a serious or fatal injury. The more severe the crash, and the heavier the occupant, the greater the risk is. Be sure the air bag is turned ON for any person who does not qualify under the NHTSA deactivation criteria.

Transport Canada deactivation criteria (Canada Only)

1. **Infant:** An infant (less than 1 year old) must ride in the front seat because:

- my vehicle has no rear seat;
- the rear seat in my vehicle cannot accommodate a rear-facing infant seat; or
- the infant has a medical condition which, according to the infant's physician, makes it necessary for the infant to ride in the front so that the driver can monitor the infant's condition.

2. **Child age 12 or under:** A child age 12 or under must ride in the front seat because:

- my vehicle has no rear seat;
- although children age 12 and under ride in the rear seat whenever possible, children age 12 and under have no option but to sometimes ride in the front because rear seat space is insufficient; or

- the child has a medical condition that, according to the child's physician, makes it necessary for the child to ride in the front seat so that the driver can monitor the child's condition.

3. **Medical condition:** A passenger has a medical condition that, according to his or her physician:

- poses a special risk for the passenger if the air bag deploys; and
- makes the potential harm from the passenger air bag in a crash greater than the potential harm from turning OFF the air bag and experiencing a crash without the protection offered by the air bag

This vehicle has special energy management safety belts for the driver and/or right front passenger. These particular belts are specifically designed to work with air bags to help reduce the risk of injury in a collision. The energy management safety belt is designed to give or release additional belt webbing in some accidents to reduce concentration of force on an occupant's chest and reduce the risk of certain bone fractures and injuries to underlying organs. In a crash, if the air bag is turned OFF, this energy management safety belt might permit the person wearing the belt to move forward enough to incur a serious or fatal injury. The more severe the crash, and the heavier the occupant, the greater the risk is. Be sure the air bag is turned ON for any person who does not qualify under the Transport Canada deactivation criteria.

SAFETY RESTRAINTS FOR CHILDREN

See the following sections for directions on how to properly use safety restraints for children. Also see *Air Bag Supplemental Restraint System (SRS)* in this chapter for special instructions about using air bags.

Important child restraint precautions

You are required by law to use safety restraints for children in the U.S. and Canada. If small children ride in your vehicle (generally children who are four years old or younger and who weigh 18 kg [40 lbs] or less), you must put them in safety seats made especially for children. Check your local and state or provincial laws for specific requirements regarding the safety of children in your vehicle.

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

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

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

Do not install a child seat in a center facing jump seat.

Children and safety belts

If the child is the proper size, restrain the child in a safety seat.

Children who are too large for child safety seats (as specified by your child safety seat manufacturer) should always wear safety belts.

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

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

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

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

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

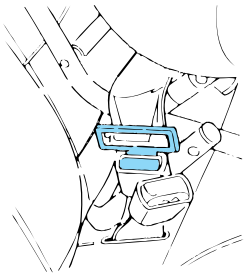
seat cushion. You may wish to discuss the special needs of your child with your pediatrician.

SAFETY SEATS FOR CHILDREN

Child and infant or child safety seats

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

When installing a child safety seat:



- Review and follow the information presented in the *Air Bag Supplemental Restraint System* section in this chapter.
- Use the correct safety belt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.

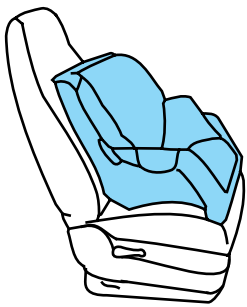
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode* (passenger side front and outboard rear seating positions)(if equipped).

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

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.

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

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

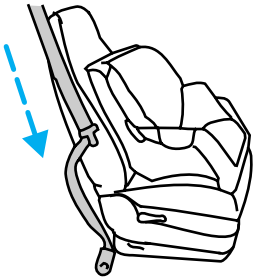


An air bag can kill or injure a child in a child seat. If you must use a forward-facing child seat in the front seat, move seat all the way back.

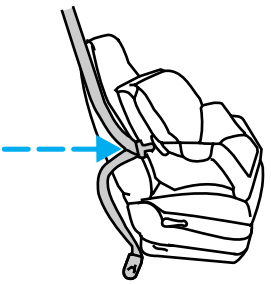
An air bag can kill or injure a child in a child seat. Child seats should never be placed in the front seats, unless passenger air bag switch is turned off, See **Passenger air bag deactivation switch.**

Rear facing child seats should NEVER be placed in the front seats.

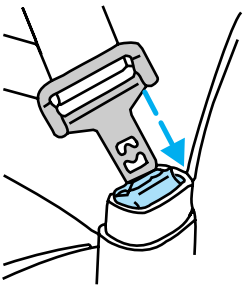
2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



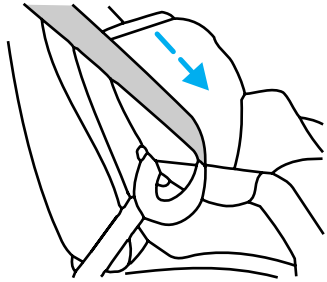
3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



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

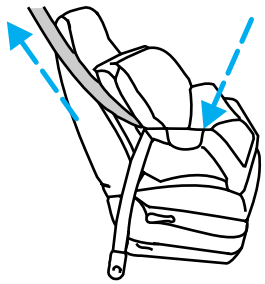


5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is extracted and a click is heard.



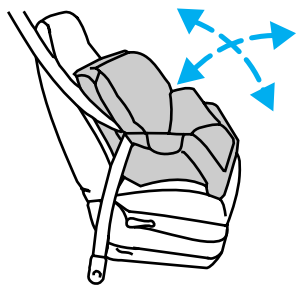
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

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



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

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



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

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

Attaching safety seats with tether straps

Some manufacturers make safety seats that include a tether strap that goes over the back of the vehicle seat and attaches to an anchoring point. Other manufacturers offer the tether strap as an accessory. Contact the manufacturer of your child safety seat for information about ordering a tether strap.

In SuperCabs equipped with Center Facing Jump Seats, the tether strap anchor bracket should be installed only at the center of the cab's back panel with the child seat in the front center seating position. Installing an anchor bracket at the right rear of the cab may increase risk of injury to an occupant of the right rear center facing jump seat in the event of a collision or a sudden stop. If a tether child seat is installed in the right front seating position, secure the tether strap to the webbing of the buckled right rear lap belt.

You can attach a tether strap anchor bracket to the cab inner back panel by using a tether anchor kit (613D20) available at no charge from any Ford dealer.

Do not install a child seat in a center facing jump seat.

Tether anchorage hardware

Tether anchorage hardware kits (part number 613D20) including instructions, may be obtained at no charge from any Ford or Lincoln-Mercury dealer.

Tighten the anchor according to specifications. Otherwise, the safety seat may not be properly secured and the child may be injured in a sudden stop or collision.

PREPARING TO START YOUR VEHICLE

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

When starting a fuel-injected engine, avoid pressing the accelerator before or during starting. Only use the accelerator when you have difficulty starting the engine. For more information on starting the vehicle, refer to *Starting the engine* in this chapter.

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

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

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

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

Important safety precautions

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

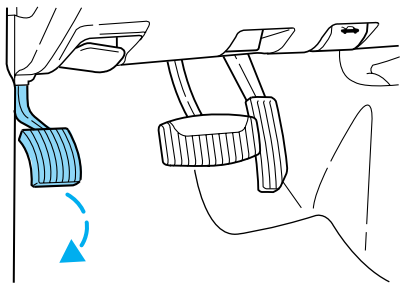
Before starting the vehicle:

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

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

If starting a vehicle with an automatic transmission:

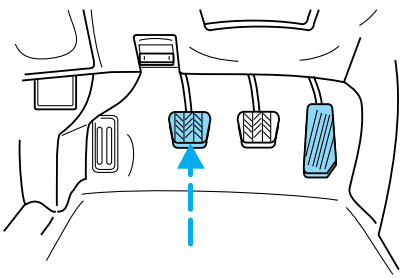
- Make sure the parking brake is set.



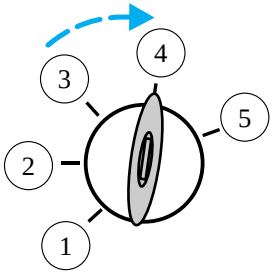
- Make sure the gearshift is in P (Park).

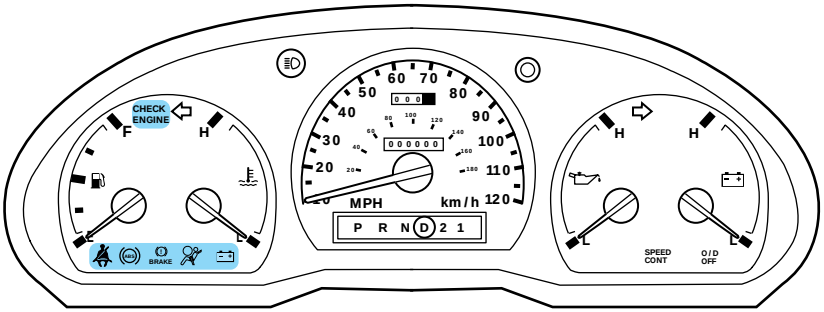
If starting a vehicle with a manual transmission:

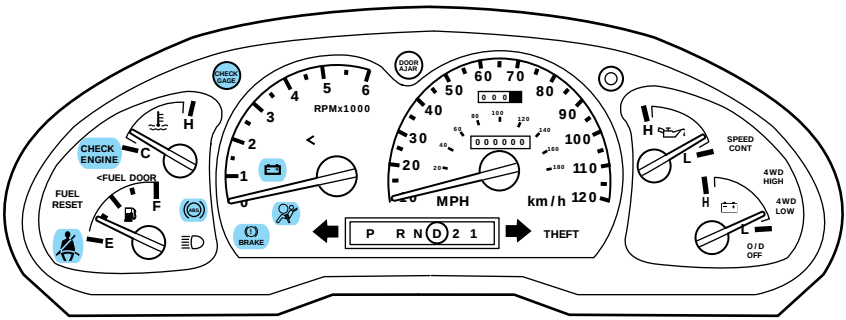
- Make sure the parking brake is set.
- Push the clutch pedal to the floor.



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





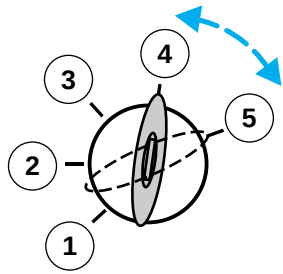


Make sure the corresponding lights illuminate briefly. If a light fails to illuminate, have the vehicle serviced.

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

STARTING THE ENGINE

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



2. If the temperature is above –12°C (10°F) and the engine does not start within five seconds on the first try, turn the key to OFF, wait ten seconds and try again.

3. If the temperature is below -12°C (10°F) and the engine does not start in fifteen seconds on the first try, turn the key OFF and wait ten seconds and try again. If the engine does not start in two attempts, depress the accelerator and start the engine while holding the accelerator down to the floor. Release the accelerator when the engine starts.

4. After idling for a few seconds, apply the brake and release the parking brake.

Using the engine block heater (if equipped)

An engine block heater warms the engine coolant, which improves starting, warms up the engine faster and allows the heater-defroster system to respond quickly. Use of an engine block heater is strongly recommended if you live in a region where temperatures reach -23°C (-10°F) or below. Your engine block heater also comes with a battery warmer. The battery warmer wraps around the battery and keeps the battery warm when the engine block heater is plugged in.

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

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

Guarding against exhaust fumes

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

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

Have the exhaust and body ventilation systems checked whenever:

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

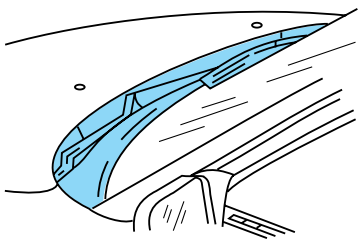
Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm.

Important ventilating information

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

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

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



BRAKES

Your service brakes are self-adjusting. Refer to the “Service Guide” for scheduled maintenance.

Occasional brake noise is normal and often does not indicate a performance concern with the vehicle's brake system. In normal operation, automotive brake systems may emit occasional or intermittent squeal or groan noises when the brakes are applied. Such noises are usually heard during the first few brake applications in the morning; however, they may be heard at any time while braking and can be aggravated by environmental conditions such as cold, heat, moisture, road dust, salt or mud. If a “metal-to-metal,” “continuous grinding” or “continuous squeal” sound is present while braking, the brake linings may be worn-out and should be inspected by a qualified service technician.

Rear anti-lock brake system (RABS)

Rear Anti-lock Brake System (RABS) is standard equipment on this vehicle. RABS is designed to help you maintain directional stability in emergency stopping situations. With RABS, the rear brakes are kept from locking during panic stops; however, the front wheels can lock because they are not controlled by RABS.

A clicking noise and slight pedal pulsation during RABS braking events indicates the RABS is functioning. Pedal pulsation coupled with clicking noise while braking under panic conditions on loose gravel, wet or snowy roads is normal and indicates proper functioning of the vehicle's RABS. If the vehicle has continuous vibration or shudder in the steering wheel while braking, the vehicle should be inspected by a qualified service technician.

The RABS operates by detecting the onset of rear wheel lockup during brake applications and compensating for this tendency.

RABS warning lamp

The (ABS) warning lamp in the instrument cluster illuminates if a RABS fault is detected. Have your vehicle serviced as soon as possible.

Normal braking is still effective unless the BRAKE warning lamp is also illuminated.

(!) BRAKE

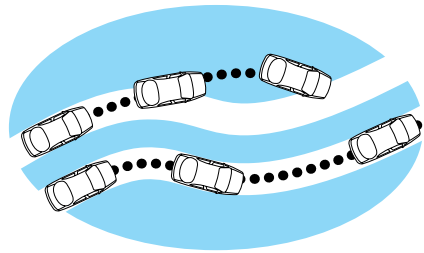
Using RABS

- In an emergency, applying full pressure may cause the front wheels to lock. **If the front brakes lock, the vehicle cannot be steered.** You should apply the brakes with steadily increasing force, as if "squeezing" the brakes. If you feel the front wheels begin to lock, momentarily release the pedal and repeat the "squeeze" technique.
- We recommend that you familiarize yourself with how the RABS performs. However, avoid unnecessary risks.

Four-wheel anti-lock brake system (ABS) (if equipped)

On vehicles equipped with an anti-lock braking system (ABS), a noise from the hydraulic pump motor and pulsation in the pedal may be observed during ABS braking events. Pedal pulsation coupled with noise while braking under panic conditions or on loose gravel, bumps, wet or snowy roads is normal and indicates proper functioning of the vehicle's anti-lock brake system. If the vehicle has continuous vibration or shudder in the steering wheel while braking, the vehicle should be inspected by a qualified service technician.

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



ABS warning lamp

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

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

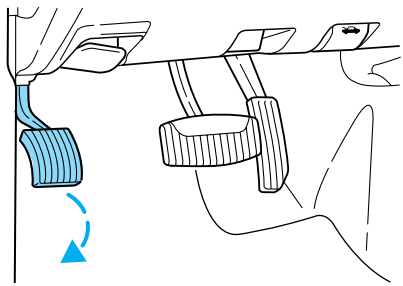
(!)
BRAKE

Using ABS

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

Parking brake

Apply the parking brake whenever the vehicle is parked. To set the parking brake, press the parking brake pedal down until the pedal stops.



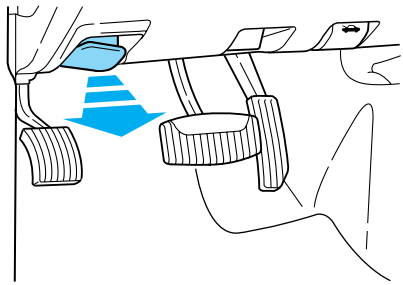
The BRAKE warning lamp in the instrument cluster illuminates and remains illuminated (when the ignition is turned ON) until the parking brake is released.

(!)
BRAKE

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

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

Pull the release lever to release the brake. Driving with the parking brake on will cause the brakes to wear out quickly and reduce fuel economy.



STEERING

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

To prevent damage to the power steering pump:

- Never hold the steering wheel to the extreme right or the extreme left for more than a few seconds when the engine is running.
- Do not operate the vehicle with a low power steering pump fluid level.

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

If the steering wanders or pulls, the condition could be caused by any of the following:

- underinflated tire(s) on any wheel(s)
- high crown in center of road
- high crosswinds
- wheels out of alignment
- loose or worn components in steering linkage

TRANSMISSION OPERATION

Brake-shift interlock

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

If you cannot move the gearshift out of P (Park) with the brake pedal depressed:

1. Apply the parking brake, turn ignition key to LOCK, then remove the key.

2. Insert the key and turn it to OFF. Apply the brake pedal and shift to N (Neutral).

3. Start the vehicle.

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

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

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

Do not rock the vehicle for more than a few minutes. The transmission and tires may be damaged or the engine may overheat.

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

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

Driving with a 4–speed automatic transmission (if equipped)

Understanding gearshift positions

Pull the gearshift lever towards you and downward to move the automatic gearshift.

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

P (Park)

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

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

Never leave your vehicle unattended while it is running.

R (Reverse)

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

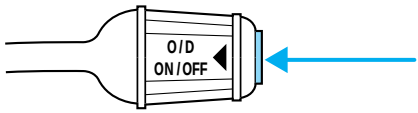
N (Neutral)

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

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.



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

O/D
OFF

Drive – Not shown on the display. Activate by pressing the transmission control switch on the end of the gearshift lever with the gearshift in the D position. The O/D OFF indicator will illuminate on the instrument cluster. Transmission operates in gears one through three. D (Drive) provides more engine braking than D (Overdrive) and is useful when:

- driving with a heavy load
- towing a trailer up or down steep hills
- additional engine braking is desired. If towing a trailer, refer to *Driving while you tow* in the *Trailer Towing* chapter.

To return to D (Overdrive) mode, press the transmission control switch. The O/D OFF indicator will no longer be illuminated.

Each time the vehicle is started, the transmission will automatically return to normal overdrive mode.

Every time the vehicle is shut off and restarted, you must press the transmission control switch to cancel overdrive operation if driving in overdrive is not desired.

2 (Second)

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

1 (First)

Use 1 (Low) to provide maximum engine braking on steep downgrades. Upshifts can be made by shifting to 2 (Second) or to D (Overdrive). Selecting 1 (Low) at higher speeds causes the transmission to shift to a lower gear, and will shift to 1 (Low) after vehicle decelerates to the proper speed.

Driving with a 5–speed automatic transmission (if equipped)

Understanding gearshift positions

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

Pull the gearshift lever towards you and downward to move the automatic gearshift.

P (Park)

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

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

Never leave your vehicle unattended while it is running.

R (Reverse)

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

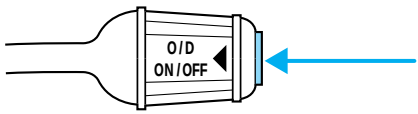
N (Neutral)

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

Ⓓ *(Overdrive)*

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

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



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

O/D
OFF

Drive – Not shown on the display. Activate by pressing the transmission control switch on the end of the gearshift lever with the gearshift in the Ⓓ position. The TCIL will illuminate on the instrument cluster. Transmission operates in gears one through four. Ⓓ (Drive) provides more engine braking than Ⓓ (Overdrive) and is useful whenever driving conditions (i.e., city traffic, hilly terrain, etc.) cause the transmission to excessively shift between Ⓓ (Overdrive) and Ⓓ (Drive). Also deactivate Ⓓ (Overdrive) when:

- driving with a heavy load
- towing a trailer up or down steep hills
- additional engine braking is desired. If towing a trailer, refer to *Driving while you tow* in the *Trailer Towing* chapter.

To return to Ⓓ (Overdrive) mode, press the transmission control switch. The TCIL will no longer be illuminated.

Each time the vehicle is started, the transmission will automatically return to normal overdrive mode.

2 (Second)

Use 2 (Second) to start-up on slippery roads or to provide additional engine braking on downgrades. Transmission operates in third gear.

1 (First)

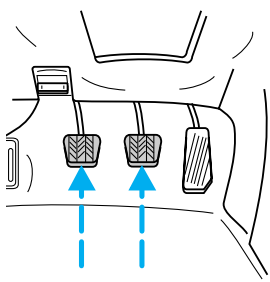
Use 1 (First) to provide maximum engine braking on steep downgrades. Upshifts can be made by shifting to 2 (Second) or to D (Overdrive). Selecting 1 (Low) at higher speeds causes the transmission to shift to a lower gear and will shift to 1 (First) after the vehicle decelerates to the proper vehicle speed.

Forced Downshifts

To gain acceleration in D (Overdrive) or Drive (O/D OFF) when passing another vehicle, push the accelerator to the floor. The transmission will downshift to the appropriate gear: fourth, third, second or first gear.

Driving a manual transmission (if equipped)

Using the clutch



Vehicles equipped with a manual transmission have a starter interlock that prevents cranking the engine unless the clutch pedal is fully depressed.

When starting a vehicle with a manual transmission:

1. Hold down the brake pedal.
2. Depress the clutch pedal.
3. Put the gearshift lever in N (Neutral).
4. Crank the engine and let it idle for a few seconds.

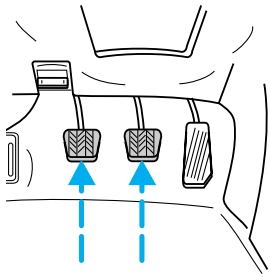
- Put the gearshift in 1 (First) or R (Reverse).

5. Release the clutch slowly while pressing gradually down on the accelerator pedal.

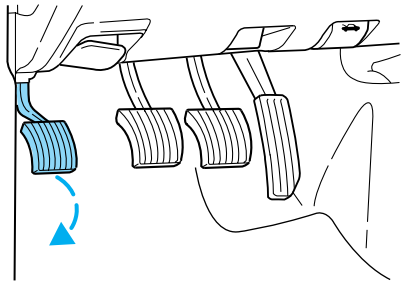
- Do not drive with your foot resting on the clutch pedal. Do not use the clutch to hold your vehicle at a standstill while waiting on a hill. These actions may reduce clutch life.

Parking

1. Apply the brake and shift into N (Neutral).



2. Engage the parking brake.



3. Shift into 1 (First).
4. Turn the ignition to Off.

Do not park your vehicle in Neutral, it may move unexpectedly and injure someone. Use 1 (First) gear and set the parking brake fully.

Recommended shift speeds

Upshifts when accelerating (for best fuel economy)		
Shift from:	Transfer case position (if equipped)	
	4H	4L
1 - 2	14 km/h (10 mph)	5 km/h (4 mph)
2 - 3	32 km/h (22 mph)	11 km/h (9 mph)
3 -4	50 km/h (33 mph)	19 km/h (13 mph)
4 - 5 (Overdrive)	71 km/h (41 mph)	27 km/h (17 mph)
Upshifts when cruising (recommended for best fuel economy)		
Shift from:	Transfer case position (if equipped)	
	4H	4L
1 -2	16 km/h (10 mph)	6 km/h (4 mph)
2 - 3	26 km/h (19 mph)	10 km/h (8 mph)
3 - 4	43 km/h (28 mph)	16 km/h (12 mph)
4 - 5 (Overdrive)	68 km/h (40 mph)	26 km/h (16 mph)
Maximum downshift speeds		
Shift from:	Transfer case position (if equipped)	
	4H	4L
5 (Overdrive) - 4	88 km/h (55 mph)	34 km/h (22 mph)
4 - 3	72 km/h (45 mph)	34 km/h (18 mph)
3 - 2	56 km/h (35 mph)	21 km/h (14 mph)
2 - 1	32 km/h (20 mph)	11 km/h (8 mph)

Reverse

Ensure that the vehicle is at a complete stop before shifting into R (Reverse). Failure to do so may damage the transmission.

Put the gearshift into N and wait at least several seconds before shifting into R.

You can shift into R (Reverse) only by moving the gearshift from left of 3 (Third) and 4 (Fourth) gears before you shift into R (Reverse). This is a special lockout feature that protects you from accidentally shifting into R (Reverse) when you downshift from 5 (Overdrive).

FOUR-WHEEL DRIVE (4WD) OPERATION (IF EQUIPPED)

When Four–wheel drive (4WD) is engaged, power is supplied to all four wheels through a transfer case. 4WD power can be selected when additional driving power is desired.

If equipped with the Electronic Shift 4WD System, and the instrument panel control is moved to 4WD Low while the vehicle is moving, the system will not engage and no damage will occur to the 4WD system.

All utility-type vehicles and 4WD vehicles have special design and equipment features to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them higher centers of gravity than ordinary passenger cars.

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 or abrupt maneuvers in these vehicles.

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.

4WD system indicator lights

The 4WD system indicator lights illuminate only under the following conditions. If these lights illuminate during normal driving, have your vehicle serviced.

- **4WD HIGH** -illuminates when the ignition is turned on or when 4H (4WD High) is engaged.

- **4WD LOW** –illuminates when the ignition is turned on or when 4L (4WD Low) is engaged.

Using the electronic shift 4WD system (if equipped)

Positions of the electronic shift system

2WD (2WD High) – Power to rear axle only.

4X4 HIGH (4WD High) – Power delivered to front and rear axles for increased traction.

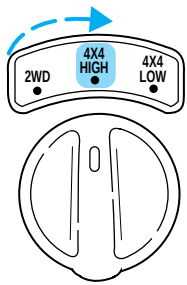
4X4 LOW (4WD Low) – Power to front and rear axles at low speeds.

Shifting from 2WD (2WD high) to 4X4 HIGH (4WD high)

Move the 4WD control to the 4X4 HIGH position.

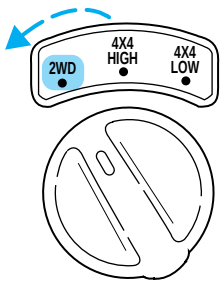
At temperatures below 0°C (32°F), shifts from 2WD to 4X4 HIGH should not be performed above 72 km/h (45 mph).

- Do not shift into 4X4 HIGH with the rear wheels slipping.



Shifting from 4X4 HIGH (4WD high) to 2WD (2WD high)

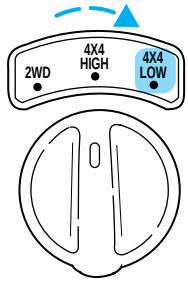
Move the 4WD control to 2WD position at any forward speed. You **do not** need to put the gearshift in R (Reverse) to disengage your front hubs.



Shifting from 2WD (2WD high) to 4X4 LOW (4WD low)

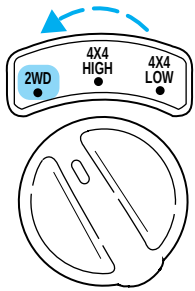
1. Bring the vehicle to a stop.
2. Depress the brake.
3. Place the gearshift in N (Neutral) (automatic transmission) or depress the clutch (manual transmission).

4. Move the 4WD control to the 4X4 LOW position.



Shifting from 4X4 LOW (4WD low) to 2WD (2WD high)

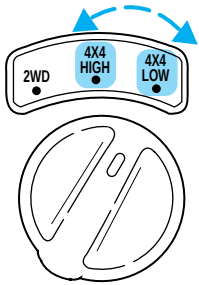
1. Bring the vehicle to a stop.
2. Depress the brake.
3. Place the gearshift in N (Neutral) (automatic transmission) or depress the clutch (manual transmission).
4. Move the 4WD control to the 2WD position.



Shifting between 4X4 HIGH (4WD high) and 4X4 LOW (4WD low)

1. Bring the vehicle to a stop.
2. Depress the brake.
3. Place the gearshift in N (Neutral) (automatic transmission) or depress the clutch (manual transmission).

4. Move the 4WD control to the 4X4 HIGH or 4X4 LOW position.



Driving off-road with 4WD

Your vehicle is specially equipped for driving on sand, snow, mud and rough terrain and has operating characteristics that are somewhat different from conventional vehicles, both on and off the road.

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. For more information on driving off-road, read the “Four Wheeling” supplement in your owner’s portfolio.

If your vehicle gets stuck

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

Do not rock the vehicle for more than a few minutes. The transmission and tires may be damaged or the engine can overheat.

Do not spin the wheels at over 56 km/h (35 mph). The tires may fail and injure a passenger or bystander.

Sand

When driving over sand, try to keep all four wheels on the most solid area of the trail. Do not reduce the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid spinning the wheels.

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.

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.

After driving through mud, clean off residue stuck to rotating driveshafts, halfshafts and tires. Excess mud stuck on tires and rotating driveshafts causes an imbalance that could damage drive components.

If the transmission, transfer case or front axle are submerged in water, their fluids should be checked and changed, if necessary.

Water intrusion into the transmission may damage the transmission.

Replace rear axle lubricant any time the axle has been submerged in water. The rear axle does not normally require a lubricant change for the life of the vehicle. Rear axle lubricant quantities are not to be checked or changed unless a leak is suspected or repair is required.

Driving on hilly or sloping terrain

When driving on a hill, avoid driving crosswise or turning on steep slopes. You could lose traction and slip sideways. Drive straight up, straight down or avoid the hill completely. Know the conditions on the other side of a hill before driving over the crest.

When climbing a steep 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.

When descending a steep hill, avoid sudden braking. Shift to a lower gear when added engine braking is desired.

When speed control is on and you are driving uphill, your vehicle speed may drop considerably, especially if you are carrying a heavy load.

If vehicle speed drops more than 16 km/h (10 mph), the speed control will cancel automatically. Resume speed with accelerator pedal.

If speed control cancels after climbing the hill, reset speed by pressing and holding the SET ACCEL button to resume speeds over 50 km/h (30 mph).

Automatic transmissions may shift frequently while driving up steep grades. Eliminate frequent shifting by shifting out of D (Overdrive) into D (Drive).

Driving on snow and ice

A 4WD vehicle has advantages over 2WD vehicles in snow and ice but can skid like any other vehicle.

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.

When braking, apply the brakes as you normally would. In order to allow the anti-lock brake system (ABS) to operate properly, keep steady pressure on the brake pedal.

Allow more stopping distance and drive slower than usual. Consider using one of the lower gears.

TRACTION-LOK AXLE (IF EQUIPPED)

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

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

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

DRIVING THROUGH WATER

Do not drive quickly through standing water, especially if the depth is unknown. Traction or brake capability may be limited and if the ignition system gets wet, your engine may stall. Water may also enter your engine's air intake and severely damage your engine.

If driving through deep or standing water is unavoidable, proceed very slowly. Never drive through water that is higher than the bottom of the hubs.

Once through the water, always try the brakes. Wet brakes do not stop the vehicle as effectively as dry brakes. Drying can be improved by moving your vehicle slowly while applying light pressure on the brake pedal.

Driving through deep water where the transmission is submerged may allow water into the transmission and cause internal transmission damage.

VEHICLE LOADING

Before loading a vehicle, familiarize yourself with the following terms:

- **Base Curb Weight** : Weight of the vehicle including any standard equipment, fluids, lubricants, etc. It does not include passengers or aftermarket equipment.
- **Payload** : Combined maximum allowable weight of cargo, passengers and optional equipment. The payload equals the gross vehicle weight rating minus base curb weight.
- **GVW (Gross Vehicle Weight)** : Base curb weight plus payload weight. The GVW is not a limit or a specification.
- **GVWR (Gross Vehicle Weight Rating)** : Maximum total weight of the base vehicle, passengers, optional equipment and cargo. The GVWR is specific to each vehicle and is listed on the Safety Compliance Label on the driver's door pillar.
- **GAWR (Gross Axle Weight Rating)** : Carrying capacity for each axle system. The GAWR is specific to each vehicle and is listed on the Safety Compliance Label on the driver's door pillar.

- **GCWR (Gross Combined Weight Rating)** : Maximum combined weight of towing vehicle (including passengers and cargo) and the trailer. The GCWR indicates the maximum loaded weight that the vehicle is designed to tow.
- **Maximum Trailer Weight Rating** : Maximum weight of a trailer the vehicle is permitted to tow. The maximum trailer weight rating is determined by subtracting the vehicle curb weight for each engine/transmission combination, any required option weight for trailer towing and the weight of the driver from the GCWR for the towing vehicle.
- **Maximum Trailer Weight** : maximum weight of a trailer the loaded vehicle (including passengers and cargo) is permitted to tow. It is determined by subtracting the weight of the loaded trailer towing vehicle from the GCWR for the towing vehicle.
- **Trailer Weight Range** : Specified weight range that the trailer must fall within that ranges from zero to the maximum trailer weight rating.

Remember to figure in the tongue load of your loaded trailer when figuring the total weight.

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

The Certification Label, found on the inside pillar of the driver's door, lists several important vehicle weight rating limitations. Before adding any additional equipment, refer to these limitations. If you are adding weight to the front of your vehicle, (potentially including weight added to the cab), the weight added should not exceed the Front Axle Reserve Capacity (FARC). Additional frontal weight may be added to the front axle reserve capacity provided you limit your payload in other ways (i.e. restrict the number of passengers or amount of cargo carried).

You may add equipment throughout your vehicle if the total weight added is equal to or less than the Total Axle Reserve Capacity (TARC) weight. You should NEVER exceed the Total Axle Reserve Capacity.

Always ensure that the weight of passengers, cargo and equipment being carried is within the weight limitations that have been established for your vehicle including both Gross Vehicle Weight and Front and Rear Gross Axle Weight Rating limits. Under no circumstance should these limitations be exceeded. Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle and/or personal injury.

Calculating the load your vehicle can carry/tow

1. Use the appropriate maximum gross combined weight rating (GCWR) chart to find the maximum GCWR for your type engine and rear axle ratio.

2. Weigh your vehicle as you customarily operate the vehicle without cargo. To obtain correct weights, try taking your vehicle to a shipping company or an inspection station for trucks.

3. Subtract your loaded vehicle weight from the maximum GCWR on the following charts. This is the maximum trailer weight your vehicle can tow and must fall below the maximum shown under maximum trailer weight on the chart.

TRAILER TOWING

Your vehicle may tow a class I, II or III 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.

Trailer towing table (4x2 manual transmission)				
Engine	**Rear axle ratio**	**Maximum GCWR-kg (lbs.)**	**Maximum trailer weight-kg (lbs.) (0-maximum)**	**Maximum frontal area of trailer-m^2 (ft^2)**
Regular Cab 4x2				
2.5L	3.73	2 177 (4 800)	0-726 (0-1 600)	Equal to frontal area of base vehicle
2.5L	4.10	2 177 (4 800)	0-726 (0-1 600)	Equal to frontal area of base vehicle
3.0L	3.73	2 721 (6 000)	0-1 234 (0-2 720)	4.64 (50)
4.0L	3.55	3 175 (7 000)	0-1 660 (0-3 660)	4.64 (50)
SuperCab 4x2				
2.5L	3.73	2 177 (4 800)	0-653 (0-1 440)	Equal to frontal area of base vehicle
2.5L	4.10	2 177 (4 800)	0-653 (0-1 440)	Equal to frontal area of base vehicle
3.0L	3.73	2 271 (6 000)	0-1 170 (0-2 580)	4.64 (50)
4.0L	3.55	3 175 (7 000)	0-1 597 (0-3 520)	4.64 (50)
For high altitude operation, reduce GCW by 2% per 300 meters (1 000 ft.) elevation.				
For definition of terms used in this table see *Vehicle Loading* earlier in this chapter.				
To determine maximum trailer weight designed for your particular vehicle, see *Calculating the load* earlier in this chapter.				
Maximum trailer weight is shown. The combined weight of the completed towing vehicle (including hitch, passengers and cargo) and the loaded trailer must not exceed the Gross Combined Weight Rating (GCWR).				

Trailer tow table (4x4 manual transmission)				
Engine	**Rear axle ratio**	**Maximum GCWR-kg (lbs.)**	**Maximum trailer weight-kg (lbs.)**	**Maximum frontal area of trailer-m^2 (ft^2)**
Regular Cab				

Trailer tow table (4x4 manual transmission)				
3.0L	3.73	2 721 (6 000)	0-1 089 (0-2 400)	4.64 (50)
3.0L	4.10	2 721 (6 000)	0-1 089 (0-2 400)	4.64 (50)
4.0L	3.73	3 175 (7 000)	0-1 524 (0-3 360)	4.64 (50)
4.0L	4.10	3175 (7 000)	0-1 524 (0-3 360)	4.64 (50)
SuperCab				
3.0L	3.73	2 721 (6 000)	0-1 016 (0-2 240)	4.64 (50)
3.0L	4.10	2 721 (6 000)	0-1 016 (0-2 240)	4.64 (50)
4.0L	3.73	3 175 (7 000)	0-1 451 (0-3 200)	4.64 (50)
4.0L	4.10	3 175 (7 000)	0-1 451 (0-3 200)	4.64 (50)
For high altitude operation, reduce GCW by 2% per 300 meters (1 000 ft.) of elevation.				
For definition of terms used in this table, see *Vehicle loading* earlier in this chapter.				
To determine maximum trailer weight designed for your vehicle, see *Calculating the load* earlier in this chapter.				
Maximum trailer weight is shown. The combined weight of the completed towing vehicle (including hitch, passengers and cargo) and the loaded trailer must not exceed the Gross Combined Weight Rating (GCWR).				

Trailer towing table (4x2 automatic transmission)				
Engine	**Rear axle ratio**	**Maximum GCWR-kg (lbs.)**	**Maximum trailer weight-kg (lbs.) (0-maximum)**	**Maximum frontal area of trailer-m^2 (ft^2)**
Regular Cab 4x2				
2.5L	4.10	2 494 (5 500)	0-1 016 (0-2 240)	Equal to frontal area of base vehicle
3.0L	3.73	3 401 (7 500)	0-1 814 (0-4 000)	4.64 (50)
4.0L	3.55	4 309 (9 500)	0-2 721 (0-6 000)	4.64 (50)
SuperCab 4x2				
3.0L	3.73	3 401 (7 500)	0-1 814 (0-4 000)	4.64 (50)
4.0L	3.55	4 309 (9 500)	0-2 712 (0-5 980)	4.64 (50)
For high altitude operation, reduce GCW by 2% per 300 meters (1 000 ft.) elevation.				
For definition of terms used in this table see *Vehicle Loading* earlier in this chapter.				
To determine maximum trailer weight designed for your particular vehicle, see *Calculating the load* earlier in this chapter.				
Maximum trailer weight is shown. The combined weight of the completed towing vehicle (including hitch, passengers and cargo) and the loaded trailer must not exceed the Gross Combined Weight Rating (GCWR).				

Trailer tow table (4x4 automatic transmission)				
Engine	**Rear axle ratio**	**Maximum GCWR-kg (lbs.)**	**Maximum trailer weight-kg (lbs.)**	**Maximum frontal area of trailer-m^2 (ft^2)**
Regular Cab				
3.0L	3.73	3 401 (7 500)	0-1 751 (0-3 860)	4.64 (50)
3.0L	4.10	3 628 (8 000)	0-1 978 (0-4 360)	4.64 (50)
4.0L	3.73	4 309 (9 500)	0-2 640 (0-5 820)	4.64 (50)
4.0L	4.10	4 309 (9 500)	0-2 640 (0-5 820)	4.64 (50)
SuperCab				
3.0L	3.73	3 401 (7 500)	0-1 678 (0-3 700)	4.64 (50)
3.0L	4.10	3 628 (8 000)	0-1 905 (0-4 200)	4.64 (50)
4.0L	3.73	4 309 (9 500)	0-2 567 (5 660)	4.64 (50)
4.0L	4.10	4 309 (9 500)	0-2 567 (0-5 660)	4.64 (50)
For high altitude operation, reduce GCW by 2% per 300 meters (1 000 ft.) of elevation.				
For definition of terms used in this table, see *Vehicle loading* earlier in this chapter.				
To determine maximum trailer weight designed for your vehicle, see *Calculating the load* earlier in this chapter.				
Maximum trailer weight is shown. The combined weight of the completed towing vehicle (including hitch, passengers and cargo) and the loaded trailer must not exceed the Gross Combined Weight Rating (GCWR).				

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

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

Preparing to tow

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

Hitches

For towing trailers up to 907 kg (2 000 lb), use a weight carrying hitch and ball which uniformly distributes the trailer tongue loads through the underbody structure. Use a frame-mounted weight distrubuting hitch for trailers over 907 kg (2 000 lb).

Do not install a single or multi-clamp type bumper hitch, or a hitch which attaches to the axle. Underbody mounted hitches are acceptable if they are installed properly. Follow the towing instructions of a reputable rental agency.

Whenever a trailer hitch and hardware are removed, make sure all mounting holes in the underbody are properly sealed to prevent noxious gases or water from entering.

Safety chains

Always connect the trailer's safety chains to the vehicle. 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 brakes are safe if installed properly and adjusted to the manufacturer's specifications. The trailer brakes must meet local and Federal regulations.

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

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

Trailer lamps

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

Using a step bumper

The optional step bumper is equipped with an integral hitch and requires only a ball with a 19 mm (3/4 inch) shank diameter. The bumper has a 907 kg (2 000 lb.) trailer weight and 91 kg (200 lb.) tongue weight capability.

The rated capcities (as shown in this guide) for trailer towing with the factory bumper are only valid when the trailer hitch ball is installed directly into the ball hole in the bumper. Addition of bracketry to either lower the ball hitch position or extend the ball hitch rearward will significantly increase the loads on the bumper and its attachments. This can result in the failure of the bumper or the bumper attachments. Use of any type of hitch extensions should be considered abuse.

Driving while you tow

Do not drive faster than 88 km/h (55 mph) when towing a trailer.

Speed control may shut off if you are towing on long, steep grades.

When towing a trailer:

- Use a lower gear when towing up or down steep hills. This will eliminate excessive downshifting and upshifting for optimum fuel economy and transmission cooling.
- Anticipate stops and brake gradually.

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

Servicing after towing

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

Trailer towing tips

- Practice turning, stopping and backing up in an area before starting on a trip to get the feel of the vehicle trailer combination. When turning, make wider turns so the trailer wheels will clear curbs and other obstacles.
- Allow more distance for stopping with a trailer attached.
- The trailer tongue weight should be 10–15% of the loaded trailer weight.
- After you have traveled 80 km (50 miles), thoroughly check your hitch, electrical connections and trailer wheel lug nuts.
- When stopped in traffic for long periods of time in hot weather, place the gearshift in P (Park) (automatic transmissions) or N (Neutral) (manual transmissions). This aids engine cooling and air conditioner efficiency.
- Vehicles with trailers should not be parked on a grade. If you must park on a grade, place wheel chocks under the trailer's wheels.

Launching or retrieving a boat

When backing down a ramp during boat launching or retrieval,

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

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

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

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

Recreational towing (all wheels on the ground)

Follow these guidelines for your specific powertrain combination to tow your vehicle with all four wheels on the ground (such as behind a recreational vehicle).

These guidelines are designed to ensure that your transmission is not damaged due to insufficient lubrication.

2WD (automatic transmissions)

- Release the parking brake and place the transmission in N (Neutral).
- Maximum speed is 56 km/h (35 mph).
- Maximum distance is 80 km (50 miles).

If a distance of 80 km (50 miles) or a speed of 56 km/h (35 mph) must be exceeded, you must disconnect the driveshaft. Mark the driveshaft and axle flanges to ensure proper position when reconnecting the driveshaft. Refer to the "Workshop Manual" for proper fastener torque specifications.

When disconnecting/installing the driveshaft, the parking brake must be set and the wheels blocked to ensure the vehicle does not roll.

With the driveshaft disconnected, the maximum speed is 88 km/h (55 mph) and there are no mileage restrictions.

See your dealer for help with disconnecting the driveshaft.

2WD (manual transmissions)

- Release the parking brake and place the transmission in the neutral position.
- Maximum speed is 56 km/h (35 mph).
- Maximum distance is limited by towing equipment manufacturer's recommendation.

4WD – Electronic shift transfer case

- Release the parking brake and place transmission in the neutral position.
- Shift the transfer case to 2H (2WD high).

Both the 4WD HIGH and 4WD LOW indicator lights in the instrument cluster will be off when the 4WD control is in 2WD.

For automatic transmissions, maximum speed is 56 km/h (35 mph) and maximum distance is 80 km (50 miles).

- If you must exceed the distance or 80 km (50 miles) and/or speed of 56 km/h (35 mph), you must remove the rear driveshaft. Mark the driveshaft and axle flanges to ensure proper position when reconnecting the driveshaft. Refer to the "Workshop Manual" for proper fastener torque specifications.

When disconnecting/installing the driveshaft, the parking brake must be set and the wheels blocked to ensure the vehicle does not roll.

- When the driveshaft is disconnected, the maximum speed is 88 km/h (55 mph) and the distance is unlimited.

For manual transmissions, maximum speed is 88 km/h (55 mph) and distance is unlimited.

Limited vehicle operation, such as driving the vehicle at a campsite, can be accomplished with the rear driveshaft removed by using the front drive to propel the vehicle. To operate the vehicle in this condition, you **must** follow these guidelines:

- Place the transfer case in 4WD by rotating the 4WD control to 4WD HIGH.
- Drive the vehicle only on good surface roads to avoid excessive loads on the front-wheel drive system.
- Maximum speed is 56 km/h (35 mph).
- Maximum distance is 80 km (50 miles).
- Avoid quick acceleration and steep grades.

To return the vehicle to a towable condition, you **must** place the transfer case in 2WD by rotating the 4WD control to 2WD. Both the 4WD HIGH and 4WD LOW indicator lights in the instrument cluster will be off when the 4WD control is in 2WD.

In addition, it is recommended that you follow the instruction provided by the manufacturer of the towing apparatus.

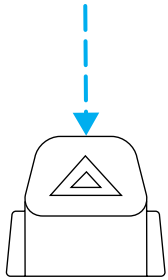
CAMPER BODIES

Your Ranger Pickup is not recommended for slide–in camper bodies.

HAZARD LIGHTS CONTROL

Use only in an emergency to warn traffic of vehicle breakdown, approaching danger, etc. The hazard flashers can be operated when the ignition is off.

- The hazard lights control is located on top of the steering column.
- Depress hazard lights control to activate all hazard flashers simultaneously.
- Depress control again to turn the flashers off.

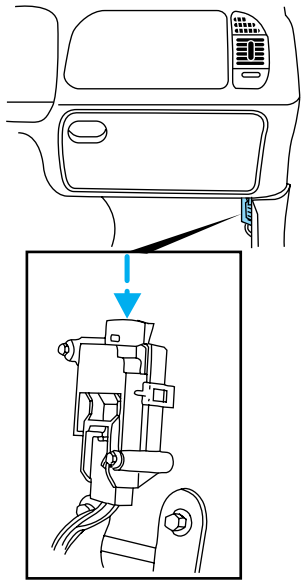


FUEL PUMP SHUT-OFF SWITCH

After a collision, if the engine cranks but does not start, the fuel pump shut-off switch may have been activated. The “Fuel Reset” indicator light will illuminate in the instrument cluster. The shut-off switch is a device intended to stop the electric fuel pump when your vehicle has been involved in a substantial jolt.

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

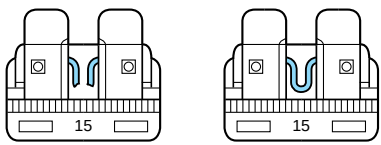
The fuel pump shut-off switch is located in the passenger's foot well, behind the kick panel.



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.



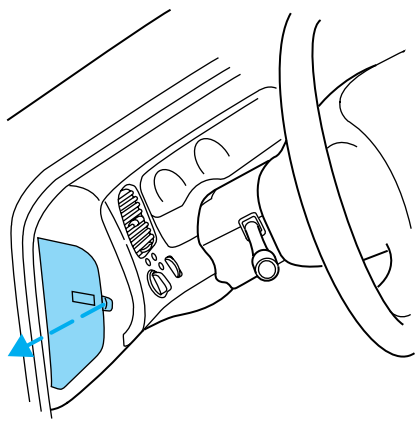
Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.

Standard fuse amperage rating and color

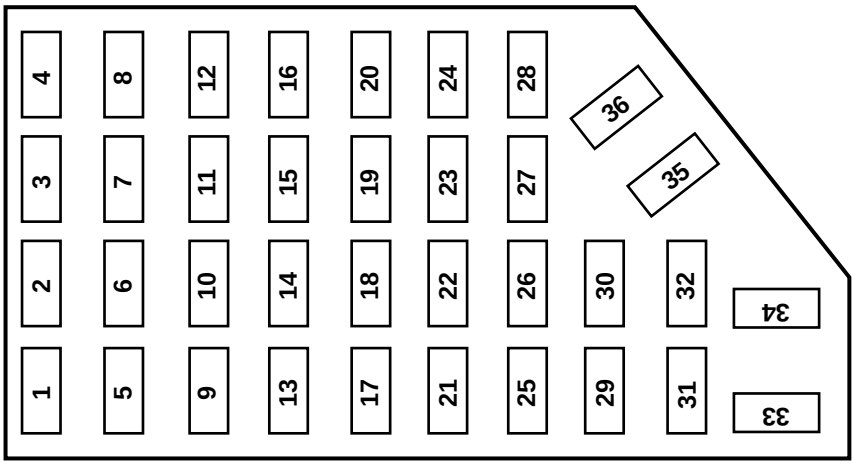
COLOR				
Fuse Rating	**Mini Fuses**	**Standard Fuses**	**Maxi Fuses**	**Fuse Link Cartridge**
2A	Grey	Grey	—	—
3A	Violet	Violet	—	—
4A	Pink	Pink	—	—
5A	Tan	Tan	—	—
7.5A	Brown	Brown	—	—
10A	Red	Red	—	—
15A	Blue	Blue	—	—
20A	Yellow	Yellow	Yellow	Blue
25A	Natural	Natural	—	—
30A	Green	Green	Green	Pink
40A	—	—	Orange	Orange
50A	—	—	Red	Red
60A	—	—	Blue	Yellow
70A	—	—	Tan	Brown
80A	—	—	Natural	Black

Passenger compartment fuse panel

The fuse panel is located on the left hand side of the instrument panel facing the driver's side door. Pull the panel cover outward to access the fuses.



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



The fuses are coded as follows:

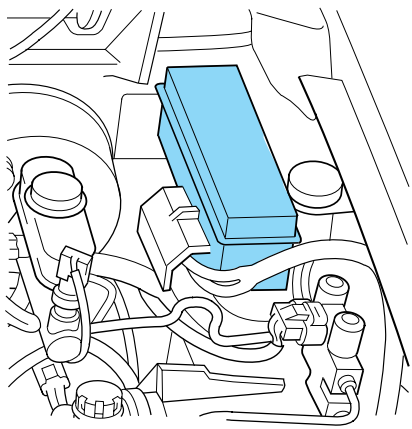
Fuse/Relay Location	Fuse Amp Rating	Description
1	7.5A	Power Mirror Switch
2	7.5A	Blower Motor Relay, PAD Module, Air Bag Diagnostic Monitor
3	7.5A	Left Stop/Turn Trailer Tow Connector
4	10A	Left Headlamp
5	10A	Data Link Connector (DLC)
6	—	Not Used
7	7.5A	Right Stop/Turn Trailer Tow Connector
8	10A	Right Headlamp, Fog Lamp Relay
9	7.5A	Brake Pedal Position Switch

Fuse/Relay Location	Fuse Amp Rating	Description
10	7.5A	Speed Control Servo/Amplifier Assembly, Generic Electronic Module (GEM), Shift Lock Actuator, Blend Door Actuator, A/C-Heater Assembly, Turn Signals
11	7.5A	Instrument Cluster, Daytime Running Lights (DRL), RABS Resistor
12	—	Not Used
13	20A	Brake Pedal Position Switch
14	20A or 10A	20A: If equipped with Rear Anti-Lock Brake System (RABS) Module. 10A: If equipped with 4 Wheel Anti-Lock Brake System (4WABS) Module, 4WABS Main Relay
15	7.5A	Air Bag Indicator Lamp, Alternator Indicator Lamp
16	30A	Windshield Wiper Motor, Wiper Hi-Lo Relay, Wiper Run/Park Relay
17	25A	Cigar Lighter
18	15A	Driver's Unlock Relay, All-Unlock Relay, All-Lock Relay
19	25A	PCM Power Diode
20	7.5A	RAP Module, Generic Electronic Module (GEM), Radio
21	15A	Flasher (Hazard)
22	20A	Auxiliary Power Socket
23	—	Not Used
24	7.5A	Clutch Pedal Position (CPP) switch, Starter Interrupt Relay, Anti-Theft
25	7.5A	Generic Electronic Module (GEM), Instrument Cluster
26	10A	Battery Saver Relay, Electronic Shift Relay, Interior Lamp Relay, Power Window Relay, Electronic Shift Control Module, Dome/Map Lamp, GEM

Fuse/Relay Location	Fuse Amp Rating	Description
27	15A	Electric Shift, Backup Lamps, Daytime Running Lamps (DRL), Transmission Control Switch, Pulse Vacuum Hub Lock
28	7.5A	Generic Electronic Module (GEM), Radio
29	15A	Radio
30	10A	RABS Test Connector
31	—	Not Used
32	—	Not Used
33	15A	Headlamps, Daytime Running Lamps (DRL) Module, Instrument Cluster
34	—	Not Used
35	15A	Park Lamp/Trailer Tow Relay
36	—	Not Used

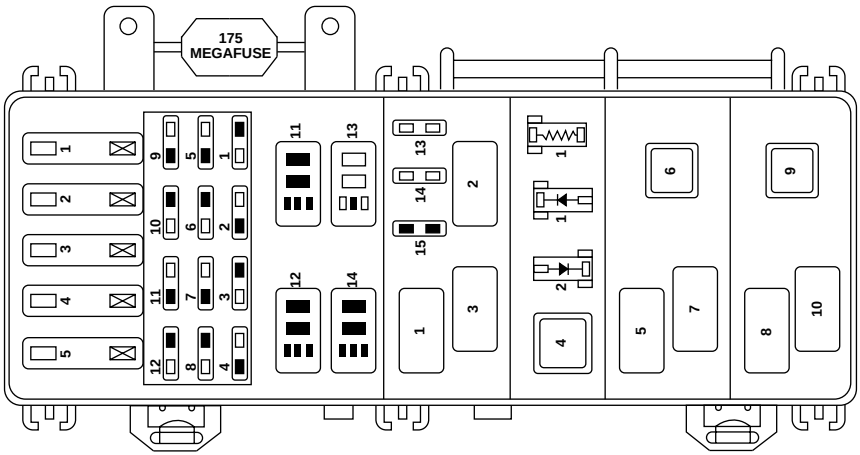
Power distribution box

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



Always disconnect the battery before servicing high current fuses.

Always replace the cover to the Power Distribution Box before reconnecting the battery or refilling fluid reservoirs.



The high-current fuses are coded as follows:

Fuse/Relay Location	Fuse Amp Rating	Description
1	50A**	I/P Fuse Panel
2	40A**	Blower Motor Relay
3	50A**	4 Wheel Anti-Lock Brake System (4WABS) Module
4	20A**	Power Windows
5	50A**	Ignition Switch, Starter Relay
1	10A*	A/C Relay
2	—	Not Used
3	20A*	Electronic Shift Relay and Electronic Shift Control Module
4	15A*	Fog Lamp and Daytime Running Lamps
5	—	Not Used

Fuse/Relay Location	Fuse Amp Rating	Description
6	10A*	Powertrain Control Module
7	30A*	4 Wheel Anti-lock Brake System (4WABS) Module
8	30A*	PCM Relay
9	20A*	Fuel Pump Relay and RAP Module
10	15A*	Horn Relay
11	15A*	Parklamps Relay and Main Light Switch
12	30A*	Main Light Switch and Multifunction Switch
13	15A*	Heated Oxygen Sensor, EGR Vacuum Regulator, EVR Solenoid, Camshaft Position Sensor (CMP), Canister Vent Solenoid
14	30A*	Generator Voltage Regulator
15	—	Not Used
1	—	Wiper Park Relay
2	—	A/C Relay
3	—	Wiper Hi/Lo Relay
4	—	PCM Power Relay
5	—	Fuel Pump Relay
6	—	Starter Relay
7	—	Horn Relay
8	—	Fog Lamp Control Relay
9	—	Blower Motor Relay
10	—	Foglamp Isolation Relay
11	—	Not Used
12	—	Not Used
13	—	Park Lamp/Trailer Tow Relay
14	—	Washer Pump Relay
1	—	RABS Resistor
1	—	RABS Diode
2	—	Electronic Engine Controls Diode
* Mini Fuses ** Maxi Fuses		

CHANGING THE TIRES

If you get a flat tire while driving, do not apply the brake heavily. Instead, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

Temporary spare tire information

Your vehicle may have a temporary or conventional spare tire. The temporary spare tire for your vehicle is labeled as such. It is smaller than a regular tire and is designed for emergency use only. Replace this tire with a full-size tire as soon as possible.

It is not recommended that the vehicle be operated in 4WD modes with a temporary spare. If 4WD operation is necessary, do not operate above speeds of 16 km/h (10 mph) or for distances above 80 km (50 miles).

If you use the temporary spare tire continuously or do not follow these precautions, the tire could fail, causing you to lose control of the vehicle, possibly injuring yourself or others.

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

- exceed 80 km/h (50 mph) under any circumstances
- load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label
- tow a trailer
- use tire chains
- drive through an automatic car wash, because of the vehicle's reduced ground clearance
- try to repair the temporary spare tire or remove it from its wheel
- use the wheel for any other type of vehicle

Conventional spare tire information

If you have the conventional spare tire, you can use it as a spare or a regular tire. The spare is identical to the other tires on your vehicle, although the wheel may not match.

Location of the spare tire and tools

The spare tire and tools for your vehicle are stowed in the following locations:

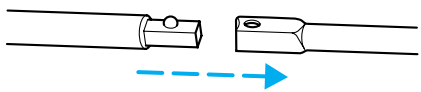
Tool	Location
Spare tire	Under the vehicle, just forward of the rear bumper
Jack, jack handle, wheel nut wrench	Regular Cab: behind seats and underneath the jack and tools cover
	SuperCab: stowed in the passenger side rear cab compartment or behind the jump seat in a separate tool bag
	Four-door models: stowed behind the front seats, between jump seats and underneath jack and tool covers.
Key, spare tire lock (if equipped)	In the glove box

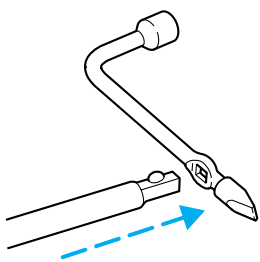
Removing the spare tire

1. Assemble the jack handle to the lug wrench as shown in the illustrations.

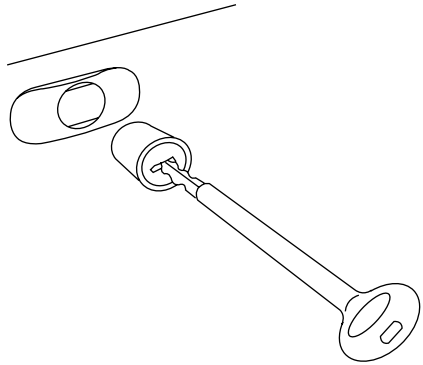
When connecting the jack handle, assemble the following:

- one handle extension and one typical extension. To assemble, slide parts together. To disconnect, depress button and pull apart.
- one wheel nut wrench. Depress button and slide together.



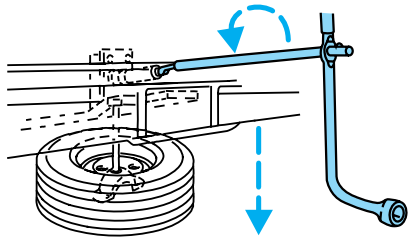


2. If equipped, unlock and remove the spare tire carrier lock from the rear access hole located just above the rear bumper and below the tailgate.



3. Insert the straight end of the jack handle into the rear access hole located just above the rear bumper and below the tailgate.

Forward motion will stop and resistance to turning will be felt when properly engaged.



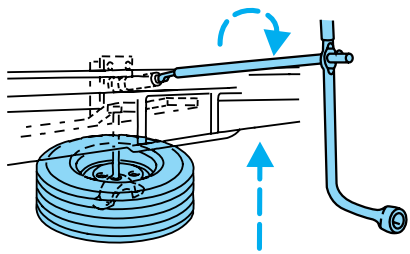
4. Turn the handle counterclockwise until tire is lowered to the ground and the cable is slightly slack.

5. Remove the retainer from the spare tire.

Stowing the spare

1. Lay the tire on the ground with the valve stem facing up.

2. Install the retainer through the wheel center and slide the wheel under the vehicle.



3. Turn the spare handle clockwise until the tire is raised to its original position underneath the vehicle. The spare handle ratchets when the tire is raised to the stowed position. It will not allow you to overtighten.

4. If your vehicle is equipped with P265/75 R15 AT tires, do not stow a flat or inflated full size spare tire in the spare tire carrier. The flat full size tire should be stowed and tied down in the pickup box bed until it can be repaired.

5. If removed, install the spare tire carrier lock on the access hole in the bumper.

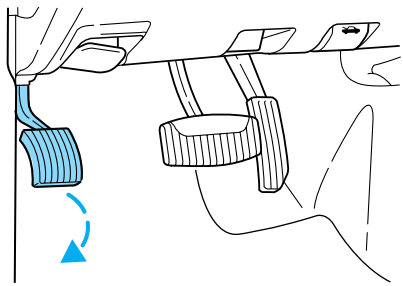
Tire change procedure

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

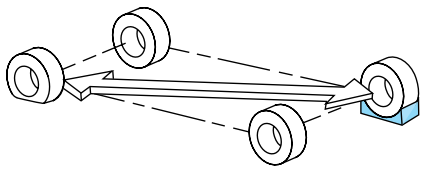
If the vehicle slips off the jack, you or someone else could be seriously injured.

1. Park on a level surface, activate hazard flashers and place gearshift lever in P (Park) (automatic transmission) or 1 (First) (manual transmission).

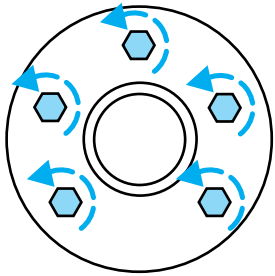
2. Set the parking brake and turn engine OFF.



3. Block the diagonally opposite wheel.



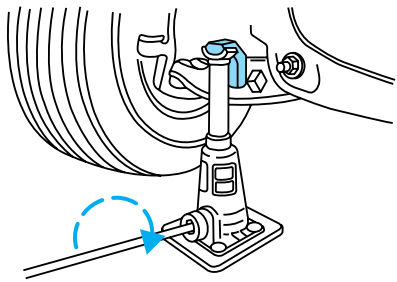
4. Insert tapered end of the lug wrench behind hub caps and twist them off.



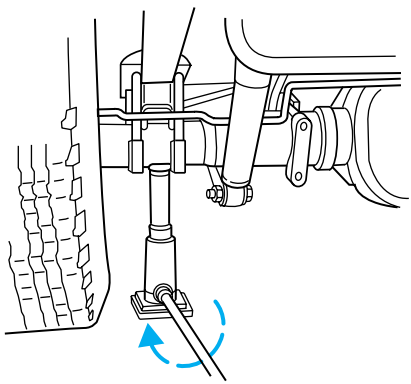
5. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.

6. Position the jack according to the following guides and turn the jack handle clockwise until the tire is a maximum of 25 mm (1 inch) off the ground.

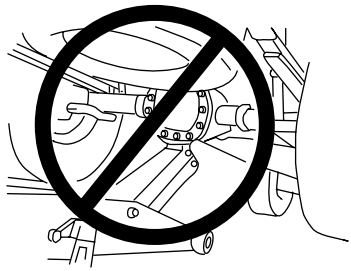
- Front



- Rear



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.



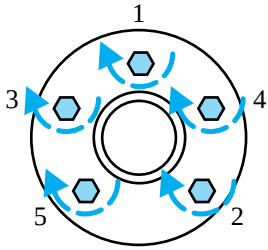
- **Never use the differential as a jacking point.**

7. Remove the wheel lug nuts with the lug wrench.

8. 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.

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

10. Remove the jack and fully tighten the lug nuts in the order shown.



11. Stow the flat tire. Refer to *Stowing the spare* .

12. Stow the jack and lug wrench. Make sure the jack is fastened so it does not rattle when you drive.

13. Unblock the wheels.

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.

Do not push start your vehicle. You could damage the catalytic converter.

Batteries contain sulfuric acid which can burn skin, eyes, and clothing, if contacted.

Do not attempt to push start your vehicle. Automatic transmissions do not have push-start capability.

Preparing your vehicle

1. **Use only a 12–volt supply to start your vehicle.**

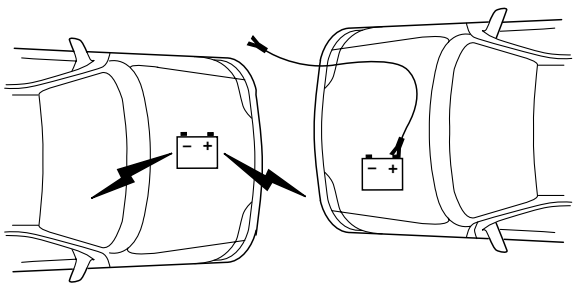
2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.

3. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles **do not** touch. Set the parking brake on both vehicles and stay clear of the engine cooling fan and other moving parts.

4. Check all battery terminals and remove any excessive corrosion before you attach the battery cables. Ensure that vent caps are tight and level.

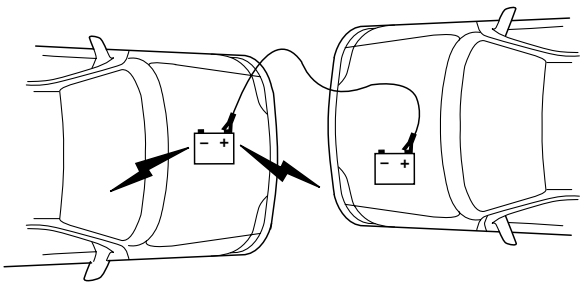
5. Turn the heater fan on in both vehicles to protect any electrical surges. Turn all other accessories off.

Connecting the jumper cables

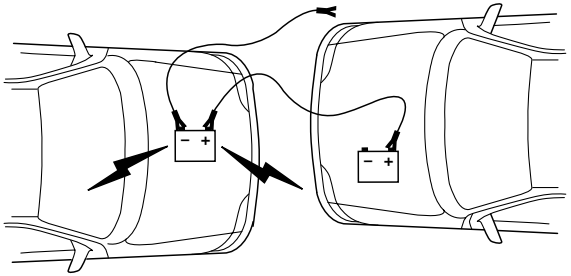


1. Connect the positive (+) booster cable to the positive (+) terminal of the discharged battery.

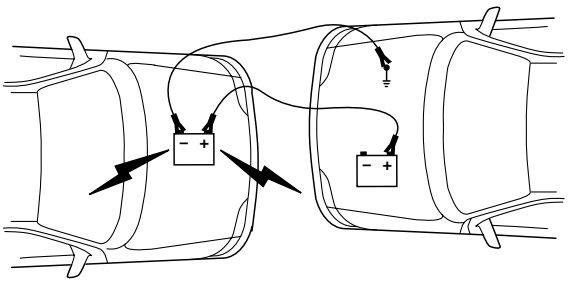
Note: In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.



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



3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.



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.

The preferred locations of an exposed metal part (to *ground* the circuit) are the alternator mounting brackets or an engine lifting *eye*. **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. Be sure that the cables are clear of fan blades, belts and other moving parts of both engines.

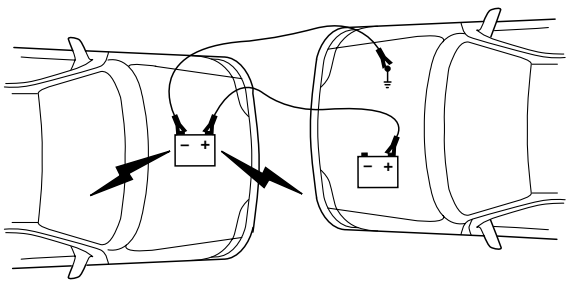
Jump starting

1. Start the engine of the booster vehicle and run the engine at moderately increased speed.

2. Start the engine of the disabled vehicle.

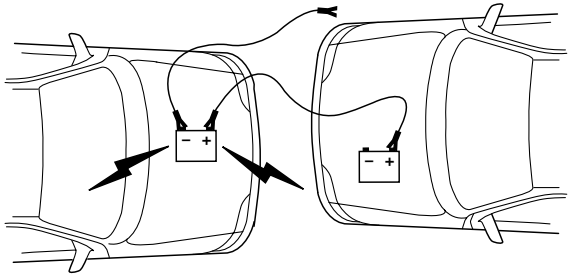
3. Once the disabled vehicle has been started, run both engines for a further three minutes before disconnecting the jumper cables.

Removing the jumper cables

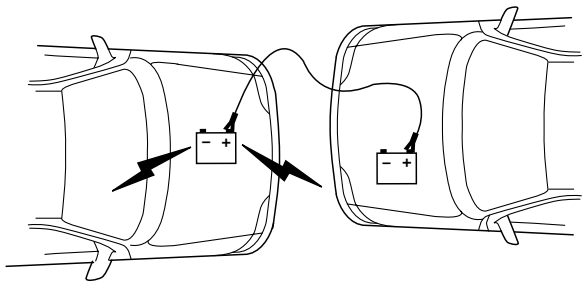


Remove the jumper cables in the reverse order that they were connected.

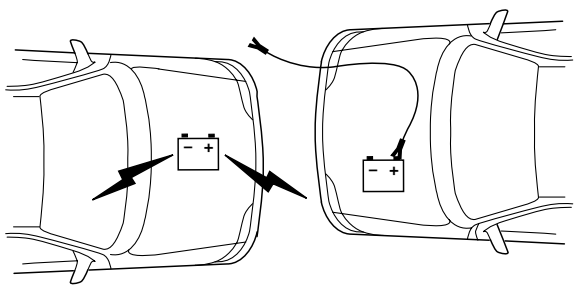
1. Remove the jumper cable from the *ground* metal surface.



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



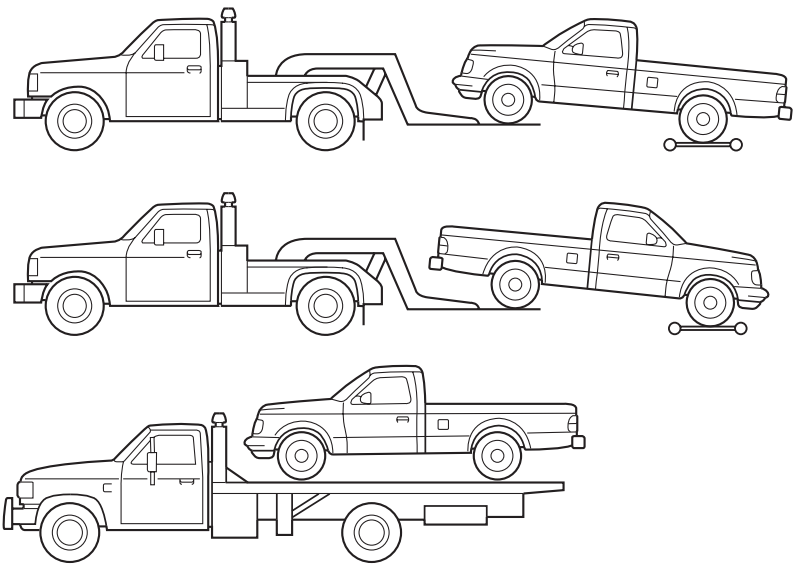
3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.



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.

WRECKER TOWING



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

On 4x2 vehicles, it is acceptable to tow the vehicle with the front wheels on the ground and the rear wheels off the ground.

On 4x4 vehicles, it is recommended that your vehicle be towed with a wheel lift or flatbed equipment with all the wheels off the ground.

Do not tow with slingbelt equipment. Ford Motor Company has not developed or approved a slingbelt towing procedure.

A towing manual is available from Ford Motor Company for all authorized tow truck operators. Have your tow truck driver refer to this manual for proper hook-up and towing procedures for your vehicle.

SERVICE RECOMMENDATIONS

To help you service your vehicle:

- We highlight do-it-yourself items in the engine compartment for easy location.
- We provide a “Service Guide” which makes tracking routine service easy.

If your vehicle requires professional service, your dealership can provide necessary parts and service. Check your “Warranty Guide” to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft parts are designed and built to provide the best performance in your vehicle.

PRECAUTIONS WHEN SERVICING YOUR VEHICLE

Be especially careful when inspecting or servicing your vehicle.

- Do not work on a hot engine.
- When the engine is running, make sure that loose clothing, jewelry or long hair does not get caught up 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 lit cigarettes, open flames and other lit material away from the battery and all fuel related parts.

If you disconnect the battery, the engine must “relearn” its idle conditions before your vehicle will drive properly, as explained in *Battery* in this chapter.

Working with the engine off

- Automatic transmission:

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

- Manual transmission:

1. Set the parking brake.
2. Depress the clutch and place the gearshift in 1 (First).
3. Turn off the engine and remove the key.
4. Block the wheels to prevent the vehicle from moving unexpectedly.

Working with the engine on

- Automatic transmission:

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

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

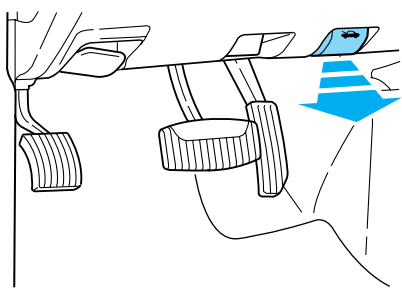
- Manual transmission:

1. Set the parking brake, depress the clutch and place the gearshift in N (Neutral).
2. Block the wheels to prevent the vehicle from moving unexpectedly.

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

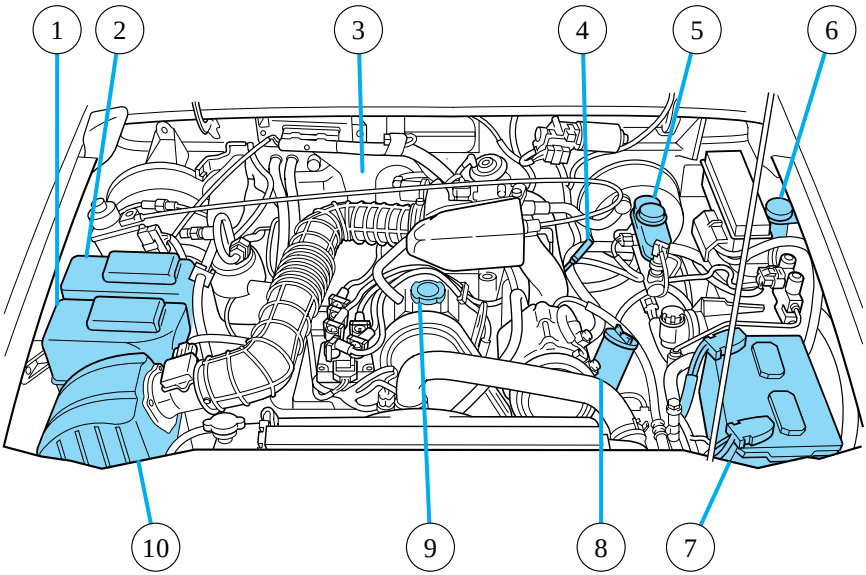
OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the bottom of the instrument panel.
2. Go to the front of the vehicle and release the auxiliary latch that is located under the front center of the hood.
3. Lift the hood and support it with the prop rod.



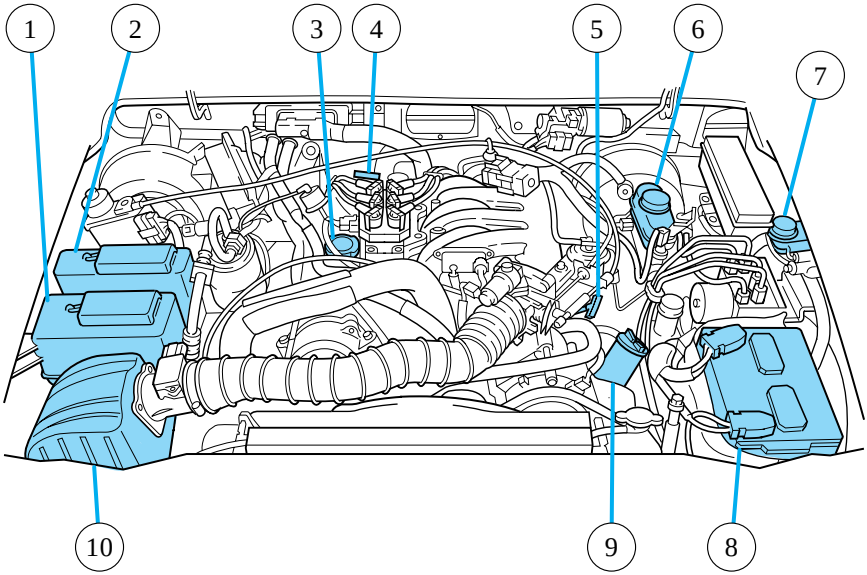
IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

2.5L I4 engine



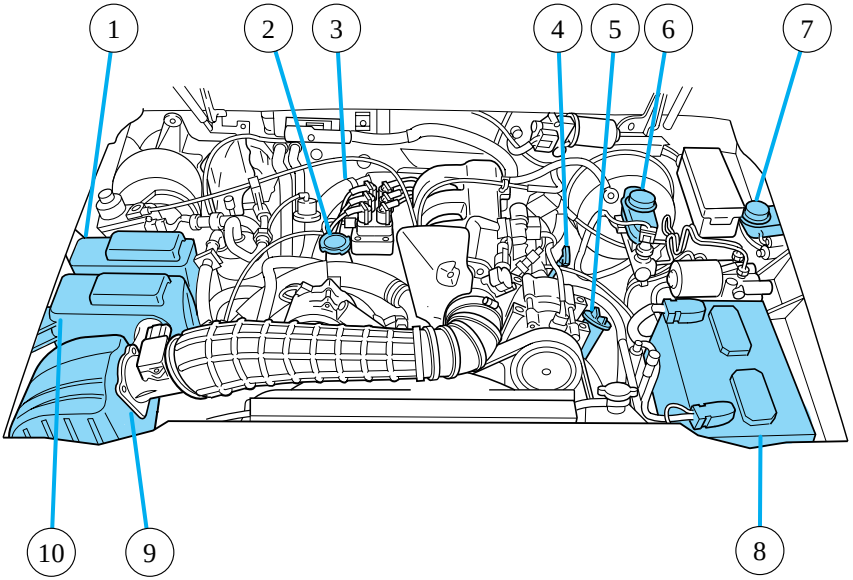
1. Engine coolant reservoir
2. Windshield washer fluid reservoir
3. Transmission fluid dipstick (automatic transmission)
4. Engine oil dipstick
5. Brake fluid reservoir
6. Clutch fluid reservoir (manual transmission)
7. Battery
8. Power steering fluid reservoir
9. Engine oil filler cap
10. Air filter assembly

3.0L V6 Vulcan engine



1. Engine coolant reservoir
2. Windshield washer fluid reservoir
3. Engine oil filler cap
4. Transmission fluid dipstick (automatic transmission)
5. Engine oil dipstick
6. Brake fluid reservoir
7. Clutch fluid reservoir
8. Battery
9. Power steering fluid reservoir
10. Air filter assembly

4.0L OHV V6 engine



1. Windshield washer fluid reservoir
2. Engine oil filler cap
3. Transmission fluid dipstick (automatic transmission)
4. Engine oil dipstick
5. Power steering fluid reservoir
6. Brake fluid reservoir
7. Clutch fluid reservoir (manual transmission)
8. Battery
9. Air filter assembly
10. Engine coolant reservoir

ENGINE OIL

Checking the engine oil

Refer to the maintence guide and or maintence guide and or service guide for the appropriate intervals for checking the engine oil .

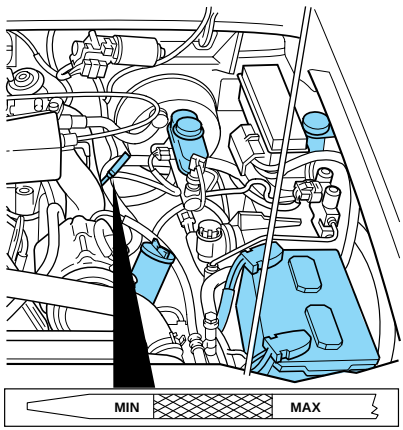
1. Make sure the vehicle is on level ground.

2. Turn the engine off and wait a few minutes for the oil to drain into the oil pan.

3. Set the parking brake and ensure the gearshift is securely latched in P (Park) (automatic transmissions) or 1 (First) (manual transmissions).

4. Open the hood. Protect yourself from engine heat.

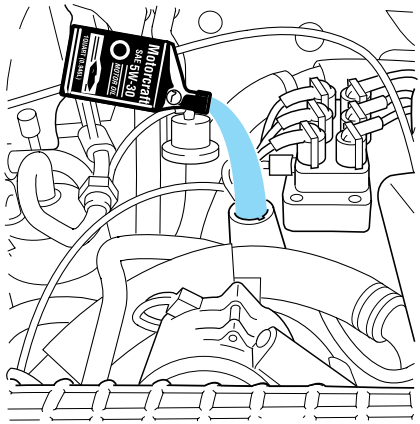
5. Locate and carefully remove the engine oil level indicator (dipstick).



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 a service technician.

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

Adding engine oil

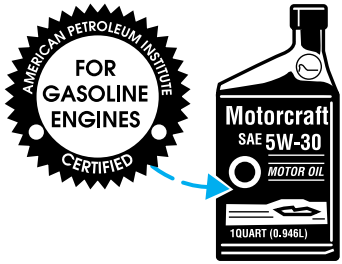
1. Check the engine oil. For instructions, refer to *Checking the engine oil* in this chapter.

2. If the engine oil level is not within the normal range, add only certified engine oil of the recommended viscosity. Remove the engine oil filler cap and use a funnel to pour the engine oil into the opening.

3. Recheck the engine oil level. Make sure the oil level is not above the MAX mark or the letter F in FULL on the dipstick.

Engine oil and filter recommendations

Look for this certification mark.



Ford oil specification is WSS-M2C153-G.

Use SAE 5W-30 motor oil certified for gasoline engines by the American Petroleum Institute.

Do not use supplemental engine oil additives, oil treatments or engine treatments. They are unnecessary and could, under certain conditions, lead to engine damage which is not covered by your warranty.

Change your engine oil and filter according to the appropriate schedule listed in the maintence guide and or service guide.

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

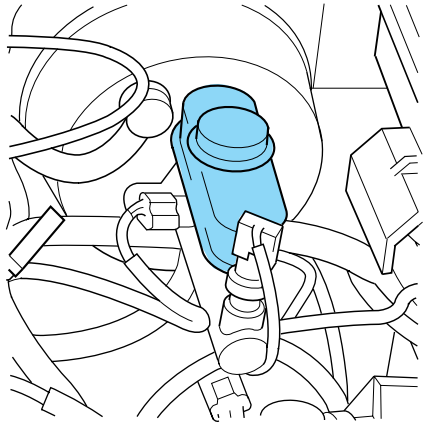
It is recommended you use the appropriate Motorcraft oil filter (or another brand meeting Ford specifications) for your engine application.

BRAKE FLUID

Checking and adding brake fluid

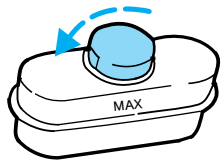
Brake fluid should be checked and refilled as needed. Refer to the maintenance guide and or service guide for the service interval schedules:

1. Clean the reservoir cap before removal to prevent dirt or water from entering the reservoir.



2. Visually inspect the fluid level.

3. If necessary, add brake fluid until the level reaches MAX. Do not fill above this line.



4. Use only a DOT 3 brake fluid certified to meet Ford specifications. Refer to *Lubricant specifications* in the *Capacities and specifications* chapter.

Brake fluid is toxic.

If you use a brake fluid that is not DOT 3, you will cause permanent damage to your brakes.

Do not let the reservoir for the master cylinder run dry. This may cause the brakes to fail.

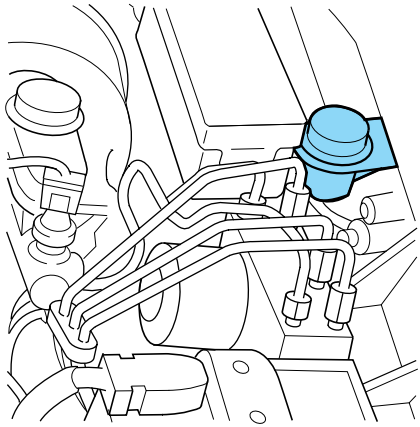
CLUTCH FLUID (IF EQUIPPED)

Check the clutch fluid level. Refer to the maintenance guide and or service guide for the service interval schedules.

During normal operation, the fluid level in the clutch reservoir should remain constant. If the fluid level drops, maintain the fluid level at the step in the reservoir.

Use only a DOT 3 brake fluid designed to meet Ford specifications. Refer to *Capacities and specifications.*

1. Clean the reservoir cap before removal to prevent dirt and water from entering the reservoir.
2. Remove cap and rubber diaphragm from reservoir.
3. Add fluid until the level reaches the step in the reservoir.
4. Reinstall rubber diaphragm and cap onto reservoir.

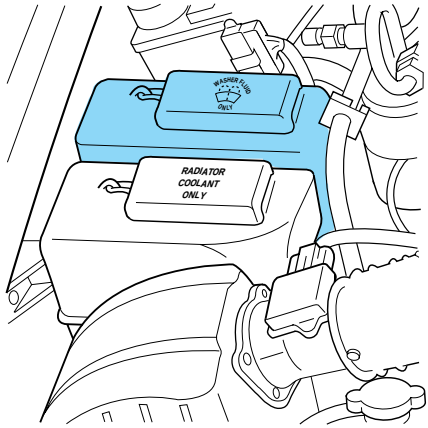


WINDSHIELD WASHER FLUID

Checking and adding washer fluid

Check the washer fluid whenever you stop for fuel. The reservoir is highlighted with a symbol.

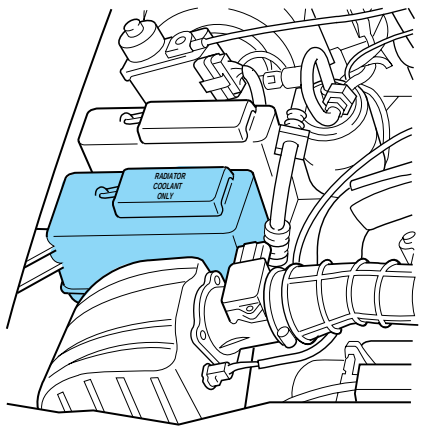
If the level is low, add enough fluid to fill the reservoir. In very cold weather, do not fill the reservoir all the way.



Do not put engine coolant in the container for the windshield washer fluid.

ENGINE COOLANT

Check the level of the engine coolant in the reservoir. Refer to the maintenance guide and or service guide for service interval schedules. Be sure to read and understand *Precautions when servicing your vehicle* in this chapter.



If the engine coolant has not been checked at the recommended interval, the engine coolant reservoir may become empty. If this occurs, add engine coolant to the reservoir. For more information on engine coolant maintenance, refer to *Adding engine coolant* in this chapter.

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

Do not put engine coolant in the container for the windshield washer fluid.

Do not mix conventional green coolant, orange coolant or recycled coolants together in your vehicle. Use only the type of coolant that your vehicle was originally equipped with. If you are unsure which type of coolant your vehicle requires, contact your local dealer.

If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

When the engine is cool, add a 50/50 mixture of engine coolant and water to the engine coolant reservoir-DO NOT ADD DIRECTLY TO THE RADIATOR. Add straight water only in an emergency, but you should replace it with a 50/50 mixture of coolant and distilled water as soon as possible.

Check the coolant level in the coolant reservoir the next few times you drive the vehicle. If necessary, add enough of a 50/50 mixture of coolant and water to bring the liquid level to the fill line on the reservoir.

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

If you must remove the coolant reservoir cap, follow these steps to avoid personal injury:

1. Before you remove the cap, turn the engine off and let it cool.

2. When the engine is cool, wrap a thick cloth around the cap. Slowly turn cap counterclockwise until pressure begins to release.

3. Step back while the pressure releases.

4. When you are sure that all the pressure has been released, use the cloth to turn it counterclockwise and remove the cap.

Change your engine coolant according to the appropriate schedule listed in the maintenance guide and or service guide.

Before adding engine coolant, check the color of the coolant in your vehicle.

For vehicles with green coolant, use Ford Premium Cooling System Fluid E2FZ-19549–AA (in Canada, Motorcraft CXC-8–B) or an equivalent premium engine coolant that meets Ford specification ESE-M97B44–A.

Do not add orange coolant or recycled coolant to your vehicle originally equipped with conventional green coolant.

For vehicles with orange coolant, use Ford Extended Life Engine Coolant F6AZ-19544–AA or a DEX-COOL® equivalent that meets Ford specification WSS-M97B44–D.

Do not add conventional green coolant or recycled coolant to your vehicle originally equipped with orange coolant.

Do not use alcohol or methanol antifreeze or any engine coolants mixed with alcohol or methanol antifreeze. Do not use supplemental coolant additives in your vehicle. These additives may harm your engine cooling system. The use of an improper coolant may void your warranty of your vehicle's engine cooling system.

Recycled engine coolant

Ford Motor Company recommends that Ford and Lincoln-Mercury dealers use recycled engine coolant produced by Ford-approved processes.

For vehicles with green coolant, not all coolant recycling processes produce coolant which meets Ford specification ESE-M97B44–A, and use of such coolant may harm engine and cooling system components.

For vehicles with orange coolant, no recycling process has been approved at this time and use of such coolant may harm engine and cooling system components.

 Always dispose of used automotive fluids in a responsible 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 the *Capacities and specifications* chapter.

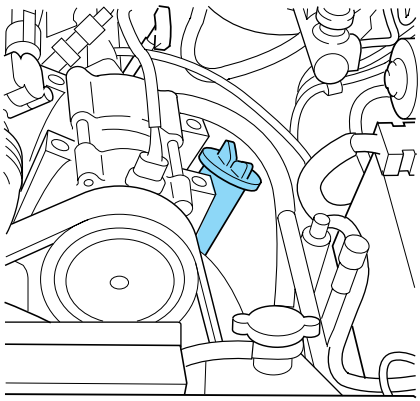
Have your dealer check the engine cooling system for leaks if you have to add more than 1.0 liter (1.0 quart) of engine coolant per month.

Severe winter climate

If you drive in extremely cold climates (less than –36°C [–34°F]), it may be necessary to increase the coolant concentration above 50%. Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle is such that the coolant will not freeze at the temperature level in which you drive during winter months. Never increase the engine coolant concentration above 60%. Leave a 50/50 mixture of engine coolant and water in your vehicle year-round in non-extreme climates.

CHECKING AND ADDING POWER STEERING FLUID

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



1. Start the engine and let it run until it reaches normal operating temperature (the engine coolant temperature gauge indicator will be near the center of the normal area between H and C).
2. While the engine idles, turn the steering wheel left and right several times.
3. Turn the engine off.

4. Check the fluid level on the dipstick. It should be between the arrows in the FULL HOT range. Do not add fluid if the level is within this range.

5. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the FULL HOT range. Be sure to put the dipstick back in the reservoir.

TRANSMISSION FLUID

Checking automatic transmission fluid

Refer to your maintenance guide and or service guide for scheduled intervals for fluid checks and changes. Your transmission does not consume fluid. However, the fluid level should be checked if the transmission is not working properly, i.e., if the transmission slips or shifts slowly or if you notice some sign of fluid leakage.

Automatic transmission fluid expands when warmed. To obtain an accurate fluid check, drive the vehicle until it is warmed up (approximately 30 km [20 miles]). If your vehicle has been operated for an extended period at high speeds, in city traffic during hot weather or pulling a trailer, the vehicle should be turned off for about 30 minutes to allow fluid to cool before checking.

1. Drive the vehicle 30 km (20 miles) or until it reaches normal operating temperature.

2. Park the vehicle on a level surface and engage the parking brake.

3. With the parking brake engaged and your foot on the brake pedal, start the engine and move the gearshift lever through all of the gear ranges. Allow sufficient time for each gear to engage.

4. Latch the gearshift lever in P (Park) and leave the engine running.

5. Remove the dipstick, wiping it clean with a clean, dry lint free rag.

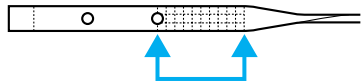
6. Install the dipstick making sure it is fully seated in the filler tube.

7. Remove the dipstick and inspect the fluid level. The fluid should be in the designated areas for normal and room temperature.

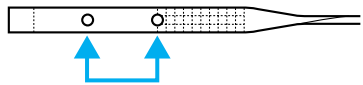
Correct fluid level

The transmission fluid should be checked at normal operating temperatures 66°C-77°C (150°F-170°F) on a level surface. The normal operating temperature can be reached after approximately 30 km (20 miles) of driving. However, you can check the fluid without driving if the outside temperatures are above 10°C (50°F). If fluid is added at this time, an overfill condition could result when the vehicle reaches normal operating temperature.

The transmission fluid should be in this range if at normal operating temperature (66°C-77°C [150°F-170°F]).

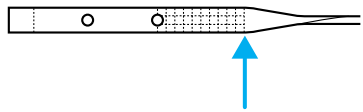


The transmission fluid should be in this range if at room temperature (10°C-35°C [50°F-95°F]).



High fluid level

Fluid levels above the safe range may result in transmission failure. An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.



High fluid levels can be caused by an overheating condition.

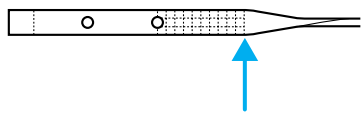
Adjusting automatic transmission fluid levels

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

Use of a non-approved automatic transmission fluid may cause internal transmission component damage.

If necessary, add fluid in 250 mL (1/2 pint) increments through the filler tube until the level is correct.

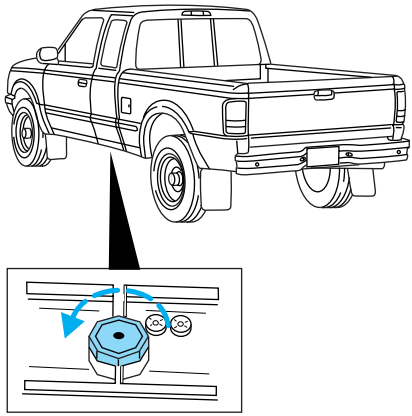
If an overfill occurs, excess fluid should be removed by a qualified technician.



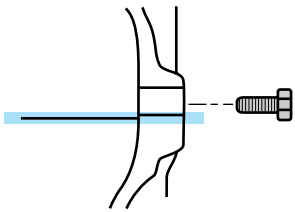
An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

Checking and adding manual transmission fluid

1. Clean the filler plug.
2. Remove the filler plug and inspect the fluid level.



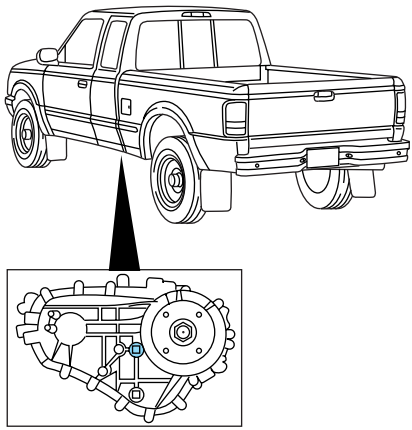
3. Fluid level should be at bottom of the opening.
4. Add enough fluid through the filler opening so that the fluid level is at the bottom of the opening.
5. Install and tighten the fill plug securely.



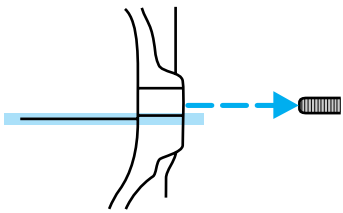
Use only fluid that meets Ford specifications. Refer to the *Capacities and specifications* chapter.

Checking and adding transfer case fluid

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.



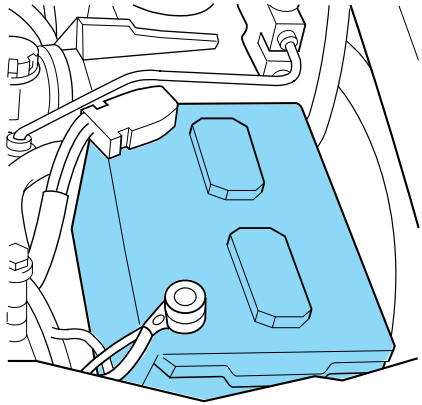
Use only fluid that meets Ford specifications. Refer to the *Capacities and specifications* chapter.

DRIVELINE UNIVERSAL JOINT AND SLIP YOKE

Your vehicle may be equipped with universal joints that require lubrication. Refer to the maintenance guide and or service guide for maintenance intervals. If the original universal joints are replaced with universal joints equipped with grease fittings, lubrication will also be necessary.

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 maintenance guide and or maintenance guide and or service guide for the service interval schedules.

Keep the electrolyte level in each cell up to the "level indicator". Do not overfill the battery cells.

If the electrolyte level in the battery is low, you can add plain tap water to the battery, as long as you do not use hard water (water with a high mineral or alkali content). If possible, however, try to only fill the battery cells with distilled water. If the battery needs water often, have the charging system checked.

If your battery has a cover/shield, make sure it is reinstalled after the battery has been cleaned or replaced.

For longer, trouble-free operation, keep the top of the battery clean and dry. Also, make certain the battery cables are always tightly fastened to the battery terminals.

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide proper ventilation.

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.

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. Set your parking brake.

2. Put the gearshift in P (Park) (automatic transmission) or the neutral position (manual transmission), turn off all accessories and start the engine.

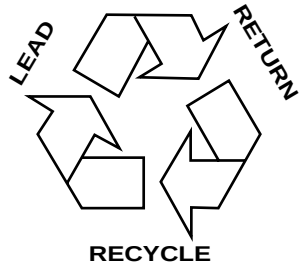
3. Let the engine idle for at least one minute.

4. The relearning process will automatically complete as you drive the vehicle.

- The vehicle may need to be driven 16 km (10 miles) or more to relearn the idle and fuel trim strategy.
- If you do not allow the engine to relearn its idle trim, the idle quality of your vehicle may be adversely affected until the idle trim is eventually relearned.

If the battery has been disconnected or a new battery has been installed, the clock and the preset radio stations must be reset once the battery is reconnected.

- Always dispose of automotive batteries in a responsible manner. Follow your local authorized standards for disposal. Call your local authorized recycling center to find out more about recycling automotive batteries.



WINDSHIELD WIPER BLADES

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

Checking the wiper blades

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

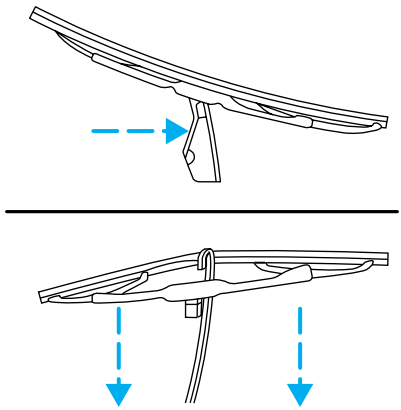
Changing the wiper blades

To replace the wiper blades:

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

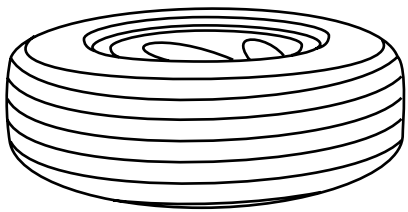
2. Turn the blade at an angle from the wiper arm. Push the lock pin manually to release the blade and pull the wiper blade down toward the windshield to remove it from the arm.

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



INFORMATION ABOUT TIRE QUALITY GRADES

New vehicles are fitted with tires that have their Tire Quality Grade (described below) molded into the tire's sidewall. These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.



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

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

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire grade 150 would wear one and one-half (1 1/2) times as well on the government course as a tire grade 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. Those 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.

SERVICING YOUR TIRES

Checking the tire pressure

- Use an accurate tire pressure gauge.
- Check the tire pressure when tires are cold, after the vehicle has been parked for at least one hour or has been driven less than 5 km (3 miles).
- Adjust tire pressure to recommended specifications found on the Tire Pressure Label.

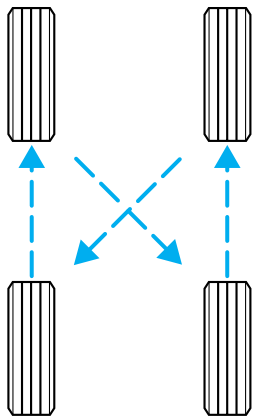
Improperly inflated tires can affect vehicle handling and can fail suddenly, possibly resulting in loss of vehicle control.

Tire rotation

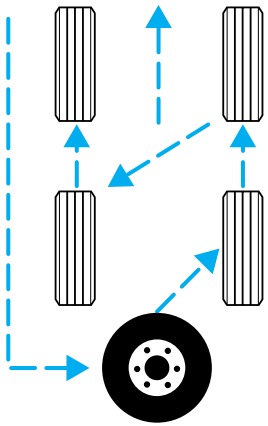
Because your vehicle's tires perform different jobs, they often wear differently. To make sure your tires wear evenly and last longer, rotate them as indicated in the maintenance guide and or service guide. If you notice that the tires wear unevenly, have them checked.

The following procedure applies to vehicles equipped with single rear wheels, if your vehicle is equipped with dual rear wheels it is recommended that only the front wheels be rotated (side to side).

- Four tire rotation

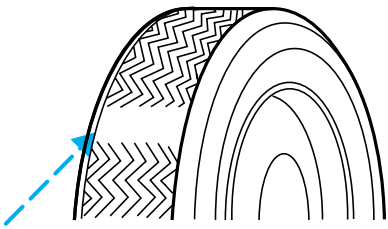


- Five tire rotation



Replacing the tires

Replace the tires when the wear band is visible through the tire treads.



When replacing full size tires, never mix radial, bias-belted, or bias-type tires. Use only the tire sizes that are listed on the tire pressure decal. Make sure that all tires are the same size, speed rating, and load-carrying capacity. Use only the tire combinations recommended on the decal. If you do not follow these precautions, your vehicle may not drive properly and safely.

Make sure that all replacement tires are of the same size, type, load-carrying capacity and tread design (e.g., “All Terrain”, etc.), as originally offered by Ford.

Do not replace your tires with “high performance” tires or larger size tires.

Failure to follow these precautions may adversely affect the handling of the vehicle and make it easier for the driver to lose control and roll over.

Tires that are larger or smaller than your vehicle's original tires may also affect the accuracy of your speedometer.

SNOW TIRES AND CHAINS

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

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

The tires on your vehicle have all weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and chains. If you need to use snow tires and chains,it is recommended that steel wheels are used of the same size and specifications as those originally installed.

Follow these guidelines when using snow tires and chains:

- Do not use tire chains on aluminum wheels. Chains may chip the wheels.
- 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.

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.

If you do not use the proper fuel cap, the pressure in the fuel tank can damage the fuel system or cause it to work improperly in a collision.

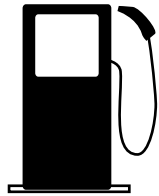
The fuel system may be under pressure. If the fuel cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the cap.

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

Fuel ethanol may contain benzene, which is a cancer-causing agent.

Flexible fuel components and standard unleaded gasoline fuel components are not interchangeable. If your vehicle is not serviced in accordance with flexible fuel vehicles procedures, damage may occur and your warranty may be invalidated.

Observe the following guidelines when handling automotive fuel:



- Extinguish all smoking materials and any open flames before fueling your vehicle.
- Always turn off the vehicle before fueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuels such as gasoline and ethanol are 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 and/or ethanol 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.
- FFV fuel tanks may contain zero to 85 percent or more of ethanol. Any fuel blends containing gasoline and ethanol should be treated the same as “Fuel Ethanol (E85)”.

Fuel Filler Cap

Your fuel tank filler cap has an indexed design with a one-eighth 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 when you start the engine, the fuel filler cap may not be properly installed. Turn off the engine, remove the fuel filler cap and reinstall it being careful to align the cap properly.

If you must replace the fuel filler cap, replace it with a genuine Ford or Motorcraft part. The customer warranty may be void for any damage to the fuel tank or fuel system if a 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, the pressure in the fuel tank can damage the fuel system or cause it to work improperly in a collision.

Choosing the right fuel

Use only UNLEADED FUEL for non-flexible fuel vehicles. The use of leaded fuel is prohibited by law and could damage your vehicle.

If your vehicle is a flexible fuel vehicle (FFV), use only UNLEADED FUEL and ETHANOL (E85). The use of leaded fuel is prohibited by law and could damage your vehicle.

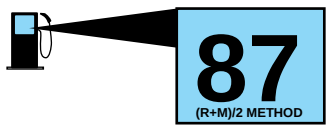
Do not use fuel containing methanol. It can damage critical fuel systems components.

Vehicles certified to meet California emission standards (indicated on the underhood Vehicle Emissions Control Information label) are designed to operate on California cleaner-burning, low-sulfur gasolines. If you have a California-certified vehicle and California cleaner—burning gasoline is not available when you refuel, your engine should perform adequately. However, the performance of the emission control devices and systems may be adversely affected. In New York and Massachusetts, which have adopted California's emission standards without requiring the sale of California cleaner-burning gasoline, repairs to correct the effects of using non-California fuel may not be covered by the emissions warranty.

Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based compounds containing (MMT).

Repairs to correct the effects of using a fuel for which your vehicle was not designed may not be covered by your warranty.

Octane recommendations



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

Unleaded Gasoline engines

Your vehicle is designed to use “Regular” unleaded gasoline with an (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.

FFV engine

Your vehicle is designed to use Fuel Ethanol (E85), “Regular” unleaded gasoline or any percentage of the two fuels combined.

U.S. government regulations require fuel ethanol dispensing pumps to have a small, square, orange and black label with the common abbreviation E85 or the appropriate percentage for that region. Use of other fuels such as Fuel Methanol may cause

powertrain damage, a loss of vehicle performance, and your warranty may be invalidated.

Fuel quality

It should not be necessary to add any aftermarket products to your fuel tank if you continue to use a high-quality fuel.

Unleaded Gasoline engines

If you are experiencing starting, rough idle or hesitation driveability problems during a cold start, try a different brand of "Regular" unleaded gasoline. "Premium" unleaded gasoline is not recommended (particularly in the United States) because it may cause these problems to become more pronounced. If the problems persist, see your dealer or a qualified service technician.

The American Automobile Manufacturers Association (AAMA) issued a fuel specification to provide information on high quality fuels that optimize the performance of your vehicle. We recommend the use of fuels that meet the AAMA specification if they are available.

FFV engine

Your FFV will operate well on ordinary "Regular" unleaded gasoline, but only the highest quality fuel ethanol will provide the same level of protection and performance.

If you are experiencing a rough or rolling idle after start-up with the outside temperature above 27° C (80° F), the idle should improve within 10 to 30 seconds. If the problems persist below this temperature, see your dealer or a qualified service technician.

To assist fuel ethanol providers in meeting high fuel quality standards, the AAMA has published guidelines which prescribe "Ethanol Fuel Compatible" dispensing station equipment. To ensure proper operation of your FFV on fuel ethanol, refuel at stations certified by the AAMA.

Cleaner air

Ford approves the use of gasolines to improve air quality, including reformulated gasolines that contain oxygenates up to 10% ethanol or 15% MTBE.

Running out of fuel

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

If you have run out of fuel:

- You may need to crank the engine several times before the system starts to pump fuel from the tank to the engine.
- Your “Check Engine” light may come on. For more information on the “Check Engine” light, refer to the *Instrumentation* chapter.

Fuel Filter

Your vehicle is equipped with a fuel filter that is mounted on the underbody.

For fuel filter replacement, see your dealer or a qualified service technician. Refer to the maintenance guide and or service guide for the appropriate intervals for changing the fuel filter.

If you replace the fuel filter, replace it with an authorized Motorcraft part. The customer warranty may be void for any damage to the fuel system if an authorized Motorcraft fuel filter is not used.

ESSENTIALS OF GOOD FUEL ECONOMY

Measuring techniques

Your best source of information about actual fuel economy is you, the driver. You must gather information as accurately and consistently as possible. Fuel expense, frequency of fillups or fuel gauge readings are NOT accurate as a measure of fuel economy. We do not recommend taking fuel economy measurements during the first 1 600 km (1 000 miles) of driving (engine break-in period). You will get a more accurate measurement after 3 000 km–5 000 km (2 000 miles-3 000 miles).

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 chart in this “Owner Guide.” 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 usable fuel remaining in the fuel tank after the fuel gauge indicates empty.

The amount of 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.

Filling the tank

For consistent results:

- Use the same filling rate setting (low — medium — high) each time the tank is filled.
- Allow three automatic click-offs when filling.
- Always use the recommended octane rating of a known quality gasoline, preferably a national brand.
- Use the same side of the same pump and have the vehicle facing the same direction each time you fill up.
- Have the vehicle loading and distribution the same every time.

Your results will be most accurate if your filling method is consistent.

Calculating fuel economy

1. Fill the fuel tank completely and record the initial odometer reading.

2. Each time you fill the tank, record the amount of fuel added (in liters or gallons).

3. After at least three to five tank fill-ups, fill the fuel tank and record the current kilometer (mileage) reading.

4. Follow one of the simple calculations in order to determine fuel economy:

Multiply liters used by 100, then divide by total kilometers traveled.

Divide total miles traveled by total gallons used.

Keep a record for at least one month and record the type of driving (city or highway). This will provide an accurate estimate of the vehicle's fuel economy. 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.
- Drive at reasonable speeds (traveling at 105 km /h [65 mph] uses 15% more fuel than traveling at 88 km/h [55 mph]).
- Revving the engine before turning it off may reduce fuel economy.
- Use of the air conditioner or defroster may reduce fuel economy.
- Use of speed control (if equipped) may improve fuel economy. Speed control can help maintain a constant speed and reduce speed changes. You may want to turn off the speed control in hilly terrain as unnecessary shifting between third and fourth gears may occur and 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* .
- Perform all regularly scheduled maintenance items. Follow the recommended maintenance schedule and owner maintenance checks found in your vehicle maintenance guide and or service guide.

Conditions

- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Carrying unnecessary weight may reduce fuel economy (approximately 2 km/h [1 mpg] is lost for every 180 kg [400 lb] of weight carried).
- Adding certain accessories to your vehicle (for example bug deflectors, rollover/light bars, running boards, ski/luggage racks) may reduce fuel economy.
- Use of fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures during the first 12–16 km (8–10 miles) of driving.
- Flat terrain driving improves fuel economy over hilly roads.
- Transmissions give their best fuel economy when operated in the top cruise gear and with steady pressure on the gas pedal.
- 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 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 Km/L (MPG) expected on the vehicle, depending upon the driver's 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 unleaded fuel.
- Avoid running out of fuel.

- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in your maintenance guide and or service guide performed according to the specified schedule.

The scheduled maintenance items listed in the maintenance guide and or service guide are essential to the life and performance of your vehicle and to its emissions system.

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

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

Illumination of the charging system warning light, “Check Engine” light or the temperature warning light, fluid leaks, strange odors, smoke or loss of oil pressure, could indicate that the emission control system is not working properly.

Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment.

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

Please consult your “Warranty Guide” for complete emission warranty information.

Readiness for inspection/maintenance (I/M) testing

In some localities, it may be a legal requirement to pass an I/M test of the on-board diagnostic (OBD-II) system. If your "Check Engine/Service Engine Soon" light is on, refer to the description in the *Warning Lights and Chimes* section of the *Instrumentation* 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 OBD-II system is reset to a "not ready for I/M test" condition. To ready the OBD-II 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.

EXTERIOR BULBS

Replacing exterior bulbs

Check the operation of the following lamps frequently:

- Headlamps
- Foglamps
- High-mount brakelamp
- Brakelamps
- Turn signals
- License plate lamp
- Tail lamps
- Back-up lamps

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

Replacing headlamp bulbs

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.

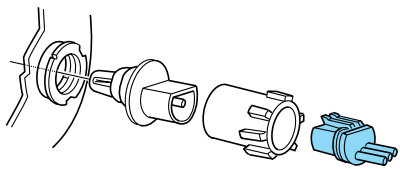
To remove the headlamp bulb:

1. Make sure headlamp switch is in OFF position.

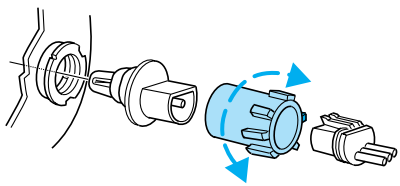
2. Open the hood. If you are replacing the driver side headlamp, unclip the electronic module on the right side of the battery and move it out of the way.

3. Locate the headlamp bulb through the hole in the upper radiator support assembly.

4. Release clip and disconnect the electrical connector from the bulb.

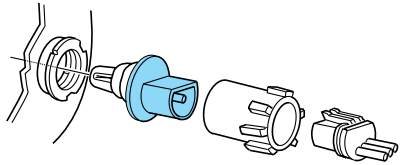


5. Remove the bulb retaining ring by rotating it counterclockwise (when viewed from the rear) about 1/8 turn to free it from the bulb socket, and slide the ring off the plastic base. Keep the ring to retain the new bulb.



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

To install the new bulb:



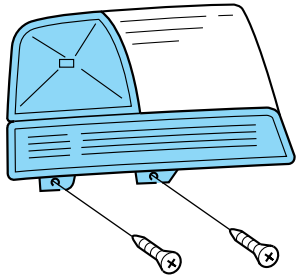
1. With the flat side of the bulb's plastic base facing upward, insert the glass end of the bulb into the lamp assembly. You may need to turn the bulb left or right to align the grooves in the plastic base with the tabs in the lamp assembly. When the grooves are aligned, push the bulb into the lamp assembly until the plastic base contacts the rear of the lamp assembly.

2. Install the bulb retaining ring over the plastic base until it contacts the rear of the socket by rotating clockwise until you feel a “stop.”

3. Install the electrical connector into the plastic base until it snaps, locking it into position.

4. Turn the headlamps on and make sure they work properly. If the headlamp was correctly aligned before you changed the bulb, you should not need to align it again.

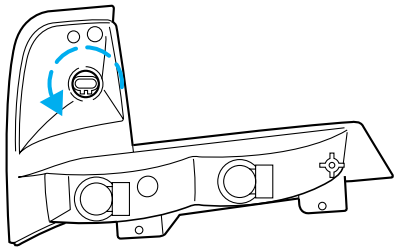
Replacing front parking lamp/turn signal bulbs



1. Remove two screws from the lamp assembly.

2. Disengage lamp assembly (it has a snap fit).

3. Release clip and disconnect the electrical connector from the bulb.



4. Rotate bulb socket counterclockwise about ¼ turn and remove from lamp assembly.

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

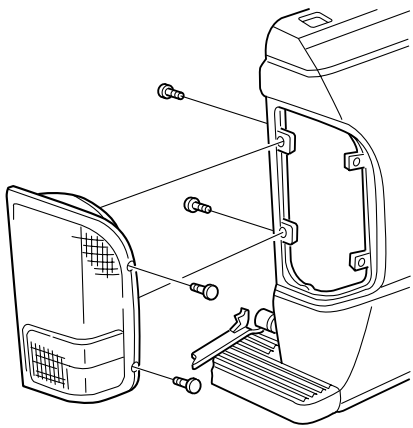
6. Insert the bulb into the parking lamp assembly. When the grooves in the plastic base are aligned, push the bulb into the lamp assembly until the plastic base contacts the rear of the lamp assembly and turn to lock.

7. Connect the electrical connector into the rear of the plastic base until it “snaps.”

8. Align the parking lamp studs with the plastic grommets on the vehicle and push to snap in place.

9. Install two screws on lamp assembly.

Replacing tail lamp/Backup lamp bulbs



The tail lamp/backup lamp bulbs are located in the same portion of the tail lamp assembly, one just below the other. Follow the same steps to replace either bulb:

1. Open the liftgate to expose the lamp assemblies.

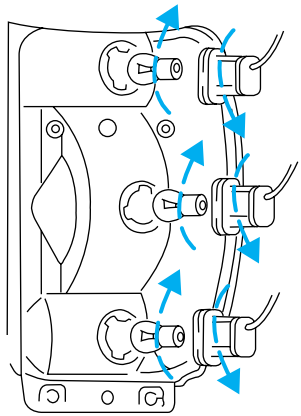
2. Remove the four screws and the lamp assembly from vehicle.

3. Rotate bulb socket counterclockwise about ¼ turn and remove from lamp assembly.

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

5. Install the bulb socket in lamp assembly by turning clockwise.

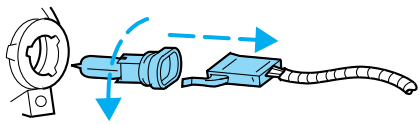
6. Install the lamp assembly and secure with four screws.



Replacing foglamp bulbs

1. Remove the bulb socket from the foglamp by turning counterclockwise.

2. Disconnect the electrical connector from the foglamp bulb.



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

4. Install the bulb socket in the foglamp turning clockwise.

High-mount brakelamp and cargo lamp bulbs

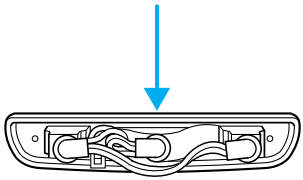
The replacement of the high-mount brakelamp bulb and cargo lamp bulb is basically the same. This procedure covers the high-mount brakelamp bulb.

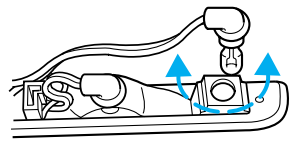
To remove the brakelamp assembly:

1. Remove the two screws and lamp assembly from vehicle.

2. Remove the bulb socket from lamp assembly by rotating it 45 degrees.

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





To install the brakelamp assembly:

1. Install the bulb socket into the lamp assembly and rotate 45 degrees.

2. Install the lamp assembly on the vehicle and secure with two screws.

Replacing license plate lamp bulbs

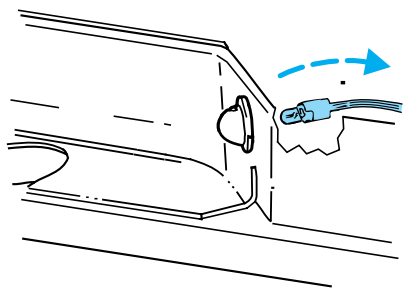
The license plate bulbs are located behind the rear bumper. To change the license plate lamp bulbs:

1. Reach behind the rear bumper to locate the bulb socket.

2. Twist the socket counterclockwise ¼ turn and remove.

3. Pull out the old bulb from socket and push in the new bulb.

4. Install the bulb socket in lamp assembly by turning it clockwise.



Using the right bulbs

Function	Number of bulbs	Trade number
Park/turn/side marker lamps (front)	4	3157
Headlamps	2	9007
Foglamps (if equipped)	2	H3
Hi-mount brakelamp	2	906
Rear stop/tail lamps	2	3157
Rear turn lamps	2	3156
Rear license plate lamps	2	194
Backup lamp	2	3156
Dome lamp	1	912
Map/dome-SuperCab (if equipped)	2	906
Map/dome-Regular Cab (if equipped)	1	212-2
	2	906
To replace all instrument panel lights - see your dealer.		

REPLACING THE INTERIOR BULBS

Check the operation of the following interior bulbs frequently:

- interior overhead lamp
- map lamp

AIMING THE HEADLAMPS

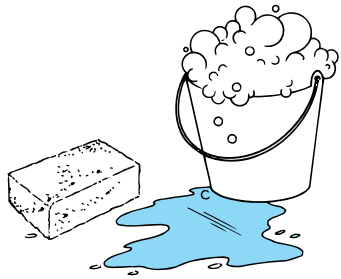
The alignment of your headlamps should be checked by a qualified service technician if:

- Oncoming motorists frequently signal you to deactivate your high beams, and your high beams are not activated.
- The headlamps do not seem to provide enough light for clear night vision.
- The headlamp beams are pointed substantially away from a slightly down and to the right position.

CLEANING AND CARING FOR YOUR VEHICLE

Refer to the “Customer Assistance Guide” for a list of Ford-approved cleaners, polishes and waxes.

Washing your vehicle



Wash your vehicle regularly with cold or lukewarm water. Never use strong detergents or soap. If your vehicle is particularly dirty, use a quality car wash detergent. Always use a clean sponge, washing glove or similar device and plenty of water for best results. To avoid spots, avoid washing when the hood is still warm, immediately after or during exposure to strong sunlight.

During winter months, it is especially important to wash the vehicle on a regular basis. Large quantities of dirt and road salt are difficult to remove and also cause damage to the vehicle.

Remove any exterior accessories, such as antennas, before entering a car wash. If you have wax applied to the vehicle at a commercial car wash, it is recommended that you clean the wiper blades and windshield as described in *Cleaning the wiper blades and windshield.*

After washing, apply the brakes several times to dry them.

Waxing your vehicle

Wax when water stops beading on the surface. This could be every three or four months, depending on operating conditions.

Use only carnauba or synthetic-based waxes. Use cleaning fluid or alcohol with a clean cloth to remove any bugs and tar before waxing vehicle. Use tar remover to remove any tar spots.

Avoid getting wax on the windshield. If you have wax applied at a commercial car wash, it is recommended that you clean the wiper blades and windshield as described in *Cleaning the wiper blades and windshield.*

Repairing paint chips

Minor scratches or paint damage from road debris may be repaired with touch-up paint, repair foil or aerosol paint spray from the Ford accessory line. Observe the application instructions on the products.

Remove particles such as bird droppings, tree sap, insect remains, tar spots, road salt and industrial fallout immediately.

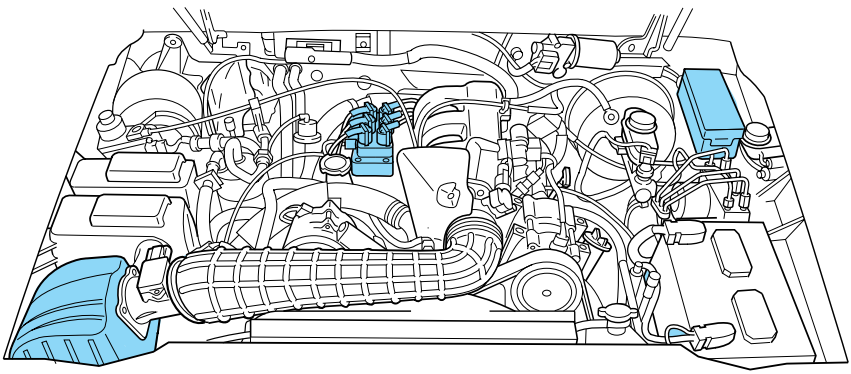
Cleaning the wheels

Wash with the same detergent as the body of your vehicle. Do not use acid-based or alcohol-based wheel cleaners, steel wool, fuel or strong detergents. Never use abrasives that will damage the finish of special wheel surfaces. Use a tar remover to remove grease and tar.

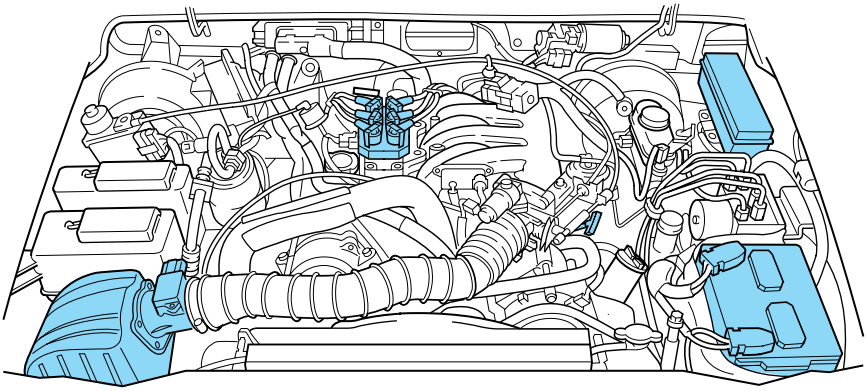
Cleaning the engine

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

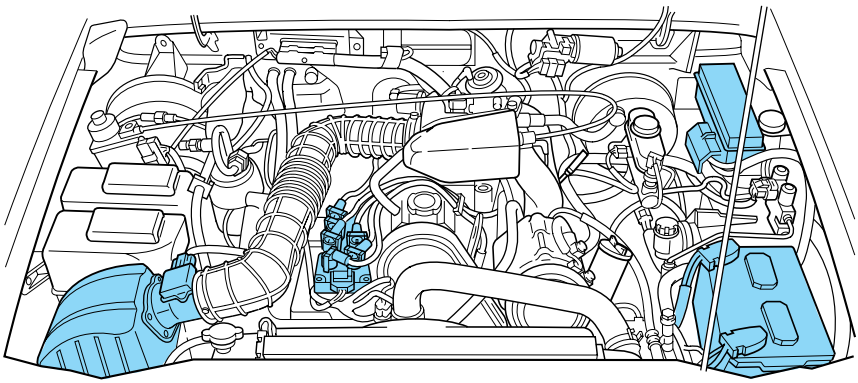
- Take care when using a power washer to clean the engine. The high pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray with cold water to avoid cracking the engine block or other engine components.
- Cover the highlighted areas to prevent water damage when cleaning the engine.



- 4.0L



- 3.0L



- 2.5L
- Never wash or rinse the engine while it is running; water in the running engine may cause internal damage.

Cleaning plastic exterior parts

Use vinyl cleaner for routine cleaning. Clean with a tar remover if necessary. Do not clean plastic parts with thinners, solvents or petroleum-based cleaners.

Cleaning the exterior lamps

Wash with the same detergent as the exterior of your vehicle. Use glass cleaner or tar remover if necessary.

To avoid scratching the lamps, do not use a dry paper towel, chemical solvents or abrasive cleaners.

Cleaning the wiper blades and windshield

If the wiper blades do not wipe properly, clean the wiper blade rubber element with undiluted windshield washer solution or a mild detergent. To avoid damaging the blades, do not use fuel, kerosene, paint thinner or other solvents.

If the wiper still does not wipe properly, this could be caused by substances on the windshield such as tree sap and some hot wax treatments used by commercial car washes. Clean the outside of the windshield with a non-abrasive cleanser such as the non-abrasive Bon-Ami® powder. Rinse thoroughly with clean water. **Do not** use abrasive cleansers on glass as they may cause scratches. The windshield is clean if beads do not form when you rinse it with water. The windshield and wiper blades should be cleaned on a regular basis, and blades or rubber elements replaced when worn.

Cleaning the instrument panel

Clean with a damp cloth, then dry with a dry cloth.

Avoid cleaner or polish that increases the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect the driver from undesirable windshield reflection.

Cleaning the interior fabric

Remove dust and loose dirt with a whisk broom or a vacuum cleaner. Remove fresh spots immediately. Do not use household or glass cleaners. These agents can stain and discolor the fabric. Use a mild soap and water solution if necessary.

Cleaning and maintaining the safety belts

Clean the safety belts with a mild soap solution recommended for cleaning upholstery or carpets. Do not bleach or dye the belts, because these actions may weaken the belt webbing.

Check the safety belt system periodically to make sure there are no nicks, wear or cuts. If your vehicle has been involved in an accident, refer to the *Safety belt maintenance* section in the *Seating and safety restraints* chapter.

Underbody

Flush the complete underside of vehicle frequently. Keep body drain holes unplugged. Inspect for road damage.

Inside windows

Use glass cleaner for the inside windows if they become fogged.

Cleaning mirrors

Do not clean your mirrors with a dry cloth or abrasive materials. Use a soft cloth and mild detergent and water. Be careful when removing ice from outside mirrors because you may damage the reflective surface.

MOTORCRAFT PART NUMBERS

Component	2.5L I4 engine	3.0L V6 engine	4.0L V6 engine	3.0L V6 FFV engine
Air filter	FA-1658	FA-1658	FA-1658	FA-1658
Fuel filter	FG-986B	FG-986B	FG-986B	FG-991
Battery	BXT-59	BXT-59	BXT-59	BXT-59
Oil filter	FL-400S	FL-400S	FL-1A	FL-400S
PCV valve	EV-227	EV-130	EV-225	EV-130
Spark plugs*	AWSF-32F**	AWSF-32PP***	AGSF-22PP***	AGSF-12PP***

* Refer to Vehicle Emissions Control Information (VECI) decal for spark plug gap information.

** Two spark plugs per cylinder required (eight total).

*** If any spark plug needs to be removed for inspection, it must be re-installed in the same cylinder. Cylinders No.1, 2 and 3 have a “PG” suffix. Cylinders No. 4, 5 and 6 have a “P” suffix. If any spark plug needs to be replaced, use only spark plugs with the service part number suffix letters “PP” as shown on the engine decal.

REFILL CAPACITIES

Fluid	Ford Part Name	Application	Capacity
Engine oil (includes filter change)	Motorcraft 5W30 Super Premium Motor Oil	2.5L I4 and 3.0L V6 engine	4.3L (4.5 quarts)
		4.0L V6 engine	4.7L (5.0 quarts)
Brake fluid	High Performance DOT 3 Motor Vehicle Brake Fluid	All	Fill to line on reservoir
Power steering fluid	Motorcraft MERCON® ATF	All	Fill to range on dipstick

Fluid	Ford Part Name	Application	Capacity
Transmission fluid	Motorcraft MERCON® ATF	5-speed manual	2.65L (2.8 quarts)
	Motorcraft MERCON®V ATF	4x2 vehicles with automatic and 2.5L engine	9.3L (9.8 quarts)
		4x2 vehicles with automatic and 3.0L or 4.0L engine	9.5L (10.0 quarts)
		4x4 vehicles with automatic	9.8L (10.3 quarts)
Engine coolant	[1]	2.5L I4 engine without A/C	6.2L (6.5 quarts)
		2.5L I4 engine with A/C	6.8L (7.2 quarts)
		3.0L V6 engine without A/C	9.0L (9.5 quarts)
		3.0L V6 engine with A/C	9.6L (10.2 quarts)
		4.0L V6 engine without A/C	7.4L (7.8 quarts)
		4.0L V6 engine with A/C	8.1L (8.6 quarts)
Fuel tank	N/A	Regular cab (Short wheel base)	62.4L (16.5 gallons)
		Regular cab (Long wheel base)	75.7L (20.0 gallons)
		SuperCab	73.8L (19.5 gallons)
Transfer Case Fluid	Motorcraft MERCON® ATF	4x4 Vehicles	1.2L (1.25 quarts)

Fluid	Ford Part Name	Application	Capacity
Front axle fluid	Motorcraft SAE 80W90 Premium Rear Axle Lubricant	4x4 Vehicles	1.7L (3.6 pints)
Rear axle lubricant[2]	Motorcraft SAE 80W90 Premium Rear Axle Lubricant	All	2.4-2.5L (5.0-5.3 pints)
Windshield washer fluid	Ultra-Clear Windshield Washer Concentrate	All	Fill to line on reservoir

[1] If your engine coolant is green in color, use Ford Premium Cooling System Fluid. If your coolant is orange in color, use Ford Extended Life Engine Coolant. Refer to *Adding engine coolant, in the Maintenance and Care chapter.*

[2] Traction-Lok axles use 2.2–2.4L (4.75–5.0 pints) of rear axle lubricant.

Add 118 ml (4 oz.) of additive friction modifier C8AZ-19B546–A, Ford specification EST-M2C118–A for complete refill of Traction-Lok axles.

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

LUBRICANT SPECIFICATIONS

Item	Ford part name or equivalent	Ford part number	Ford specification
Front axle	75W90 Gear Lube	XY-75W90-QL	WSP-M2C201-A
Rear axle	Motorcraft SAE 80W90 Premium Rear Axle Lubricant[1]	XY-80W90-QL	WSP-M2C197-A

Item	Ford part name or equivalent	Ford part number	Ford specification
Brake fluid and clutch fluid (if equipped)	High Performance DOT 3 Motor Vehicle Brake Fluid	C6AZ-19542-AB	ESA-M6C25-A and DOT 3
Door weather strips	Silicone Lubricant	C0AZ-19553-AA	ESR-M13P4-A
Engine coolant	Ford Premium Engine Coolant (green in color)	E2FZ-19549-AA	ESE-M97B44-A
	Ford Extended Life Engine Coolant (orange in color)	F6AZ-19544-AA	WSS-M97B44-D or DEX-COOL® equivalent
Engine oil	Motorcraft 5W30 Super Premium Motor Oil	XO-5W30-QSP	WSS-M2C153-G and API Certification Mark
Hinges, door checks, latches, striker plates, fuel filler door hinge and seat tracks	Multi-Purpose Grease	DOAZ-19584-AA or F5AZ-19G209-AA	ESB-M1C93-B or ESB-M1C159-A
Transmission /steering/parking brake linkages and pivots, brake and clutch pedal shaft, clutch pilot bearing and. input shaft spline (manual transmission).	Premium Long-Life Grease	XG-1-C	ESA-M1C75-B

Item	Ford part name or equivalent	Ford part number	Ford specification
Power steering fluid, transfer case fluid and transmission fluid (manual)	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Automatic transmission (4R44E and 5R55E)	Motorcraft MERCON®V ATF	XT-5-QM	MERCON®V
Windshield washer fluid	Ultra-Clear Windshield Washer Concentrate	C9AZ-19550-AB	ESR-M17P5-A

[1] Add 118 ml (4 oz.) of additive friction modifier C8AZ-19B546–A, Ford specification EST-M2C118–A for complete refill of Traction-Lok axles.

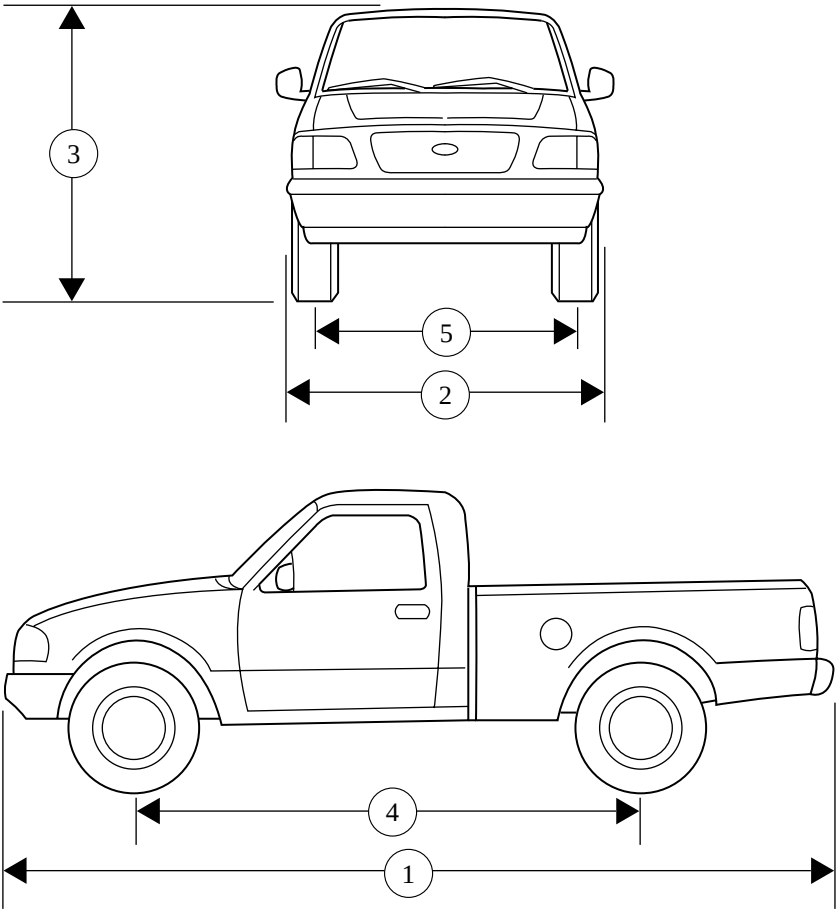
ENGINE DATA

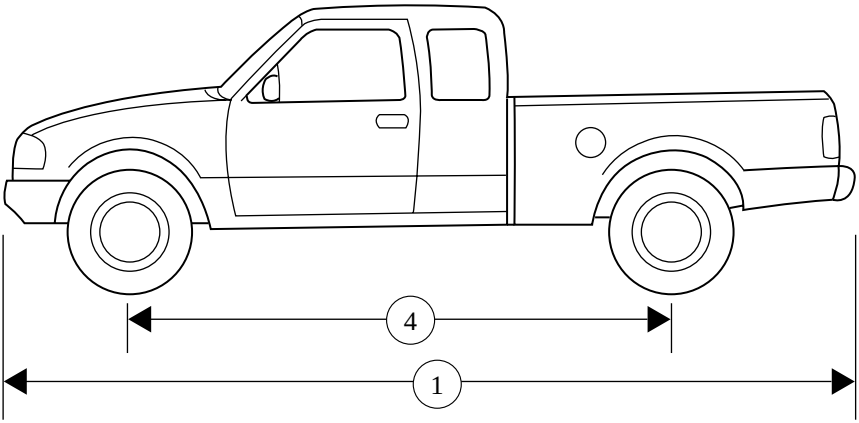
Engine	2.5L I4 engine	3.0L V6 engine	3.0L FFV V6 engine	4.0L V6 engine
Cubic inches	153	182	182	245
Horsepower	119 @ 5000 rpm	150 @ 5000 rpm	150 @ 5000 rpm (on E85)	160 @ 4200 rpm
Torque	146 lb.-ft. @ 3000 rpm	185 lb.-ft. @ 3750 rpm	190 lb.-ft. @ 3750 rpm (on E85)	225 lb.-ft. @ 2750 rpm
Recommended fuel	87 octane	87 octane	87 octane or Ethanol (E 85)	87 octane
Firing order	1-3-4-2	1-4-2-5-3-6	1-4-2-5-3-6	1-4-2-5-3-6

Engine	2.5L I4 engine	3.0L V6 engine	3.0L FFV V6 engine	4.0L V6 engine
Spark plug gap	1.07-1.17 mm (0.042-.046 inch)	1.07-1.17 mm (0.042-.046 inch)	1.07-1.17 mm (0.042-.046 inch)	1.3-1.4 mm (0.052-0.056 inch)
Ignition system	EDIS	EDIS	EDIS	EDIS
Compression ratio	9.4:1	9.14:1	9.14:1	9.0:1

VEHICLE DIMENSIONS

Vehicle dimensions	Regular Cab Short Wheel Base (SWB) mm (in)	Regular Cab Long Wheel Base (LWB) mm (in)	Supercab mm (in)
(1) Overall length	4 763 (187.5)	5 093 (200.5)	5 153 (202.9)
(2) Overall width	1 785 (70.3)	1 785 (70.3)	1 785 (70.3)
(3) Overall height 4x2/4x4	1 575 (62.0) / 1 655 (65.2)	1 586 (62.4) / 1 655 (65.2)	1 585 (62.4) / 1 684 (66.3)
(4) Wheelbase	2 831 (111.4)	2 983 (117.4)	3 192 (125.7)
(5) Track - Front	1 486 (58.5)	1 486 (58.5)	1 485 (58.5)
(5) Track - Rear	1 455 (57.3)	1 455 (57.3)	1 455 (57.3)


3
5
2
4
1



IDENTIFYING YOUR VEHICLE

Safety compliance 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 front door latch pillar on the driver's side.

MFD. BY FORD MOTOR CO. IN U.S.A.

DATE: XXXXX GVWR:XXXXX LB/ XXXXX KG
FGAWR: XXXXXX/XXXXXXX RGAWR: XXXXXXX/XXXXXXX
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.
VIN: XXXXXXXXXXXXXXXXX TYPE: XXXXXXXXXXXXXXX

MAXIMUM LOAD=OCCUPANTS + LUGGAGE=XXXKG/XXXXLB
OCCUPANTS: X TOTAL X FR X 2ND X RR OCCUPANTS LUGGAGE
XX XXXKG/XXXXLB
TIRE: XXXX/XXXXX XXX X XXXKG/XXXXLB
PRESSURE (FR) XXX kPa/33 PSI COLD
PRESSURE (RR) XXX kPa/33 PSI COLD
TRAILER TOWING - SEE OWNER GUIDE

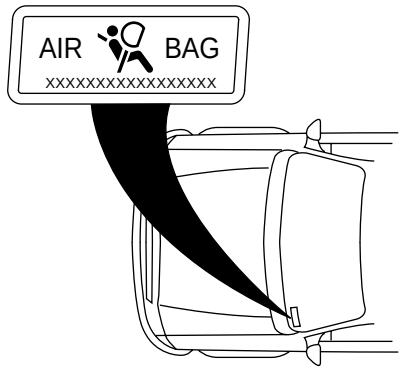
EXT PNT: XXXXXX XXXXXX	RC: XX	DSO: XXXX	F0000

BAR	INT TR	TP/PS	R	AXLE	TR	SPR	T0000
X	XX	XXX	X	XX	X	XXXX	

UTC ∇FOHT-15294A10-GA

Vehicle identification number

The vehicle identification number is attached to a metal tag and is located on the driver side instrument panel. For your protection, you will also find the vehicle identification number in the following areas:



- the left and right front fenders
- the left and right front doors
- the front and rear bumpers
- the hood
- the left and right rear quarter panels
- the decklid
- the liftgate

Engine number

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

REPORTING SAFETY DEFECTS (U.S. ONLY)

If you believe that your vehicle has a defect that 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 (202–366–0123 in the Washington D.C. area) or write to:

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

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

Index

Item	Information
Recommended fuel	Refer to ″Octane recommendations″ in the *Maintenance and care* chapter.
Fuel tank capacity (Regular cab-Short wheel base)	62.4L (16.5 gallons)
Fuel tank capacity (Regular cab-Long wheel base)	75.7 (20.0 gallons)
Fuel tank capacity (SuperCab)	73.8L (19.5 gallons)
Engine oil capacity (includes filter change)-2.5L I4 and 3.0L V6 engines	4.3L (4.5 quarts). Use Motorcraft 5W30 Super Premium Motor Oil, Ford specification WSS-M2C153-G.
Engine oil capacity (includes filter change)-4.0L V6 engine	4.7L (5.0 quarts). Use Motorcraft 5W30 Super Premium Motor Oil, Ford specification WSS-M2C153-G.
Tire size and pressure	See Safety Compliance Certification Label on inside of driver door.
Hood release	Pull handle under the left side of the instrument panel.
Coolant capacity-2.5L I4 without air conditioning[1]	6.2L (6.5 quarts)
Coolant capacity-2.5L I4 with air conditioning[1]	6.8L (7.2 quarts)
Coolant capacity-3.0L V6 without air conditioning[1]	9.0L (9.5 quarts)
Coolant capacity-3.0L V6 with air conditioning[1]	9.6L (10.2 quarts)
Coolant capacity-4.0L V6 without air conditioning[1]	7.4L (7.8 quarts)
Coolant capacity-4.0L V6 with air conditioning[1]	8.1L (8.6 quarts)
Power steering fluid capacity	Fill to range on dipstick. Use Motorcraft MERCON® ATF.
Manual transmission fluid capacity	2.65L (2.8 quarts). Use Motorcraft MERCON® ATF.

Filling station information

Item	Information
Automatic transmission fluid capacity-4x2 vehicles with 2.5L I4 engine[2]	9.3L (9.8 quarts). Use Motorcraft MERCON®V ATF.
Automatic transmission fluid capacity-4x2 vehicles with 3.0L or 4.0L V6 engine[2]	9.5L (10.0 quarts). Use Motorcraft MERCON®V ATF.
Automatic transmission fluid capacity-4x4 vehicles[2]	9.8L (10.3 quarts). Use Motorcraft MERCON®V ATF.

[1] If your engine coolant is green in color, use Ford Premium Cooling System Fluid. If your engine coolant is orange in color, use Ford Extended Life Engine Coolant. Refer to *Adding engine coolant, in the Maintenance and Care chapter.*

[2] Ensure correct automatic transmission fluid is used for a specific application. Check the container to verify the fluid is MERCON® and/or MERCON® V approved. Some fluids have been approved as meeting both MERCON® and MERCON® V requirements and will be labeled as such. Fluids labeled as meeting only MERCON® or only MERCON® V requirements must not be used interchangeably. DO NOT mix MERCON® and MERCON® V. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. Refer to your “Service Guide” to determine the correct service interval.