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CALIFORNIA Proposition 65 Warning

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

CONGRATULATIONS

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

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

- In the United States: www.ford.com
- In Canada: www.ford.ca
- In Australia: www.ford.com.au
- In Mexico: www.ford.com.mx

Additional owner information is given in separate publications.

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

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

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

SAFETY AND ENVIRONMENT PROTECTION

Warning symbols in this guide

How can you reduce the risk of personal injury to yourself or others? In this guide, answers to such questions are contained in comments highlighted by the warning triangle symbol. These comments should be read and observed.

Warning symbols on your vehicle

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



Protecting the environment

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



BREAKING-IN YOUR VEHICLE

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

Drive your new vehicle at least 500 miles (800 km) before towing a trailer. Additionally, during the first 500 miles (800 km) that you tow a trailer, do not drive over 50 mph (80 km/h) and do not make starts at full throttle. This style of driving will help the engine and other parts of your vehicle wear-in at the heavier loads.

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

SPECIAL NOTICES

Emission warranty

The New Vehicle Limited Warranty includes Bumper-to-Bumper Coverage, Safety Restraint Coverage, Corrosion Coverage, and 6.0L Power Stroke Diesel Engine Coverage. In addition, your vehicle is eligible for Emissions Defect and Emissions Performance Warranties. For a detailed description of what is covered and what is not covered, refer to the *Warranty Guide* that is provided to you along with your Owner's Guide.

Service Data Recording

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

Event Data Recording

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

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

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

Special instructions

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

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

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

Using your vehicle with a snowplow

For more information and guidelines for using your vehicle with a snowplow, refer to the *Driving* chapter.

F150 SuperCrew Owners: Snowplowing

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

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.

Notice to owners of pickup trucks and utility type vehicles

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

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

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

MIDDLE EAST/NORTH AFRICA VEHICLE SPECIFIC INFORMATION

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

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

Vehicle Symbol Glossary

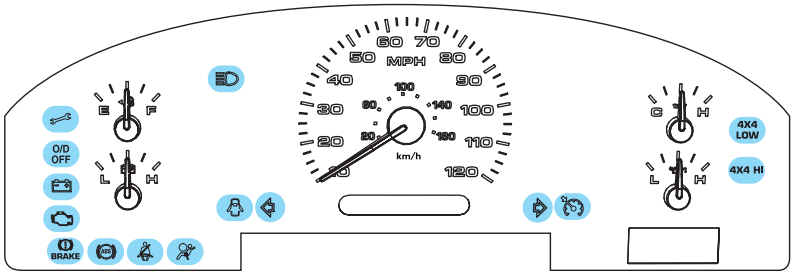
Safety Alert		See Owner's Guide	
Fasten Safety Belt		Air Bag-Front	
Air Bag-Side		Child Seat	
Child Seat Installation Warning		Child Seat Lower Anchor	
Child Seat Tether Anchor		Brake System	
Anti-Lock Brake System		Brake Fluid - Non-Petroleum Based	
Traction Control		AdvanceTrac™	
Master Lighting Switch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

Vehicle Symbol Glossary

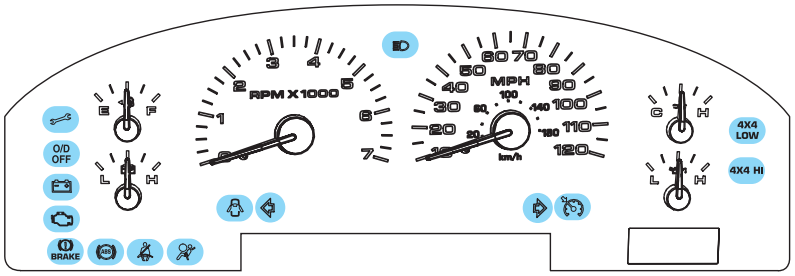
Power Windows Front/Rear		Power Window Lockout	
Child Safety Door Lock/Unlock		Interior Luggage Compartment Release Symbol	
Panic Alarm		Engine Oil	
Engine Coolant		Engine Coolant Temperature	
Do Not Open When Hot		Battery	
Avoid Smoking, Flames, or Sparks		Battery Acid	
Explosive Gas		Fan Warning	
Power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

WARNING LIGHTS AND CHIMES

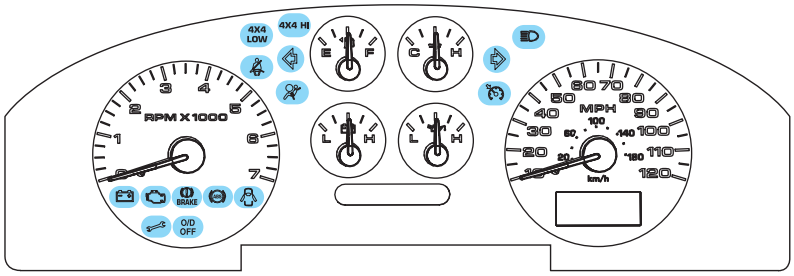
Base instrument cluster



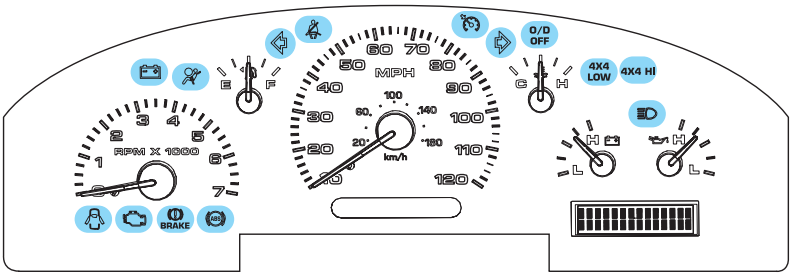
Base with Tachometer instrument cluster



Mid instrument cluster

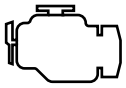


Luxury instrument cluster



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

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



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.

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



On vehicles equipped with a message center, “ENGINE FAILSAFE MODE” will be displayed, refer to *Message Center* in the *Driver Controls* chapter.

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



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

Anti-lock brake system: If the ABS light stays illuminated or continues to flash, a malfunction has been detected, have the system serviced immediately. Normal braking is still functional unless the brake warning light also is illuminated.



Air bag readiness: If this light fails to illuminate when ignition is turned to ON, continues to flash or remains on, have the system serviced immediately. A chime will also sound when a malfunction in the supplemental restraint system has been detected.



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



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



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



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

O/D
OFF

Four wheel drive low: Illuminates when four-wheel drive low is engaged.

4x4
LOW

Four wheel drive high: Illuminates when four-wheel drive high is engaged.

4x4 HI

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



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



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



MINI MESSAGE CENTER WARNING DISPLAYS (IF EQUIPPED)

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



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



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



Check gauge: Displays when any of the following conditions has occurred:



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

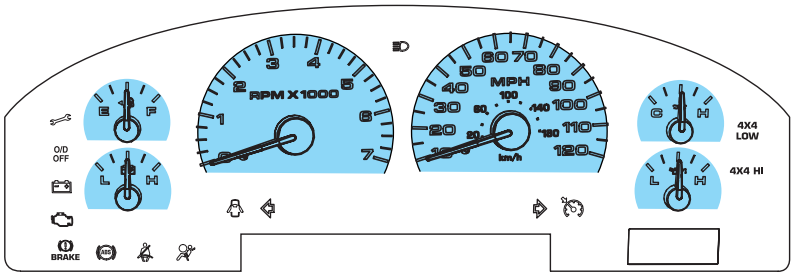
Trans Fault: Displays when a transmission problem has been detected and shifting may be restricted. If the light remains on, have the system serviced immediately.



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

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

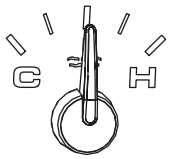
GAUGES



Speedometer: Indicates the current vehicle speed.



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



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

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

- With Mini Message Center



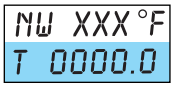
• With Full Message Center



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

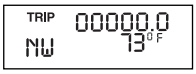
Trip odometer: Registers the miles (kilometers) of individual journeys.

• With Mini Message Center

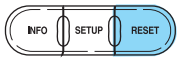


Press and release the button on top of the cluster to toggle between odometer and trip odometer display.

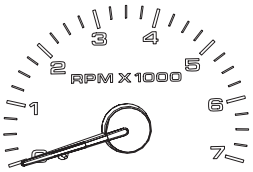
• With Full Message Center



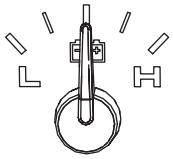
Press and release the message center INFO button until TRIP mode appears in the display. Press the RESET button to reset.



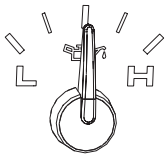
Tachometer (if equipped): Indicates the engine speed in revolutions per minute. Driving with your tachometer pointer continuously at the top of the scale may damage the engine.



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

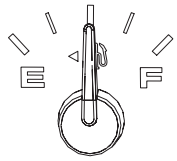


Engine oil pressure gauge: Indicates engine oil pressure. The needle should stay in the normal operating range (between "L" and "H"). If the needle falls below the normal range, stop the vehicle, turn



off the engine and check the engine oil level. Add oil if needed. If the oil level is correct, have your vehicle checked at your dealership or by a qualified technician.

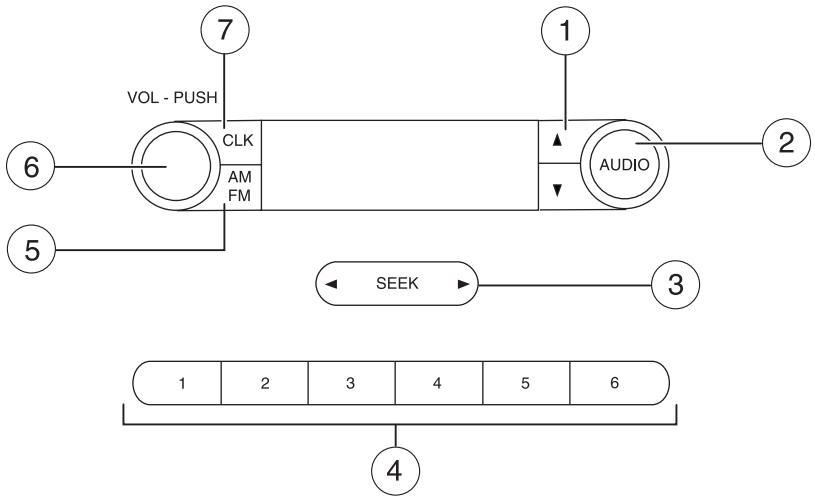
Fuel gauge: Indicates approximately how much fuel is left in the fuel tank (when the ignition is in the ON position). The fuel gauge may vary slightly when the vehicle is in motion or on a grade.



The arrow next to the fuel pump icon indicates which side of the vehicle the fuel filler door is located.

For more information, refer to *Filling the tank* under the *Fuel Information section* in the *Maintenance and Specifications* chapter.

FORD AM/FM STEREO SYSTEM (IF EQUIPPED)



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



2. **Audio:** Press to access select various settings.



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

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

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

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

Setting the clock: Press until HR or Mn is displayed.
Press ▲ /▼ /◀ SEEK ▶ to adjust the hours/minutes.

3. **Seek:** Press to access the next/previous strong station.



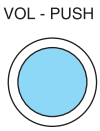
4. **Memory presets:** To set a station: Select frequency band AM/FM; tune to a station, press and hold a preset button until sound returns.



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



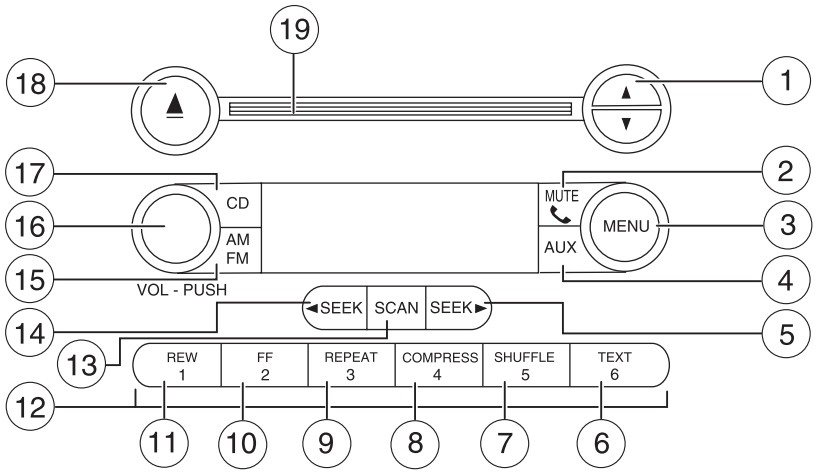
6. **ON/OFF/Volume:** Press to turn ON/OFF. Turn to increase/decrease volume.
If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a "nominal" listening level when the ignition switch is turned back on.



7. **CLK (Clock):** Press CLK to toggle between displaying the radio frequency and the clock setting.



FORD SINGLE CD SOUND SYSTEM (IF EQUIPPED)



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



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



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



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

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

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

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

Speed sensitive volume: Radio volume automatically changes slightly with vehicle speed to compensate for road and wind noise. Use ▲ /▼ /◀ SEEK, SEEK ▶ to adjust.

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

When the six strongest stations are filled, the station stored in preset 1 will begin playing. If there are less than six strong stations, the system will store the last one in the remaining presets.

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

4. **Aux:** Press to toggle between FES/DVD and AUX modes. If no auxiliary sources are available, NO AUX AUDIO will be displayed.



5. **Seek:** Press to access the next strong station or track.



6. **Text:** This control currently not supported.



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



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



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



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



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



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



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



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



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



16. **ON/OFF/Volume:** Press to turn ON/OFF. Turn to increase/decrease volume.
If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a "nominal" listening level when the ignition switch is turned back on.



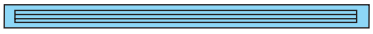
17. **CD:** Press to enter CD mode. If a CD is already loaded into the system, CD play will begin where it ended last.



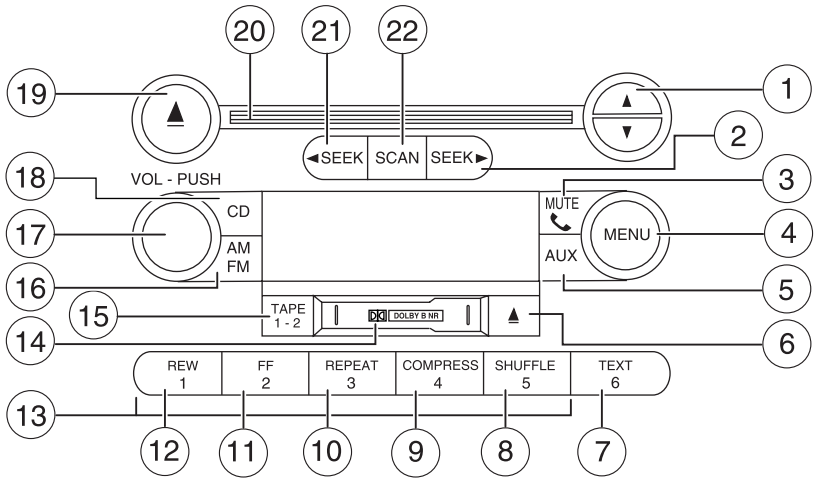
18. **CD eject:** Press to eject a CD.



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



FORD DUAL MEDIA SOUND SYSTEM (IF EQUIPPED)



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



2. **Seek:** Press to access the next strong station or track.



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



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



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

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

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

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

Speed sensitive volume: Radio volume automatically changes slightly with vehicle speed to compensate for road and wind noise. Use ▲ /▼ /◀ SEEK, SEEK ▶ to adjust.

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

When the six strongest stations are filled, the station stored in preset 1 will begin playing. If there are less than six strong stations, the system will store the last one in the remaining presets.

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

5. **Aux:** Press to toggle between FES/DVD and AUX modes. If no auxiliary sources are available, NO AUX AUDIO will be displayed.



6. **Tape eject:** Press to eject a tape.



7. **Text:** This control currently not supported.



8. **Shuffle:** Press to play CD tracks in random order on the selected CD.



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



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



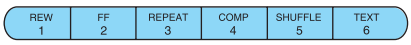
11. **Fast forward:** Press to manually advance in a tape or CD track.



12. **Rewind:** Press to manually reverse in a tape or CD track.



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



14. **Cassette door**: Insert a tape, facing to the right.

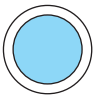
15. **Tape direction:** Press to change which side of the tape is playing.



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



17. **ON/OFF/Volume:** Press to turn ON/OFF. Turn to increase/decrease volume.
If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a "nominal" listening level when the ignition switch is turned back on.



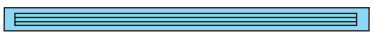
18. **CD:** Press to enter CD mode. If a CD is already loaded into the system, CD play will begin where it ended last.



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



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



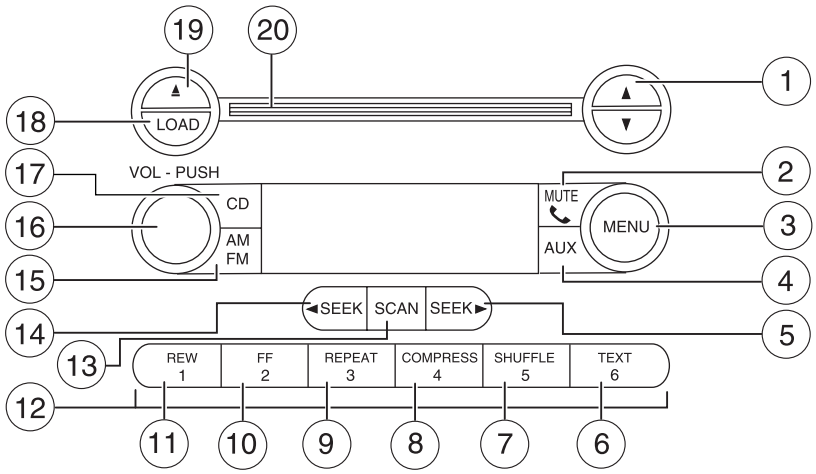
21. **Seek:** Press to access the previous strong station or track.



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



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



1. ▲ / ▼ **Tune/Disc selector:** Press to manually go up or down the radio frequency or to select a desired disc. Also use in menu mode to select various settings.



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



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



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

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

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

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

Speed sensitive volume: Radio volume automatically changes slightly with vehicle speed to compensate for road and wind noise.
Use ▲ /▼ /◀ SEEK, SEEK ▶ to adjust.

Ambiance (Available on Audiophile radios only): This feature gives the feeling of "being there" to your music, creating increased clarity as well as an open and spacious feel to the music. Use ▲ /▼ /◀ SEEK, SEEK ▶ to turn on/off. Turn the volume control to increase/decrease the level of ambiance.

Occupancy mode: (Available on Audiophile radios only):
Use ▲ /▼ /◀ SEEK, SEEK ▶ select and optimize sound for ALL SEATS, DRIVERS SEAT or REAR SEATS.

Autoset: Allows you to set the strongest local radio stations without losing your original manually set preset stations for AM/FM1/FM2 .
Use ▲ /▼ /◀ SEEK, SEEK ▶ to turn on/off.
When the six strongest stations are filled, the station stored in preset 1 will begin playing. If there are less than six strong stations, the system will store the last one in the remaining presets.

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

RDS (Available on Audiophile radios only): Allows you to search RDS-equipped stations for a certain category of music format: Classic, Country, Info, Jazz, Oldies, R&B, Religious, Rock, Soft, Top 40. RDS (only available in FM mode) must be activated to access the Traffic, Find and Show functions.

To activate, press and hold MENU until TRAFFIC appears in the display. This indicates RDS is active. Press MENU consecutively to scroll through Traffic, Find, Show or RDS ON. Use ◀ SEEK, SEEK ▶ to activate/deactivate the functions. To deactivate RDS, scroll to RDS ON and press ◀ SEEK, SEEK ▶ so the display reads RDS OFF. When RDS is Off, you will not be able to access Traffic, Find or Show functions.

Traffic (Available on Audiophile radios only): Allows you to hear traffic broadcasts. Use ▲ /▼ to turn on/off, then use ◀ SEEK, SEEK ▶ or SCAN to find a station broadcasting a traffic report (if it is broadcasting RDS data). *Traffic information is not available in most U.S. markets.*

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

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

4. **Aux:** Press to toggle between FES/DVD and AUX modes. If no auxiliary sources are available, NO AUX AUDIO will be displayed.



5. **Seek:** Press to access the next strong station or track.



6. **Text:** This control currently not supported.



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



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



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



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



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



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



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



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



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



16. **ON/OFF/Volume:** Press to turn ON/OFF. Turn to increase/decrease volume.
If the volume is set above a certain level and the ignition is turned off, the volume will come back on at a "nominal" listening level when the ignition switch is turned back on.



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

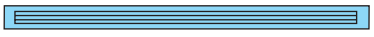


18. **LOAD:** Press to load a CD. Press and hold to autoload up to six CDs.

19. **CD eject:** Press to eject a CD. Press and hold to auto eject all CDs present in the system.



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



RADIO FREQUENCIES

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

AM - 530, 540–1700, 1710 kHz

FM- 87.7, 87.9–107.7, 107.9 MHz

RADIO RECEPTION FACTORS

There are three factors that can affect radio reception:

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

CASSETTE/PLAYER CARE

Do:

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

Don't:

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

CD/CD PLAYER CARE

Do:

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

Don't:

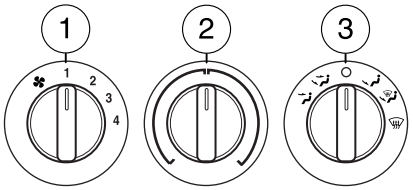
- Expose discs to direct sunlight or heat sources for extended periods of time.
- Insert more than one disc into each slot of the CD changer magazine.
- Clean using a circular motion.

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

AUDIO SYSTEM WARRANTY AND SERVICE

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

HEATER ONLY SYSTEM (IF EQUIPPED)



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

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

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

: Distributes outside air through the instrument panel vents.

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

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

: Distributes outside air through the floor vents.

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

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

OPERATING TIPS

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the position.
- Do not put objects under the front seats that will interfere with the air flow to the back seats.
- To reduce humidity build-up inside the vehicle, do not drive in the OFF position.
- Under normal weather conditions, do not leave the airflow selector in OFF. This allows the vehicle to breathe using the outside air inlets.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.

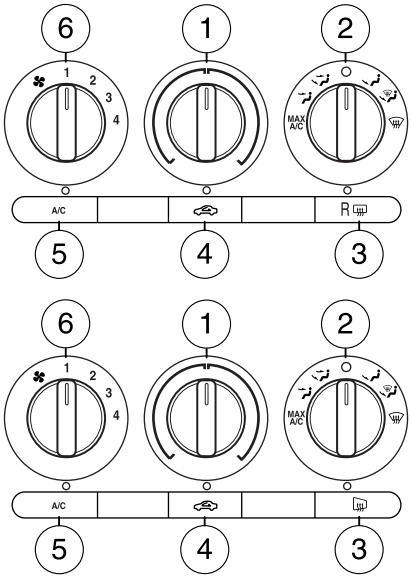
To aid in side window defogging/demisting in cold weather:

1. Select .
2. Adjust the temperature control to maintain comfort.
3. Set the fan speed to the highest setting.

4. Direct the outer instrument panel vents towards the side windows.
To increase airflow to the outer instrument panel vents, close the vents located in the middle of the instrument panel.

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

MANUAL HEATING AND AIR CONDITIONING SYSTEM (IF EQUIPPED)



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

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

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

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

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

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

: Distributes air through the floor vents.

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

: Distributes outside air through the windshield defroster vents.

3. **Rear defrost (if equipped):** Press to defrost the rear window. Refer to *Rear Window Defrost* for more information.

Heated mirrors (if equipped): Press to activate/deactivate. This function will clear snow, fog and thin ice from the side rear view mirrors.

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

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

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

OPERATING TIPS

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

For maximum cooling performance (Max A/C):

Max A/C mode:

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

Panel ( ) and panel/floor ( ) modes:

- Move the temperature control to the coolest setting.
- Select A/C and recirculated air ( ). Use recirculated air with A/C to provide colder airflow.

- Set the fan to the highest speed initially, then adjust to maintain comfort.

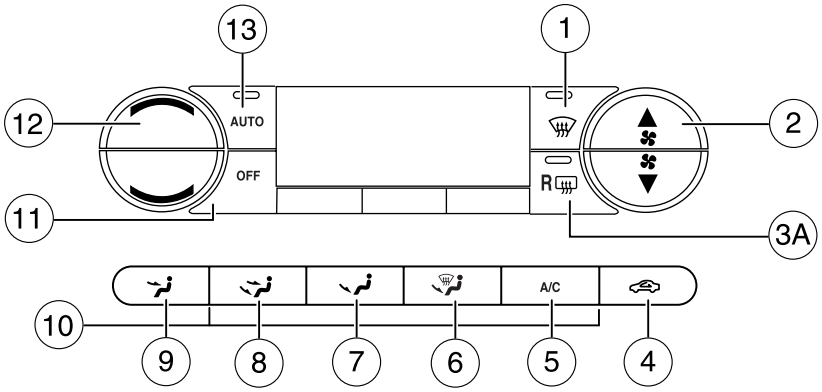
To aid in side window defogging/demisting in cold weather:

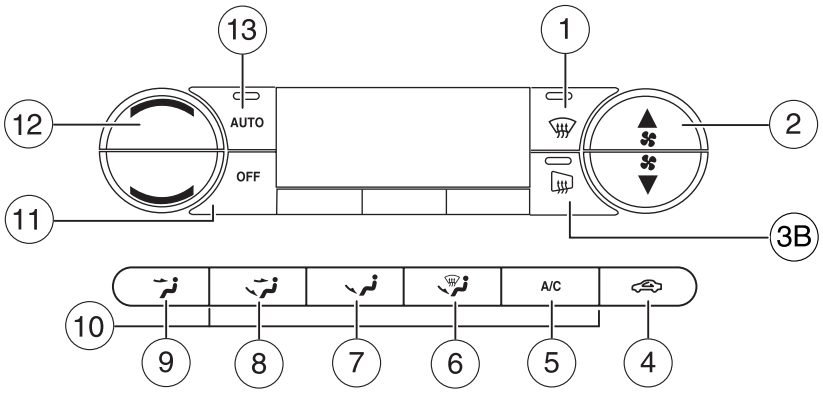
1. Select .
2. Select A/C.
3. Adjust the temperature control to maintain comfort.
4. Set the fan speed to the highest setting.
5. Direct the outer instrument panel vents towards the side windows.

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

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

AUTOMATIC TEMPERATURE CONTROL (ATC) SYSTEM (IF EQUIPPED)





Temperature conversion: To switch between Fahrenheit and Celsius:
If your vehicle is equipped with a full message center, refer to *Units (Fahrenheit/Celsius)* in the Driver Controls chapter.
If your vehicle is equipped with a mini message center, refer to *Mini message center electronic compass temperature display* in the Driver Controls Chapter.

MAX A/C: For maximum cooling performance, press , A/C, , and set the temperature to 60°F and the highest blower setting.

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

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

3. A. **Rear defrost:** Press to defrost the rear window. Refer to *Rear window defroster (if equipped)* in this section for more information. If your vehicle is equipped with both rear defrost and heated mirrors, the same button will activate both.

3. B. **Heated mirrors (if equipped):** Press to activate/deactivate. This feature will remove ice and snow from the side view mirrors.

4. **Recirculation control:** Press to activate/deactivate air recirculation in cabin. Recirculated air may reduce the amount of time to cool down the interior of the vehicle and may also help reduce undesired

odors from reaching the interior of the vehicle. Recirculation can be engaged manually in any other airflow selection except  (defrost). Recirculation may turn off automatically in all airflow selections except MAX A/C.

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

6.  **:** Distributes air through the windshield defroster ducts, demister outlets, and the front and rear seat floor ducts. The system will automatically provide outside air to reduce window fogging.

7.  **:** Distributes air through the floor and rear seat floor ducts.

8.  **:** Distributes air through the windshield defroster ducts, demister outlets, and the front and rear seat floor ducts.

9.  **:** Distributes air through the instrument panel and center console registers (if equipped).

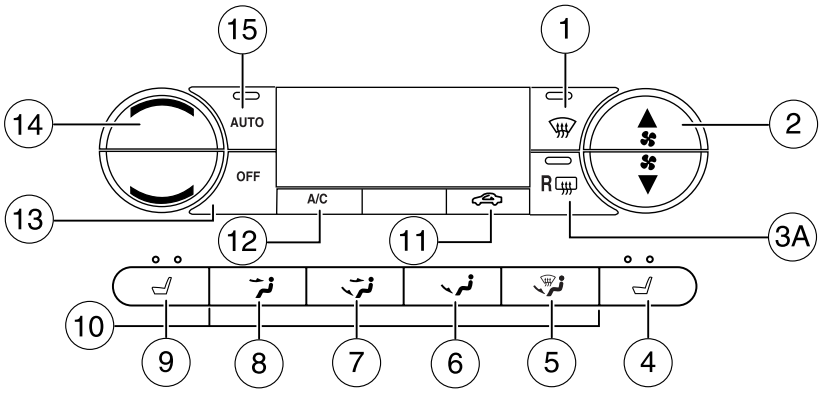
10. **Manual override controls:** Allows you to manually select where airflow is directed. To return to full automatic control, press AUTO.

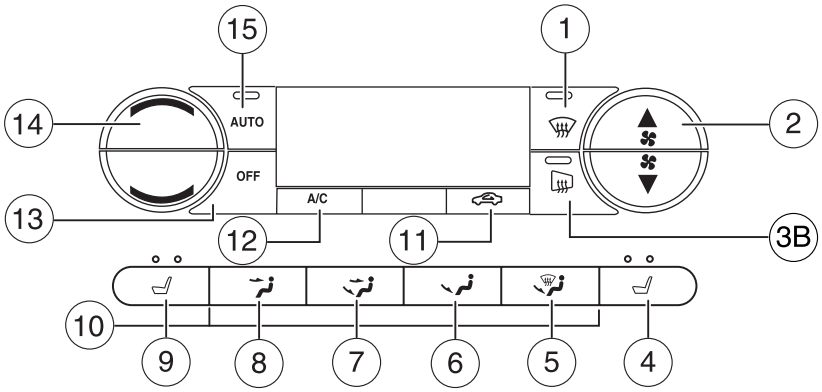
11. **OFF:** Outside air is shut out and the fan will not operate.

12. **Temperature control:** Controls the temperature in the cabin of the vehicle. Press to increase/decrease the temperature.

13. **AUTO:** To engage automatic temperature control, press AUTO and select the desired temperature using the temperature control. The system will automatically determine fan speed, airflow location, A/C on or off, and outside or recirculated air, to heat or cool the vehicle to reach the desired temperature.

AUTOMATIC TEMPERATURE CONTROL (ATC) SYSTEM WITH HEATED SEATS (IF EQUIPPED)





Temperature conversion: To switch between Fahrenheit and Celsius:
If your vehicle is equipped with a full message center, refer to *Units (Fahrenheit/Celsius)* in the *Driver Controls* chapter.
If your vehicle is equipped with a mini message center, refer to *Mini message center electronic compass temperature display* in the *Driver Controls* Chapter.

MAX A/C: For maximum cooling performance, press , A/C, , and set the temperature to 60°F and the highest blower setting.

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

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

3. A. **Rear defrost:** Press to defrost the rear window. Refer to *Rear window defroster (if equipped)* in this section for more information. If your vehicle is equipped with both rear defrost and heated mirrors, the same button will activate both.

3. B. **Heated mirrors (if equipped):** Press to activate/deactivate. This feature will remove ice and snow from the side view mirrors.

4. **Passenger heated seat control:** Press to heat the passenger seat. Press once to activate high heat (two indicator lights). Press again to activate low heat (one indicator light). Press again to deactivate the passenger heated seat.

5. **:** Distributes air through the windshield defroster ducts, demister outlets, and the front and rear seat floor ducts. The system will automatically provide outside air to reduce window fogging.

6. **:** Distributes air through the floor and rear seat floor ducts.

7. **:** Distributes air through the windshield defroster ducts, demister outlets, and the front and rear seat floor ducts.

8. **:** Distributes air through the instrument panel and center console registers (if equipped).

9. **Driver heated seat control:** Press to heat the driver seat. Press once to activate high heat (two indicator lights). Press again to activate low heat (one indicator light). Press again to deactivate the driver heated seat.

10. **Manual override controls:** Allows you to manually select where airflow is directed. To return to full automatic control, press AUTO.

11. **Recirculation control:** Press to activate/deactivate air recirculation in cabin. Recirculated air may reduce the amount of time to cool down the interior of the vehicle and may also help reduce undesired odors from reaching the interior of the vehicle. Recirculation can be engaged manually in any other airflow selection except (defrost). Recirculation may turn off automatically in all airflow selections except MAX A/C.

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

13. **OFF:** Outside air is shut out and the fan will not operate.

14. **Temperature control:** Press to increase/decrease the temperature in the vehicle cabin.

15. **AUTO:** To engage automatic temperature control, press AUTO and select the desired temperature using the temperature control. The system will automatically determine fan speed, airflow location, A/C on or off, and outside or recirculated air, to heat or cool the vehicle to reach the desired temperature.

OPERATING TIPS

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

For maximum cooling performance (Max A/C):

Max A/C mode:

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

Panel ( ) and panel/floor ( ) modes:

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

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

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

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

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

REAR WINDOW DEFROSTER (IF EQUIPPED)

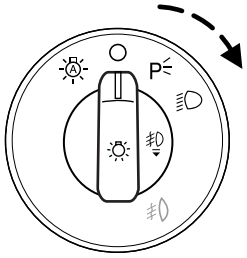
The rear defroster control is located on the climate control panel and works to defrost your rear windshield from fog and thin ice. If equipped, it also operates the heated mirror to remove snow and thin ice from the side mirrors.

Ensure that the ignition is ON position. Press to turn the defroster ON/OFF. The indicator light will illuminate when ON.

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

HEADLAMP CONTROL

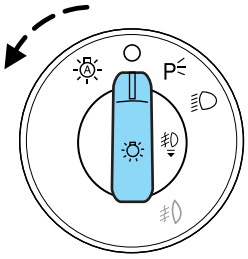
Rotate the headlamp control clockwise to the first position to turn on the parking lamps. Rotate clockwise to the second position to also turn on the headlamps.



Autolamp control (if equipped)

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

The autolamp system also keeps the lights on for approximately 20 seconds or on vehicles equipped with a message center, you can select a delay from 0–180 seconds, after the ignition switch is turned to OFF.



- To turn autolamps on, rotate the control counterclockwise.
- To turn autolamps off, rotate the control clockwise to OFF.

If your vehicle is not equipped with a message center, then the auto lamps can be programmed manually by:

1. Start with the ignition in OFF and the autolamps selected ON.
2. Deselect (switch off) the autolamps.
3. Put the ignition in RUN.
4. Put the ignition in OFF.
5. Select the autolamps (switch on).

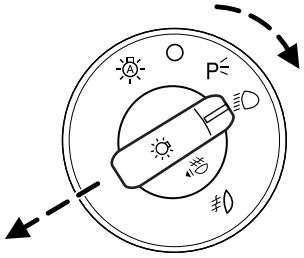
Steps 2 through 5 must be performed within a 10 second period. At this point, the headlamps and park lamps will turn on.

6. Deselect the autolamps after the desired autolamp delay time (maximum of 3 minutes)

At this point, the headlamps and park lamps will turn off.

Foglamp control (if equipped)

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



Pull headlamp control towards you to turn foglamps on. The foglamp indicator light will illuminate if the ignition is in the ON position.

Daytime running lamps (DRL) (if equipped)

Turns the headlamps on with a reduced output.

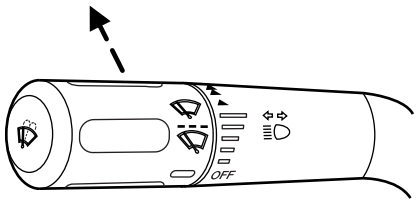
In order for the DRLs to function:

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

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

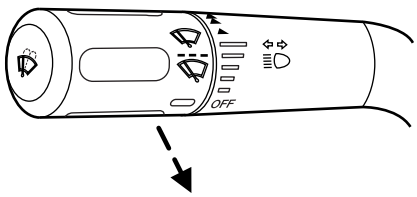
High beams

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



Flash to pass

Pull toward you slightly to activate and release to deactivate.

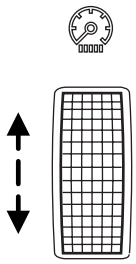


PANEL DIMMER CONTROL

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

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

Move the control to the full down position, past detent, to prevent the interior lights from illuminating when the doors are opened.

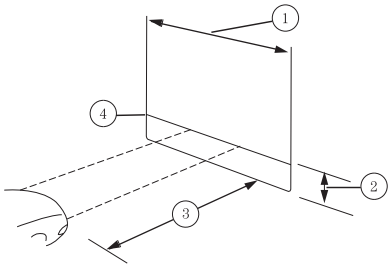


VERTICAL AIM ADJUSTMENT

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

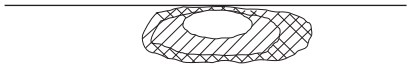
- (1) Eight feet
- (2) Center height of lamp to ground
- (3) Twenty-five feet

• (4) Horizontal reference line

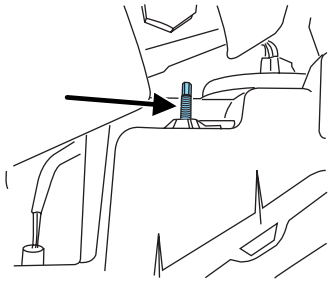


2. Measure the height from the center of your headlamp (indicated by a 3.0 mm circle on the lens) to the ground and mark a 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height (a piece of masking tape works well).

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



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



5. Locate the vertical adjuster on each headlamp, then use a 4 mm socket/wrench to turn the adjuster either counterclockwise (to adjust down) or clockwise (to adjust up) aligning the upper edge of the light pattern up to the horizontal line.

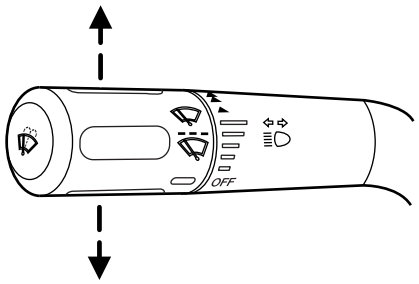
6. HORIZONTAL AIM IS NOT REQUIRED FOR THIS VEHICLE AND IS NON-ADJUSTABLE.

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

8. Close the hood and turn off the lamps.

TURN SIGNAL CONTROL ⇦⇨

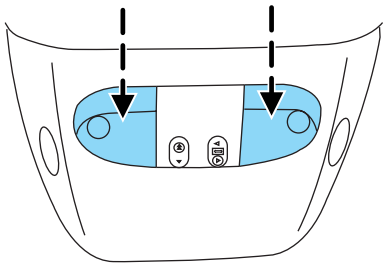
- Push down to activate the left turn signal.
- Push up to activate the right turn signal.



INTERIOR LAMPS

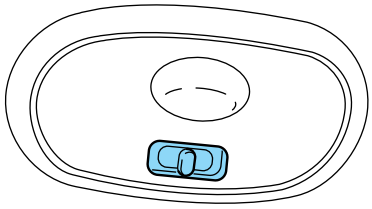
Map lamps

To turn on the map lamps, press the control next to each lamp.



Rear dome lamp (if equipped)

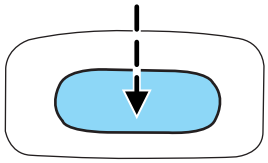
The dome lamp lights when the control is in the DOOR (left) position, any door is open, the instrument panel switch is pushed past the detent and when any of the remote entry controls are pressed while the ignition is off.



The rear dome lamp can be turned ON (center) or OFF (right) by sliding the control.

Rear map lamp (if equipped)

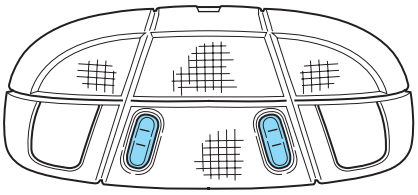
The rear map lamp lights are located on the end of the overhead rail system. The lamps can be turned on or off by pushing on the lens.



Dome/courtesy lamps (if equipped)

The dome lamp lights when:

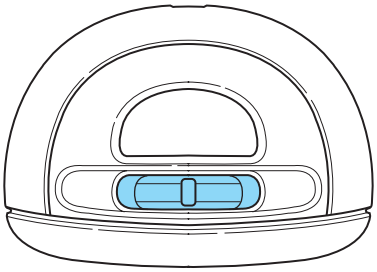
- any door is opened.
- the instrument panel dimmer switch is rotated up until the courtesy lamps come on.
- any of the remote entry controls are pressed and the ignition is OFF.



The reading portion, the two outer lights, can only be toggled on and off at the lamp.

Courtesy/reading/cargo lamps (if equipped)

The dome portion of the lamp, the center light, can be turned on when the headlamp control is rotated fully up or when any door is opened.



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

BULBS

Replacing exterior bulbs

Check the operation of all the bulbs frequently.

Using the right bulbs

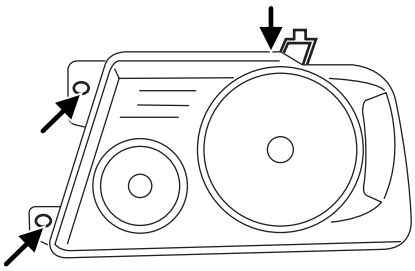
Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized “D.O.T.” for North America and an “E” for Europe to assure lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly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

Function	Number of bulbs	Trade number
Headlamps	2	9008
Front park/turn lamps	2	3157A (amber)
Front sidemarker	2	194
Foglamps	2	9145
Backup lamp	2	3156
Rear stop/turn/sidemarker/tail lamp	2	4057K or 3057K
High-mount brakelamp	1	921
Cargo lamp	2	921
License plate lamp	2	194
Exterior mounted mirror turn signal indicator (if equipped)	1	See your dealer
All replacement bulbs are clear in color except where noted.		
To replace all instrument panel lights - see your dealer		

Replacing headlamp bulbs

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

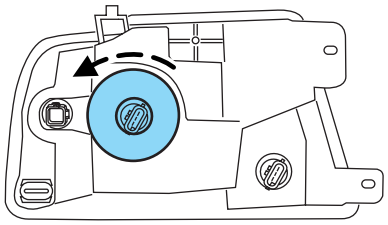
2. At the top and inboard side of the headlamp, loosen the three retaining screws.



3. Once the three retaining screws have been removed, disengage the tab at the top center of the headlamp assembly by lifting it up.

4. Slide headlamp assembly forward disconnecting the snap attachment at the fender and disconnect the electrical connector from the bulb by pulling rearward.

5. Remove the bulb by turning it counterclockwise, then pull it straight out.



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

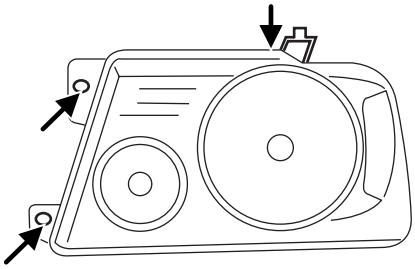
Install the new bulb in reverse order.

Replacing front parking lamp/turn signal/sidemarker bulbs

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

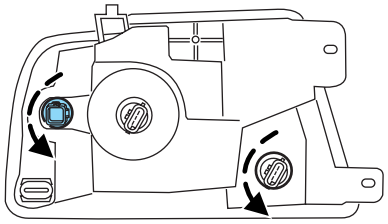
2. At the top and inboard side of the headlamp, loosen the three retaining screws.

3. Once the three retaining screws have been removed, disengage the tab at the top center of the headlamp assembly by lifting it up.



4. Slide the headlamp assembly forward disconnecting the snap attachment at the fender.

5. Remove bulb socket from the lamp assembly by turning it counterclockwise and then pull the bulb straight out.

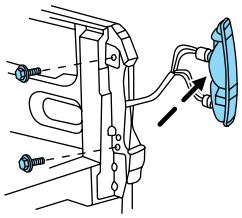


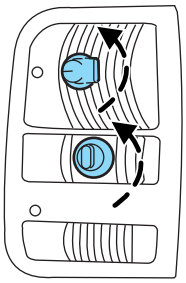
Install the new bulb(s) in reverse order.

Replacing tail/brake/turn signal/backup lamp bulbs

1. Make sure the headlamp control is in the OFF position.

2. Open the tailgate to expose the lamp assembly screws and remove the two screws from the tail lamp assembly.





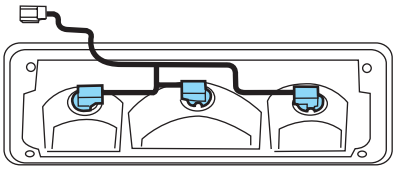
3. Carefully pull the lamp assembly straight rearward from the tailgate pillar to disengage two hidden snap-in retainers. (Flare side tail lamps are not equipped with snap-in retainers.)

4. Remove bulb socket from the lamp assembly by turning it counterclockwise.

5. Pull bulb straight out of socket and press in the new bulb.

Install the new bulb(s) in reverse order.

Replacing high-mount brake and cargo lamp bulbs



Make sure the headlamp control is in the OFF position.

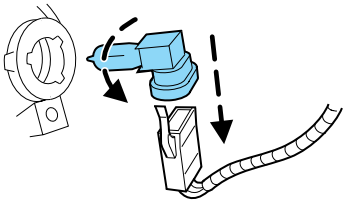
1. Remove the two screws and move the lamp assembly away from the vehicle to expose the bulb sockets.

2. Remove the bulb socket by rotating counterclockwise and pulling it out of the lamp assembly.

3. Pull the bulb straight out of the socket and push in the new bulb.

Install the new bulbs in reverse order.

Replacing foglamp bulbs (if equipped)



1. Make sure the headlamp control is in the OFF position.

2. Remove the bulb socket from the foglamp by turning counterclockwise.

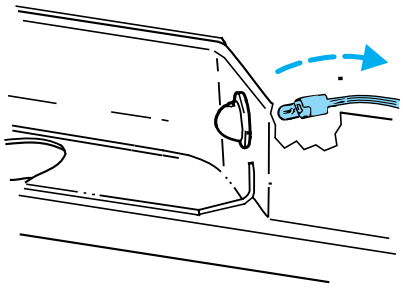
3. Disconnect the electrical connector from the foglamp bulb.

Install the new bulb in reverse order.

Replacing exterior mounted mirror turn signal indicator lamp bulbs

For bulb replacement, see a dealer or qualified technician.

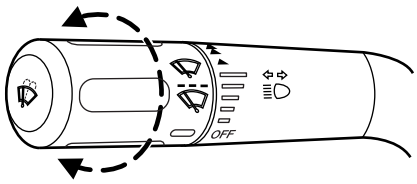
Replacing license plate lamp bulbs



The license plate bulbs are located behind the rear bumper. To change the license plate lamp bulbs:

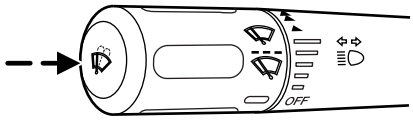
1. Reach behind the rear bumper to locate the bulb.
2. Twist the bulb socket counterclockwise and carefully pull to remove it from the lamp assembly.
3. Pull out the old bulb from the socket and push in the new bulb.
4. Install the bulb socket in lamp assembly by turning it clockwise.

MULTI-FUNCTION LEVER



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

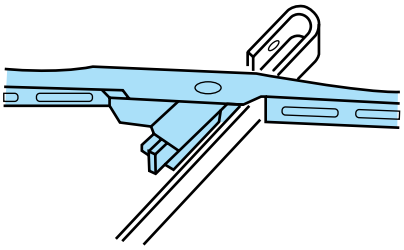
Speed dependent wipers (if equipped): When the wiper control is on, the speed of the wipers will automatically adjust with the vehicle speed. The faster your vehicle is travelling the faster the wipers will go.



Windshield washer: Push the end of the stalk:

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

CHANGING THE WIPER BLADES



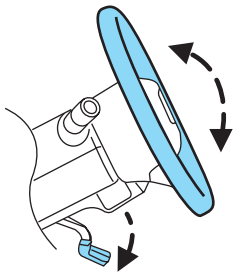
1. Pull the wiper arm away from the vehicle. Turn the blade at an angle from the wiper arm. Push the lock pin manually to release the blade and pull the wiper blade down toward the windshield to remove it from the arm.

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

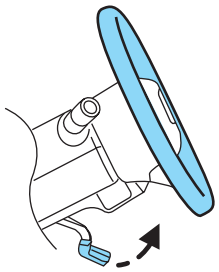
3. Replace wiper blades every 6 months for optimum performance.

TILT STEERING WHEEL (IF EQUIPPED)

Pull the lever down to unlock the steering column. While the lever is in the down position, tilt the steering column to its desired orientation.



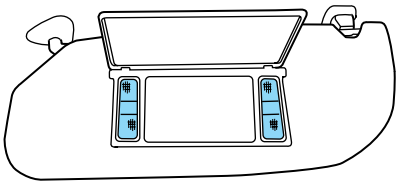
While holding the steering column, pull the lever up to its original position to lock the steering column.



Never adjust the steering column when the vehicle is moving.

ILLUMINATED VISOR MIRROR (IF EQUIPPED)

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



OVERHEAD CONSOLE (IF EQUIPPED)

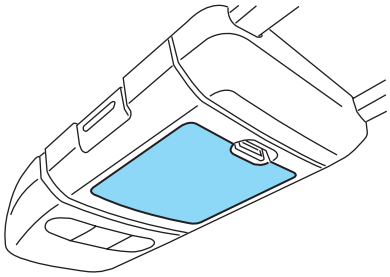
The appearance of your vehicle's overhead console will vary according to your option package.

If your vehicle is equipped with a overhead console rail system, there are several features that can operated.

1. To open the bins, move the center latch forward which will allow the door to be opened.

2. The latches on the side of the bins are to enable the user to remove the bin or add a dealer purchased feature.

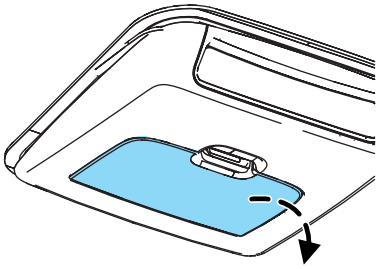
Sliding the bins on the rails may cause damage to the headliner. The removable bins are to be snapped into place not slid.



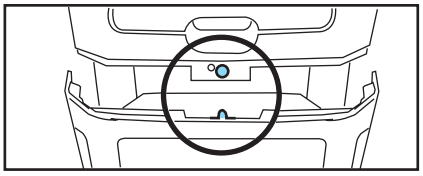
Storage compartment

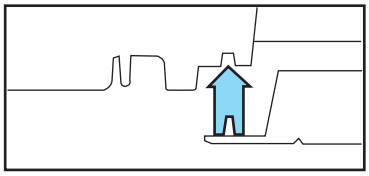
Press the latch to open the storage compartment. The door will open slightly and can be moved to full open.

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



Overhead Storage Bins



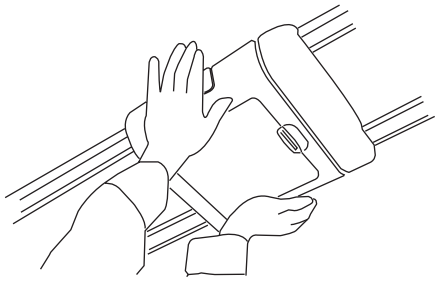


- When on the overhead rail, adjacent bins must be pinned together. Bins adjacent to the End Cap must be pinned to the End Cap. Bins without pin attachments should not be placed on the overhead rail.
- **Failure to pin the bins together can allow the bins to become separated from the rail under certain conditions.**

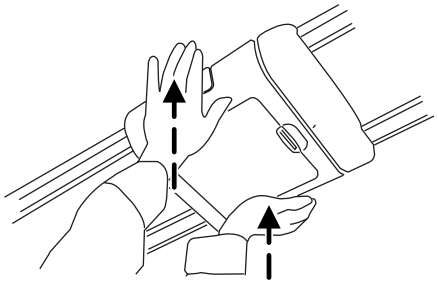
Bin Removal

Attach and remove bins from the rail using the following instructions:

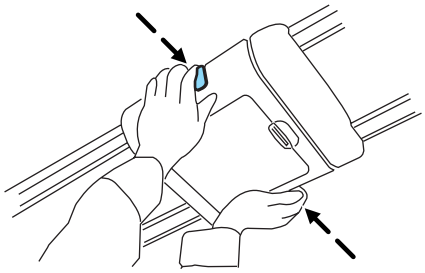
Place both palms on the underside of the storage bin, avoiding the storage bin door.



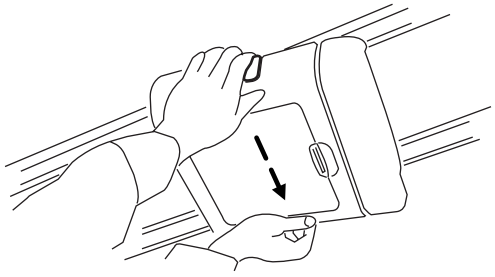
Push upwards with palms.



While pushing upwards with palms, grip the side latches with fingers and squeeze.

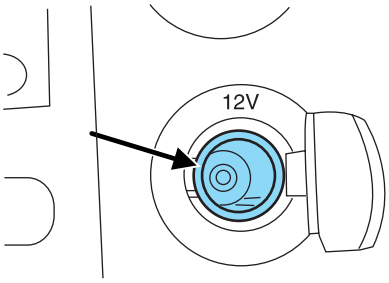


With pressure applied with palms and side latches squeezed down, pull downward on the entire storage bin and remove.



AUXILIARY POWER POINT

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



The auxiliary power point is located on the instrument panel.

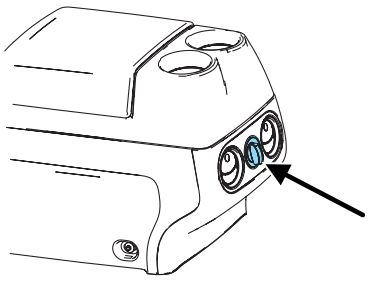
Do not plug optional electrical accessories into the cigarette lighter. Use the power point.

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

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

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

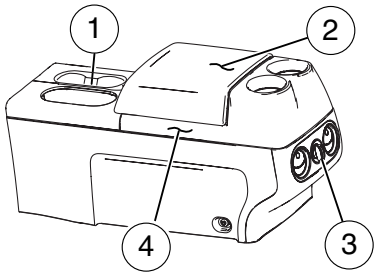
An additional auxiliary power point is located on the lower rear side of the center console. The power point is accessible from the rear seats.



CENTER CONSOLE (IF EQUIPPED)

The center console offers several useful storage features. These include:

1. Cupholders
2. Tissue holder in lid
3. Power point
4. Large utility compartment has Coin holder slots, PalmPilot™/PDA holder, and Pen holder



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

CELL PHONE USE

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

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

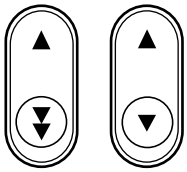
A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communications Equipment.

POWER WINDOWS (IF EQUIPPED)

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

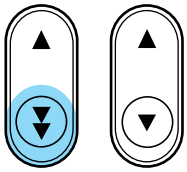
When closing the power windows, you should verify they are free of obstructions and ensure that children and/or pets are not in the proximity of the window openings.

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

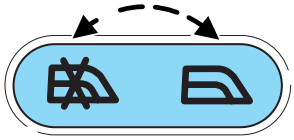


One touch down

Allows the driver's window to open fully without holding the control down. Press completely down on the bottom part of the rocker switch and release quickly. Press the top part of the rocker switch to stop.



Window lock (if equipped)



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

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

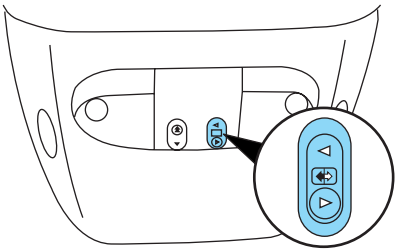
NOTE: The rear window switches will not illuminate when the window control is in the LOCKED position.

Press the right side to restore the window controls.

Power Sliding Back Window (if equipped)

To operate the power sliding back window, the ignition switch must be in the Run or Accessory position.

- Press and hold the bottom part of the rocker switch to open window all the way to the full open position.
- Press and hold the top part of the rocker switch to close the window.



All rear seat occupants and/or cargo must be properly restrained and clear of the back window opening before operating the power sliding back window.

Accessory delay (if equipped)

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

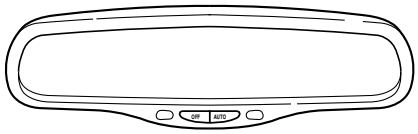
MIRRORS

Automatic dimming rear view mirrors (if equipped)

Your vehicle is equipped with an inside rear view mirror with an auto-dimming function. The electronic day/night mirror will change from

the normal state to the non-glare state when bright lights (glare) reach the inside rear view mirror. When the inside rear view mirror detects bright light from behind the vehicle, the inside rear view mirror will automatically adjust (darken) to minimize glare.

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



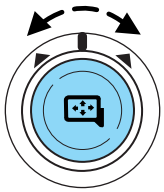
Press the control to turn the mirror OFF or AUTO.

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

Power side view mirrors

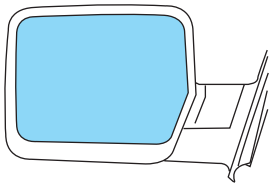
The ignition must be in the ACC or ON position to adjust the power side view mirrors.

To adjust your mirrors:



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

Heated outside mirrors (if equipped)



Heated mirrors remove ice, mist and fog. To activate the heated mirrors, press the rear defrost button R located on the climate control panel.

Refer to *Rear Window Defrost* in the *Climate Controls* chapter for more information.

On vehicles not equipped with rear defrost, press the heated mirror control located on the climate control panel, refer to the *Climate Controls* chapter for more information.

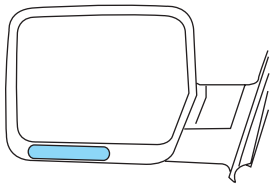


Do not remove ice from the mirrors with a scraper or attempt to readjust the mirror glass if it is frozen in place. These actions could cause damage to the glass and mirrors.

Exterior mounted mirror turn signal indicator (if equipped)

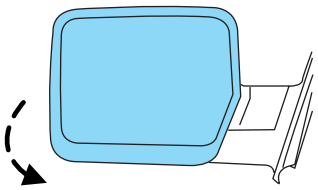
When the vehicle turn signal is activated, the lower portion of the mirror housing will blink.

This feature provides an indicator to the driver that the vehicle turn signal is working properly.



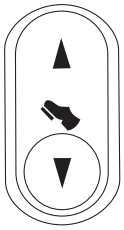
Fold-away mirrors

Fold the side mirrors in carefully before driving through a narrow space, like an automatic car wash.



POWER ADJUSTABLE FOOT PEDALS (IF EQUIPPED)

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



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

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

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

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

SPEED CONTROL (IF EQUIPPED)

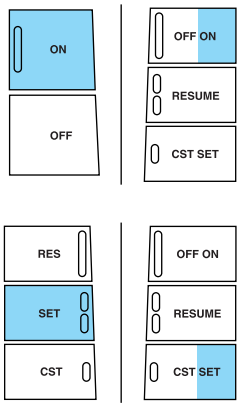
With speed control set, you can maintain a speed of 30 mph (48 km/h) or more without keeping your foot on the accelerator pedal. Speed control does not work at speeds below 30 mph (48 km/h).

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

Setting speed control

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

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

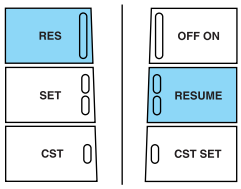


Note:

- Vehicle speed may vary momentarily when driving up and down a steep hill.
- If the vehicle speed increases above the set speed on a downhill, you may want to apply the brakes to reduce the speed.
- If the vehicle speed decreases more than 10 mph (16 km/h) below your set speed on an uphill, your speed control will disengage.

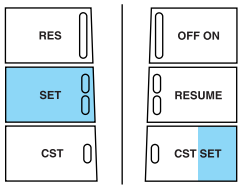
Resuming a set speed

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



Increasing speed while using speed control

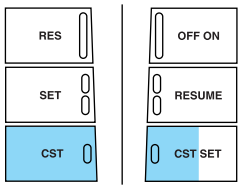
There are two ways to set a higher speed:



- Press and hold the SET control until you get to the desired speed, then release the control. You can also use the SET control to operate the Tap-Up function. Press and release this control to increase the vehicle set speed in small amounts by 1 mph (1.6 km/h).
- Use the accelerator pedal to get to the desired speed. When the vehicle reaches that speed press and release the SET control.

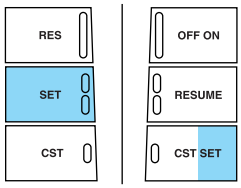
Reducing speed while using speed control

There are two ways to reduce a set speed:



- Press and hold the CST (coast) control until you get to the desired speed, then release the control. You can also use the CST control to operate the Tap-Down function. Press and release this control to decrease the vehicle set speed in small amounts by 1 mph (1.6 km/h).

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

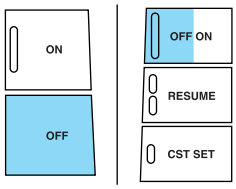


Turning off speed control

There are two ways to turn off the speed control:

- Depress the brake pedal or the clutch pedal (if equipped). This will not erase your vehicle's previously set speed, if RES/RESUME is then selected, the vehicle will return to the previously set speed.
- Press the speed control OFF control. This will erase your vehicle's previously set speed.

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



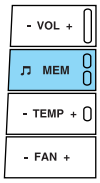
STEERING WHEEL CONTROLS (IF EQUIPPED)

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

Audio control features

Press ♫ to select:

- AM, FM1, FM2,
- CD, or
- DVD (if equipped).



In AM, FM1, or FM2 mode:

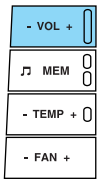
- Press MEM to select preset stations within the selected radio band.

In CD mode:

- Press MEM to select the next selection on the CD.

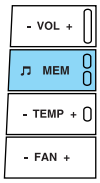
In any mode:

- Press VOL + or – to adjust volume.

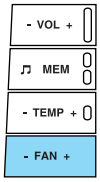


Climate control features

Press TEMP + or - to adjust temperature.



Press FAN + or - to adjust fan speed.

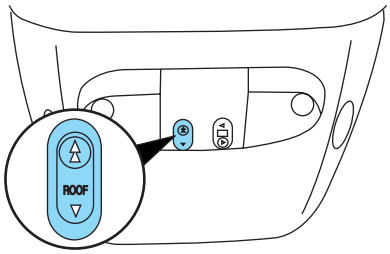


MOON ROOF (IF EQUIPPED)

The moon roof control is located on the overhead console.

Do not let children play with the moon roof. They may seriously hurt themselves.

Note: The moon roof will open to the **"comfort"** position first before opening all the way. The "comfort" position helps to alleviate rumbling wind noise which may happen in the vehicle with the roof fully opened.



To open the moon roof: The moon roof is equipped with a one-touch open feature. Press and release the ▲▲ control. The moon roof will open to the "comfort" position. Press and release the control again to fully open. To stop the one-touch open feature press either the ▲▲ or ▼ control again.

To close the moon roof: Press and hold the ▼ control until the glass panel stops at the "comfort" position. Press and hold the control again until the glass stops moving. When fully closed, the rear portion of the glass panel will appear higher than the front portion.

To vent the moon roof: Press and hold the ▼ control. **The moon roof must be in the closed position in order to move it into the vent position.** To close, press and hold the ▲▲ control until the glass panel stops moving.

The moon roof has a built-in sliding shade that can be manually opened or closed when the glass panel is shut. To close the shade, pull it toward the front of the vehicle.

When closing the moon roof, you should verify that it is free of obstructions and ensure that children and/or pets are not in the proximity of the moon roof opening.

HOMELINK® WIRELESS CONTROL SYSTEM (IF EQUIPPED)

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

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

Do not use the HomeLink® Wireless Control System with any garage door opener that lacks safety stop and reverse features as required by

U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door which cannot detect an object, signaling the door to stop and reverse, does not meet current U.S. federal safety standards. For more information, contact HomeLink® at: **www.homelink.com** or **1–800–355–3515.**

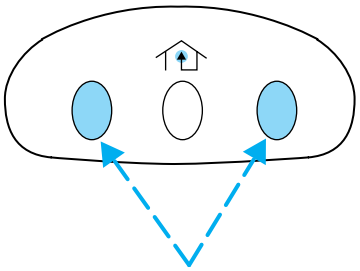
Retain the original transmitter for use in other vehicles as well as for future programming procedures (i.e. new HomeLink® equipped vehicle purchase). It is also suggested that upon the sale of the vehicle, the programmed Homelink® buttons be erased for security purposes, refer to *Programming* in this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

Programming

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

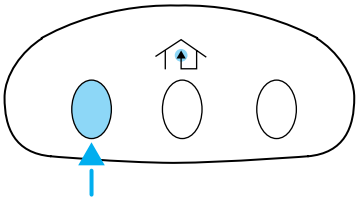
Note: Your vehicle may require the ignition switch to be turned to the ACC position for programming and/or operation of the HomeLink®. It is also recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink® for quicker training and accurate transmission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

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



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

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



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

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

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

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

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

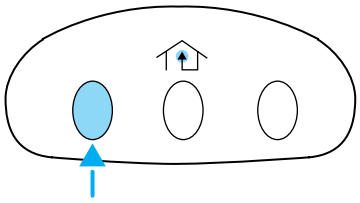
7. Press and release the "learn" or "smart" button. (The name and color of the button may vary by manufacturer.)

Note: There are 30 seconds in which to initiate step eight.

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

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

Gate Operator & Canadian Programming



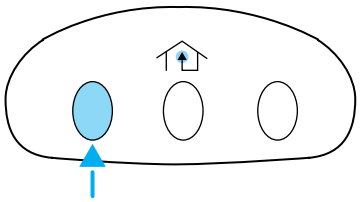
During programming, your hand-held transmitter may automatically stop transmitting — not allowing enough time for HomeLink® to accept the signal from the hand-held transmitter.

After completing steps 1 and 2 outlined in the *"Programming"* section, replace step 3 with the following:

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

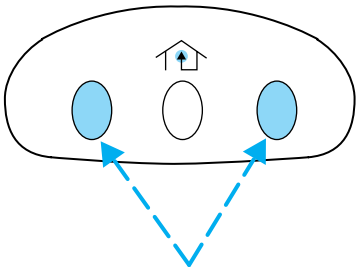
- Continue to press and hold the HomeLink® button (note step 3 in the "Programming" section) while you press and release — **every two seconds** ("cycle") your hand-held transmitter until the frequency signal has been accepted by the HomeLink®. The indicator light will flash slowly and then rapidly after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

Operating the HomeLink® Wireless Control System



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

Erasing HomeLink® buttons



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

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

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

Reprogramming a single HomeLink® button

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

1. Press and hold the desired HomeLink® button. **Do NOT** release the button.

2. The indicator light will begin to flash after 20 seconds. Without releasing the HomeLink® button, follow step 2 in the “Programming” section.

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

MESSAGE CENTER (IF EQUIPPED)

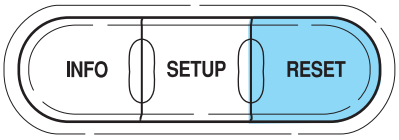


With the ignition in the ON position, the message center, located on your instrument cluster, displays important vehicle information **through a constant monitor of vehicle systems.** You may select display features on the message center for a display of status preceded by a brief indicator chime. The system will also notify you of potential vehicle problems with a display of system warnings followed by a long indicator chime.

Selectable features

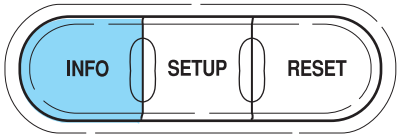
Reset

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



Info menu

This control displays the following control displays:



- Odometer/Compass
- Trip odometer/Odometer/Compass
- Distance to Empty
- Average Fuel Economy
- Trip Elapsed Drive Time

Odometer/Trip odometer

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

Compass display

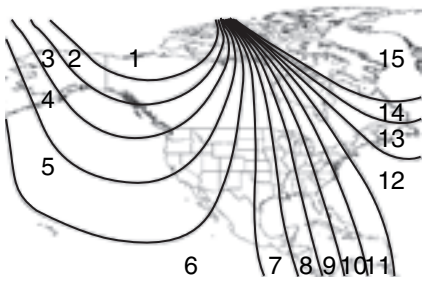
The compass reading may be affected when you drive near large buildings, bridges, power lines and powerful broadcast antenna. Magnetic or metallic objects placed in, on or near the vehicle may also affect compass accuracy.

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

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

Compass zone/calibration adjustment

1. Determine your magnetic zone by referring to the zone map.



2. Turn ignition to the ON position.

3. Start the engine.

4. From Info menu, select the Compass/Odometer function. (Do not select Trip, DTE, or AFE. The top of the message center must be blank).

5. Press and hold the SETUP and RESET controls until the message center display changes to show the current zone setting (XX).



6. Press the SETUP control repeatedly until the correct zone setting for your geographic location is displayed on the message center. The range of zone values are from 01 to 15 and “wraps” back to 01.



7. To exit the zone setting mode, and to “lock in” your change, press and release the RESET control.



Perform compass calibration in an open area free from steel structures and high voltage lines. For optimum calibration, turn off all electrical accessories (heater/air conditioning, wipers, etc.) and make sure all vehicle doors are shut.

8. Press the RESET control to start the compass calibration function.



9. Slowly drive the vehicle in a circle (less than 3 mph [5 km/h]) until the CIRCLE SLOWLY TO CALIBRATE display changes to CALIBRATION COMPLETED. It will take up to five circles to complete calibration.

10. The compass is now calibrated.



Distance to empty (DTE)

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



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

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

Average fuel economy (AFE)

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



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

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

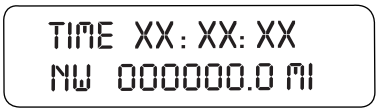
1. Drive the vehicle at least 8 km (5 miles) with the speed control system engaged to display a stabilized average.

2. Record the highway fuel economy for future reference.

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

Trip elapsed drive time

Select this function from the INFO menu to display a timer.



To operate the Trip Elapsed Drive Time perform the following:

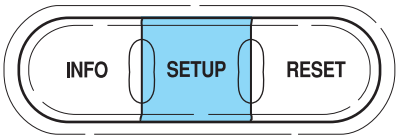
1. Press and release RESET in order to start the timer.

2. Press and release RESET to pause the timer.

3. Press and hold RESET for 2 seconds in order to reset the timer.

Setup menu

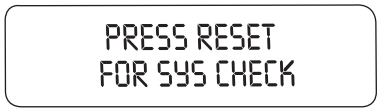
Press this control for the following displays:



- System Check
- Units (English/Metric)
- Autolock
- Autolamp Delay
- Language

System check

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



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

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

1. FUEL LEVEL
2. ENGINE TEMP
3. OIL PRESSURE
4. BRAKE FLUID LEVEL
5. CHARGING SYSTEM

Units (English/Metric)

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



2. Press the RESET control to change from English to Metric.

Autolocks

This feature automatically locks all vehicle doors when the vehicle is shifted into any gear, putting the vehicle in motion.

1. To disable/enable the autolock feature, select this function from the SETUP control for the current display mode.

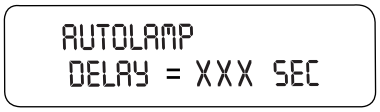


2. Press the RESET control to turn the autolocks ON or OFF.

Autolamp delay

This feature keeps your headlights on for up to three minutes after the ignition is switched off.

1. To disable/enable the autolamp delay feature, select this function from the SETUP control for the current display mode.



2. Press the RESET control to turn the autolamp delay ON or OFF.



Language

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



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



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



System warnings

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

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

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

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

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

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

Warning display	Status
Door ajar	Warning can be reset
Low fuel level	Warning returns after 10 minutes
Check charging system	
Low brake fluid level	
Low oil pressure	
Check engine temperature	
Reduced engine power	
Stop engine safely	
Check fuel cap	Warning returns after the ignition key is turned from OFF to ON.
Engine failsafe mode	

DOOR AJAR. Displayed when a door is not completely closed.

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

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

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

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

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

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

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

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

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

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

- Fuel computer
- Charging system
- Autolamp delay
- Auto locks
- Brake fluid
- Compass
- Outside temperature
- Engine sensor

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

MINI MESSAGE CENTER ELECTRONIC COMPASS/TEMPERATURE DISPLAY (IF EQUIPPED)

Outside air temperature

The outside temperature display is contained in the instrument cluster and displays all the time, except when a warning message is present.



To turn the display off or change the display from English to metric see your dealer.

Compass

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

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

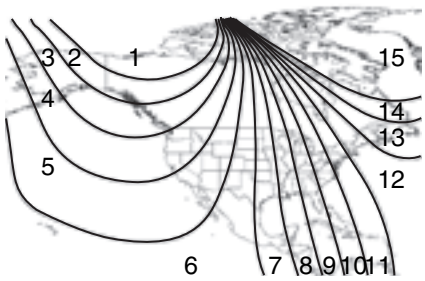
Most geographic areas (zones) have a magnetic north compass point that varies slightly from the northerly direction on maps. This variation is four degrees between adjacent zones and will become noticeable as the vehicle crosses multiple zones. A correct zone setting will eliminate this error. Refer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

Compass zone adjustment

1. Determine which magnetic zone you are in for your geographic location by referring to the zone map.

2. Turn ignition to the ON position.

3. Start the engine.



4. Press the ODO reset button in the cluster, hold for six seconds and release. You will see that ZONE appears in the instrument cluster display.



5. Press and release the button until the desired zone number appears.

Note: The range of zone values are from 01 to 15 and “wraps” back to 01.

6. When you get to the desired ZONE number, hold the button down to “lock in” the new value.

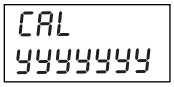
The cluster display will return to the “normal” mode when the button has not been pressed for 6 seconds.

Compass calibration adjustment

Perform this adjustment in an open area free from steel structures and high voltage lines. For optimum calibration, turn off all electrical accessories (heater/air conditioning, wipers, etc.) and make sure all vehicle doors are shut.

1. Start the vehicle.

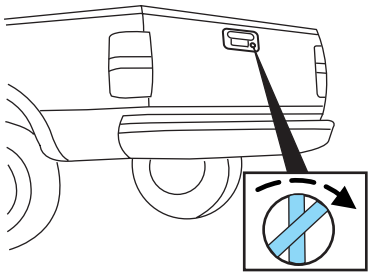
2. To enter the compass calibration mode, press and hold the button for greater than eight seconds. The display will then show CAL in the display window.



3. Drive the vehicle slowly (less than 3 mph [5 km/h]) in circles until CAL indicator turns off. As many as 5 complete circles may be required.

4. The compass is now calibrated.

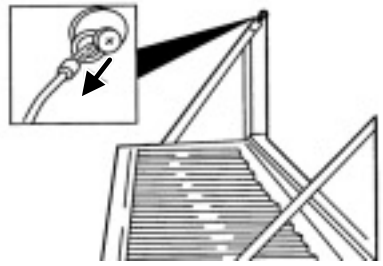
TAILGATE LOCK (IF EQUIPPED)



Your vehicle may be equipped with a tailgate lock designed to prevent theft of the tailgate.

- Insert ignition key and turn to the right to engage lock.
- Turn ignition key to the left to unlock.

TAILGATE REMOVAL



Your tailgate is removable to allow more room for loading.

1. Lower the tailgate.
2. Use a screwdriver to pry the spring clip (on each connector) past the head of the support screw. Disconnect cable.
3. Disconnect the other cable.
4. Lift tailgate to a 45 degree angle from horizontal.
5. Lift right side off of its hinge.
6. Lift tailgate to a 80 degree angle from horizontal.
7. Remove tailgate from left side hinge by sliding tailgate to the right.

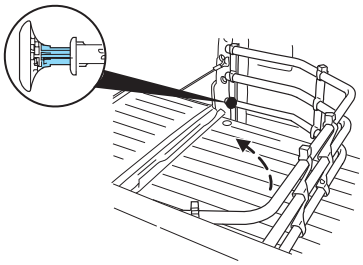
To install, follow the removal procedures in reverse order.

BED EXTENDER (IF EQUIPPED)

Your vehicle may be equipped with a bed extender designed to extend the pickup box for longer loads.

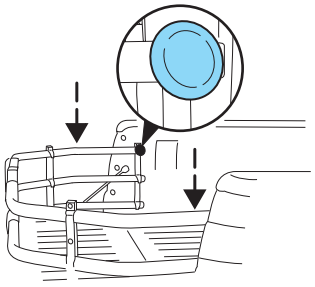
To extend the bed extender:

1. Lower tailgate.
2. Pull the round knobs on each side of the extender to release it from the pickup box.
3. Pivot extender on to the tailgate.



4. Evenly push down on the extender and push the round knobs in on each side locking it in place.

Green markings on the shaft indicate the locked position. The locking clip screws below the middle bar can be tightened counterclockwise for extra security.



Note: If the red marking on the shaft is visible, the bed extender is not locked or properly secured.

To stow the bed extender, follow steps one through four in reverse order.

The bed extender may be used to secure a load of up to 46 kg (100 lbs.) on the tailgate.

The bed extender should always be kept in the stowed position with the tailgate closed when not in use.

When driving the vehicle off road, the bed extender should be removed and the tailgate closed.

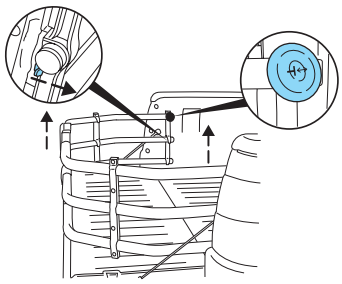
To remove the bed extender:

1. Extend the bed extender.

2. Pull the round knobs on each side of the extender to unlock it.

Make sure the locking clip screws are loose before removing the extender.

3. Press the locking clips below the middle bar on each side and lift the extender out of the bed.



Note: Remove and store the bed extender when not in use.

To install the bed extender, follow the removal procedure in reverse order.

KEYS

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

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

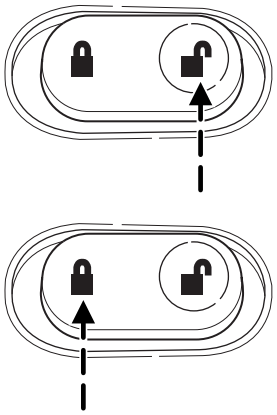
Refer to *SecuriLock™ Passive Anti-Theft System* for more information.

POWER DOOR LOCKS (IF EQUIPPED)

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

Press control to unlock all vehicle doors.

Press control to lock all vehicle doors.



Smart unlocking feature

The smart unlocking feature prevents you from locking yourself out of your vehicle.

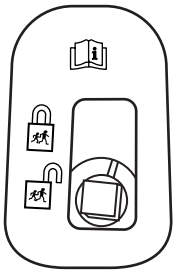
With the key in any ignition position:

- The driver's door will automatically unlock if it is locked by the driver's power lock control while the driver's door is open.

The vehicle may still be locked with the key in the ignition, and performing one of the following actions:

- Pressing the manual lock button on the door.
- Operating the remote entry transmitter.
- Operating the keyless entry keypad.
- Operating the driver's door with a key.

Childproof door locks (if equipped)



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

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

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

REMOTE ENTRY SYSTEM (IF EQUIPPED)

This device complies with part 15 of the FCC rules and with RS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

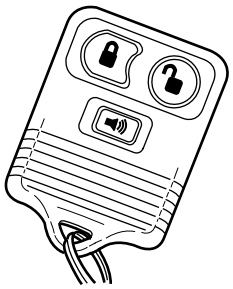
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

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

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

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



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

Unlocking the doors

1. Press and release to unlock the driver's door. **Note:** The interior lamps will illuminate.

2. Press and release again within three seconds to unlock all the doors.

Locking the doors

1. Press and release to lock all the doors. The parklamps will flash.

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

If any of the doors are not properly closed the horn will make two quick chirps and the parklamps will not flash.

Power door lock/unlock disable feature (if equipped)

The (lock) and (unlock) features on your power door locks will not work from inside the vehicle when:

- the ignition has been turned to the 1 (OFF/LOCK) position, and
- 20 seconds elapse after all vehicle doors are closed and locked using the remote entry transmitter, the keyless entry pad, or the power door lock control (while the accompanying door is open).

The (lock) and (unlock) features will work again after:

- a door has become ajar,
- the ignition is turned to the 3 (ON) position, or
- using the UNLOCK control on your remote entry transmitter or unlocking via the keyless entry keypad.

Deactivating/activating power door lock/unlock disable feature

All vehicle doors must be closed before beginning the procedure. You must complete Steps 1–5 within 30 seconds, or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait a minimum of 30 seconds to begin again.

1. Turn the ignition to the 3 (ON) position, then press the button three times.

2. Turn the ignition to the 1 (OFF/LOCK) position, then press the button three times.

3. Turn the ignition to the 3 (ON) position, and within five seconds, press the button two times. **Note:** After turning the ignition to the 3 (ON) position, two horn chirps should be heard, indicating that the system has been disabled. Conversely, two horn chirps followed by a honk will indicate that the system is enabled.

4. Pressing the power door button two times again will turn the feature ON if it was previously OFF, or OFF if it was previously ON. Every two consecutive presses of the button after successfully entering the configuration mode will change the enable/disable condition of the feature.

5. Turn the ignition to the 1 (OFF/LOCK) position to exit programming. **Note:** After exiting the driver configuration mode, the horn will chirp once to indicate a feature has been activated/deactivated.

Sounding a panic alarm

Press to activate the alarm. Press again or turn the ignition to 2 (ACCESSORY) or 3 (ON) to deactivate.

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

Memory feature (if equipped)

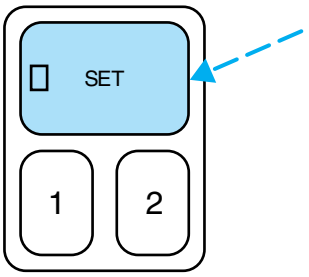
The remote entry system can also control the memory feature.

Press the control once to unlock the driver's door. Pressing the control will automatically move the seat and adjustable pedals to the desired memory position (the memory position corresponds to the transmitter being used).

Activating the memory feature

To activate this feature:

1. Position the seat and adjustable pedals to the positions you desire.
2. Press the SET control on the driver's seat.
3. Within 5 five seconds, press one control on the remote transmitter and then press the 1 or 2 control on the driver's door panel to which you would like to associate with Driver 1 or Driver 2 positions.
4. Repeat this procedure for another remote transmitter if desired.



Deactivating the memory feature

To deactivate this feature:

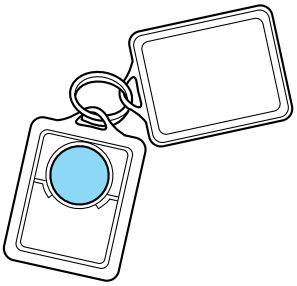
1. Press the SET control on the driver's door seat.
2. Within 5 five seconds, press any control on the remote transmitter which you would like to deactivate and then press the SET control on the driver's door panel.
3. Repeat this procedure for another remote transmitter if desired.

Replacing the battery

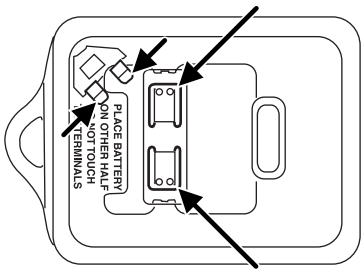
The remote entry transmitter uses one coin type three-volt lithium battery CR2032 or equivalent.

To replace the battery:

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



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



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

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

5. Snap the two halves back together.

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

Replacing lost transmitters

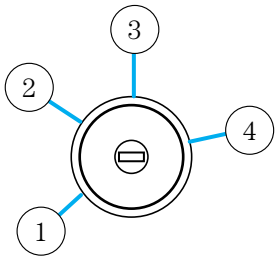
If a remote transmitter has been lost and you would like to remove it from the vehicle's memory, or you would like to purchase additional remote transmitters and have them programmed to your vehicle:

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

Programming remote transmitters

It is necessary to have **all** (maximum of six — original and/or new) of your remote transmitters available prior to beginning this procedure. If all remote entry transmitters are not present during the programming procedure, the transmitters that are not present during programming will no longer operate the vehicle. **Note:** Do not press the brake pedal anytime during this sequencing, as doing so will invalidate the procedure.

To program the transmitters yourself:



- Unlock all doors using the power door lock/unlock control. Insert a key and turn the ignition from the 1 (OFF/LOCK) to the 3 (ON) position and cycle between 1 (OFF/LOCK) and 3 (ON) eight times in rapid succession (within 10 seconds) with the eighth turn ending in the 3 (ON) position. The locks will cycle to confirm that the programming mode has been entered.
- Within 20 seconds, program a remote transmitter by pressing any button on a transmitter. The locks will cycle once to confirm that the remote transmitter has been programmed. (If more than 20 seconds pass before pressing a remote transmitter button, the programming mode will exit and the procedure will have to be repeated.)
- Repeat the previous step to program additional remote transmitters. The locks will cycle once to confirm that each remote transmitter has been programmed.
- When you have completed programming the remote transmitters, turn the ignition to the 1 (OFF/LOCK) position or wait 20 seconds. Again the doors will lock/unlock to confirm programming has been completed.

Illuminated entry

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

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

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

The dome lamp control (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 30 minutes after the last door is closed, even if the dimmer control is on.

Perimeter lighting feature (if equipped)

The perimeter lighting feature illuminates the exterior of the vehicle in order to provide better visibility to the user while he or she approaches and enters the vehicle.

The perimeter lighting feature activates when:

- the ignition is in the 1 (OFF/LOCK) position,
- the autolamp sensor determines that it is dark, and
- the user activates an unlock feature, using either the remote keyless transmitter or the keypad.

The perimeter lighting feature will illuminate the headlamps and parking lamps for 25 seconds, or until:

- the ignition is turned to any position other than the 1 (OFF/LOCK) position, or
- the user activates a lock feature, using either the remote keyless transmitter or the keypad.

Enabling/disabling the perimeter lighting feature

Your vehicle comes with the perimeter lighting feature enabled. All vehicle doors must be closed before beginning the procedure. You must complete Steps 1–5 within 30 seconds, or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait a minimum of 30 seconds to begin again.

1. Turn the ignition to the 3 (ON) position, then press the control three times.

2. Turn the ignition to the 1 (OFF/LOCK) position, then press the control three times.

3. Turn the ignition to the 3 (ON) position, and within five seconds, press the control two times. **Note:** After turning the ignition to the 3 (ON) position, two horn chirps should be heard, indicating that the

system has been disabled. Conversely, two horn chirps followed by a honk will indicate that the system is enabled.

4. Pressing the power door control two times again will turn the feature ON if it was previously OFF, or OFF if it was previously ON. Every two consecutive presses of the control after successfully entering the configuration mode will change the enable/disable condition of the feature.

5. Turn the ignition to the 1 (OFF/LOCK) position to exit programming.
Note: After exiting the driver configuration mode, the horn will chirp once to indicate a feature has been activated/deactivated.

Autolock (if equipped)

The autolock feature will lock all the doors when:

- all the doors are closed,
- the ignition is in the 3 (ON) position,
- you shift into any gear putting the vehicle in motion, and
- the brake pedal is released and the vehicle attains a speed greater than 5 mph (8 km/h).

The autolock feature repeats when:

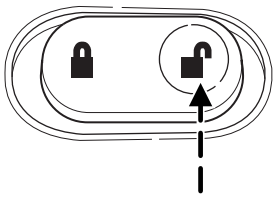
- any door is opened then closed while the ignition is in the 3 (ON) position, and
- the brake pedal is released and the vehicle attains a speed greater than 5 mph (8 km/h).

Deactivating/activating autolock

Your vehicle comes with the autolock feature activated. There are three methods to enable/disable this feature: One is through your dealer, the second with a power door unlock/lock sequence and the third with the keypad.

Before following the activation or deactivation procedures, make sure the ignition is off, and all vehicle doors are closed.

Power door unlock/lock procedure



You must complete Steps 1–5 within 30 seconds, or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait a minimum of 30 seconds to begin again.

1. Turn the ignition to the 3 (ON) position, then press the control three times.

2. Turn the ignition to the 1 (OFF/LOCK) position, then press the control three times.

3. Turn the ignition to the 3 (ON) position, and within five seconds, press the control two times. **Note:** After turning the ignition to the 3 (ON) position, two horn chirps should be heard, indicating that the system has been disabled. Conversely, two horn chirps followed by a honk will indicate that the system is enabled.

4. Press the unlock control, then press the lock control. The horn will chirp once if autolock was deactivated or twice (one short and one long chirp) if autolock was activated.

5. Turn the ignition to the 1 (OFF/LOCK) position to exit programming. **Note:** After exiting the driver configuration mode, the horn will chirp once to indicate a feature has been activated/deactivated.

Keyless entry key pad procedure

1. Turn the ignition to the 1 (OFF/LOCK) position.

2. Close all the doors.

3. Enter 5–digit entry code

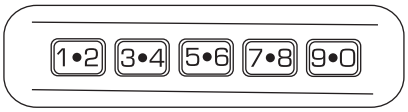
4. Press and hold the 7 • 8. While holding the 7 • 8 press the 3 • 4.

5. Release the 3 • 4.

6. Release the 7 • 8.

The user should receive a **horn chirp** to indicate the system has been disabled or a chirp followed by a honk to indicate the system has been enabled.

KEYLESS ENTRY SYSTEM (IF EQUIPPED)



You can use the keyless entry keypad to:

- lock all vehicle doors.
- unlock only the driver's door.
- unlock all vehicle doors.
- program/erase the customer keycode.
- enable/disable the autolocking feature.

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

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

Programming a personal entry code

To create your own personal entry code:

1. Enter the factory set code (keypad will illuminate when pressed).

2. Within five seconds press the 1 • 2 on the keypad.

3. Enter your personal 5-digit code. Each number must be entered within five seconds of each other.

4. After the code is entered, the locks will cycle, confirming that the new code has been set.

Tips:

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

Erasing personal code

1. Enter the factory set 5–digit code.

2. Press and release 1 • 2 then,

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

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

Antiscan feature

The keyless entry keypad is equipped with an anti-theft function called "antiscan." The antiscan feature provides a one-minute lockout feature, where the user is unable to enter the vehicle using the keypad; this lockout occurs when a valid entry code has not been entered by the user within 7 attempts (35 consecutive button presses). During the lockout, the keypad will flash and pressing the controls on the keypad will be ignored, except for pressing the 7 • 8 and the 9 • 0 controls simultaneously, which will still lock the vehicle.

The antiscan feature will be turned off after:

- one minute, when the antiscan feature times out.
- one minute of keypad inactivity.
- the control is pressed on the remote entry transmitter.
- the ignition is turned from the 1 (OFF/LOCK) position to the 3 (ON) position, or from the 3 (ON) position to the 1 (OFF/LOCK) position.

Unlocking and locking the doors using keyless entry keypad

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

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

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

SECURILOCK™ PASSIVE ANTI-THEFT SYSTEM

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

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

Note: The SecuriLock™ passive anti-theft system is not compatible with non-Ford aftermarket remote start systems. Use of these systems may result in vehicle starting problems and a loss of security protection.

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

Theft indicator

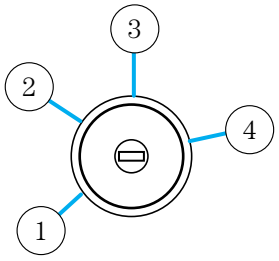
The theft indicator is located on top of the instrument panel.

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

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

Automatic arming

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



Automatic disarming

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

Replacement keys

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

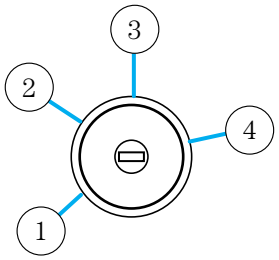
Replacing coded keys can be very costly. Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. Please visit an authorized dealer to purchase additional spare or replacement keys.

Programming spare keys

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

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

Please read and understand the entire procedure before you begin.



1. Insert the first previously programmed **coded key** into the ignition and turn the ignition from the 1 (OFF/LOCK) position to the 3 (ON) position (maintain ignition in the 3 (ON) position for at least one second, but no more than ten seconds).

2. Turn ignition from the 3 (ON) position back to the 1 (OFF/LOCK) position in order to remove the first **coded key** from the ignition.

3. Within ten seconds of removing the first **coded key,** insert the second previously programmed **coded key** into the ignition and turn the ignition from the 1 (OFF/LOCK) position to the 3 (ON) position (maintain ignition in the 3 (ON) position for at least one second but no more than ten seconds).

4. Turn the ignition from the 3 (ON) position back to the 1 (OFF/LOCK) position in order to remove the second **coded key** from the ignition.

5. Within 10 seconds of removing the second **coded key,** insert the new unprogrammed key (new key/valet key) into the ignition and turn the

ignition from the 1 (OFF/LOCK) position to the 3 (ON) position (maintain ignition in the 3 (ON) position for at least one second, but no more than ten seconds). This step will program your new key to a coded key.

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

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

If not successful, the new coded key(s) will not start the vehicle's engine and the theft indicator will flash on and off and you may repeat Steps 1 through 5. If failure repeats, bring your vehicle to your dealership to have the new spare key(s) programmed.

SEATING

Notes:

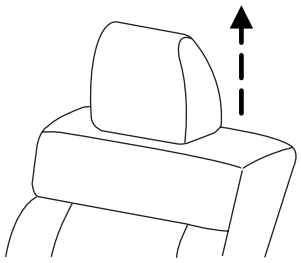
Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

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

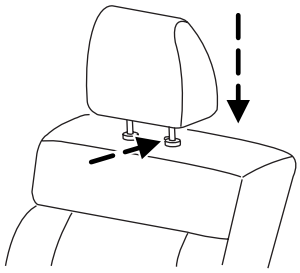
Adjustable head restraints

Head restraints help to limit head motion in the event of a rear collision. Adjust your head restraint so that it is located directly or as close as possible behind your head.

The head restraints can be moved up and down.

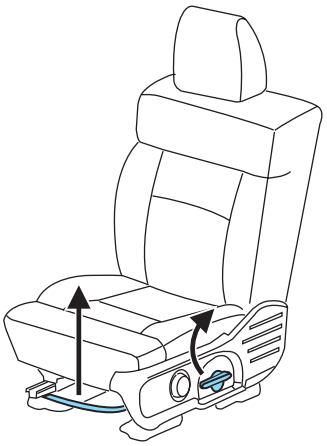


Push control to lower head restraint.



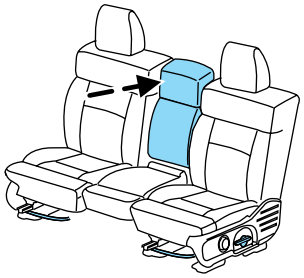
Front seat

- Lift the track release bar to move the seat forward or rearward. Make sure that the seat is relatched into place.
- Pull the release lever handle located on the side of the seat up to move the seat back forward or backward.



Using the armrest (if equipped)

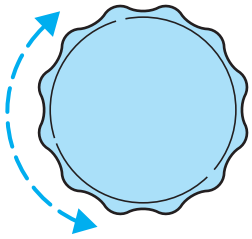
Push the release control to move the armrest up or down.



Using the manual lumbar support

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

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



Adjusting the front power seat (if equipped)

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

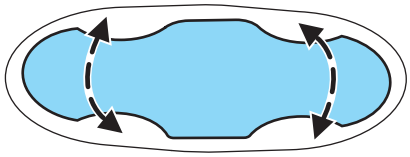
Do not pile cargo higher than the seatbacks to avoid injuring people in a collision or sudden stop.

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

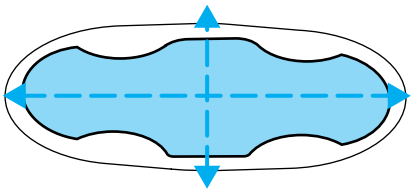
Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

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

Press the front or rear portion to tilt the seat.

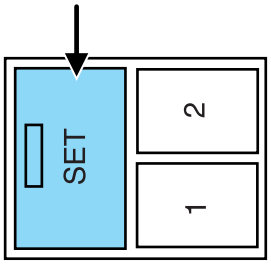


Press the control to move the seat forward, backward, up or down.



Memory seats/adjustable pedals (if equipped)

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



The memory seat control is located on the driver's seat.

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

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

Heated seats (if equipped)

To operate the heated seats, do the following:



- Push control located on the instrument panel to set at high heat.
- Push control again to set at low heat.
- Push again to deactivate.

The indicator light on the control will illuminate when activated.

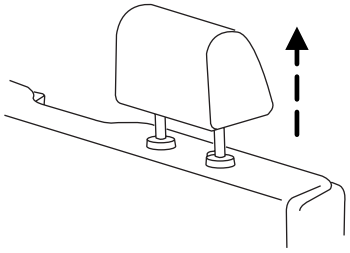
The system automatically shuts off after 10 minutes.

REAR SEATS

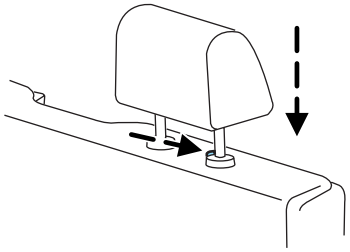
Head restraints

The purpose of these head restraints is to help limit head motion in the event of a rear collision. To properly adjust your head restraints, lift the head restraint so that it is located directly behind your head or as close to that position as possible.

The head restraints can be moved up and down. Lift the head restraint so that it is located directly or as close as possible behind your head.



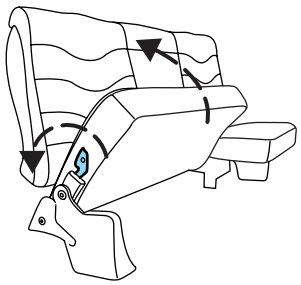
Push control to lower head restraint.



Folding up the rear seats (if equipped)

The rear seat has a split 60/40 cushion. Each seat cushion can be flipped up into the seatback position.

1. Pull control to release seat cushion.
2. Rotate seat cushion up until it locks into vertical storage position.



Returning the seat to seating position

Always be sure that the seat is in a latched position, whether the seat is occupied or empty. If not latched, the seat may cause injury during a sudden stop.

1. Pull control on the side of the seat to release seat cushion from storage position.
2. Push seat cushion down until it locks into horizontal position.

SAFETY RESTRAINTS

Personal Safety System

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

Your vehicle's Personal Safety System consists of:

- Driver and passenger dual-stage air bag supplemental restraints.
- Front safety belts with pretensioners, energy management retractors, and safety belt usage sensors.
- Driver's seat position sensor.
- Front crash severity sensor.
- Front passenger sensing system
- Passenger Air Bag Off indicator light.
- Passenger air bag ON/OFF switch (if equipped)

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

How does the personal safety system work?

The Personal Safety System can adapt the deployment strategy of your vehicle's safety devices according to crash severity and occupant classification and conditions. A collection of crash and occupant sensors provides information to the Restraints Control Module (RCM). During a crash, the RCM activates the safety belt pretensioners and/or either none, one, or both stages of the dual-stage air bag supplemental restraints based on crash severity and occupant classification and conditions.

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

Driver and passenger dual-stage air bag supplemental restraints

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

Front crash severity sensor

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

Driver's seat position sensor

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

Front passenger sensing system

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



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



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

The front passenger sensing system can automatically turn off the passenger front air bag when a rear facing child seat, a forward-facing child restraint, or a booster seat is detected. Even with this technology, parents are **STRONGLY** encouraged to always properly restrain children in the rear seat. The system may not automatically turn the airbag OFF if a child seat is attached to the LATCH anchors on the front passenger seat of the Regular Cab, therefore turn the airbag OFF with the manual Airbag On/Off switch. The sensor also turns off the air bag when the passenger seat is empty to prevent unnecessary replacement of the air bag(s) after a collision.

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

Front safety belt usage sensors

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

Front safety belt pretensioners

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

Front safety belt energy management retractors

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

Passenger Airbag on/off switch (if equipped)

The passenger airbag on/off switch (if equipped) allows deactivation of the passenger side airbag by inserting a key into the switch. See *Passenger air bag ON/OFF switch (if equipped)* in this chapter.

Determining if the Personal Safety System is operational

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

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

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

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

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

Safety restraints precautions

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

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

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

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

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

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

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

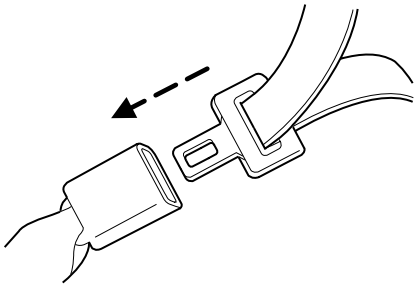
Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints.

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

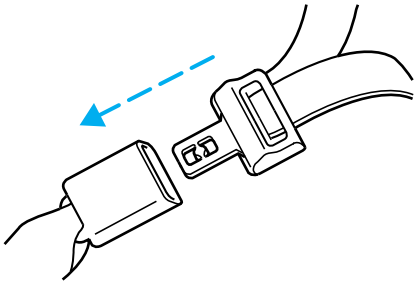
Combination lap and shoulder belts

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

- Front seats

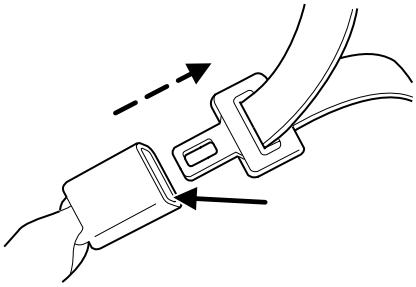


- Rear seats (if equipped)

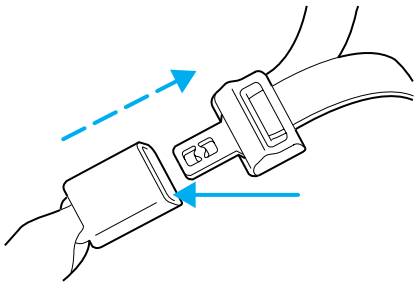


2. To unfasten, push the release button and remove the tongue from the buckle.

- Front seats



- Rear seats (if equipped)



Energy management retractors

Your vehicle has a seat belt system equipped with energy management retractors at the driver and front outboard passenger seating positions.

An energy management retractor is a device which pays out webbing in a controlled manner. This feature is designed to help further reduce the risk of force-related injuries to the occupant.

Seat belt systems equipped with an energy management retractor must be replaced if they were in use during a frontal collision which resulted in deployment of the frontal air bags. Refer to the *Safety belt maintenance* section in this chapter.

Vehicle sensitive mode

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

The front seat belt system can also be made to lock manually by quickly pulling on the shoulder belt. Rear seat belts (if equipped) cannot be made to lock up by pulling quickly on the belt.

Automatic locking mode

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

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

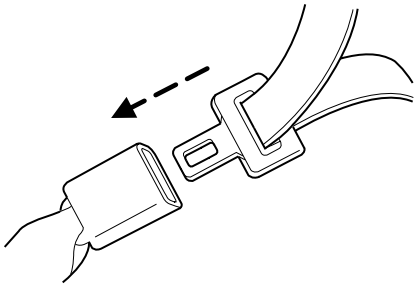
When to use the automatic locking mode

- **Anytime** a child safety seat is installed in a passenger front or outboard rear seating position with Regular Cab or SuperCab. SuperCrew and SuperCab models include the center seating position of the second row. Children 12 years old and under should be properly restrained in the rear seat whenever possible. Refer to *Safety Restraints for Children* or *Safety Seats for Children* later in this chapter.

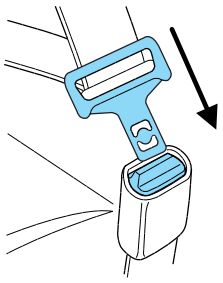
How to use the automatic locking mode

1. Buckle the combination lap and shoulder belt.

- Front passenger seat



- Rear seats (if equipped)



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



3. 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.

After any vehicle collision, the safety belt systems at all outboard seating positions (except the driver position, which does not have this feature) must be checked by a qualified technician to verify that the automatic locking retractor feature for child seats is still functioning properly. In addition, all seat belts should be checked for proper function.

BELT AND RETRACTOR ASSEMBLY MUST BE REPLACED if the seat belt assembly “automatic locking retractor” feature or any other seat belt function is not operating properly when checked according to the procedures in Workshop Manual. Failure to replace the Belt and Retractor assembly could increase the risk of injury in collisions.

Safety belt pretensioner

Your vehicle is equipped with safety belt buckle pretensioners at the driver and front outboard passenger seating positions.

Do NOT place objects between the seats, this could interfere with the functioning of the pretensioner.

The driver and front outboard passenger safety belt pretensioners are designed to activate only during certain frontal or near-frontal collisions with sufficient longitudinal deceleration. A safety belt buckle pretensioner is a device which tightens the webbing of the lap and shoulder belts during some collisions in such a way that they fit more snugly against the body.

The driver and front outboard passenger safety belt system (including retractors, buckles and height adjusters) must be replaced if the vehicle is involved in a collision that results in the activation of the safety belt pretensioners. Refer to the *Safety belt maintenance* section in this chapter.

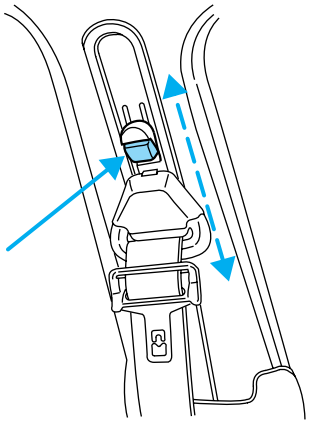
Failure to replace the safety belt assembly under the above conditions could result in severe personal injuries in the event of a collision.

Safety belt usage sensors

The driver and front outboard passenger safety belt buckles are equipped with sensors that detect if the safety belts are fastened. The sensors provide information to the Personal Safety System which can then adapt the air bag deployment or safety belt pretensioner activation based upon safety belt usage.

The Personal Safety System provides the most benefit to belted occupants. The system monitors and tailors the air bag deployment based upon safety belt usage. Failure to properly wear your safety belt will increase your risk of injury.

Front safety belt height adjustment (if equipped)



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

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

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

Lap belts

Adjusting the lap belt

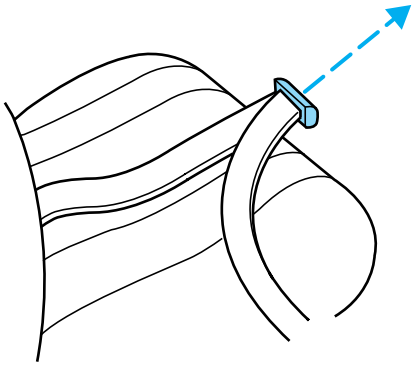
The lap belt should fit snugly and as low as possible around the hips, not across the waist.

The front center lap belt tongue is designed to fit only in the correct buckle. The tongue will not securely latch if you attempt to use it in any of the outboard seating position buckles. To ensure that you have used the correct buckle you should hear a snap and feel it latch.

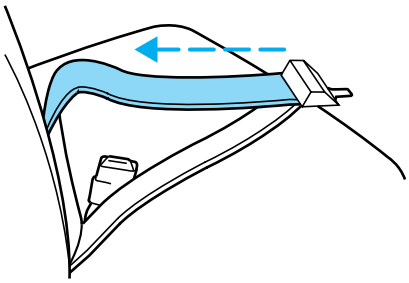
- **1st row center seating position**

The lap belt does not adjust automatically.

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



Shorten and fasten the belt when not in use.



Safety belt warning light and indicator chime

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

Conditions of operation

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

BeltMinder

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

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

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

If...	Then...
The driver's and front passenger's safety belts are buckled before the ignition switch is turned to the ON position or less than 1-2 minutes have elapsed since the ignition switch has been turned ON...	The BeltMinder feature will not activate.
The driver's or front passenger's safety belt is not buckled when the vehicle has reached at least 5 km/h (3 mph) and 1-2 minutes have elapsed since the ignition switch has been turned to ON...	The BeltMinder feature is activated - the safety belt warning light illuminates and the warning chime sounds for 6 seconds every 30 seconds, repeating for approximately 5 minutes or until the safety belts are buckled.
The driver's or front passenger's safety belt becomes unbuckled for approximately 1 minute while the vehicle is traveling at least 5 km/h (3 mph) and more than 1-2 minutes have elapsed since the ignition switch has been turned to ON...	The BeltMinder feature is activated - the safety belt warning light illuminates and the warning chime sounds for 6 seconds every 30 seconds, repeating for approximately 5 minutes or until the safety belts are buckled.

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

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

Reasons given...	Consider...
"I have an air bag"	Air bags offer greater protection when used with safety belts. Frontal airbags are not designed to inflate in rear and side crashes or rollovers.
"I'd rather be thrown clear"	Not a good idea. **People** who are **ejected are 40 times more likely to DIE.** Safety belts help prevent ejection, WE CAN'T "PICK OUR CRASH".

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

One time disable

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

Deactivating/activating the BeltMinder feature

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

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

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

Before following the procedure, make sure that:

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

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

1. Turn the ignition switch to the RUN (or ON) position. (DO NOT START THE ENGINE)
2. Wait until the safety belt warning light turns off. (Approximately 1 minute)
- Step 3 must be completed within 50 seconds after the safety belt warning light turns off.

3. For the seating position being disabled, buckle then unbuckle the safety belt 9 times, ending in the unbuckled state. (Step 3 must be completed within 50 seconds after the safety belt warning light turns off.)
- After step 3, the restraint system warning light (airbag light) will be turned on for three seconds.

4. Within 10 seconds of the light turning on, buckle then unbuckle the safety belt.
- This will disable the BeltMinder feature for that seating position if it is currently enabled. As confirmation, the restraint system warning light will flash 4 times per second for 3 seconds.
- This will enable the BeltMinder feature for that seating position if it is currently disabled. As confirmation, the restraint system warning light will flash 4 times per second for 3 seconds, followed by 3 seconds with the light off, then followed by the restraint system warning light flashing 4 times per second for 3 seconds again.

Safety belt extension assembly

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

Use only extensions manufactured by the same supplier as the safety belt. Manufacturer identification is located at the end of the webbing on the label. Also, use the safety belt extension only if the safety belt is too short for you when fully extended.

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

Safety belt maintenance

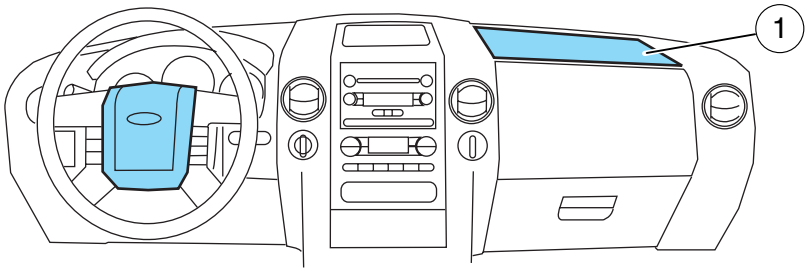
Inspect the safety belt systems periodically to make sure they work properly and are not damaged. Inspect the safety belts to make sure

there are no nicks, tears or cuts. Replace if necessary. All safety belt assemblies, including retractors, buckles, front seat belt buckle assemblies, buckle support assemblies (slide bar-if equipped), shoulder belt height adjusters (if equipped), shoulder belt guide on seatback (if equipped), child safety seat LATCH and tether anchors, and attaching hardware, should be inspected after a collision. Ford Motor Company recommends that all safety belt assemblies in use in vehicles involved in a collision be replaced. However, if the collision was minor and 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 *Interior* in the *Cleaning* chapter.

AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



1. Air bag cover

The air bag supplemental restraint system is designed to work in conjunction with the safety belts to help protect the driver and front outboard passenger from certain upper body injuries. The term “supplemental restraint” means the air bags are intended as a supplement to the safety belts. Air bags alone cannot protect as well as air bags plus safety belts in impacts for which the air bags are designed to deploy, and air bags do not offer any protection in crashes for which they do not deploy.

The air bag supplemental restraint system consists of:

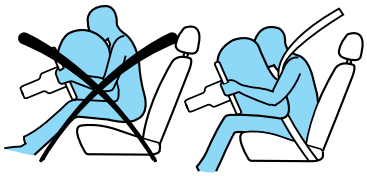
- driver and passenger dual stage air bag modules (which include the inflators and air bags).

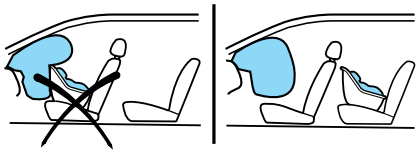
- one or more impact and safing sensors.
- the same indicator light, RCM (restraints control module) and diagnostic unit used for the Personal safety system.
- Front passenger sensing system
- Passenger airbag on/off switch (if equipped)
- Passenger air bag off indicator light.

The air bag supplemental restraints are an integral part of the Personal Safety System. They are designed to be deployed in cases where the Personal Safety System has determined the occupant conditions and crash severity are appropriate to activate these devices. Refer to the *Personal Safety System* section in this chapter.

Important SRS precautions

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





Always transport children 12 years old and under in the back seat if your vehicle has a back seat. Rear facing infant seats should NEVER be placed in the front seats, unless the passenger air bag is turned off (if equipped with an air bag On/Off switch). See *Passenger air bag ON/OFF switch.* 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.

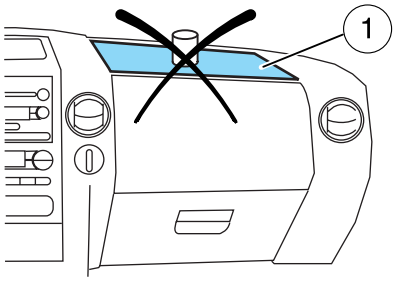
The National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of at least 10 inches (25 cm) between an occupant's chest and the driver air bag cover.

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

To properly position yourself away from the air bag:

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

Do not put anything on or over the air bag cover (1). Placing objects on or over the air bag cover may cause those objects to be thrown by the air bag into your face and torso or may result in a failure of the air bag to inflate properly, both of which could result in serious injury.



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

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

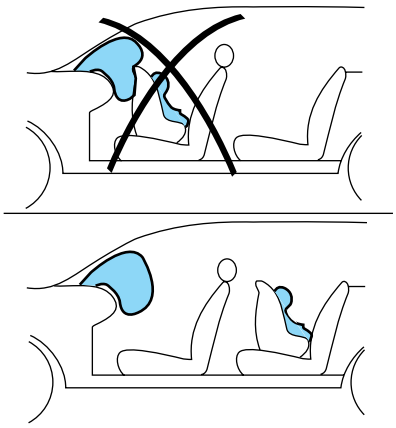
Modifying or adding equipment to the front end of the vehicle (including frame, bumper, front end body structure and tow hooks) may affect the performance of the air bag system, increasing the risk of injury. Do not modify the front end of the vehicle.

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

Children and air bags

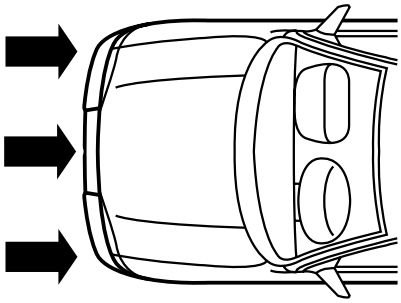
For additional important safety information, read all information on safety restraints in this guide.

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 (if equipped with an air bag On/Off switch). 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 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 cover as possible while maintaining vehicle control.

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

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

Determining if the system is operational

The SRS uses readiness lights in the instrument cluster and the passenger air bag on/off switch or a tone to indicate the condition of the system. Refer to the *Air bag readiness* section in the *Instrument cluster* chapter or *Passenger air bag on/off 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/or light are repaired.

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

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

See your local dealership or qualified technician. Air bags MUST BE disposed of by qualified personnel.

Front passenger sensing system

The front passenger sensing system will turn off the front passenger's frontal air bag under certain conditions. The driver's air bag and side air bag are not part of the front passenger sensing system. The front passenger sensing system works with sensors that are part of the front passenger's seat and safety belt. The sensors are designed to detect the presence of a properly-seated occupant and determine if the front passenger's frontal air bag should be enabled (may inflate) or not.

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

- The front passenger seat is unoccupied.
- The system determines that a small child is present in a rear-facing child seat that is properly installed according to the manufacturer's instructions. (The system may not automatically turn the airbag OFF if a child seat is attached to the LATCH anchors on the front passenger seat of the Regular Cab, therefore turn the airbag OFF with the manual Airbag On/Off switch.)
- The system determines that a small child is present in a forward-facing child restraint that is properly installed according to the manufacturer's instructions. (The system may not automatically turn the airbag OFF if a child seat is attached to the LATCH anchors on the front passenger seat of the Regular Cab, therefore turn the airbag OFF with the manual Airbag On/Off switch.)
- The system determines that a small child is present in a booster seat. (The system may not automatically turn the airbag OFF if a booster is attached to the LATCH anchors on the front passenger seat of the Regular Cab, therefore turn the airbag OFF with the manual Airbag On/Off switch.)
- A front passenger takes his/her weight off of the seat for a period of time.

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

When you install a child seat on the front passenger seat of a Regular Cab, turn the Passenger Airbag On/Off switch to OFF.

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

The indicator light is located in the center stack of the instrument panel just above the radio. To confirm that the indicator light is functional, it will momentarily illuminate when the ignition is turned to the ON postion.



The front passenger sensing system is designed to turn off the front passenger's frontal air bag when a rear facing child seat, a forward-facing

child restraint, or a booster seat is detected. If the child restraint has been installed and the indicator is not lit, then turn the vehicle off, remove the child restraint from the vehicle and reinstall the restraint following the child restraint manufacturer's directions. The system may not automatically turn the airbag OFF if a child seat is attached to the LATCH anchors on the front passenger seat of the Regular Cab, therefore turn the airbag OFF with the manual Airbag On/Off switch.

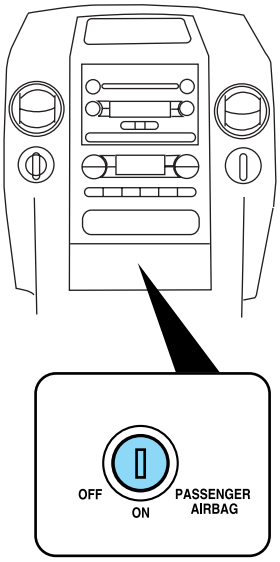
The front passenger sensing system is designed to enable (may inflate) the right front passenger's frontal air bag anytime the system senses that a person of adult size is sitting properly in the front passenger seat. When the passenger sensing system has allowed the air bag to be enabled, the indicator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

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

After all occupants have adjusted their seats and put on seat belts, it's very important that they continue to sit upright, with their back against the seatback, with their feet comfortably extended on the floor while the vehicle is still in motion. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.


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

Vehicles without rear seats are equipped with an Airbag On/Off switch, which will override the decision from the passenger sensing system when turned to OFF. When you install child seats (with or without the LATCH system) on the front passenger seat of vehicles that do not have a rear seat, the airbag cut-off switch should be turned to OFF to turn off the airbag. If there is an adult on the passenger seat, the airbag cut-off switch should be turned to ON to enable the airbag. Again, placing children on the front seat is ONLY recommended for vehicles that do not have a rear seat, otherwise all children 12 and under should be properly restrained in the rear seat.



When you install a child seat on the front passenger seat of a Regular Cab, turn the Passenger Airbag On/Off switch to OFF.

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



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

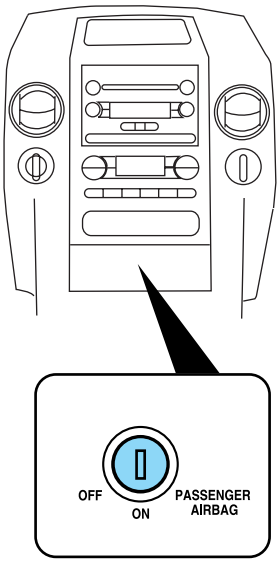
An out of position front center occupant could affect the decision of the front passenger sensing system.

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

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

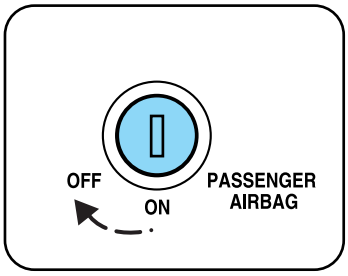
Passenger air bag ON/OFF switch (if equipped)

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 position and hold in OFF position while removing the key.



2. When the ignition is turned to the ON position the “passenger airbag off” indicator light illuminates briefly, momentarily shuts off and then turns back on. This indicates that the passenger air bag is deactivated. Refer to *Front passenger sensing system* in this chapter.



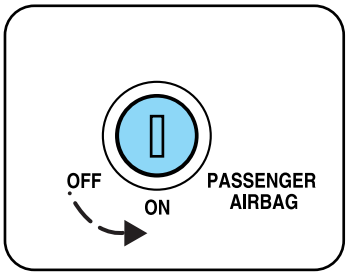
If the OFF light fails to illuminate when the passenger air bag ON/OFF switch is in the OFF position and the ignition switch is in ON, have the passenger air bag ON/OFF switch serviced at your Ford or Lincoln-Mercury dealer immediately.

In order to avoid inadvertent activation of the switch, 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 “passenger airbag off” indicator light will briefly illuminate when the ignition is turned to ON. This indicates that the passenger air bag is operational. Refer to *Front passenger sensing system* in this chapter.



The passenger-side air bag should always be turned to the ON position (the “passenger airbag off” or “pass airbag off” indicator 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.

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 (if equipped with an air bag On/Off switch). See *Passenger air bag ON/OFF switch.*

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 AND TO AVOID PLACING OBJECTS ON OR OVER AIR BAG COVER. 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.

Transport Canada deactivation criteria (Canada Only)

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

- the 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 seat 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:

- the 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 seat 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 deployment greater than the potential harm from turning OFF the air bag and experiencing a crash without the protection offered by the air bag

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 (generally children who are four years old

or younger and who weigh 40 lbs[18 kg] or less) ride in your vehicle, you must put them in safety seats made especially for children. Many states require that children use approved booster seats until they are eight years old. Check your local and state or provincial laws for specific requirements regarding the safety of children in your vehicle. When possible, always place children under age 12 in the rear seat of your vehicle. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position.

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

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

Children and safety belts

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

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

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

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

Child booster seats

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

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

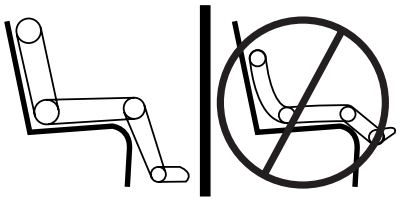
Booster seats position a child so that safety belts fit better. They lift the child up so that the lap belt rests low across the hips and the knees bend comfortably. Booster seats also make the shoulder belt fit better and more comfortably for growing children.

When children should use booster seats

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

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

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



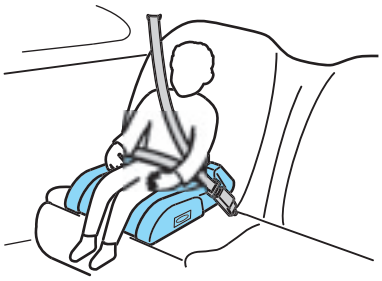
- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

Types of booster seats

There are two types of belt-positioning booster seats:

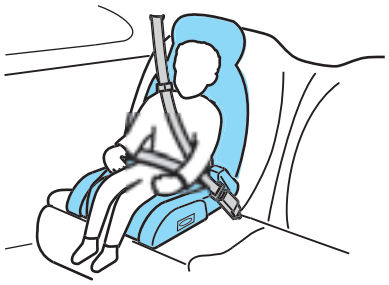
- Those that are backless.

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



- Those with a high back.

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



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

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

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

The importance of shoulder belts

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

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

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

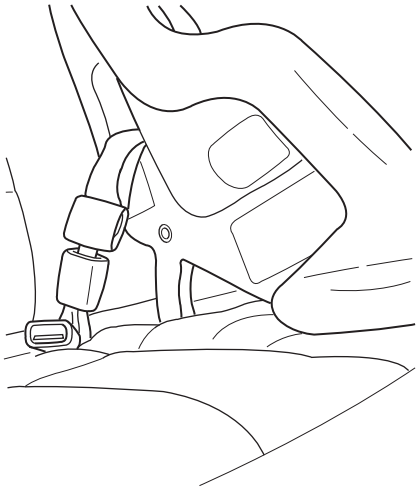
Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a collision.

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 (the buckle closest to the direction the tongue is coming from).
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode* (passenger side front seating position-Regular Cab) (passenger side front and rear seating positions-SuperCrew and SuperCab) (if equipped).
- LATCH lower anchors are recommended for use by children up to 22 kg (48 pounds) in a child restraint. Top tether anchors can be used for children up to 27 kg (60 pounds) in a child restraint, and to provide upper torso restraint for children up to 36 kg (80 pounds) using an upper torso harness and a belt-positioning booster.

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

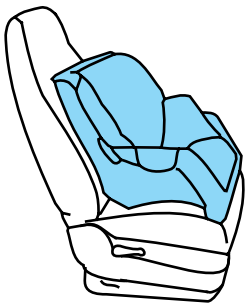
Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

Installing child safety seats with combination lap and shoulder belts

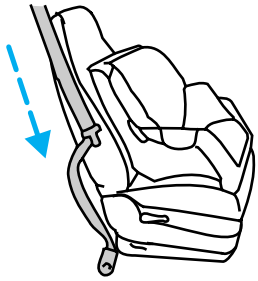
Air bags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active air bag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

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

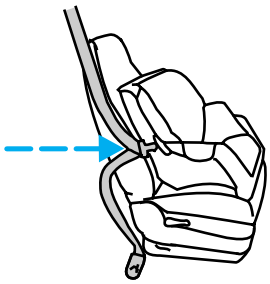
1. Position the child safety seat in a seat with a combination lap and shoulder belt.



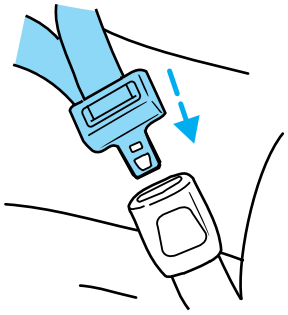
2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



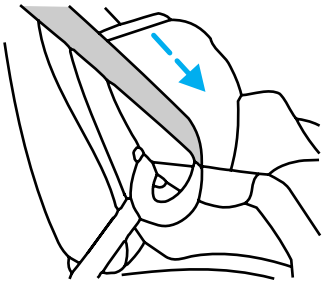
3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



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

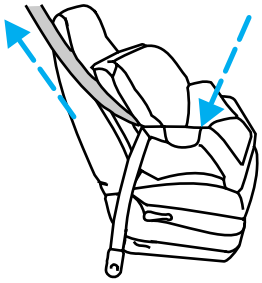


5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out and a click is heard.



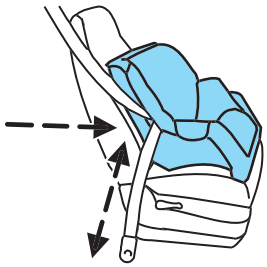
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

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



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

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



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

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

Installing child safety seats in the front row lap belt seating positions

Note: Installing a child safety seat in the front row lap seating position should be avoided if at all possible. The passenger sensing system does not recognize child seats in the front center seating position.

Never place a rear-facing infant seat in the front center seating position.

1. Lengthen the lap belt. To lengthen the belt, hold the tongue so that its bottom is perpendicular to the direction of webbing while sliding the tongue up the webbing.
2. Place the child safety seat in the center seating position.
3. Route the tongue and webbing through the child seat according to the child seat manufacturer's instructions.
4. Insert the belt tongue into the proper buckle for the center seating position until you hear a snap and feel it latch. Make sure the tongue is securely fastened to the buckle by pulling on tongue.
5. Push down on the child seat while pulling on the loose end of the lap belt webbing to tighten the belt.
6. If you are installing a forward facing child seat, attach and tighten any top tether strap.
7. Before placing the child into the child seat, forcibly tilt the child seat from side to side and in forward direction to make sure that the seat is held securely in place. If the child seat moves excessively, repeat steps 5 through 7, try a different child safety seat, or properly install the child seat in a different position.

Attaching child safety seats with tether straps

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

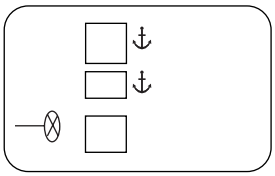
The passenger seats of your vehicle are equipped with built-in tether strap anchors located behind the seats as described below.

The tether anchors in your vehicle may be loops of webbing above the seatback or an anchor bracket behind the seat on the rear edge of the seat cushion.

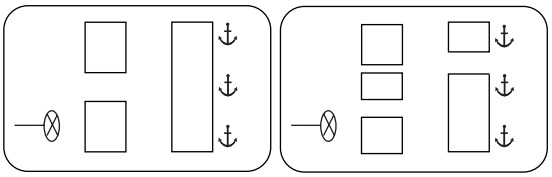
The rear seat in the SuperCab and SuperCrew has three straps along the top of the seatback that function as both routing loops for the tether straps and anchor loops.

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

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



- **F150 Regular Cab**

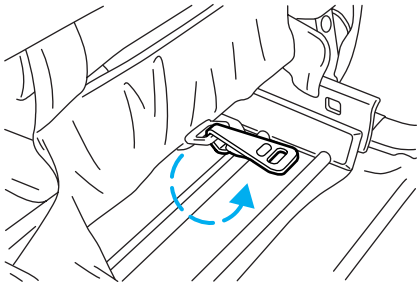


- **F150 SuperCrew and SuperCab**

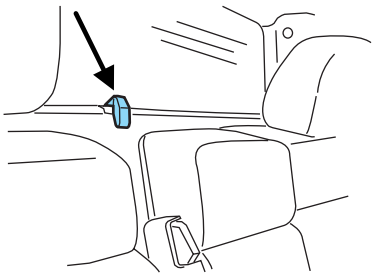
Front seat tether strap attachment

1. Position the child safety seat on the seat cushion.
2. Route the child safety seat tether strap over the back of the seat and under the head restraint.
3. Locate the correct anchor for the selected seating position.
   - You may need to pull the seatback forward to access the tether anchors. Make sure the seatback is locked in the upright position before installing the child seat.
4. Clip the tether strap to the anchor as shown.

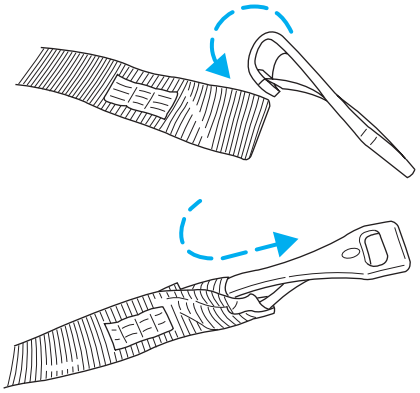
- Front seat Regular Cab passenger side



- Front seat Regular Cab center (located on back panel)



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

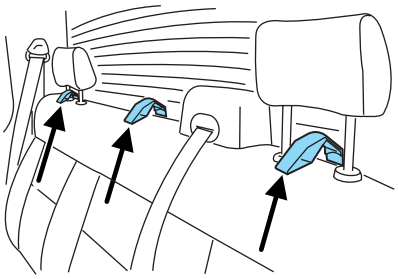


5. Install the child safety seat tightly using the LATCH anchors or safety belts. Follow the instructions in this chapter.

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

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

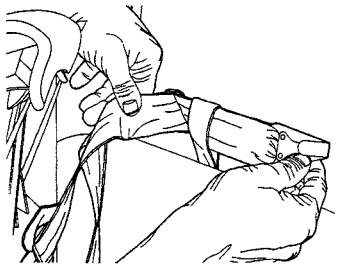
Rear seat tether strap attachment



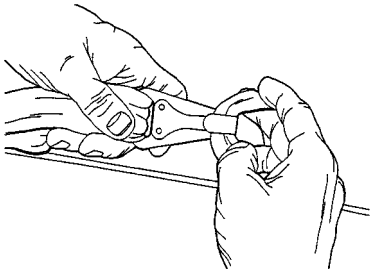
There are three loops of webbing just above the back of the rear seat (along the bottom edge of the rear window) in the SuperCab and SuperCrew. These loops are to be used as both routing loops and anchor loops for up to three child safety seat tether straps. For example, the center loop can be used as a routing loop for a child safety seat in the center rear seat and as an anchoring loop for child seats installed in the outboard rear seats.

Many tether straps cannot be tightened if the tether strap is hooked to the loop directly behind the child seat. To provide a tight tether strap:

1. Route the tether strap under the head restraint and through the loop directly behind the child seat.



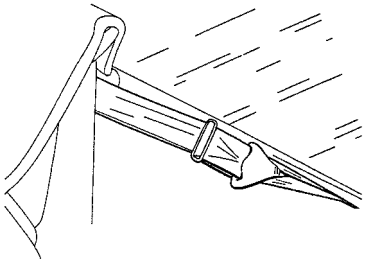
2. Route the tether strap behind the head restraint supports to a loop behind an adjacent seating position, and hook the strap hook onto the loop. If using the driver's side, pass the strap behind the shoulder belt mounting for the center seat.



- Always put the tether strap through the routing loop. The head restraint support post will hold the child seat tightly, but the head restraint post is not strong enough to hold the child seat during a collision.

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

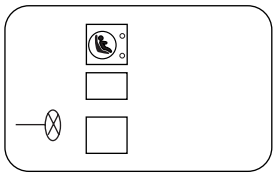
4. Tighten the tether strap according to the child seat manufacturer's instructions.



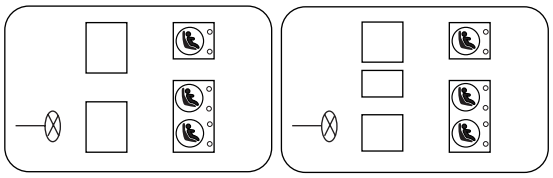
Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments for child seat anchors

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

Your vehicle is equipped with LATCH anchors for child seat installation at the following seating positions:



- F150 Regular Cab

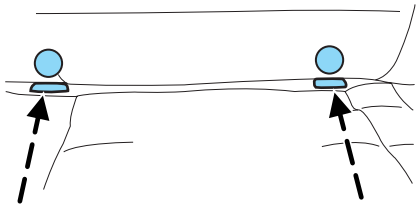


- F150 SuperCab and SuperCrew

Connectors on the LATCH child seat and the child seat instructions may use the symbol shown here. Your vehicle seat may have plain buttons, instead of this symbol, to indicate the location of the LATCH lower anchors.

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

The lower anchors for child seat installation are located at the rear section of the seat between the cushion and seat back. The LATCH anchors are below the locator buttons (if provided) on the seat back.



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

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

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

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

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

Installing LATCH seats (Regular Cab)

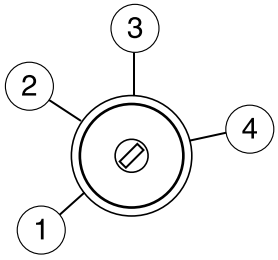


When you install a child seat on the front passenger seat of a Regular Cab, turn the Passenger Airbag On/Off switch to OFF.

If you tightly install a LATCH infant or child safety seat with its own webbing-mounted attachments to the LATCH anchors on the front passenger seat of the Regular Cab, the front passenger sensing system may not automatically turn the airbag off. The vehicle safety belts at the right front seat include a sensor that adjusts the weight on the seat cushion. This adjustment does not work when the child seat is installed using the LATCH attachment belts instead of the vehicle safety belts. Therefore, turn the airbag OFF with the manual Airbag On/Off switch.

STARTING

Positions of the ignition



1. OFF/LOCK, locks the steering wheel, automatic transmission gearshift lever and allows key removal.

Note: The ignition key can not be removed from the ignition unless the gearshift lever is securely latched in P (Park).

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

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

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

Preparing to start your vehicle

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

When starting a fuel-injected engine, don't press the accelerator before or during starting. Only use the accelerator when you have difficulty starting the engine. For more information on starting the vehicle, refer to *Starting the engine* in this chapter.

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

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

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

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

Important safety precautions

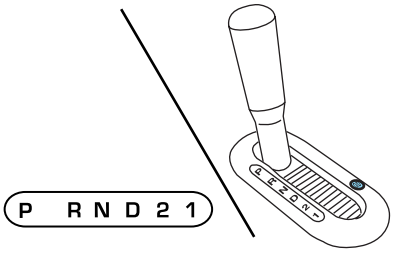
A computer system controls the engine's idle revolutions per minute (RPM). When the engine starts, the idle RPM runs higher than normal in order to warm the engine. If the engine idle speed does not slow down automatically, have the vehicle checked. Do not allow the vehicle to idle for more than 10 minutes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

Before starting the vehicle:

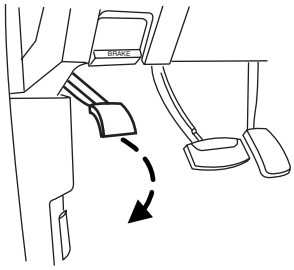
1. Make sure all vehicle occupants have buckled their safety belts. For more information on safety belts and their proper usage, refer to the *Seating and Safety Restraints* chapter.

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

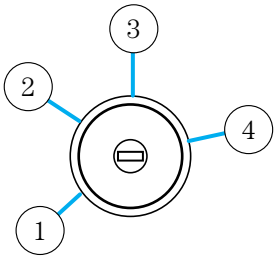
3. Make sure the gearshift is in P (Park).

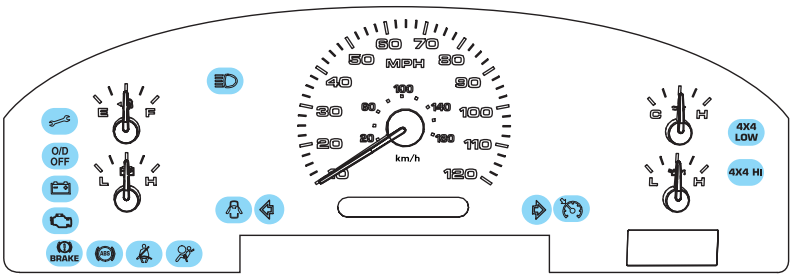


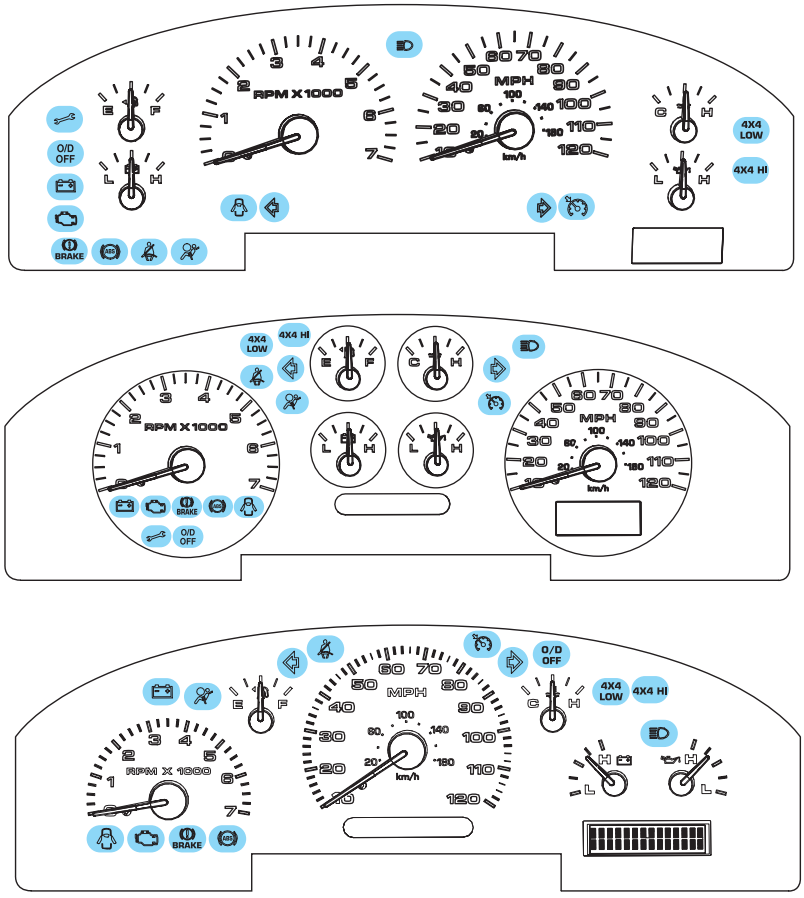
4. Make sure the parking brake is set.



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







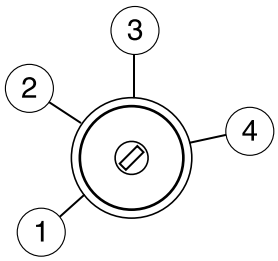
Make sure the corresponding lights illuminate or illuminate briefly. If a light fails to illuminate, have the vehicle serviced.

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

Starting the engine

1. Turn the key to 3 (ON) without turning the key to 4 (START). If there is difficulty in turning the key, rotate the steering wheel until the key turns freely.

2. Turn the key to 4 (START), then release the key as soon as the engine starts.



Note: If the engine does not start within five seconds on the first try, turn the key to OFF, wait 10 seconds and try again. If the engine still fails to start, press and hold the accelerator to the floor and try again; this will allow the engine to crank with the fuel shut off in case the engine is flooded with fuel.

Using the engine block heater (if equipped)

An engine block heater warms the engine coolant which aids in starting and heater/defroster performance. Use of an engine block heater is strongly recommended if you live in a region where temperatures reach -10°F (-23°C) or below. For best results, plug the heater in at least three hours before starting the vehicle. The heater can be plugged in the night before starting the vehicle.

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

Guarding against exhaust fumes

Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.

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

Important ventilating information

If the engine is idling while the vehicle is stopped for a long period of time, open the windows at least one inch (2.5 cm) or adjust the heating or air conditioning to bring in fresh air.

BRAKES

Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings may be worn-out and should be inspected by a qualified service technician. If the vehicle has continuous vibration or shudder in the steering wheel while braking, the vehicle should be inspected by a qualified service technician.

Refer to *Brake system warning light* in the *Instrument Cluster* chapter for information on the brake system warning light.



Four-wheel anti-lock brake system (ABS)

Your vehicle is equipped with an Anti-lock Braking System (ABS). This system helps you maintain steering control during emergency stops by keeping the brakes from locking. Noise from the ABS pump motor and brake pedal pulsation may be observed during ABS braking and the brake pedal may suddenly travel a little further as soon as ABS braking is done and normal brake operation resumes. These are normal characteristics of the ABS and should be no reason for concern.

Using ABS

When hard braking is required, apply continuous force on the brake pedal; do not pump the brake pedal since this will reduce the effectiveness of the ABS and will increase your vehicle's stopping distance. The ABS will be activated immediately, allowing you to retain full steering control during hard braking and on slippery surfaces. However, the ABS does not decrease stopping distance.

ABS warning lamp

The ABS lamp in the instrument cluster momentarily illuminates when the ignition is turned on. If the light does not illuminate during start up, remains on or flashes, the ABS may be disabled and may need to be serviced.



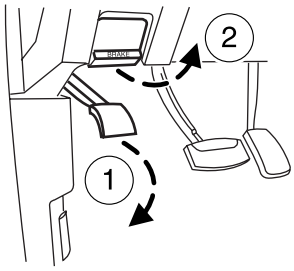
Even when the ABS is disabled, normal braking is still effective. (If your BRAKE warning lamp illuminates with the parking brake released, have your brake system serviced immediately.)



Parking brake

To set the parking brake (1), press the parking brake pedal down until the pedal stops.

To release, pull the lever (2).



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

The BRAKE warning lamp will illuminate and will remain illuminated until the parking brake is released.



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.

STEERING

To prevent damage to the power steering system:

- Never hold the steering wheel at its furthest turning points (until it stops) for more than a few seconds when the engine is running.
- Do not operate the vehicle with a low power steering pump fluid level (below the MIN mark on the reservoir).

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

If the steering wanders or pulls, check for:

- an improperly inflated tire
- uneven tire wear
- loose or worn suspension components
- loose or worn steering components
- improper steering alignment

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

TRACTION-LOK AXLE (IF EQUIPPED)

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

PREPARING TO DRIVE YOUR VEHICLE

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

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

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

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

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

AUTOMATIC TRANSMISSION OPERATION

Brake-shift interlock - column-shift transmission

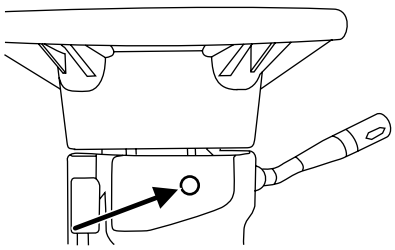
This vehicle is equipped with a park/brake-shift interlock feature that prevents the gearshift lever from being moved from P (Park) when the ignition is in the ON position unless brake pedal is depressed.

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

If the fuse is not blown, perform the following procedure:

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

2. Locate the round access plug on the underside of the steering column cover.



3. Remove the access plug using a flat head screwdriver, then push the override button using a flat head screwdriver, apply the brake pedal and shift the transmission into N (Neutral).

4. Reinstall the access plug cover, start the vehicle and release the parking brake.

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

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

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

Brake-shift interlock - floor-shift transmission

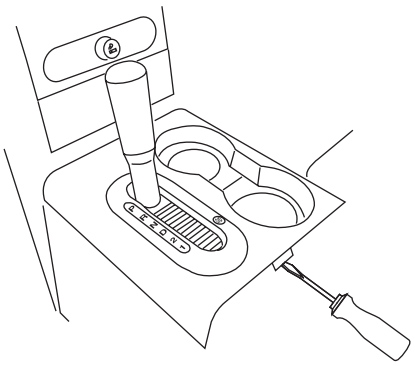
This vehicle is equipped with a brake-shift interlock feature that prevents the gearshift lever from being moved from P (Park) when the ignition is in the ON position unless brake pedal is depressed.

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

If the fuse is not blown, perform the following procedure:

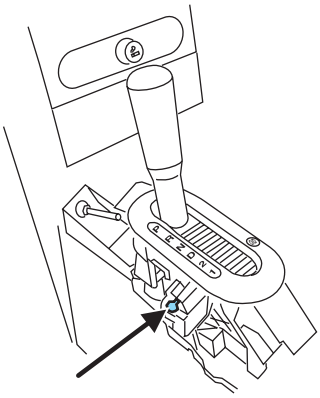
1. Apply the parking brake, turn the ignition to LOCK, then remove the key.

2. Open the center console bin. Using a screwdriver, carefully pry off the console finish panel surrounding the shifter mechanism by inserting a screwdriver into the latch slot as shown.



3. Remove console finish panel assembly to expose the inside of the gearshift.

4. Press and hold the white button located along side the shifter housing assembly (as shown in the illustration). Press the gearshift lever release on the shifter knob and move the gearshift lever back to N (Neutral) (two places rearward from P [Park]).



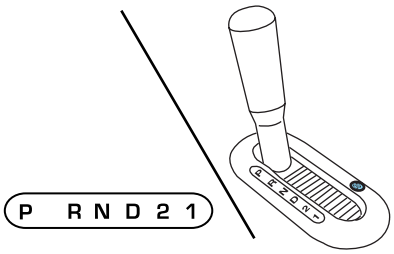
5. Start the vehicle and release the parking brake.

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

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

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

Understanding the gearshift positions of the 4–speed automatic transmission



Your vehicle's automatic transmission is equipped with a special shift strategy that insures maximum heater performance during cold weather operation.

When ambient temperature is 23°F (–5°C) or below and the engine coolant temperature is below 100°F (38°C), light throttle upshifts may be slightly delayed. Once the engine coolant temperature reaches 160°F (71°C) the normal shift strategy will resume. This is normal operation and will not affect the function or the durability of the transmission.

If the normal shift strategy does not resume once the engine coolant temperature reaches the normal operating temperature, or if the downshifts and other throttle conditions do not function normally, see your dealer or a qualified service technician as soon as possible.

P (Park)

This position locks the transmission and prevents the rear wheels from turning.

To put your vehicle in gear:

- Start the engine
- Depress the brake pedal
- Move the gearshift lever into the desired gear
- Release the parking brake.

To put your vehicle in P (Park):

- Come to a complete stop
- Move the gearshift lever and securely latch it in P (Park)

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

R (Reverse)

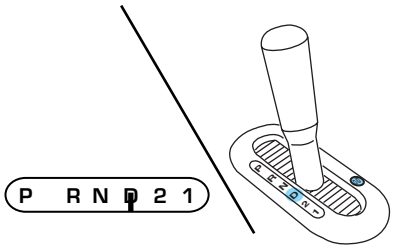
With the gearshift lever in R (Reverse), the vehicle will move backward. Always come to a complete stop before shifting into and out of R (Reverse).

N (Neutral)

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

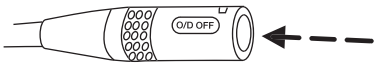
D (Overdrive)

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

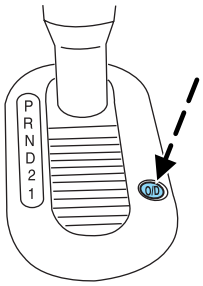


Overdrive can be deactivated by pressing the transmission control switch on the end of the gearshift lever (column-shift transmission) or on the gearshift bezel (floor-shift transmission).

- Column-shift transmission



- Floor-shift transmission



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

O/D OFF

Drive (not shown)

Drive is activated when the transmission control switch is pressed.

- This position allows for all forward gears except overdrive.
- O/D OFF lamp is illuminated.
- Provides engine braking.
- Use when driving conditions cause excessive shifting from O/D to other gears. Examples: city traffic, hilly terrain, heavy loads, trailer towing and when engine braking is required.
- To return to O/D (Overdrive), press the transmission control switch. The O/D OFF lamp will not be illuminated.
- O/D (Overdrive) is automatically returned each time the key is turned off.

2 (Second)

This position allows for second gear only.

- Provides engine braking.
- Use to start-up on slippery roads.

- To return to D (Overdrive), move the gearshift lever into the D (Overdrive) position.
- Selecting 2 (Second) at higher speeds will cause the transmission to downshift to second gear at the appropriate vehicle speed.

1 (First)

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

Forced downshifts

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

If your vehicle gets stuck in mud or snow

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

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

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

REVERSE SENSING SYSTEM (IF EQUIPPED)

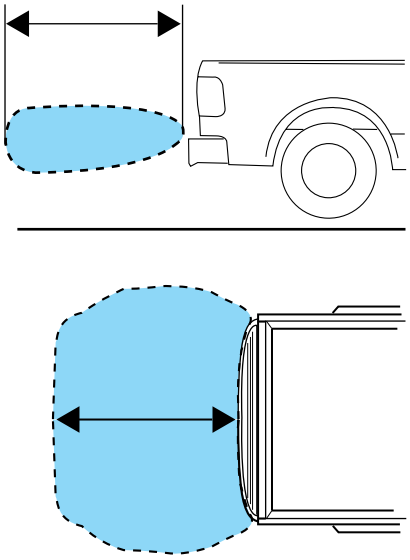
The Reverse Sensing System (RSS) sounds a tone to warn the driver of obstacles near the rear bumper when the R (Reverse) is selected and the vehicle is moving at speeds less than 3 mph (5 km/h). The system is not effective at speeds above 3 mph (5 km/h) and may not detect certain angular or moving objects.

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

To help avoid personal injury, always use caution when in reverse and when using the RSS.

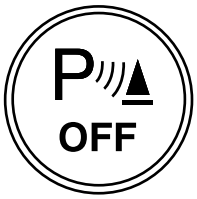
This system is not designed to prevent contact with small or moving objects. The system is designed to provide a warning to assist the driver in detecting large stationary objects to avoid damaging the vehicle. The system may not detect smaller objects, particularly those close to the ground.

Certain add-on devices such as large trailer hitches, bike or surfboard racks and any device that may block the normal detection zone of the RSS system may create false beeps.



The RSS detects obstacles up to 6 feet (2 meters.) from the rear bumper with a decreased coverage area at the outer corners of the bumper, (refer to the figures for approximate zone coverage areas). As you move closer to the obstacle, the rate of the tone increases. When the obstacle is less than 10 inches (25.0 cm) away, the tone will sound continuously. If the RSS detects a stationary or receding object further than 10 inches (25.0 cm) from the side of the vehicle, the tone will sound for only three seconds. Once the system detects an object approaching, the tone will sound again.

The RSS may have reduced performance or an increased chance of false detection if the tailgate is not locked and in the upright position. If the tailgate is down, the RSS tone may be heard intermittently or continuously. The tone may also be heard if items in the truck bed protrude rearward outside the bed.



The RSS automatically turns on when the gearshift lever is placed in R (Reverse) and the ignition is ON. An RSS control allows the driver to turn the RSS on and off. To turn the RSS off, the ignition must be ON, and the gear selector in R (Reverse). An indicator light on the control will illuminate when the system is turned off. If the indicator light illuminates when the RSS is not turned off, it may indicate a failure in the RSS. The RSS will remain off until either the RSS control is pushed again or the ignition switch is recycled.

Keep the RSS sensors (located on the rear bumper/fascia) free from snow, ice and large accumulations of dirt (do not clean the sensors with sharp objects). If the sensors are covered, it will affect the accuracy of the RSS.

If your vehicle sustains damage to the rear bumper/fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms.

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

For important information regarding safe operation of this type of vehicle, see **Preparing to drive your vehicle** in this chapter.

Four–wheel drive (4WD) supplies power to all four wheels. 4WD should not be operated on dry pavement; driveline damage may occur.

If equipped with the Electronic Shift 4WD System, and 4WD Low is selected while the vehicle is moving, the 4WD system will not engage. This is normal and should be no reason for concern. Refer to *Shifting to/from 4WD Low* for proper operation.

System indicator lights

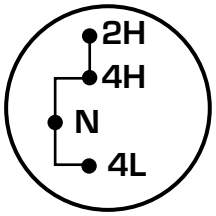
- **4X4 HI** - Momentarily illuminates when the engine is started. Illuminates when 4H is selected.

4x4 HI

- **4X4 LOW** – Momentarily illuminates when the engine is started. Illuminates when 4L is selected.

4x4
LOW

Using a manual 4WD system (if equipped)



2H (2WD High) – Power to the rear wheels only; used for street and highway driving. Provides optimal smoothness and fuel economy at high speeds.

4H (4WD High) – Used for extra traction such as in snow or icy roads or in off-road situations. Not intended for use on dry pavement.

N (Neutral) – No power to either front or rear wheels.

4L (4WD Low)– Uses extra gearing to provide maximum power to all four wheels at reduced speeds. Intended only for off-road applications such as deep sand, steep grades or pulling heavy objects. 4L (4WD Low) will not engage while the vehicle is moving; this is normal and should be no reason for concern. Refer to *Shifting to/from 4L (4WD Low)* for proper operation.

Shifting between 2H (2WD high) and 4H (4WD high)

- Move the transfer case lever between 2H (2WD High) and 4H (4WD High) at a stop or any forward speed up to 55 mph (88 km/h).

Note: Do not perform this operation at speeds above 45 mph (72 km/h) if the outside temperature is below 32°F (0°C).

Note: Do not perform this operation if the rear wheels are slipping.

Note: Some noise may be heard as the system shifts or engages; this is normal.

Shifting to/from 4L (4WD Low)

1. Bring the vehicle to a complete stop.

2. Depress the brake.

3. On vehicles equipped with an automatic transmission, place the transmission in N (Neutral); on vehicles equipped with a manual transmission, depress the clutch.

4. Move the transfer case lever through N (Neutral) directly to the desired position.

- If the transfer case **will not** engage into 4L (4WD Low), drive the vehicle above 5 mph (8 km/h), then repeat steps 1 through 4.

Note: Some noise may be heard as the system shifts or engages; this is normal.

Note: For proper operation in 4WD Low, ensure the transfer case shift lever is moved entirely rearward in to the 4L (4WD Low) position and that the 4x4 Low light is illuminated.

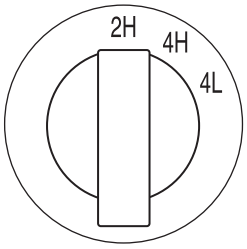
Using the N (Neutral) position

The transfer case N (Neutral) position overrides the transmission and puts the vehicle in neutral regardless of transmission gearshift lever position. The vehicle can move forward or backward.

This position should only be used when towing the vehicle.

Do not leave the vehicle unattended with the transfer case in the N (Neutral) position. Always set the parking brake fully and turn off the ignition when leaving the vehicle.

Using the electronic shift 4WD system (if equipped)



2H (2WD High) - Power to the rear wheels only; used for street and highway driving. Provides optimal smoothness and fuel economy at high speeds.

4H (4WD High) - Used for extra traction such as in snow or icy roads or in off-road situations. Not intended for use on dry pavement.

4L (4WD Low) - Uses extra gearing to provide maximum power to all four wheels at reduced speeds. Intended only for off-road applications such as deep sand, steep grades or pulling heavy objects. 4L (4WD Low)

will not engage while the vehicle is moving; this is normal and should be no reason for concern. Refer to *Shifting to/from 4L (4WD Low)* for proper operation.

Shifting between 2H (2WD High) and 4H (4WD High)

- Move the 4WD control between 2H and 4H at any forward speed up to 55 mph (88 km/h).

Note: Do not perform this operation at speeds above 45 mph (72 km/h) if the outside temperature is below 32°F (0°C).

Note: Do not perform this operation if the rear wheels are slipping.

Note: Some noise may be heard as the system shifts or engages; this is normal.

Shifting to/from 4L (4WD Low)

1. Bring the vehicle to a complete stop
2. Depress the brake
3. On vehicles equipped with an automatic transmission, place the transmission in N (Neutral); on vehicles equipped with a manual transmission, depress the clutch.
4. Move the 4WD control to the desired position.

- If shifting into 4L (4WD Low), wait for the 4X4 LOW light in the instrument cluster to turn **on** indicating the shift is complete.
- If shifting out of 4L (4WD Low), wait for the 4X4 LOW light in the instrument cluster turn turn **off** indicating the shift is complete.

Note: Some noise may be heard as the system shifts or engages; this is normal.

Driving off-road with truck and utility vehicles

4WD vehicles are specially equipped for driving on sand, snow, mud and rough terrain and have operating characteristics that are somewhat different from conventional vehicles, both on and off the road.

How your vehicle differs from other vehicles

Truck and utility vehicles can differ from some other vehicles. Your vehicle may be higher to allow it to travel over rough terrain without getting hung up or damaging underbody components.

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

Maintain steering wheel control at all times, especially in rough terrain. Since sudden changes in terrain can result in abrupt steering wheel motion, make sure you grip the steering wheel from the outside. Do not grip the spokes.

Drive cautiously to avoid vehicle damage from concealed objects such as rocks and stumps.

You should either know the terrain or examine maps of the area before driving. Map out your route before driving in the area. To maintain steering and braking control of your vehicle, you must have all four wheels on the ground and they must be rolling, not sliding or spinning.

Basic operating principles

- Do not use 4WD on dry, hard surfaced roads. Doing so will produce excessive noise, increase tire wear and may damage drive components. 4WD modes are only intended for consistently slippery or loose surfaces.
- Drive slower in strong crosswinds which can affect the normal steering characteristics of your vehicle.
- Be extremely careful when driving on pavement made slippery by loose sand, water, gravel, snow or ice.

If your vehicle goes off the edge of the pavement

- If your vehicle goes off the edge of the pavement, slow down, but avoid severe brake application, ease the vehicle back onto the pavement only after reducing your speed. Do not turn the steering wheel too sharply while returning to the road surface.
- It may be safer to stay on the apron or shoulder of the road and slow down gradually before returning to the pavement. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.
- It often may be less risky to strike small objects, such as highway reflectors, with minor damage to your vehicle rather than attempt a sudden return to the pavement which could cause the vehicle to slide sideways out of control or roll over. Remember, your safety and the safety of others should be your primary concern.

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

If your vehicle gets stuck

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

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

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

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

Emergency maneuvers

- In an unavoidable emergency situation where a sudden sharp turn must be made, remember to avoid "over-driving" your vehicle, i.e., turn the steering wheel only as rapidly and as far as required to avoid the emergency. Excessive steering will result in less vehicle control, not more. Additionally, smooth variations of the accelerator and/or brake pedal pressure should be utilized if changes in vehicle speed are called for. Avoid abrupt steering, acceleration or braking which could result in an increased risk of loss of vehicle control, vehicle rollover and/or personal injury. Use all available road surface to return the vehicle to a safe direction of travel.
- In the event of an emergency stop, avoid skidding the tires and do not attempt any sharp steering wheel movements.

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

- If the vehicle goes from one type of surface to another (i.e., from concrete to gravel) there will be a change in the way the vehicle responds to a maneuver (steering, acceleration or braking). Again, avoid these abrupt inputs.

Parking

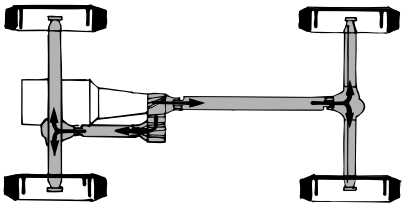
On some 4WD vehicles, when the transfer case is in the N (Neutral) position, the engine and transmission are disconnected from the rest of the driveline. Therefore, the vehicle is free to roll even if the automatic transmission is in P (Park) or the manual transmission is in gear. Do not leave the vehicle unattended with the transfer case in the N (Neutral) position. Always set the parking brake fully and turn off the ignition when leaving the vehicle.

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

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

4WD Systems

4WD (when you select a 4WD mode) uses all four wheels to power the vehicle. This increases traction, enabling you to drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.



Power is supplied to all four wheels through a transfer case. On 4WD vehicles, the transfer case allows you to select 4WD when necessary. Information on transfer case operation and shifting procedures can be found in the *Driving* chapter. Information on transfer case maintenance can be found in the *Maintenance and Specifications* chapter. You should become thoroughly familiar with this information before you operate your vehicle.

Normal characteristics

On some 4WD models, the initial shift from two-wheel drive to 4x4 while the vehicle is moving can cause some momentary clunk and ratcheting sounds. This is the front drivetrain coming up to speed and the automatic locking hubs engaging and is not cause for concern.

Sand

When driving over sand, try to keep all four wheels on the most solid area of the trail. Avoid reducing the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid spinning the wheels.

If you must reduce the tire pressure for whatever reason in sand, make sure you re-inflate the tires as soon as possible.

Avoid excessive speed because vehicle momentum can work against you and cause the vehicle to become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

Mud and water

If you must drive through high water, drive slowly. Traction or brake capability may be limited.



When driving through water, determine the depth; avoid water higher than the bottom of the hubs (if possible) and proceed slowly. If the ignition system gets wet, the vehicle may stall.

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

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even 4WD vehicles can lose traction in slick mud. As when you are driving over sand, apply the accelerator slowly and avoid spinning your wheels. If the vehicle does slide, steer in the direction of the slide until you regain control of the vehicle.

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

Driving through deep water may damage the transmission.

If the front or rear axle is submerged in water, the axle lubricant should be replaced.

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

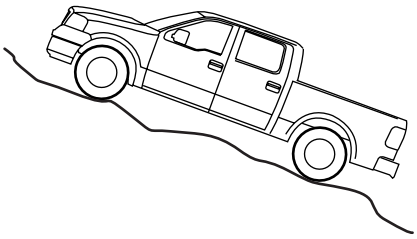


"Tread Lightly" is an educational program designed to increase public awareness of land-use regulations and responsibilities in our nations wilderness areas. Ford Motor Company joins the U.S. Forest Service and the Bureau of Land Management in encouraging you to help preserve our national forest and other public and private lands by "treading lightly."

Driving on hilly or sloping terrain

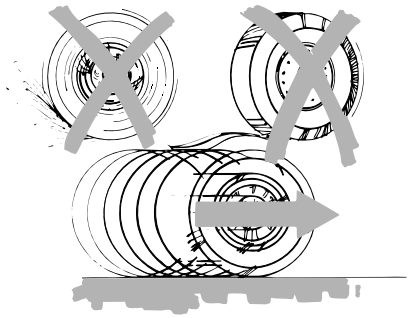
Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, you should always try to drive straight up or straight down. **Avoid driving crosswise or turning on steep slopes or hills**. A danger lies in losing traction, slipping sideways and possibly rolling over. Whenever driving on a hill, determine beforehand the route you will use. Do not drive over the crest of a hill without seeing what conditions are on the other side. Do not drive in reverse over a hill without the aid of an observer.

When climbing a steep slope or hill, start in a lower gear rather than downshifting to a lower gear from a higher gear once the ascent has started. This reduces strain on the engine and the possibility of stalling.



If you do stall out, do not try to turn around because you might roll over. It is better to back down to a safe location.

Apply just enough power to the wheels to climb the hill. Too much power will cause the tires to slip, spin or lose traction, resulting in loss of vehicle control.



Descend a hill in the same gear you would use to climb up the hill to avoid excessive brake application and brake overheating. Do not descend in neutral; instead, disengage overdrive or manually shift to a lower gear. When descending a steep hill, avoid sudden hard braking as you could lose control. When you brake hard, the front wheels can't turn and if they aren't turning, you won't be able to steer. The front wheels have to be turning in order to steer the vehicle. Rapid pumping of the brake pedal will help you slow the vehicle and still maintain steering control.

If your vehicle has anti-lock brakes, apply the brakes steadily. Do not "pump" the brakes.

Driving on snow and ice

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

Should you start to slide while driving on snowy or icy roads, turn the steering wheel in the direction of the slide until you regain control.

Avoid sudden applications of power and quick changes of direction on snow and ice. Apply the accelerator slowly and steadily when starting from a full stop.

Avoid sudden braking as well. Although a 4WD vehicle may accelerate better than a two-wheel drive vehicle in snow and ice, it won't stop any faster, because as in other vehicles, braking occurs at all four wheels. Do not become overconfident as to road conditions.

Make sure you allow sufficient distance between you and other vehicles for stopping. Drive slower than usual and consider using one of the lower gears. In emergency stopping situations, apply the brake steadily. Do not "pump" the brakes. Refer to the *Brakes* section of this chapter for additional information on the operation of the Anti-lock Brake System (ABS).

Never drive with chains on the front tires of 4WD vehicles without also putting them on the rear tires. This could cause the rear to slide and swing around during braking.

Tires, Replacement Requirements

Do not use a size and type of tire and wheel other than that originally provided by Ford Motor Company because it can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover and/or serious personal injury or death.

Make sure all tires and wheels on the vehicle are of the same size, type, tread design and load-carrying capacity. If you have questions regarding tire replacement, see an authorized Ford or Lincoln/Mercury dealer.

If you nevertheless decide to equip your 4WD for off-road use with tires larger than what Ford Motor Company recommends, you should not use these tires for highway driving.

If you use any tire/wheel combination not recommended by Ford Motor Company, it may adversely affect vehicle handling and could cause steering, suspension, axle or transfer case failure as well as the increased risk of loss of vehicle control.

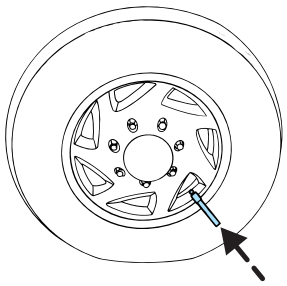
Do not use “aftermarket lift kits” or other suspension modifications, whether or not they are used with larger tires and wheels.

These “aftermarket lift kits” could adversely affect the vehicle’s handling characteristics, which could lead to loss of vehicle control or rollover and serious injury.

Tires can be damaged during off-road use. For your safety, tires that are damaged should not be used for highway driving because they are more likely to blow out or fail.

You should carefully observe the recommended tire inflation pressure found on the safety compliance certification label attached to the left front door lock facing or door latch post pillar. Failure to follow tire pressure recommendations can adversely affect the way your vehicle handles. Do not exceed the Ford Motor Company recommended pressure even if it is less than the maximum pressure allowed for the tire.

Each day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires, and adjust if required. Check tire pressure with a tire gauge monthly (including spare). Safe vehicle operation requires your tires to be set at the proper pressure and your vehicle not be overloaded.



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

Inspect the tire sidewalls for cuts, bruises and other damage. If internal damage to the tire is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced.

Maintenance and Modifications

The suspension and steering systems on your vehicle have been designed and tested to provide predictable performance whether loaded or empty and durable load carrying capability. For this reason, Ford Motor Company strongly recommends that you do not make modifications such as adding or removing parts (such as lift kits or stabilizer bars) or by using replacement parts not equivalent to the original factory equipment.

Any modifications to a vehicle that raise the center of gravity can make it more likely the vehicle will roll over as a result of a loss of control. Ford Motor Company recommends that caution be used with any vehicle equipped with a high load or device (such as ladder racks or pickup box cover).

Failure to maintain your vehicle properly may void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities and adversely affect driver and passenger safety. Frequent inspection of vehicle chassis components is recommended if the vehicle is subjected to heavy off-road usage.

DRIVING THROUGH WATER

If driving through deep or standing water is unavoidable, proceed very slowly especially when the depth is not known. Never drive through water that is higher than the bottom of the hubs (for trucks) or the

bottom of the wheel rims (for cars). When driving through water, traction or brake capability may be limited. Also, water may enter your engine's air intake and severely damage your engine or your vehicle may stall. **Driving through deep water where the transmission vent tube is submerged may allow water into the transmission and cause internal transmission damage.**

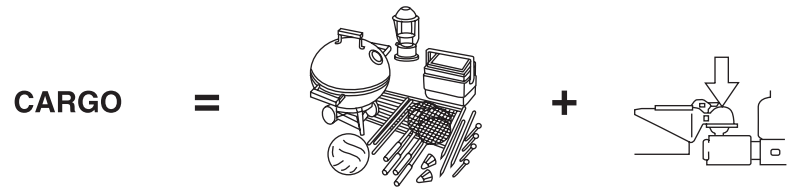
Once through the water, always dry the brakes by moving your vehicle slowly while applying light pressure on the brake pedal. Wet brakes do not stop the vehicle as quickly as dry brakes.

VEHICLE LOADING – WITH AND WITHOUT A TRAILER

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

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

Vehicle Curb Weight – is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.



Cargo Weight – includes all weight added to the Base Curb Weight, including cargo and optional equipment. When towing, trailer tongue load or king pin weight is also part of cargo weight.

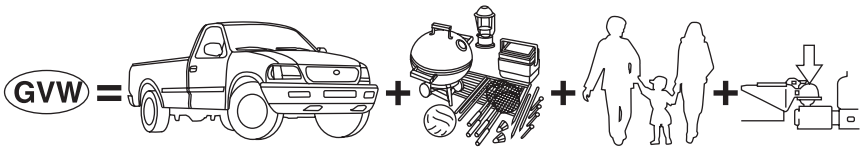
GAW (Gross Axle Weight) – is the total weight placed on each axle (front and rear) – including vehicle curb weight and all payload.

GAWR (Gross Axle Weight Rating) – is the maximum allowable weight that can be carried by a single axle (front or rear). **These**

numbers are shown on the Safety Compliance Certification Label located on the driver's door or B-Pillar. The total load on each axle must never exceed its GAWR.

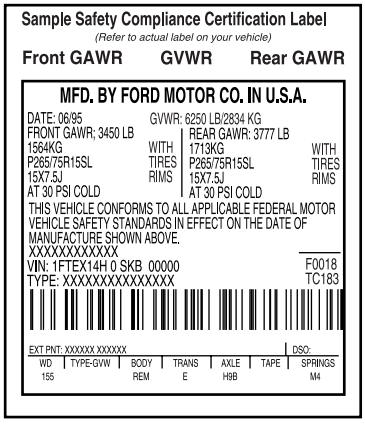
Exceeding the Safety Certification Label axle weight rating limits could result in substandard vehicle handling or performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.

Note: For trailer towing information refer to *Trailer towing* found in this chapter or the *RV and Trailer Towing Guide* provided by your dealership.

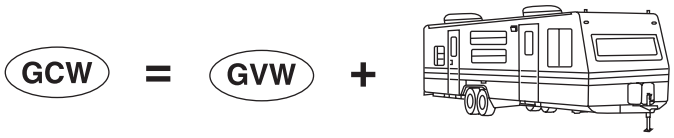


GVW (Gross Vehicle Weight) – is the Vehicle Curb Weight + cargo + passengers.

GVWR (Gross Vehicle Weight Rating) – is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). **The GVWR is shown on the Safety Compliance Certification Label located on the driver's door or B-Pillar. The GVW must never exceed the GVWR.**



Exceeding the Safety Certification Label vehicle weight rating limits could result in substandard vehicle handling or performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.



GCW (Gross Combined Weight) – is the weight of the loaded vehicle (GVW) plus the weight of the fully loaded trailer.

GCWR (Gross Combined Weight Rating) – is the maximum allowable weight of the vehicle and the loaded trailer – including all cargo and passengers – that the vehicle can handle without risking damage. (Important: The towing vehicle's braking system is rated for operation at GVWR, not at GCWR. Separate functional brakes should be used for safe control of towed vehicles and for trailers where the GCW of the towing vehicle plus the trailer exceed the GVWR of the towing vehicle. **The GCW must never exceed the GCWR.**

Maximum Loaded Trailer Weight – is the highest possible weight of a fully loaded trailer the vehicle can tow. It assumes a vehicle with only mandatory options, no cargo (internal or external), a tongue load of 10–15% (conventional trailer) or king pin weight of 15–25% (fifth wheel trailer), and driver only (150 lbs [68 kg]). **Consult your dealership (or the** *RV and Trailer Towing Guide* **provided by your dealership) for more detailed information.**

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

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

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

Do not use replacement tires with lower load carrying capacities than the originals because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the originals do not increase the GVWR and GAWR limitations.

Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle and/or personal injury.

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

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

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

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

Calculating the load your vehicle can carry/tow

1. Use the appropriate maximum GCWR chart (in the *Trailer towing* section in this chapter) for your type of engine, rear axle ratio and tire size.

2. Weigh your vehicle without cargo. To obtain correct weights, take your vehicle to a shipping company or an inspection station for trucks.

3. Subtract your loaded weight from the maximum GCWR in the chart. This is the maximum trailer weight your vehicle can tow. It must be below the maximum trailer weight shown in the chart.

TRAILER TOWING

Your vehicle may tow a class I, II, III or IV trailer provided the maximum trailer weight is less than or equal to the maximum trailer weight listed for your engine and rear axle ratio on the following charts.

If your vehicle is not equipped with a heavy-duty trailer towing package, the maximum weight your vehicle can tow is limited to 5,000 lbs. (2,268 kg)

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 periodically during, and after any towing operation.

Exceeding the maximum GCWR could result in extensive damage to your vehicle and personal injury.

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

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

Regular Cab 4x2 (126" wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11500 (5216)	6500 (2948)
4.6L	3.73	12000 (5443)	7000 (3175)
5.4L	3.31	12000 (5443)	6800 (3084)
5.4L (w/17" tires)	3.55	13000 (5897)	7800 (3538)
5.4L (w/17" tires)	3.73	13500 (6123)	8300 (3765)

Regular Cab 4x2 (145” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11700 (5307)	6500 (2948)
4.6L	3.73	12200 (5534)	7000 (3175)
5.4L	3.31	12500 (5670)	7200 (3266)
5.4L (w/17” tires)	3.55	14000 (6350)	8700 (3946)
5.4L (w/17” tires)	3.73	15000 (6804)	9800 (4445)
5.4L Heavy Duty	4.10	15300 (6940)	9900 (4491)

Regular Cab 4x4 (126” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11500 (5216)	6200 (2812)
4.6L	3.73	12000 (5443)	6700 (3039)
5.4L (w/17” tires)	3.55	13000 (5897)	7600 (3447)
5.4L (w/18” tires)	3.55	12500 (5670)	7100 (3220)
5.4L (w/17” tires)	3.73	13500 (6123)	8100 (3674)
5.4L (w/18” tires)	3.73	13000 (5897)	7600 (3447)

Regular Cab 4x4 (145” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11700 (5307)	6200 (2812)
4.6L	3.73	12200 (5534)	6700 (3039)
5.4L (w/17” tires)	3.55	14000 (6350)	8500 (3856)
5.4L (w/18” tires)	3.55	13500 (6123)	8000 (3629)
5.4L (w/17” tires)	3.73	15000 (6804)	9500 (4309)*
5.4L (w/18” tires)	3.73	14500 (6577)	9000 (4082)
5.4L Heavy Duty	4.10	15300 (6940)	9500 (4309)*
* Trailer tow capability is limited to 9500 lbs. (4309 kg)			

SuperCab 4x2 (133” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11500 (5216)	6300 (2858)
4.6L	3.73	12000 (5443)	6800 (3084)
5.4L (with 17” tires)	3.55	13000 (5897)	7600 (3447)
5.4L (with 18” tires)	3.55	12500 (5670)	7100 (3220)
5.4L (with 17” tires)	3.73	13500 (6123)	8100 (3674)
5.4L (with 18” tires)	3.73	13000 (5897)	7600 (3447)

SuperCab 4x2 (145” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11700 (5307)	6300 (2858)
4.6L	3.73	12200 (5534)	6800 (3084)
5.4L (w/17” tires)	3.55	14000 (6350)	8500 (3856)
5.4L (w/18” tires)	3.55	13500 (6123)	8000 (3629)
5.4L (w/17” tires)	3.73	15000 (6804)	9500 (4309)*
5.4L (w/18” tires)	3.73	14500 (6577)	9000 (4082)
* Trailer tow capability is limited to 9500 lbs. (4309 kg)			

SuperCab 4x2 (163” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-kg (lbs.)**	**Maximum trailer weight-kg (lbs.)**
5.4L Heavy Duty	4.10	15300 (6940)	9500 (4309)

SuperCab 4x4 (133” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11500 (5216)	5900 (2676)
4.6L	3.73	12000 (5443)	6400 (2903)
5.4L (w/17” tires)	3.55	13000 (5897)	7300 (3311)
5.4L (w/18” tires)	3.55	12500 (5670)	6800 (3084)
5.4L (w/17” tires)	3.73	13500 (6123)	7800 (3538)
5.4L (w/18” tires)	3.73	13000 (5897)	7300 (3311)

SuperCab 4x4 (145” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11700 (5307)	6000 (2721)
4.6L	3.73	12200 (5534)	6500 (2948)
5.4L (w/17” tires)	3.55	14000 (6350)	8300 (3765)
5.4L (w/18” tires)	3.55	13500 (6123)	7800 (3538)
5.4L (w/17” tires)	3.73	15000 (6804)	9300 (4218)
5.4L (w/18” tires)	3.73	14500 (6577)	8800 (3992)

SuperCab 4x4 (163” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
5.4L Heavy Duty	4.10	15300 (6940)	9300 (4218)

Crew Cab 4x2 (139” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11700 (5307)	6200 (2812)
4.6L	3.73	12200 (5534)	6700 (3039)
5.4L (w/17” tires)	3.55	14000 (6350)	8500 (3856)
5.4L (w/18” tires)	3.55	13500 (6123)	8000 (3629)
5.4L (w/17” tires)	3.73	15000 (6804)	9500 (4309)*
5.4L (w/18” tires)	3.73	14500 (6577)	9000 (4082)
* Trailer tow capability is limited to 9500 lbs. (4309 kg)			

Crew Cab 4x4 (139” wheelbase)			
Engine	**Rear axle ratio**	**Maximum GCWR-lbs. (kg)**	**Maximum trailer weight-lbs. (kg)**
4.6L	3.55	11700 (5307)	6000 (2721)
4.6L	3.73	12200 (5534)	6500 (2948)
5.4L (w/17” tires)	3.55	14000 (6350)	8200 (3719)
5.4L (w/18” tires)	3.55	13500 (6123)	7700 (3493)
5.4L (w/17” tires)	3.73	15000 (6804)	9200 (4173)
5.4L (w/18” tires)	3.73	14500 (6577)	8700 (3946)

Trailer frontal area considerations:

- Not to exceed towing vehicle frontal area without Class IV trailer towing package
- Not to exceed 60 square feet (5.52 square meters) with Class IV trailer towing package

Preparing to tow

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

Hitches

Do not use hitches that clamp onto the vehicle’s bumper or attach to the axle. You must distribute the load in your trailer so that 10%–15% of the total weight of the trailer is on the tongue.

Load equalizing hitch

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

1. Park the unloaded vehicle on a level surface. With the ignition on and all doors closed, allow the vehicle to stand for several minutes so that it can level.

2. Measure the height of a reference point on the front and rear bumpers at the center of the vehicle.

3. Attach the trailer to the vehicle and adjust the hitch equalizers so that the front bumper height is within ½" (13 mm) of the reference point. After proper adjustment, the rear bumper should be no higher than in Step 2.

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

Safety chains

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

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

Do not attach safety chains to the bumper.

Trailer brakes

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

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

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

Trailer lamps

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

Using a step bumper (if equipped)

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

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

Driving while you tow

When towing a trailer:

- Turn off the speed control. The speed control may shut off automatically when you are towing on long, steep grades.
- Consult your local motor vehicle speed regulations for towing a trailer.
- To eliminate excessive shifting, use a lower gear. This will also assist in transmission cooling. (For additional information, refer to the *Understanding the positions of the 4–speed automatic transmission* section in this chapter.
- Anticipate stops and brake gradually.
- Do not exceed the GCWR rating or transmission damage may occur.

Servicing after towing

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

Trailer towing tips

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

Launching or retrieving a boat

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.

When backing down a ramp during boat launching or retrieval:

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

Exceeding these limits may allow water to enter vehicle components:

- causing internal damage to the components.
- affecting driveability, emissions and reliability.

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

RECREATIONAL TOWING (ALL WHEELS ON THE GROUND)

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

2WD vehicles:

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

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

Ford recommends the driveshaft be removed/installed only by a qualified technician. See your local dealer for driveshaft removal/installation.

Improper removal/installation of the driveshaft can cause transmission fluid loss, damage to the driveshaft and internal transmission components.

4WD vehicles electronic shift transfer case:

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

SNOWPLOWING

Ford recommends that the F–150 used for snow removal include the Snow Plow Prep Package Option. The option is available for F–150 4x4 Regular Cab and Super Cab (not available or recommended for SuperCrew), and includes the following upgrades:

- F–150 4x4 (except F–150 SuperCrew)
- 5.4L engine
- Heavy-duty payload package
- Snowplow prep package

SNOWPLOWING

For F–150 snowplow applications, Ford recommends the F–150 4x4 Regular Cab and SuperCab equipped with the 5.4L engine, Heavy Duty Payload Package and Snow Plow Prep Package. F–150 SuperCrew is not available, or recommended, for snowplowing.

Installing the snowplow

Weight limits and guidelines for selecting and installing the snowplow can be found in the Ford Truck Body Builders Layout Book, Snowplow section, found at www.fleet.ford.com/truckbbas. A typical installation affects the following:

- Certification to government safety laws such as occupant protection and air bag deployment, braking, and lighting. Look for an ″Alterer's Label″ on the vehicle from the snowplow installer certifying that the installation meets all applicable Federal Motor Vehicle Safety Standards (FMVSS).
- The Total Accessory Reserve Capacity (TARC) is shown on the lower right side of the vehicle's Safety Certification Label. This is the weight of permanently-attached auxiliary equipment, such as snowplow frame-mounting hardware, that can be added to the vehicle and satisfy Ford compliance certification to FMVSS. Exceeding this weight may require the auxiliary equipment installer additional safety certification responsibility. The Front Accessory Reserve Capacity (FARC) is added for customer convenience
- Rear ballast weight behind the rear axle may be required to prevent exceeding the FGAWR, and provide front-to-rear weight balance for proper braking and steering.
- Front wheel toe may require re-adjustment to prevent premature uneven tire wear. Specifications are found in the Ford Workshop Manual.

- Headlight aim may require re-adjustment.
- The tire air pressures recommended for general driving are found on the vehicle's Safety Certification Label. The maximum cold inflation pressure for the tire and associated load rating is imprinted on the tire sidewall. Tire air pressure may require re-adjustment within these pressure limits to accommodate the additional weight of the snowplow installation

Operating the vehicle with the snowplow attached

Ford recommends that the F–150 be limited to low speed, personal-use snow removal. Do not use your vehicle for snow removal until it has been driven at least 500 miles (800 km).

The attached snowplow blade restricts airflow to the radiator, and may cause the engine to run at a higher temperature:

- If you are driving more than 15 miles (24 km) where outside air temperatures are above freezing, then angle the plow blade to full left or right to maximize airflow to the radiator.
- If you are driving less than 15 miles (24 km) at speeds up to 40 mph (64 km/h) in cold weather you will not need to adjust blade position

Snowplowing with your air bag equipped vehicle

Your vehicle is equipped with a driver and passenger air bag Supplemental Restraint System (SRS) The SRS is designed to activate in certain frontal and offset frontal collisions when the vehicle sustains sufficient longitudinal deceleration.

Careless or high speed driving while plowing snow which results in sufficient vehicle decelerations can deploy the air bag. Such driving also increases the risk of accidents.

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

Never remove or defeat the "tripping mechanisms" designed into the snow removal equipment by its manufacturer. Doing so may cause damage to the vehicle and the snow removal equipment as well as possible air bag deployment.

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

Transmission operation while plowing

- Shift transfer case to 4L (4WD Low) when plowing in small areas at speeds below 5 mph (8 km/h).
- Shift transfer case to 4H (4WD High) when plowing larger areas or light snow at higher speeds. Do not exceed 15 mph (24 km/h).
- Do not shift the transmission from a forward gear to R (Reverse) until the engine is at idle and the wheels are stopped.
- If the vehicle is stuck, shift the transmission in a steady motion between forward and reverse gears. 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 rock the vehicle if the engine is not at operating temperature. Do not rock the vehicle for more than a minute. The transmission and tires may be damaged or the engine may overheat.

Do not spin the wheels at over 35 mph (55 km/h). The tires may fail and injure a passenger or bystander.

Engine temperature while plowing

When driving with a plow, your engine may run at a higher temperature than normal because the attached snowplow blade will restrict airflow to the radiator.

If you are driving more than 15 miles (24 km) at temperatures above freezing, angle the plow blade either full left or full right to provide maximum airflow to the radiator.

If you are driving less than 15 miles (24 km) at speeds up to 40 mph (64 km/h) in cold weather, you will not need to worry about blade position to provide maximum airflow.

GETTING ROADSIDE ASSISTANCE

To fully assist you should you have a vehicle concern, Ford Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty. The service is available:

- 24–hours, seven days a week
- for the New Vehicle Limited Warranty period of three years or 36,000 miles (60,000 km), whichever occurs first on Ford and Mercury vehicles, and four years or 50,000 miles (80,000 km) on Lincoln vehicles.

Roadside assistance will cover:

- changing a flat tire
- jump-starts
- lock-out assistance
- limited fuel delivery
- towing of your disabled vehicle to the nearest Ford Motor Company dealership, or your selling dealer if within 35 miles (56.3 km) of the nearest Ford Motor Company dealership (one tow per disablement). Even non-warranty related tows, like accidents or getting stuck in the mud or snow, are covered (some exclusions apply, such as impound towing or repossession).

Canadian customers refer to your Owner Information Guide for information on:

- coverage period
- exact fuel amounts
- towing of your disabled vehicle
- emergency travel expense reimbursement
- travel planning benefits

USING ROADSIDE ASSISTANCE

Complete the roadside assistance identification card and place it in your wallet for quick reference. In the United States, this card is found in the Owner Guide portfolio in the glove compartment in Ford vehicles and is mailed to you if you own a Mercury or Lincoln. In Canada, the card is found in the *Owner Information Guide* in the glove compartment.

U.S. Ford or Mercury vehicle customers who require roadside assistance, call 1–800–241–3673; Lincoln vehicle customers call 1–800–521–4140.

Canadian customers who require roadside assistance, call 1–800–665–2006.

If you need to arrange roadside assistance for yourself, Ford Motor Company will reimburse a reasonable amount. To obtain reimbursement information, U.S. Ford or Mercury vehicles customers call 1-800-241-3673; Lincoln vehicle customers call 1–800–521–4140.

Canadian customers who need to obtain reimbursement information, call 1–800–665–2006.

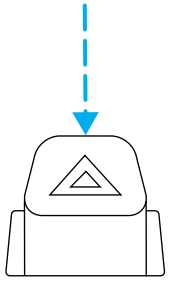
ROADSIDE COVERAGE BEYOND BASIC WARRANTY

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

Similarly in Canada, for uninterrupted Roadside Assistance coverage, you may purchase extended coverage prior to your Basic Warranty's Roadside Assistance expiring. For more information and enrollment, contact 1–877–294–2582 or visit our website at www.ford.ca.

HAZARD FLASHER

The hazard flasher is located on the steering column, just behind the steering wheel. The hazard flashers will operate when the ignition is in any position or if the key is not in the ignition.



Push in the flasher control and all front and rear direction signals will flash. Press the flasher control again to turn them off. Use it when your vehicle is disabled and is creating a safety hazard for other motorists.

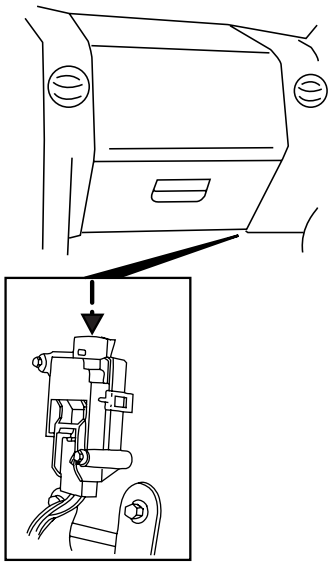
Note: With extended use, the flasher may run down your battery.

FUEL PUMP SHUT-OFF SWITCH

This device stops the electric fuel pump from sending fuel to the engine when your vehicle has had a substantial jolt.

After an accident, if the engine cranks but does not start, this switch may have been activated.

This switch is located in the front passenger's footwell, behind the kick panel access cover, in front of the fuse box. The access cover needs to be removed to reset the fuel pump shut-off switch.



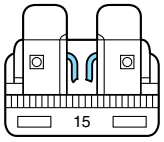
To reset the switch:

1. Turn the ignition OFF.
2. Check the fuel system for leaks.
3. If no leaks are apparent, reset the switch by pushing in on the reset button.
4. Turn the ignition ON.
5. Wait a few seconds and return the key to OFF.
6. Make another check for leaks.

FUSES AND RELAYS

Fuses

If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.



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

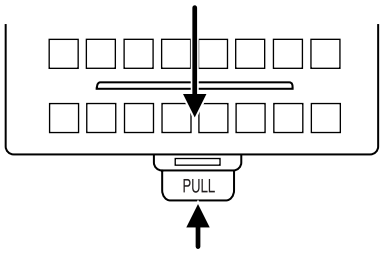
Standard fuse amperage rating and color

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

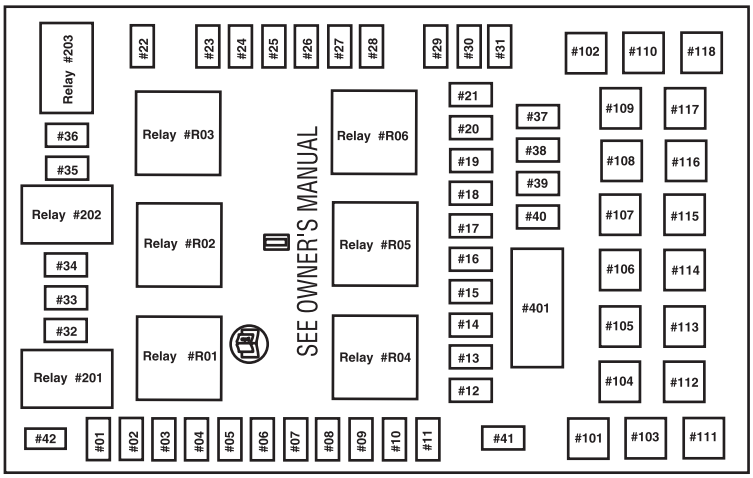
Passenger compartment fuse panel / power distribution box

The fuse panel is located under the right-hand side of the instrument panel. Remove the trim panel and fuse box cover to access the fuses.

To remove the fuse box cover, place a finger behind the PULL tab and your thumb above the PULL tab as shown in the illustration, then pull the cover off.



To reinstall the fuse box cover, place the top part of the cover on the fuse panel, then push the bottom part of the cover until you hear it click shut. Gently pull on the cover to make sure it is seated properly.



The fuses are coded as follows.

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
1	10A*	Run/Accessory - Wipers, Instrument cluster
2	20A*	Stop/Turn lamps, Speed control deactivate switch
3	5A*	Power mirrors, Memory logic power, Memory seats and pedals
4	10A*	DVD battery power
5	7.5A*	Keep alive memory for Powertrain Control Module (PCM) and climate control module
6	15A*	Parklamps, BSM, Instrument panel illumination
7	5A*	Radio (start signal)
8	10A*	Heated mirrors, Switch indicator
9	—	Not used

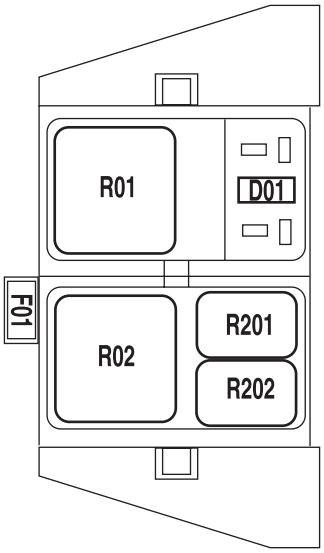
Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
10	20A*	Trailer tow back-up lamps relay (PCB1), Trailer tow parklamp relay (R201)
11	10A*	A/C clutch, 4x4 solenoid
12	—	Not used
13	10A*	Climate control module power
14	10A*	Back-up lamp and Daytime Running Lamps (DRL) relay coil, A/C pressure switch, Brake-shift interlock solenoid, Heated PCV
15	5A*	Overdrive cancel, Cluster, Brake-Shift Interlock (BSI)
16	10A*	ABS module (Run/Start power)
17	15A*	Fog lamp relay (R202)
18	10A*	Run/Start feed - Flasher relay, Electrochromatic mirror, Heated seats, BSM, Compass, RSS (Reverse Sensing System)
19	10A*	Restraints (Air bag module)
20	15A*	PCM 4x4 power
21	15A*	Cluster keep alive power
22	10A*	Delayed accessory power for audio, power door lock switch and moonroof switch illumination
23	10A*	RH low beam headlamp
24	15A*	Battery saver power for demand lamps
25	10A*	LH low beam headlamp
26	20A*	Horn relay (PCB3), Horn power

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
27	5A*	Passenger Air bag Deactivation (PAD) warning lamp, Cluster air bag warning lamp, Cluster RUN /START power
28	5A*	SecuriLock transceiver (PATS)
29	15A*	PCM 4x4 power
30	—	Not used
31	20A*	Radio power
32	15A*	Vapor Management Valve (VMV), A/C clutch relay, Canister vent, Heated Exhaust Gas Oxygen (HEGO) sensors #11 and #21, CMCV, Mass Air Flow (MAF) sensor, VCT
33	15A*	Shift solenoid, CMS #12 and #22
34	20A*	Fuel injectors and PCM power
35	20A*	Instrument cluster high beam indicator, High beam headlamps
36	10A*	Trailer tow right turn/stop lamps
37	20A*	Rear power point
38	25A*	Subwoofer power
39	20A*	Instrument panel power point
40	20A*	Low beam headlamps, DRL
41	20A*	Cigar lighter, Diagnostic connector power
42	10A*	Trailer tow left turn/stop lamps
101	30A**	Starter solenoid
102	20A**	Ignition switch feed
103	20A**	ABS valves
104	—	Not used
105	30A**	Electric trailer brakes
106	30A**	Trailer tow battery charge

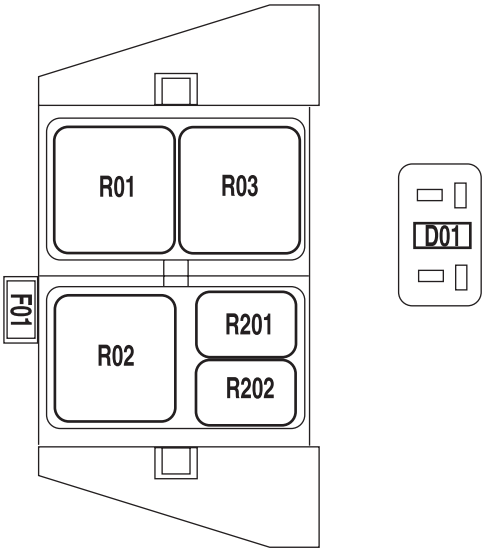
Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
107	30A**	Power door locks (BSM)
108	30A**	Passenger power seat
109	30A**	Driver power seat, Adjustable pedals
110	—	Not used
111	30A**	4x4 relays
112	40A**	ABS pump power
113	30A**	Wipers and washer pump
114	40A**	Heated backlite, Heated mirror power
115	—	Not used
116	30A**	Blower motor
117	—	Not used
118	30A**	Heated seats
401	30A Circuit breaker	Power windows, Moonroof, Power sliding backlite
R01	Full ISO relay	Starter solenoid
R02	Full ISO relay	Accessory delay
R03	Full ISO relay	Hi-beam headlamps
R04	Full ISO relay	Heated backlite
R05	Full ISO relay	Trailer tow battery charge
R06	Full ISO relay	Blower motor
R201	Half ISO relay	Trailer tow park lamps
R202	Half ISO relay	Fog lamps
R203	Half ISO relay	PCM
* Mini fuses ** Cartridge fuses		

Auxiliary relay box

The relay box is located in the engine compartment on the left fender.



- Without Daytime Running Lamp (DRL) option



• With Daytime Running Lamp (DRL) option

The relays are coded as follows:

Fuse/Relay location	Fuse amp rating	Description
F01	5A	Clockspring illumination
R01	—	4x4 CCW
R02	—	4x4 CW
R03	—	Daytime Running Lamps (DRL) (if equipped, otherwise not used)
R201	—	DRL
R202	—	A/C clutch
D01	—	A/C clutch diode

CHANGING THE TIRES

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

The use of tire sealants may damage your tires.

Dissimilar spare tire/wheel information

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

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

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

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

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

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

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

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

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

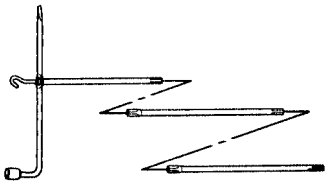
Location of the spare tire and tools

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

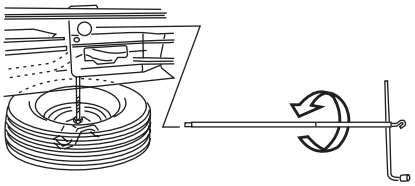
Tool	Location
Spare tire	Under the vehicle, just forward of the rear bumper
Jack, jack handle and lug nut wrench	Regular Cab: Behind the interior trim on the passenger side of the cab SuperCrew and SuperCab: Under the rear seat on the passenger side

Removing the spare tire

1. Use the ignition key to remove the lock cylinder from the access hole of the bumper to allow access to the guide tube. Assemble the jack handle as shown in the illustration.



2. Fully insert the jack handle through the bumper hole and into the guide tube through the access hole in the rear bumper.



3. Turn the handle counterclockwise until tire is lowered to the ground, the tire can be slid rearward and the cable is slightly slack.

4. Slide the retainer through the center of the wheel.

Tire change procedure

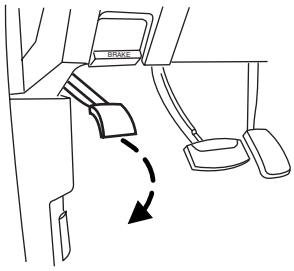
To help prevent the vehicle from moving when you change a tire, be sure the parking brake is set, then block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.

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

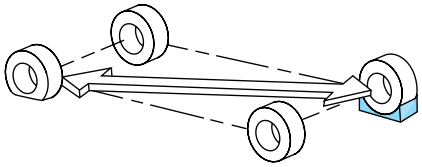
Refer to the instruction sheet (located with the jack) for detailed tire change instructions.

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

2. Place gearshift lever in P (Park) and turn engine OFF.



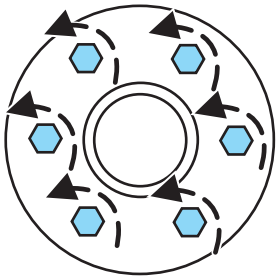
3. Block the diagonally opposite wheel.



4. Obtain the spare tire and jack from their storage locations.

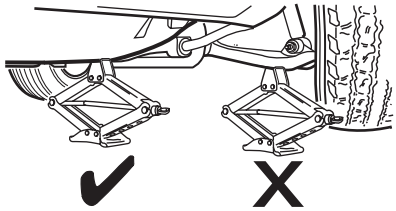
5. Use the tip of the lug wrench to remove any wheel trim.

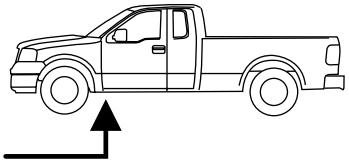
6. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.



7. Position the jack according to the following guides and turn the jack handle clockwise until the wheel is completely off the ground.

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

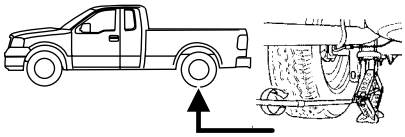




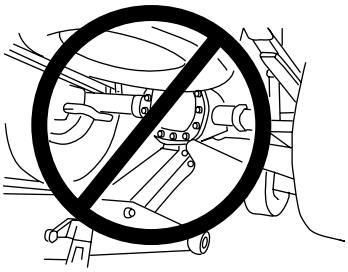
- Front

Note: Use the frame rail as the jacking location point, NOT the control arm.

- 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 front or rear differential as a jacking point.**

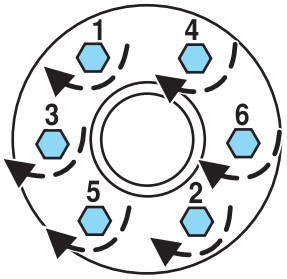
8. Remove the lug nuts with the lug wrench.

9. 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.

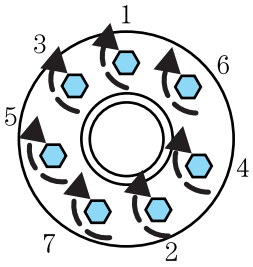
10. Lower the wheel by turning the jack handle counterclockwise.

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

- Six lug nut wheel



- Seven lug nut wheel



12. Stow the flat tire. Refer to *Stowing the flat/spare tire.*

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

14. Unblock the wheels.

Stowing the flat/spare tire

Note: Failure to follow spare tire stowage instructions may result in failure of cable or loss of spare tire.

1. Lay the tire on the ground with the valve stem facing in the direction specified on the Tire Changing Instructions located with the jack hardware.

2. Slide the wheel partially under the vehicle and install the retainer through the wheel center. Pull on the cable to align the components at the end of the cable.

3. Turn the jack handle clockwise until the tire is raised to its stowed position underneath the vehicle. The effort to turn the jack handle increases significantly and the spare tire carrier ratchets or slips when the tire is raised to the maximum tightness. Tighten to the best of your ability, to the point where the ratchet/slip occurs, if possible. The spare tire carrier will not allow you to overtighten. If the spare tire carrier ratchets or slips with little effort, take the vehicle to your dealer for assistance at your earliest convenience.

4. Check that the tire lies flat against the frame and is properly tightened. Try to push or pull, then turn the tire to be sure it will not move. Loosen and retighten, if necessary. Failure to properly stow the spare tire may result in failure of the winch cable and loss of the tire.

5. Repeat this tightness check procedure when servicing the spare tire pressure (every six months, per *Scheduled Maintenance Guide),* or at any time that the spare tire is disturbed through service of other components.

6. If removed, install the spare tire lock (if equipped) into the bumper drive tube with the spare tire lock key (if equipped) and jack handle.

WHEEL LUG NUT TORQUE SPECIFICATIONS

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

Bolt size	Wheel lug nut torque*	
	lb.ft.	N•m
M14 x 2.0	150	200
* Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.		

When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the front disc brake hub and rotor that contacts the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while the vehicle is in motion, resulting in loss of control.

JUMP STARTING YOUR VEHICLE

The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in injury or vehicle damage.

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

Do not attempt to push-start your vehicle. Automatic transmissions do not have push-start capability; doing so may damage the catalytic converter.

Preparing your vehicle

When the battery is disconnected or a new battery is installed, the transmission must relearn its shift strategy. As a result, the transmission may have firm and/or soft shifts. This operation is considered normal and will not affect function or durability of the transmission. Over time, the adaptive learning process will fully update transmission operation.

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

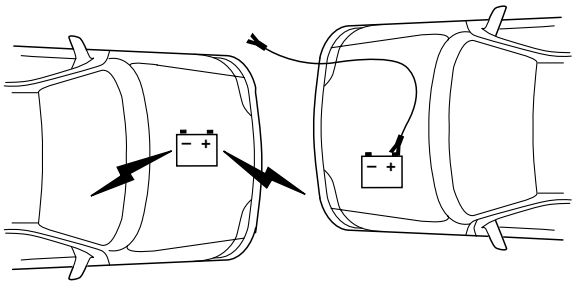
2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.

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

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

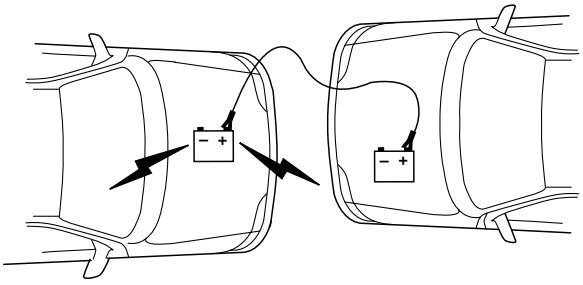
5. Turn the heater fan on in both vehicles to protect any electrical surges. Turn all other accessories off.

Connecting the jumper cables

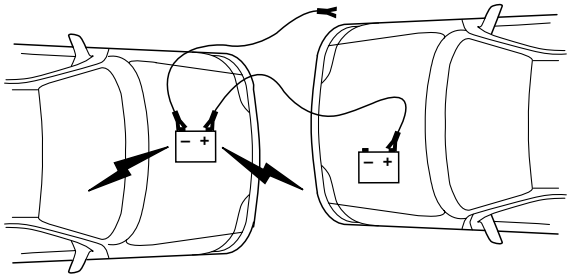


1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

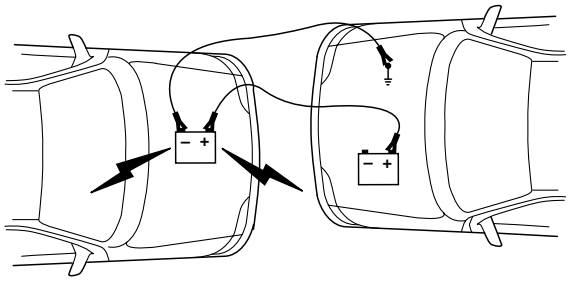
Note: In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.



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



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



4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the carburetor/fuel injection system. **Do not** use fuel lines, engine rocker covers or the intake manifold as *grounding* points.

Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

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

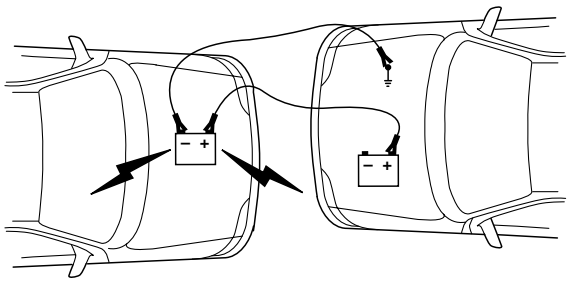
Jump starting

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

2. Start the engine of the disabled vehicle.

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

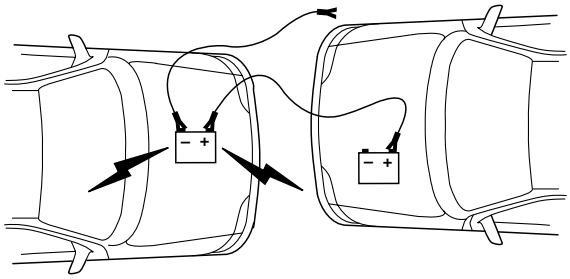
Removing the jumper cables



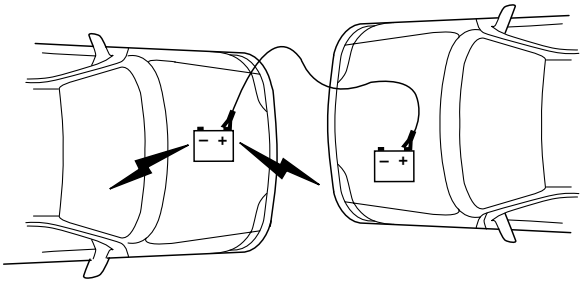
Remove the jumper cables in the reverse order that they were connected.

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

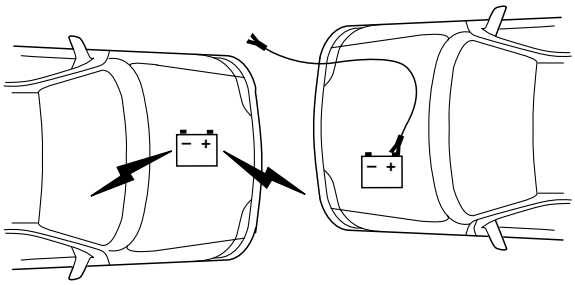
Note: In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.



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



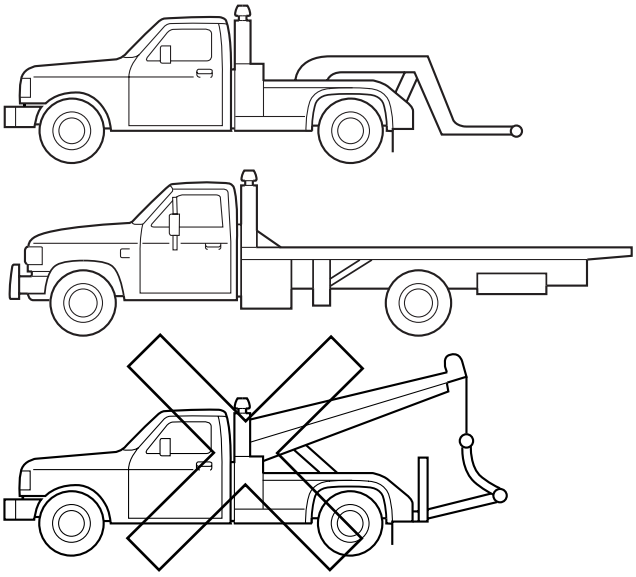
3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.



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 of a roadside assistance program, your roadside assistance service provider.

Ford recommends your vehicle be towed with a wheel lift or flatbed. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

On 4x2 vehicles, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

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

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

GETTING THE SERVICES YOU NEED

At home

You must take your Ford vehicle to an authorized Ford dealer for warranty repairs. While any Ford dealership handling your vehicle line will provide warranty service, we recommend you return to your selling dealer who wants to ensure your continued satisfaction. Please note that certain warranty repairs require special training and/or equipment, so not all dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another dealer. A reasonable time must be allowed to perform a repair after taking your vehicle to the dealership. Repairs will be made using Ford or Motorcraft parts, or remanufactured or other parts that are authorized by Ford.

If you have questions or concerns, or are unsatisfied with the service you are receiving, follow these steps:

1. Contact your Sales Representative or Service Advisor at your selling/servicing dealership.

2. If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.

3. If you require assistance or clarification on Ford Motor Company policies or procedures, please contact the Ford Customer Relationship Center at the number below.

Away from home

If you own a Ford or Mercury vehicle and are away from home when your vehicle needs service, or if you need more help than the dealership could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealership to help you.

In the United States:

Ford Motor Company
Customer Relationship Center
P.O. Box 6248
Dearborn, MI 48121
1-800-392-3673 (FORD)
(TDD for the hearing impaired: 1-800-232-5952)
www.customersaskford.com

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

If you own a Lincoln vehicle and are away from home when your vehicle needs service, or if you need more help than the dealership could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealership to help you.

In the United States:
Ford Motor Company
Customer Relationship Center
P.O. Box 6248
Dearborn, MI 48121
1-800-521-4140
(TDD for the hearing impaired: 1-800-232-5952)
www.customersaskford.com

In Canada:
Lincoln Centre
Ford Motor Company of Canada, Limited
P.O. Box 2000
Oakville, Ontario L6J 5E4
1-800-387-9333
www.lincolncanada.com

In order to help you service your Lincoln vehicle, please have the following information available when contacting the Lincoln Centre:

- Your telephone number (home and business)
- The name of the dealer and the city where the dealership is located
- The year and make of your vehicle
- The date of vehicle purchase
- The current odometer reading
- The vehicle identification number (VIN)

Additional Assistance

If you still have a complaint involving a warranty dispute, you may wish to contact the Dispute Settlement Board (U.S.).

In some states (in the U.S.) you must directly notify Ford in writing before pursuing remedies under your state's warranty laws. Ford is also allowed a final repair attempt in some states.

In the United States, a warranty dispute must be submitted to the Dispute Settlement Board before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

FORD EXTENDED SERVICE PLAN

You can get more protection for your new car or light truck by purchasing Ford Extended Service Plan (Ford ESP) coverage. It provides the following:

- Benefits during the warranty period depending on the plan you purchase (such as: reimbursement for rentals; coverage for certain maintenance and wear items).
- Protection against covered repair costs after your Bumper-to-Bumper Warranty expires.

You may purchase Ford ESP from any participating Ford and Lincoln Mercury and Ford of Canada dealer. There are several plans available in various time, distance and deductible combinations which can be tailored to fit your own driving needs. Ford ESP also offers reimbursement benefits for towing and rental coverage.

When you buy Ford ESP, you receive Peace-of-Mind protection throughout the United States and Canada, provided by a network of more than 5,000 participating Ford or Lincoln Mercury and Ford of Canada dealers.

If you did not take advantage of the Ford Extended Service Plan at the time of purchasing your vehicle, you may still be eligible. Since this information is subject to change, please ask your dealer for complete details about Ford Extended Service Plan coverage options, or visit the Ford ESP website at www.ford-esp.com.

THE DISPUTE SETTLEMENT BOARD (U.S. ONLY)

The Dispute Settlement Board is:

- an independent, third-party arbitration program for warranty disputes.
- available free to owners and lessees of qualifying Ford Motor Company vehicles.

The Dispute Settlement Board may not be available in all states. Ford Motor Company reserves the right to change eligibility limitations, modify procedures and/or to discontinue this service without notice and without incurring obligations per applicable state law.

What kinds of cases does the Board review?

Unresolved warranty repair concerns or vehicle performance concerns as on Ford and Lincoln Mercury cars and Ford and Lincoln Mercury light trucks which are within the terms of any applicable written new vehicle warranty are eligible for review, except those involving:

- a non-Ford product
- a non-Ford dealership
- sales disputes between customer and dealer except those associated with warranty repairs or concerns with the vehicle's performance as designed
- a request for reimbursement of consequential expenses unless a service or product concern is being reviewed
- items not covered by the New Vehicle Limited Warranty (including maintenance and wear items)
- alleged personal injury/property damage claims
- cases currently in litigation
- vehicles not used primarily for family, personal or household purposes (except in states where the Dispute Settlement Board is required to review commercial vehicles)
- vehicles with non-U.S. warranties

Concerns are ineligible for review if the New Vehicle Limited Warranty has expired at receipt of your application and, in certain states eligibility is dependent upon the customer's possession of the vehicle.

Eligibility may differ according to state law. For example, see the unique brochures for California, West Virginia, Georgia and Wisconsin purchasers/lessees.

Board membership

The Board consists of:

- Three consumer representatives
- A Ford or Lincoln Mercury dealership representative

Consumer candidates for Board membership are recruited and trained by an independent consulting firm. The dealership Board member is chosen

from Ford and Lincoln Mercury dealership management, recognized for their business leadership qualities.

What the Board needs

To have your case reviewed you must complete the application in the DSB brochure and mail it to the address provided on the application form. Some states will require you to use certified mail, with return receipt requested.

Your application is reviewed and, if it is determined to be eligible, you will receive an acknowledgment indicating:

- The file number assigned to your application.
- The toll-free phone number of the DSB's independent administrator.

Your dealership and a Ford Motor Company representative will then be asked to submit statements.

To properly review your case, the Board needs the following information:

- Legible copies of all documents and maintenance or repair orders relevant to the case.
- The year, make, model, and Vehicle Identification Number (VIN) listed on your vehicle ownership license.
- The date of repair(s) and mileage at the time of occurrence(s).
- The current mileage.
- The name of the dealer(s) who sold or serviced the vehicle.
- A brief description of your unresolved concern.
- A brief summary of the action taken by the dealer(s) and Ford Motor Company.
- The names (if known) of all the people you contacted at the dealership(s).
- A description of the action you expect to resolve your concern.

You will receive a letter of explanation if your application does not qualify for Board review.

Oral presentations

If you would like to make an oral presentation, indicate YES to question 6 on the application. While it is your right to make an oral presentation before the Board, this is not a requirement and the Board will decide the case whether or not an oral presentation is made. An oral presentation may be requested by the Board as well.

Making a decision

Board members review all available information related to each complaint, including oral presentations, and arrive at a fair and impartial decision. Board review may be terminated at any time by either party.

Every effort is made to decide the case within 40 days of the date that all requested information is received by the Board. Since the Board generally meets once a month, it may take longer for the Board to consider some cases.

After a case is reviewed, the Board mails you a decision letter and a form on which to accept or reject the Board's decision. The decisions of the Board are binding on Ford (and, in some cases, on the dealer) but not on consumers who are free to pursue other remedies available to them under state or federal law.

To request a DSB Brochure/Application

For a brochure/application, speak to your dealer or write/call the Board at the following address/phone number:

Dispute Settlement Board
P.O. Box 1424
Waukesha, WI 53187–1424
1–800–428–3718

You may also contact the North American Customer Relationship Center at 1-800-392-3673 (Ford), TDD for the hearing impaired: 1-800-232-5952 or by writing to the Center at the following address:

Ford Motor Company
Customer Relationship Center
P.O. Box 6248
Dearborn, Michigan 48121

UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)

In those cases where you continue to feel that the efforts by Ford and the dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight-forward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final; the arbitrator's award is binding both to you and Ford of Canada.

CAMVAP services are available in all territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685.

GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel.

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact a district or owner relations/customer relationship office.

The use of leaded fuel in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company/Ford of Canada is not responsible for any damage caused by use of improper fuel.

In the United States, using leaded fuel may also result in difficulty importing your vehicle back into the U.S.

If your vehicle must be serviced while you are traveling or living in Central or South America, the Caribbean, or the Middle East, contact the nearest Ford dealership. If the dealership cannot help you, write or call:

FORD MOTOR COMPANY
WORLDWIDE DIRECT MARKET OPERATIONS
1555 Fairlane Drive
Fairlane Business Park #3
Allen Park, Michigan 48101
U.S.A.
Telephone: (313) 594-4857
FAX: (313) 390-0804

If you are in another foreign country, contact the nearest Ford dealership. If the dealership employees cannot help you, they can direct you to the nearest Ford affiliate office.

If you buy your vehicle in North America and then relocate outside of the U.S. or Canada, register your vehicle identification number (VIN) and new address with Ford Motor Company Worldwide Direct Market Operations.

ORDERING ADDITIONAL OWNER'S LITERATURE

To order the publications in this portfolio, contact Helm, Incorporated at:

HELM, INCORPORATED
P.O. Box 07150
Detroit, Michigan 48207

Or call:

For a free publication catalog, order toll free: 1-800-782-4356

Monday-Friday 8:00 a.m. - 6:00 p.m. EST

Helm, Incorporated can also be reached by their website: www.helminc.com.

(Items in this catalog may be purchased by credit card, check or money order.)

Obtaining a French owner's guide

French Owner's Guides can be obtained from your dealer or by writing to Ford Motor Company of Canada, Limited, Service Publications, P.O. Box 1580, Station B, Mississauga, Ontario L4Y 4G3.

IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 18,000 miles (29,000 km), whichever occurs first:

1. Two or more repair attempts are made on the same non-conformity likely to cause death or serious bodily injury OR

2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR

3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time)

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company
16800 Executive Plaza Drive
Mail Drop 3NE-B
Dearborn, MI 48126

REPORTING SAFETY DEFECTS (U.S. ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Ford Motor Company.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ford Motor Company.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1–800–424–9393 (or 366–0123 in the Washington D.C. area) or write to:

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

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

Cleaning

WASHING THE EXTERIOR

Wash your vehicle regularly with cool or lukewarm water and a neutral Ph shampoo, such as Motorcraft Detail Wash (ZC-3–A), which is available from your dealer.

- Never use strong household detergents or soap, such as dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash a vehicle that is “hot to the touch” or during exposure to strong, direct sunlight.
- Always use a clean sponge or car wash mitt with plenty of water for best results.
- Dry the vehicle with a chamois or soft terry cloth towel in order to eliminate water spotting.
- It is especially important to wash the vehicle regularly during the winter months, as dirt and road salt are difficult to remove and cause damage to the vehicle.
- Immediately remove items such as gasoline, diesel fuel, bird droppings and insect deposits because they can cause damage to the vehicle’s paintwork and trim over time.
- Remove any exterior accessories, such as antennas, before entering a car wash.
- **Suntan lotions and insect repellents can damage any painted surface; if these substances come in contact with your vehicle, wash off as soon as possible.**
- **If your vehicle is equipped with running boards, do not use rubber, plastic and vinyl protectant products on the running board surface, as the area may become slippery.**

WAXING

Applying a polymer paint sealant to your vehicle every six months will assist in reducing minor scratches and paint damage.

- Wash the vehicle first.
- Do not use waxes that contain abrasives.
- Do not allow paint sealant to come in contact with any non-body (low-gloss black) colored trim, such as grained door handles, roof racks, bumpers, side moldings, mirror housings or the windshield cowl area. The paint sealant will “gray” or stain the parts over time.

PAINT CHIPS

Your dealer has touch-up paint and sprays to match your vehicle's color. Take your color code (printed on a sticker in the driver's door jam) to your dealer to ensure you get the correct color.

- Remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout before repairing paint chips.
- Always read the instructions before using the products.

ALUMINUM WHEELS AND WHEEL COVERS

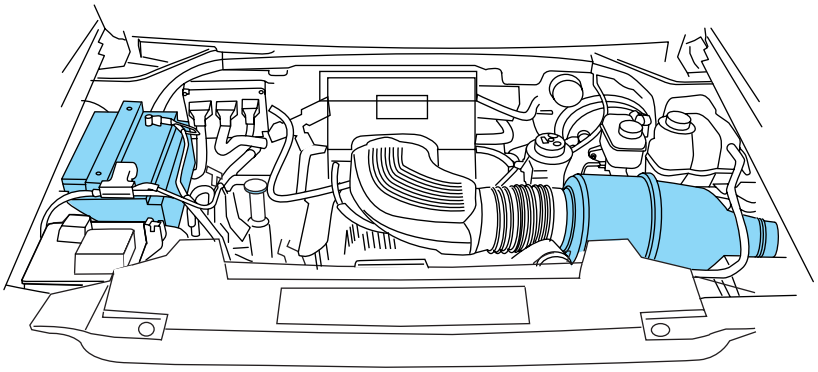
Aluminum wheels and wheel covers are coated with a clearcoat paint finish. In order to maintain their shine:

- Clean weekly with Motorcraft Wheel and Tire Cleaner (ZC-37–A), which is available from your dealer. Heavy dirt and brake dust accumulation may require agitation with a sponge. Rinse thoroughly with a strong stream of water.
- Never apply any cleaning chemical to hot or warm wheel rims or covers.
- Some automatic car washes may cause damage to the finish on your wheel rims or covers. Chemical-strength cleaners, or cleaning chemicals, in combination with brush agitation to remove brake dust and dirt, could wear away the clearcoat finish over time.
- Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergent.
- To remove tar and grease, use Motorcraft Bug and Tar Remover (ZC-42), available from your dealer.

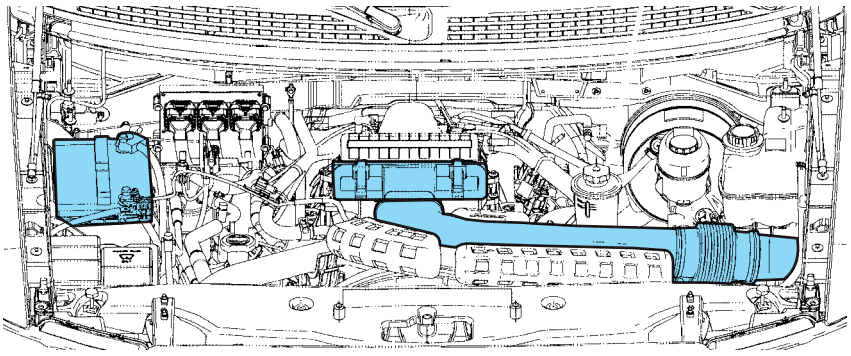
ENGINE

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

- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser (ZC-20) on all parts that require cleaning and pressure rinse clean.
- Cover the highlighted areas to prevent water damage when cleaning the engine.



- **4.6L engine**



- **5.4L engine**
- Never wash or rinse the engine while it is running; water in the running engine may cause internal damage.

PLASTIC (NON-PAINTED) EXTERIOR PARTS

Use only approved products to clean plastic parts. These products are available from your dealer.

- For routine cleaning, use Motorcraft Detail Wash (ZC-3–A).
- If tar or grease spots are present, use Motorcraft Bug and Tar Remover (ZC-42).

WINDOWS AND WIPER BLADES

The windshield, rear and side windows and the wiper blades should be cleaned regularly. If the wipers do not wipe properly, substances on the vehicle's glass or the wiper blades may be the cause. These may include hot wax treatments used by commercial car washes, tree sap, or other organic contamination. To clean these items, please follow these tips:

- The windshield, rear windows and side windows may be cleaned with a non-abrasive cleaner such as Motorcraft Ultra Clear Spray Glass Cleaner (ZC-23), available from your dealer.
- Do not use abrasives, as they may cause scratches.
- Do not use fuel, kerosene, or paint thinner to clean any parts.
- Wiper blades can be cleaned with isopropyl (rubbing) alcohol or windshield washer solution. Be sure to replace wiper blades when they appear worn or do not function properly.

Do not use sharp objects, such as a razor blade, to clean the inside of the rear window or to remove decals, as it may cause damage to the rear window defroster's heated grid lines (if equipped).

INSTRUMENT PANEL AND CLUSTER LENS

Clean the instrument panel with a damp cloth, then dry with a dry cloth.

- Avoid cleaners or polish that increase the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect the driver from undesirable windshield reflection.

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

- Be certain to wash or wipe your hands clean if you have been in contact with certain products such as insect repellent and suntan lotion in order to avoid possible damage to the interior painted surfaces.

INTERIOR TRIM

- Clean the interior trim areas with a damp cloth, then dry by wiping with a dry, soft, clean cloth.
- Do not use household or glass cleaners as these may damage the finish.

Cleaning

INTERIOR

For fabric, carpets, cloth seats and safety belts:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Motorcraft Extra Strength Upholstery Cleaner (ZC-41).
- If grease or tar is present on the material, spot-clean the area first with Motorcraft Spot and Stain Remover (ZC-14).
- Never saturate the seat covers with cleaning solution.
- Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.



Do not use cleaning solvents, bleach or dye on the vehicle's seatbelts, as these actions may weaken the belt webbing.

LEATHER SEATS (IF EQUIPPED)

Your leather seating surfaces have a clear, protective coating over the leather.

- To clean, use a soft cloth with Motorcraft Deluxe Leather and Vinyl Cleaner (ZC-11–A). Dry the area with a soft cloth.
- To help maintain its resiliency and color, use the Motorcraft Deluxe Leather Care Kit (ZC-11–D), available from your authorized dealer.
- Do not use household cleaning products, alcohol solutions, solvents or cleaners intended for rubber, vinyl and plastics, or oil/petroleum-based leather conditioners. These products may cause premature wearing of the clear, protective coating.

Note: In some instances, color or dye transfer can occur when wet clothing comes in contact with leather upholstery. If this occurs, the leather should be cleaned immediately to avoid permanent staining.

UNDERBODY

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

FORD, LINCOLN AND MERCURY CAR CARE PRODUCTS

Your Ford, Lincoln or Mercury dealer has many quality products available to clean your vehicle and protect its finishes. These quality products have been specifically engineered to fulfill your automotive needs; they are custom designed to complement the style and appearance of your vehicle. Each product is made from high quality materials that meet or exceed rigid specifications. For best results, use the following products or products of equivalent quality:

Motorcraft Custom Clearcoat Polish (ZC–8–A)

Motorcraft Custom Vinyl Protectant (not available in Canada) (ZC-40–A)

Motorcraft Vinyl Cleaner (Canada only) (CXC-93)

Motorcraft Vinyl Conditioner (Canada only) (CXC-94)

Motorcraft Deluxe Leather and Vinyl Cleaner (not available in Canada) (ZC-11–A)

Motorcraft Bug and Tar Remover (ZC-42)

Motorcraft Extra Strength Upholstery Cleaner (not available in Canada) (ZC-41)

Motorcraft Custom Bright Metal Cleaner (ZC-15)

Motorcraft Wheel and Tire Cleaner (ZC-37–A)

Motorcraft Dash and Vinyl Cleaner (ZC-38–A)

Motorcraft Car Care Kit (ZC-26)

Motorcraft Premium Car Wash Concentrate (ZC-17-B)

Motorcraft Carlite Glass Cleaner (Canada only) (CXC-100)

Motorcraft Spot and Stain Remover (ZC-14)

Motorcraft Detail Wash (ZC-3–A)

Motorcraft Tire Clean and Shine (ZC-28)

Motorcraft Triple Clean (ZC-13)

Motorcraft Ultra-Clear Spray Glass Cleaner (not available in Canada) (ZC-23)

Motorcraft Engine Shampoo and Degreaser (ZC-20)

SERVICE RECOMMENDATIONS

To help you service your vehicle:

- We highlight do-it-yourself items in the engine compartment for easy location.
- We provide a scheduled maintenance guide which makes tracking routine service easy.

If your vehicle requires professional service, your dealership can provide the necessary parts and service. Check your *Warranty Guide/Owner Information Guide* to find out which parts and services are covered.

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

PRECAUTIONS WHEN SERVICING YOUR VEHICLE

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning (cigarettes) material away from the battery and all fuel related parts.

Working with the engine off

- Automatic transmission:

1. Set the parking brake and shift to P (Park).
2. Turn off the engine and remove the key.
3. Block the wheels.

- Manual transmission:

1. Set the parking brake, depress the clutch and place the gearshift in 1 (First).
2. Turn off the engine and remove the key.
3. Block the wheels.

Working with the engine on

- Automatic transmission:

1. Set the parking brake and shift to P (Park).
2. Block the wheels.

• Manual transmission:

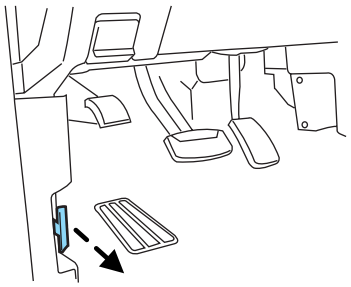
1. Set the parking brake, depress the clutch and place the gearshift in N (Neutral).

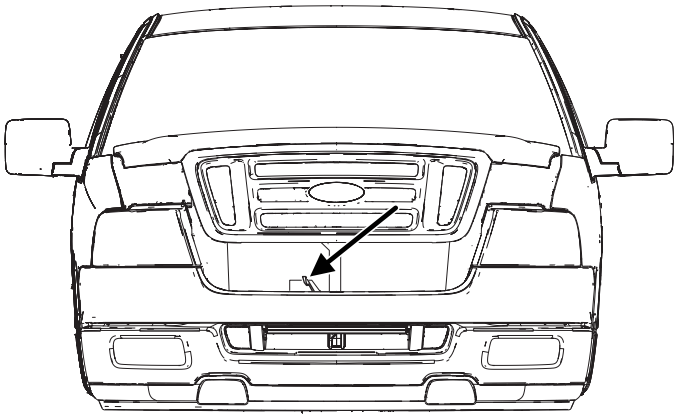
2. Block the wheels.

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

OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the bottom of the instrument panel.



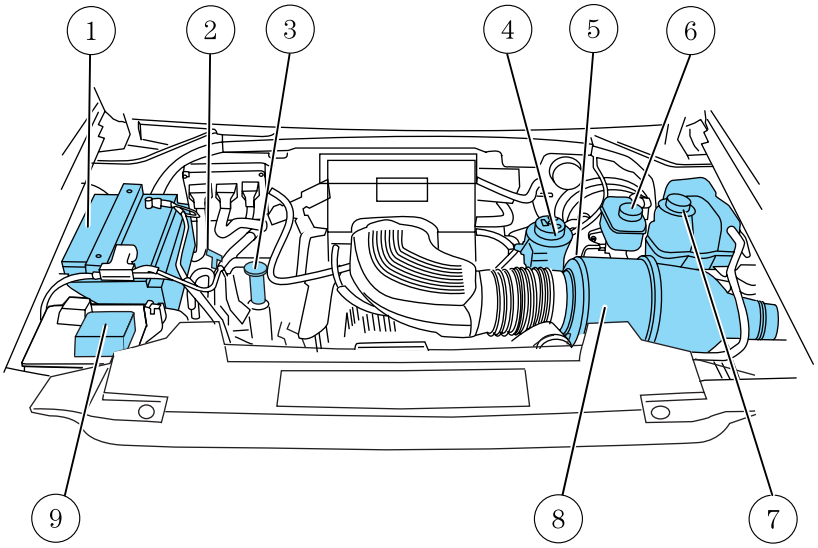


2. Go to the front of the vehicle and release the auxiliary latch that is located on the front bumper under the grill.

3. Lift the hood until the lift cylinders hold it open.

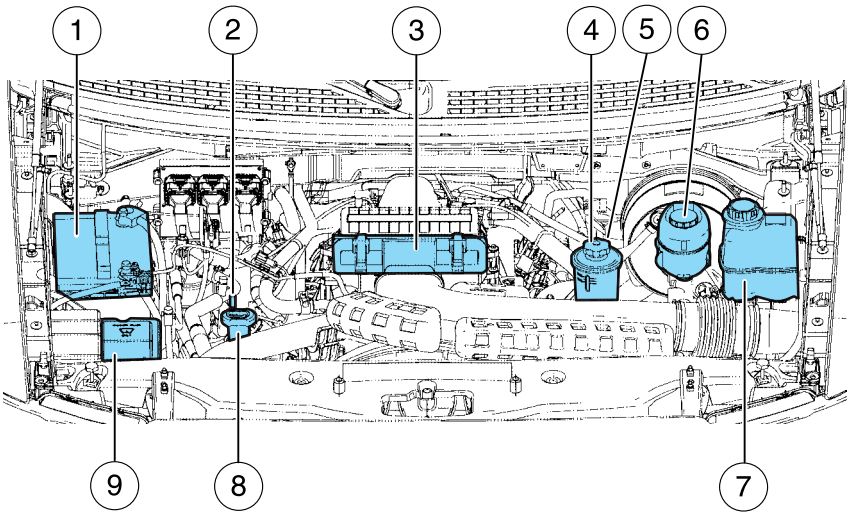
IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

4.6L V8



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

5.4L V8

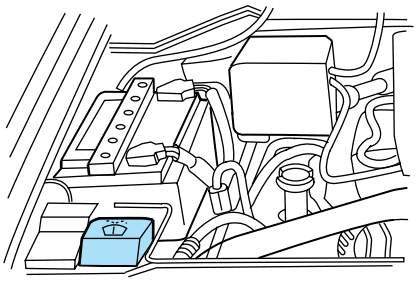


1. Battery
2. Transmission fluid dipstick (automatic transmission)
3. Air filter assembly
4. Power steering fluid reservoir
5. Engine oil dipstick
6. Brake fluid reservoir
7. Engine coolant reservoir
8. Engine oil filler cap
9. Windshield washer fluid reservoir

WINDSHIELD WASHER FLUID

Add fluid to fill the reservoir if the level is low. In very cold weather, do not fill the reservoir completely.

Only use a washer fluid that meets Ford specification WSB-M8B16–A2. Refer to *Lubricant specifications* in this chapter.



State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.

If you operate your vehicle in temperatures below 40° F (4.5°C), use washer fluid with antifreeze protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

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

ENGINE OIL

Checking the engine oil

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

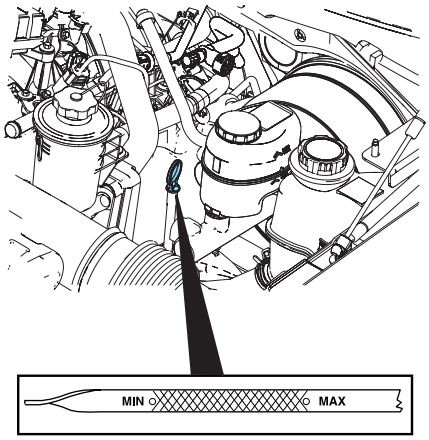
1. Make sure the vehicle is on level ground.

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 transmission) or 1 (First) (manual transmission).

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

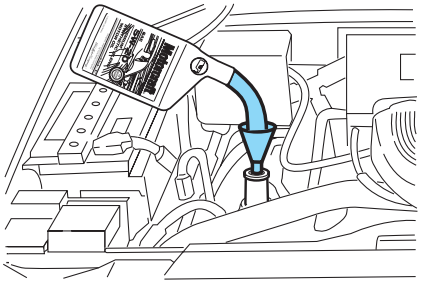
- 4.6L/5.4L V8 engine



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 on the engine oil level indicator (dipstick).

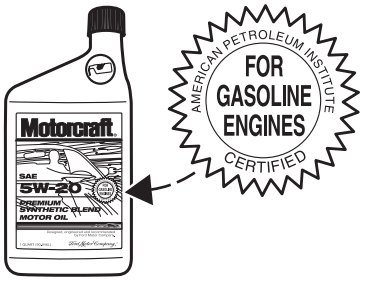
4. Install the indicator and ensure it is fully seated.

5. Fully install the engine oil filler cap by turning the filler cap clockwise 1/4 of a turn until three clicks are heard or until the cap is fully seated.

To avoid possible oil loss, DO NOT operate the vehicle with the engine oil level indicator and/or the engine oil filler cap removed.

Engine oil and filter recommendations

Look for this certification trademark.



Use SAE 5W-20 engine oil.

Only use oils "Certified For Gasoline Engines" by the American Petroleum Institute (API). To protect your engine's warranty use Motorcraft SAE 5W-20 or an equivalent 5W-20 oil meeting Ford specification WSS-M2C153-H. **SAE 5W-20 oil provides optimum fuel economy and durability performance meeting all requirements for your vehicle's engine**.

Do not use supplemental engine oil additives, cleaners or other engine treatments. They are unnecessary and could lead to engine damage that is not covered by Ford warranty.

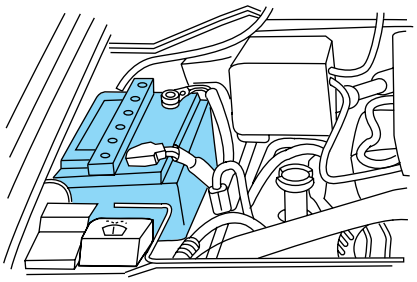
Change your engine oil and filter according to the appropriate schedule listed in the scheduled maintenance guide.

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

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

BATTERY

Your vehicle is equipped with a Motorcraft maintenance-free battery which normally does not require additional water during its life of service.



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.

Note: Electrical or electronic accessories or components added to the vehicle by the dealer or the owner may adversely affect battery performance and durability.

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide proper ventilation.

When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and/or damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.

Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.

Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.**

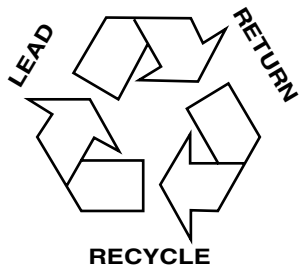
Because your vehicle's engine is also electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance.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

1. With the vehicle at a complete stop, set the parking brake.
2. Put the gearshift in P (Park) (automatic transmission) or the neutral position (manual transmission), turn off all accessories and start the engine.
3. Run the engine until it reaches normal operating temperature.
4. Allow the engine to idle for at least one minute.
5. Turn the A/C on and allow the engine to idle for at least one minute.
6. Drive the vehicle to complete the relearning process.

- The vehicle may need to be driven 10 miles (16 km) or more to relearn the idle and fuel trim strategy.
- **If you do not allow the engine to relearn its idle trim, the idle quality of your vehicle may be adversely affected until the idle trim is eventually relearned.**

If the battery has been disconnected or a new battery has been installed, the clock and the preset radio stations must be reset once the battery is reconnected.

- Always dispose of automotive batteries in a responsible manner. Follow your local authorized standards for disposal. Call your local authorized recycling center to find out more about recycling automotive batteries.



ENGINE COOLANT

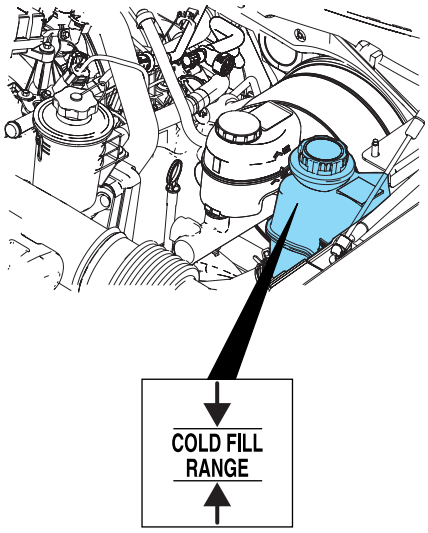
Checking engine coolant

The concentration and level of engine coolant should be checked at the mileage intervals listed in the *Scheduled Maintenance Guide*. The coolant concentration should be maintained at 50/50 coolant and distilled water, which equates to a freeze point of -34°F (-36°C). Coolant concentration testing is possible with a hydrometer or antifreeze tester (such as the Rotunda Battery and Antifreeze Tester, 014–R1060). The level of coolant should be maintained at the "FULL COLD" level or within the "COLD FILL RANGE" in the coolant reservoir. If the level falls below, add coolant per the instructions in the *Adding engine coolant* section.

Your vehicle was factory-filled with a 50/50 engine coolant and water concentration. If the concentration of coolant falls below 40% or above 60%, the engine parts could become damaged or not work properly. **A 50–50 mixture of coolant and water provides the following:**

- **Freeze protection down to -34°F (-36°C).**
- **Boiling protection up to 265°F (129°C).**
- **Protection against rust and other forms of corrosion.**
- **Enables calibrated gauges to work properly.**

When the engine is cold, check the level of the engine coolant in the reservoir.



- The engine coolant should be at the “FULL COLD” level or within the “COLD FILL RANGE” as listed on the engine coolant reservoir (depending upon application).
- Refer to the *Scheduled Maintenance Guide* for service interval schedules.
- Be sure to read and understand *Precautions when servicing your vehicle* in this chapter.

If the engine coolant has not been checked at the recommended interval, the engine coolant reservoir may become low or empty. If the reservoir is low or empty, add engine coolant to the reservoir. Refer to *Adding engine coolant* in this chapter.

Note: Automotive fluids are not interchangeable; do not use engine coolant, antifreeze or windshield washer fluid outside of its specified function and vehicle location.

Adding engine coolant

When adding coolant, make sure it is a 50/50 mixture of engine coolant and distilled water. Add the mixture to the coolant reservoir, **when the engine is cool**, until the appropriate fill level is obtained.

Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

- **Add Motorcraft Premium Gold Engine Coolant (yellow-colored), VC-7–A (U.S., except CA and OR), VC-7–B (CA and OR only), meeting Ford Specification WSS-M97B51–A1.**

Note: Use of Motorcraft Cooling System Stop Leak Pellets, VC-6, may darken the color of Motorcraft Premium Gold Engine Coolant from yellow to golden tan.

- **Do not add/mix an orange-colored, extended life coolant such as Motorcraft Speciality Orange Engine Coolant, VC-2 (US) or CXC-209 (Canada), meeting Ford specification WSS-M97B44–D with the factory-filled coolant.** Mixing Motorcraft Speciality Orange Engine Coolant or any orange-colored extended life product with your factory filled coolant can result in degraded corrosion protection.
- A large amount of water without engine coolant may be added, in case of emergency, to reach a vehicle service location. In this instance, the cooling system must be drained and refilled with a 50/50 mixture of engine coolant and distilled water as soon as possible. Water alone (without engine coolant) can cause engine damage from corrosion, overheating or freezing.
- **Do not use alcohol, methanol, brine or any engine coolants mixed with alcohol or methanol antifreeze (coolant).** Alcohol and other liquids can cause engine damage from overheating or freezing.
- **Do not add extra inhibitors or additives to the coolant.** These can be harmful and compromise the corrosion protection of the engine coolant.

Add the proper mixture of coolant and water to the “FULL COLD” level. Follow these steps to add engine coolant.

To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.

1. Before you begin, turn the engine off and let it cool.
2. When the engine is cool, wrap a thick cloth around the coolant pressure relief cap on the coolant reservoir (an opaque plastic bottle). Slowly turn cap counterclockwise (left) until pressure begins to release.
3. Step back while the pressure releases.
4. When you are sure that all the pressure has been released, use the cloth to turn it counterclockwise and remove the cap.
5. Fill the coolant reservoir slowly with the proper coolant mixture (see above), to within the “COLD FILL RANGE” or the “FULL COLD” level on the reservoir.
6. Replace the cap. Turn until tightly installed. Turn cap until click is heard/felt to ensure it is tightly installed.

After any coolant has been added, check the coolant concentration, refer to *Checking engine coolant* section. If the concentration is not 50/50 (protection to –34° F/–36° C), drain some coolant and adjust the concentration. It may take several drains and additions to obtain a 50/50 coolant concentration.

Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add enough 50/50 concentration of engine coolant and distilled water to bring the liquid level to the proper level.

If you have to add more than 1.0 liter (1.0 quart) of engine coolant per month, have your dealer check the engine cooling system. Your cooling system may have a leak. Operating an engine with a low level of coolant can result in engine overheating and possible engine damage.

Recycled engine coolant

Ford Motor Company does NOT recommend the use of recycled engine coolant in vehicles originally equipped with Motorcraft Premium Gold Engine Coolant since a Ford-approved recycling process is not yet available.

Used engine coolant should be disposed of in an appropriate manner. Follow your community’s regulations and standards for recycling and disposing of automotive fluids.

Coolant refill capacity

To find out how much fluid your vehicle's cooling system can hold, refer to *Refill capacities* in this section.

Fill your engine coolant reservoir as outlined in *Adding engine coolant* in this section.

Severe climates

If you drive in extremely cold climates (less than –36° C [–34° F]):

- **It may be necessary to increase the coolant concentration above 50%.**
- **NEVER increase the coolant concentration above 60%.**
- **Increased engine coolant concentrations above 60% will decrease the overheat protection characteristics of the engine coolant and may cause engine damage.**
- **Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate freeze protection at the temperatures in which you drive in the winter months.**

If you drive in extremely hot climates:

- **It is still necessary to maintain the coolant concentration above 40%.**
- **NEVER decrease the coolant concentration below 40%.**
- **Decreased engine coolant concentrations below 40% will decrease the corrosion protection characteristics of the engine coolant and may cause engine damage.**
- **Decreased engine coolant concentrations below 40% will decrease the freeze protection characteristics of the engine coolant and may cause engine damage.**
- **Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate protection at the temperatures in which you drive.**

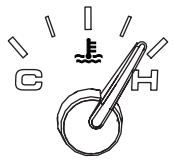
Vehicles driven year-round in non-extreme climates should use a 50/50 mixture of engine coolant and distilled water for optimum cooling system and engine protection.

What you should know about fail-safe cooling (if equipped)

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

How fail-safe cooling works

If the engine begins to overheat:



- The engine coolant temperature gauge will move to the red (hot) area.
- The mini message center (if equipped) will indicate “Check Gauges”, refer to *Warning Lights and Chimes* in the *Instrument Cluster* chapter.
- The message center (if equipped) will indicate a system warning, refer to *Message Center* in the *Driver Controls* chapter.
- The *Service engine soon* indicator light will illuminate.

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

When this occurs the vehicle will still operate. However:

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

Continued operation will increase the engine temperature:

- The engine will completely shut down.
- Steering and braking effort will increase.

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

When fail-safe mode is activated

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

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

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

5. Restart the engine and take your vehicle to a service facility.

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

WHAT YOU SHOULD KNOW ABOUT AUTOMOTIVE FUELS

Important safety precautions

Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.

The fuel system may be under pressure. If the fuel filler cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the fuel filler cap. Otherwise, fuel may spray out and injure you or others.

If you do not use the proper fuel filler cap, excessive pressure or vacuum in the fuel tank may damage the fuel system or cause the fuel cap to disengage in a collision, which may result in possible personal injury.

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

Gasoline may contain benzene, which is a cancer-causing agent.

Observe the following guidelines when handling automotive fuel:



- Extinguish all smoking materials and any open flames before fueling your vehicle.
- Always turn off the vehicle before fueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed, call a physician immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.
- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin and/or clothing, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking “Antabuse” or other forms of disulfiram for the treatment of alcoholism. Breathing gasoline vapors, or skin contact could cause an adverse reaction. In sensitive individuals, serious personal injury or sickness may result. If fuel is splashed on the skin, promptly wash skin thoroughly with soap and water. Consult a physician immediately if you experience an adverse reaction.

When refueling always shut the engine off and never allow sparks or open flames near the filler neck. Never smoke while refueling. Fuel vapor is extremely hazardous under certain conditions. Care should be taken to avoid inhaling excess fumes.

The flow of fuel through a fuel pump nozzle can produce static electricity, which can cause a fire if fuel is pumped into an ungrounded fuel container.

Use the following guidelines to avoid static build-up when filling an ungrounded fuel container:

- Place approved fuel container on the ground.
- DO NOT fill a fuel container while it is in the vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container while filling.
- DO NOT use a device that would hold the fuel pump handle in the fill position.

Fuel Filler Cap

Your fuel tank filler cap has an indexed design with a 1/4 turn on/off feature.

When fueling your vehicle:

1. Turn the engine off.

2. Carefully turn the filler cap counterclockwise 1/4 of a turn until it stops.

3. Pull to remove the cap from the fuel filler pipe.

4. To install the cap, align the tabs on the cap with the notches on the filler pipe.

5. Turn the filler cap clockwise 1/4 of a turn until it stops.

If the Digital Display reads “CHECK FUEL CAP” and stays on after you start the engine, the fuel filler cap may not be properly installed. Turn off the engine, remove the fuel filler cap, align the cap properly and reinstall it.



If you must replace the fuel filler cap, replace it with a fuel filler cap that is designed for your vehicle. The customer warranty may be void for any damage to the fuel tank or fuel system if the correct genuine Ford or Motorcraft fuel filler cap is not used.

The fuel system may be under pressure. If the fuel filler cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the fuel filler cap. Otherwise, fuel may spray out and injure you or others.

If you do not use the proper fuel filler cap, excessive pressure or vacuum in the fuel tank may damage the fuel system or cause the fuel cap to disengage in a collision, which may result in possible personal injury.

Choosing the right fuel

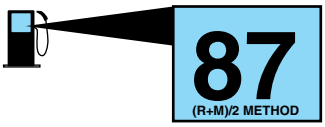
Use only UNLEADED FUEL. The use of leaded fuel is prohibited by law and could damage your vehicle.

Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based additives. Studies indicate that these additives can cause your vehicle's emission control system to deteriorate more rapidly. In Canada, premium grade fuel generally contains more metallic additives than regular fuel. We recommend using regular grade fuel. In Canada, many fuels contain metallic additives, but fuels free of such additives may be available; check with your local fuel dealer.

Do not use fuel containing methanol. It can damage critical fuel system components.

Repairs to correct the effects of using a fuel for which your vehicle was not designed may not be covered by your warranty.

Octane recommendations



Your vehicle is designed to use "Regular" unleaded gasoline with pump (R+M)/2 octane rating of 87. We do not recommend the use of gasolines labeled as "Regular" that are sold with octane ratings of 86 or lower in high altitude areas.

Do not be concerned if your engine sometimes knocks lightly. However, if it knocks heavily under most driving conditions while you are using fuel with the recommended octane rating, see your dealer or a qualified service technician to prevent any engine damage.

Fuel quality

If you are experiencing starting, rough idle or hesitation driveability problems, try a different brand of unleaded gasoline. "Premium" unleaded gasoline is not recommended for vehicles designed to use "Regular" unleaded gasoline because it may cause these problems to become more pronounced. If the problems persist, see your dealer or a qualified service technician.

It should not be necessary to add any aftermarket products to your fuel tank if you continue to use high quality fuel of the recommended octane rating. Aftermarket products could cause damage to the fuel system. Repairs to correct the effects of using an aftermarket product in your fuel may not be covered by your warranty.

Many of the world's automakers approved the World-wide Fuel Charter that recommends gasoline specifications to provide improved performance and emission control system protection for your vehicle. Gasolines that meet the World-wide Fuel Charter should be used when available. Ask your fuel supplier about gasolines that meet the World-wide Fuel Charter.

Cleaner air

Ford endorses the use of reformulated "cleaner-burning" gasolines to improve air quality.

Running out of fuel

Avoid running out of fuel because this situation may have an adverse affect on powertrain components.

If you have run out of fuel:

- You may need to cycle the ignition from OFF to ON several times after refueling, to allow the fuel system to pump the fuel from the tank to the engine.
- Your *Service engine soon* indicator may come on. For more information on the *Service engine soon* indicator, refer to the *Instrument cluster* chapter.

Fuel Filter

For fuel filter replacement, see your dealer or a qualified service technician. Refer to the scheduled maintenance guide for the appropriate intervals for changing the fuel filter.

Replace the fuel filter with an authorized Motorcraft part. The customer warranty may be void for any damage to the fuel system if an authorized Motorcraft fuel filter is not used.

ESSENTIALS OF GOOD FUEL ECONOMY

Measuring techniques

Your best source of information about actual fuel economy is you, the driver. You must gather information as accurately and consistently as

possible. Fuel expense, frequency of fill-ups or fuel gauge readings are NOT accurate as a measure of fuel economy. We do not recommend taking fuel economy measurements during the first 1,600 km (1,000 miles) of driving (engine break-in period). You will get a more accurate measurement after 3,000 km–5,000 km (2,000 miles-3,000 miles).

Filling the tank

The advertised fuel capacity of the fuel tank on your vehicle is equal to the rated refill capacity of the fuel tank as listed in the *Refill capacities* section of this chapter.

The advertised capacity is the amount of the indicated capacity and the empty reserve combined. Indicated capacity is the difference in the amount of fuel in a full tank and a tank when the fuel gauge indicates empty. Empty reserve is the small amount of fuel remaining in the fuel tank after the fuel gauge indicates empty.

The amount of usable fuel in the empty reserve varies and should not be relied upon to increase driving range. When refueling your vehicle after the fuel gauge indicates empty, you might not be able to refuel the full amount of the advertised capacity of the fuel tank due to the empty reserve still present in the tank.

For consistent results when filling the fuel tank:

- Turn the engine/ignition switch to the off position prior to refueling, an error in the reading may result if the engine is left running.
- Use the same filling rate setting (low — medium — high) each time the tank is filled.
- Allow no more than 3 automatic click-offs when filling.
- Always use fuel with the recommended octane rating.
- Use a known quality gasoline, preferably a national brand.
- Use the same side of the same pump and have the vehicle facing the same direction each time you fill up.
- Have the vehicle loading and distribution the same every time.

Your results will be most accurate if your filling method is consistent.

Calculating fuel economy

1. Fill the fuel tank completely and record the initial odometer reading (in kilometers or miles).

2. Each time you fill the tank, record the amount of fuel added (in liters or gallons).

3. After at least three to five tank fill-ups, fill the fuel tank and record the current odometer reading.

4. Subtract your initial odometer reading from the current odometer reading.

5. Follow one of the simple calculations in order to determine fuel economy:

Calculation 1: **Multiply liters used by 100, then divide by total kilometers traveled.**

Calculation 2: **Divide total miles traveled by total gallons used.**

Keep a record for at least one month and record the type of driving (city or highway). This will provide an accurate estimate of the vehicle's fuel economy under current driving conditions. Additionally, keeping records during summer and winter will show how temperature impacts fuel economy. In general, lower temperatures give lower fuel economy.

Driving style — good driving and fuel economy habits

Give consideration to the lists that follow and you may be able to change a number of variables and improve your fuel economy.

Habits

- Smooth, moderate operation can yield up to 10% savings in fuel.
- Steady speeds without stopping will usually give the best fuel economy.
- Idling for long periods of time (greater than one minute) may waste fuel.
- Anticipate stopping; slowing down may eliminate the need to stop.
- Sudden or hard accelerations may reduce fuel economy.
- Slow down gradually.
- Driving at reasonable speeds (traveling at 88 km/h [55 mph] uses 15% less fuel than traveling at 105 km/h [65 mph]).
- Revving the engine before turning it off may reduce fuel economy.
- Using the air conditioner or defroster may reduce fuel economy.
- You may want to turn off the speed control in hilly terrain if unnecessary shifting between third and fourth gear occurs. Unnecessary shifting of this type could result in reduced fuel economy.
- Warming up a vehicle on cold mornings is not required and may reduce fuel economy.

- Resting your foot on the brake pedal while driving may reduce fuel economy.
- Combine errands and minimize stop-and-go driving.

Maintenance

- Keep tires properly inflated and use only recommended size.
- Operating a vehicle with the wheels out of alignment will reduce fuel economy.
- Use recommended engine oil. Refer to *Lubricant specifications* in this chapter.
- Perform all regularly scheduled maintenance items. Follow the recommended maintenance schedule and owner maintenance checks found in your vehicle scheduled maintenance guide.

Conditions

- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Carrying unnecessary weight may reduce fuel economy (approximately 0.4 km/L [1 mpg] is lost for every 180 kg [400 lb] of weight carried).
- Adding certain accessories to your vehicle (for example bug deflectors, rollbars/light bars, running boards, ski/luggage racks) may reduce fuel economy.
- To maximize the fuel economy, drive with the tonneau cover installed (if equipped).
- Using fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures during the first 12–16 km (8–10 miles) of driving.
- Driving on flat terrain offers improved fuel economy as compared to driving on hilly terrain.
- Transmissions give their best fuel economy when operated in the top cruise gear and with steady pressure on the gas pedal.
- 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 L/100 km (MPG) expected on the vehicle under optimum conditions. Your fuel economy may vary depending upon the method of operation and conditions.

EMISSION CONTROL SYSTEM

Your vehicle is equipped with various emission control components and a catalytic converter which will enable your vehicle to comply with applicable exhaust emission standards. To make sure that the catalytic converter and other emission control components continue to work properly:

- Use only the specified fuel listed.
- Avoid running out of fuel.
- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in your *Scheduled Maintenance Guide* performed according to the specified schedule.

The scheduled maintenance items listed in the *Scheduled Maintenance Guide* are essential to the life and performance of your vehicle and to its emissions system.

If other than Ford, Motorcraft or Ford-authorized parts are used for maintenance replacements or for service of components affecting emission control, such non-Ford parts should be equivalent to genuine Ford Motor Company parts in performance and durability.

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

Illumination of the *Service engine soon* light, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power, could indicate that the emission control system is not working properly.

Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not

permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal identifies engine displacement and gives some tune up specifications.

Please consult your *Warranty Guide* for complete emission warranty information.

On board diagnostics (OBD-II)

Your vehicle is equipped with a computer that monitors the engine's emission control system. This system is commonly known as the On Board Diagnostics System (OBD-II). This OBD-II system protects the environment by ensuring that your vehicle continues to meet government emission standards. The OBD-II system also assists the service technician in properly servicing your vehicle. When the *Check engine/Service engine soon* light illuminates, the OBD-II system has detected a malfunction. Temporary malfunctions may cause your *Check engine/Service engine soon* 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 securely tightened.

These temporary malfunctions can be corrected by filling the fuel tank with good quality fuel and/or properly tightening the fuel cap. After three driving cycles without these or any other temporary malfunctions present, the *Check engine/Service engine soon* 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/Service engine soon* light remains on, have your vehicle serviced at the first available opportunity.

Readiness for Inspection/Maintenance (I/M) testing

In some localities, it may be a legal requirement to pass an I/M test of the on-board diagnostics system. If your *Service engine soon* light is on, refer to the description in the *Warning lights and chimes* section of the *Instrument Cluster* chapter. Your vehicle may not pass the I/M test with the *Service engine soon* light on.

If the vehicle's powertrain system or its battery has just been serviced, the on-board diagnostics system is reset to a "not ready for I/M test"

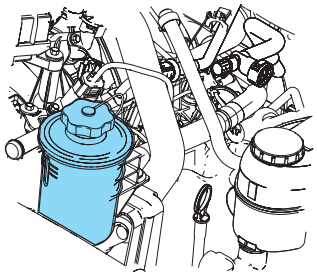
condition. To ready the on-board diagnostics system for I/M testing, a minimum of 30 minutes of city and highway driving is necessary as described below:

- First, at least 10 minutes of driving on an expressway or highway.
- Next, at least 20 minutes driving in stop-and-go, city-type traffic with at least four idle periods.

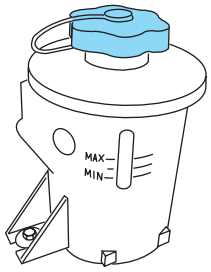
Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once started, do not turn off the engine until the above driving cycle is complete.

CHECKING AND ADDING POWER STEERING FLUID

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

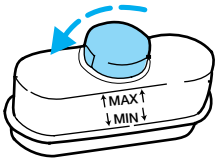


1. Start the engine and let it run until it reaches normal operating temperature (the engine coolant temperature gauge indicator will be near the center of the normal area between H and C).
2. While the engine idles, turn the steering wheel left and right several times.
3. Turn the engine off.
4. Check the fluid level in the reservoir. It should be between the MIN and MAX lines. Do not add fluid if the level is in this range.



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

BRAKE FLUID RESERVOIR



The fluid level will drop slowly as the brakes wear, and will rise when the brake components are replaced. Fluid levels between the “MIN” and “MAX” lines are within the normal operating range; there is no need to add fluid. If the fluid levels are outside of the normal operating range the performance of your brake system could be compromised; seek service from your dealer immediately.

TRANSMISSION FLUID

Checking automatic transmission fluid (if equipped)

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

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

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

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

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

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

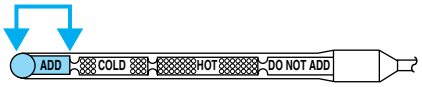
5. Remove the dipstick, wiping it clean with a clean, dry lint free rag. If necessary, refer to *Identifying components in the engine compartment* in this chapter for the location of the dipstick.

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

7. Remove the dipstick and inspect the fluid level. The fluid should be in the designated area for normal operating temperature or ambient temperature.

Low fluid level

Do not drive the vehicle if the fluid level is at the bottom of the dipstick and the ambient temperature is above 10°C (50°F).

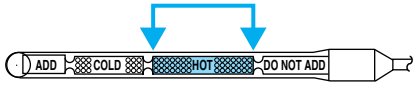


Correct fluid level

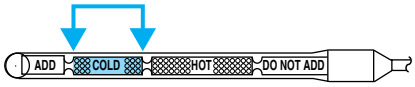
The transmission fluid should be checked at normal operating temperature 66°C-77°C (150°F-170°F) on a level surface. The normal operating temperature can be reached after approximately 30 km (20 miles) of driving.

You can check the fluid without driving if the ambient temperature is above 10°C (50°F). However, if fluid is added at this time, an overfill condition could result when the vehicle reaches normal operating temperature.

The transmission fluid should be in this range if at normal operating temperature (66°C-77°C [150°F-170°F]).



The transmission fluid should be in this range if at ambient temperature (10°C-35°C [50°F-95°F]).



High fluid level

Fluid levels above the safe range may result in transmission failure. An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.



High fluid levels can be caused by an overheating condition.

Adjusting automatic transmission fluid levels

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

Use of a non-approved automatic transmission fluid may cause internal transmission component damage.

If necessary, add fluid in 250 ml (1/2 pint) increments through the filler tube until the level is correct.

If an overfill occurs, excess fluid should be removed by a qualified technician.

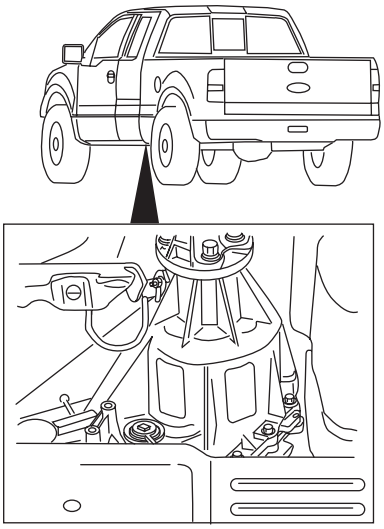


An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

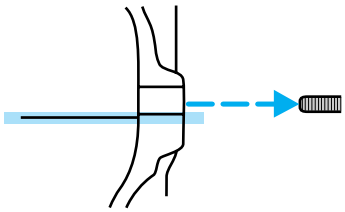
Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

Checking and adding transfer case fluid (if equipped)

1. Clean the filler plug.
2. Remove the filler plug and inspect the fluid level.



3. Add only enough fluid through the filler opening so that the fluid level is at the bottom of the opening.



Use only fluid that meets Ford specifications. Refer to *Lubricant specifications* in this chapter.

DRIVELINE UNIVERSAL JOINT AND SLIP YOKE

Your vehicle may be equipped with universal joints that require lubrication. Refer to the *Scheduled Maintenance Guide* for maintenance intervals. If the original universal joints are replaced with universal joints equipped with grease fittings, lubrication will also be necessary.

AIR FILTER MAINTENANCE

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

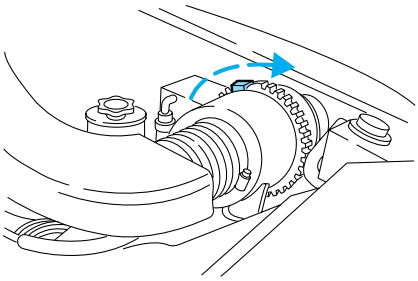
When changing the air filter element, use only the Motorcraft air filter element listed. Refer to *Motorcraft part numbers* in this chapter.

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

Changing the air filter element

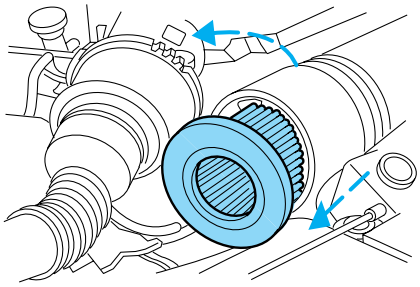
- 4.6L Engine

1. Loosen the clamp that secures the air filter element in place.



2. Carefully separate the two halves of the air filter housing.

3. Remove the air filter element from the open end of the air filter housing.

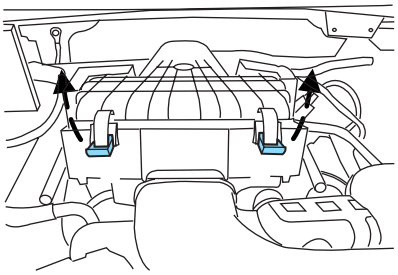


4. Install a new air filter element.

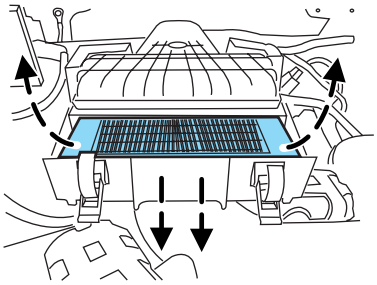
5. Reassemble the two halves of the air filter housing, aligning the notch and slot found on the top of each half. Secure the clamp, making sure not to crimp the air filter edges between the two halves of the air filter housing. This could cause filter damage and allow unmetered air to enter the engine if not properly seated.

- 5.4L Engine

1. Release two retainer clamps.



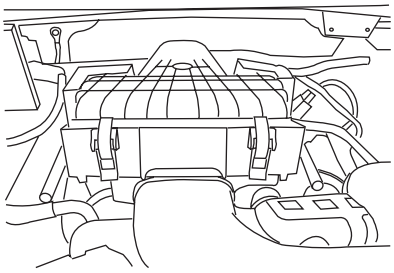
2. Pull air filter tray assembly out toward front of vehicle and lift air filter element up and out of housing.



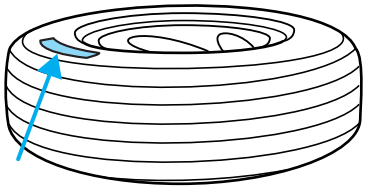
The air filter box needs to be free of any debris before installing a new air filter.

3. Install a new air filter element into the tray assembly.

4. Return air filter tray to original position by pressing firmly on the handle until all rearward movement stops and secure the two clamps.



INFORMATION ABOUT UNIFORM TIRE QUALITY GRADING



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

- **Treadwear 200 Traction AA Temperature A**

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

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

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

Treadwear

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

Traction AA A B C

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

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

Temperature A B C

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

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

TIRES

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

Glossary of tire terminology

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

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

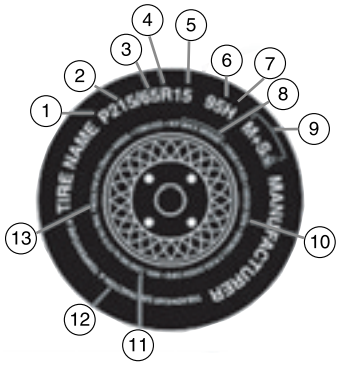
- **kPa:** Kilopascal, a metric unit of air pressure.
- **PSI:** Pounds per square inch, a standard unit of air pressure.
- **B-pillar:** The structural member at the side of the vehicle behind the front door.
- **Bead area of the tire:** Area of the tire next to the rim.
- **Sidewall of the tire:** Area between the bead area and the tread.
- **Tread area of the tire:** Area of the perimeter of the tire that contacts the road when mounted on the vehicle.
- **Rim:** The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

INFORMATION CONTAINED ON THE TIRE SIDEWALL

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

Information on "P" type tires

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



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

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

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

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

4. **R:** Indicates a "radial" type tire.

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

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

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

7. **H:** Indicates the tire's speed rating. The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time under a standard condition of load and inflation pressure. The tires on your vehicle may operate at different conditions for load and inflation pressure. These speed ratings may need to be adjusted for the difference in conditions. The ratings range from 99 mph (159 km/h) to 186 mph (299 km/h). These ratings are listed in the following chart.

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

Letter rating	Speed rating - mph (km/h)
Q	99 mph (159 km/h)
R	106 mph (171 km/h)
S	112 mph (180 km/h)
T	118 mph (190 km/h)
U	124 mph (200 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)
W	168 mph (270 km/h)
Y	186 mph (299 km/h)
Note: For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.	

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

9. **M+S or M/S:** Mud and Snow. or
AT: All Terrain. or
AS: All Season.

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

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

12. **Treadwear, Traction and Temperature Grades**

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

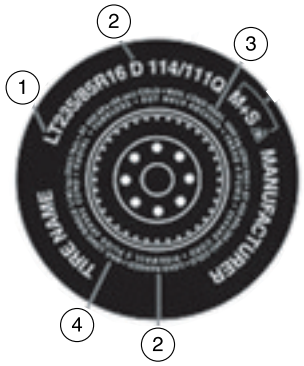
13. **Maximum Permissible Inflation Pressure:** Indicates the tire manufacturers’ maximum permissible pressure and/or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer’s recommended cold inflation pressure which can be found on either the tire label or certification label

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

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

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

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



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

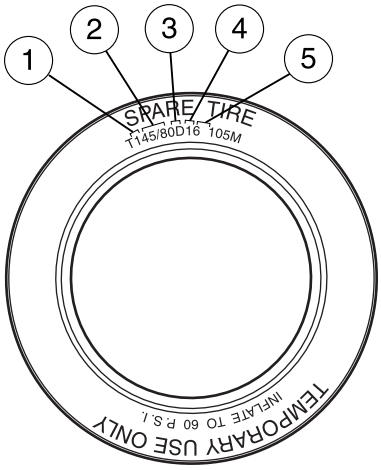
2. **Load Range/Load Inflation Limits:** Indicates the tire's load-carrying capabilities and its inflation limits.

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

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

Information on “T” type tires

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



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

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

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

3. **80:** Indicates the aspect ratio which gives the tire’s ratio of height to width. Numbers of 70 or lower indicate a short sidewall.

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

5. **16:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

Location of the tire label

You will find a tire label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver’s door.

TIRE CARE

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

Inflating your tires

Use a tire gauge to check the tire inflation pressure, including the spare, at least monthly and before long trips. You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be

inaccurate. Ford recommends the use of a digital or dial type tire pressure gauge rather than a stick type tire pressure gauge.

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

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

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

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

To check the pressure in your tire(s):

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

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

2. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure.

3. Add enough air to reach the recommended air pressure

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

4. Replace the valve cap.

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

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

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

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

Tire and wheel alignment

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

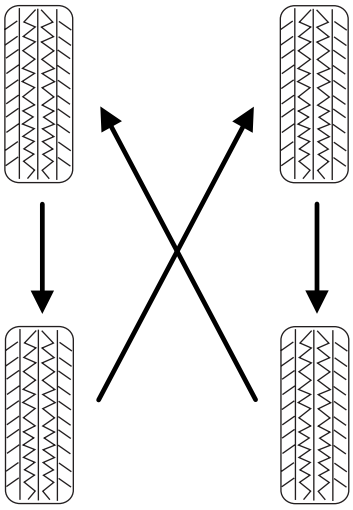
Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by a qualified technician at a Ford or Lincoln/Mercury dealer. Front wheel drive (FWD) vehicles and those with an independent rear suspension (if equipped) may require alignment of all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

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

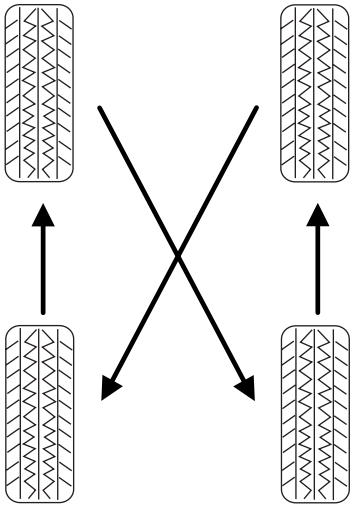
Tire rotation

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

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



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



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

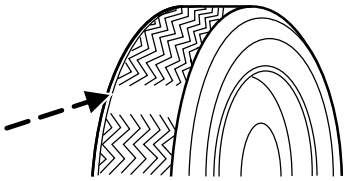
Note: If your tires show uneven wear ask a qualified technician at a Ford or Lincoln/Mercury dealership to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.

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

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

Tire wear

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



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

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

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

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

Tire Replacement Requirements

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

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

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

You should replace the spare tire when you replace the other road tires due to the aging of the spare tire.

Safety practices

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

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

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

Tire explosions can cause death, personal injury or property damage. Do not allow anyone to stand near, directly ahead or behind the spinning tire.

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

Highway hazards

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

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

SNOW TIRES AND CHAINS

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

The tires on your vehicle have all weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and chains. If you need to use chains, it is recommended that steel wheels (of the same size and specifications) be used, as chains may chip aluminum wheels.

Follow these guidelines when using snow tires and chains:

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

MOTORCRAFT PART NUMBERS

Component	4.6L V8 engine	5.4L V8 engine
Air filter element	FA-1632	FA-1754
Battery	BTX-65-650	BTX-65-650
Fuel filter	FG-986B	FG-986B
Oil filter	FL-820-S or FL-400-S[3]	FL-820-S
PCV valve	[1]	
Spark plugs	[2]	

[1]The PCV valve is a critical emission component. It is one of the items listed in the *Scheduled Maintenance Guide* and is essential to the life and performance of your vehicle and to its emissions system.

For PCV valve replacement, see your dealer or a qualified service technician. Refer to the *Scheduled Maintenance Guide* for the appropriate intervals for changing the PCV valve.

Replace the PCV valve with one that meets Ford material and design specifications for your vehicle, such as a Motorcraft or equivalent replacement part. The customer warranty may be void for any damage to the emissions system if such a PCV valve is not used.

[2]For spark plug replacement, see your dealer or a qualified service technician. Refer to the *Scheduled Maintenance Guide* for the appropriate intervals for changing the spark plugs.

Replace the spark plugs with ones that meet Ford material and design specifications for your vehicle, such as Motorcraft or equivalent replacement parts. The customer warranty may be void for any damage to the engine if such spark plugs are not used.

Refer to Vehicle Emissions Control Information (VECI) decal for spark plug gap information.

[3]The 4.6L engine is produced with two different oil filters depending on which engine plant is was produced in. Please refer to the label on the engine, on the valve/cam cover, to determine which replacement oil filter to use for your application. If the label shows **"REP"** it uses oil filter number FL-820-S. If the label shows **"Ford Windsor"** it uses oil filter number FL-400-S. The correct oil filter must be used as previously described.

REFILL CAPACITIES

Fluid	Ford Part Name	Application	Capacity
Brake fluid and clutch fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	All	Fill to line or step (for clutch) on reservoir
Engine coolant [1]	Motorcraft Premium Gold Engine Coolant (yellow-colored)	4.6L V8 engine	18.7L (19.8 quarts)
		5.4L V8 engine	19.5L (20.6 quarts)
Engine oil (includes filter change)[8]	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	4.6L engine	5.7L (6.0 quarts)
		5.4L engine	6.6L (7.0 quarts)

Fluid	Ford Part Name	Application	Capacity
Fuel tank	N/A	Reg. Cab 6.5' box/SuperCab 5.5' box	98.4L (26.0 gallons)
		SuperCrew	113.6L (30 gallons)
		Reg. Cab 8' box/SuperCab 6.5' box/SuperCab 8' box	102.1L (27 gallons) Standard 135.1L (35.7 gallons) Optional
Power steering fluid	Motorcraft MERCON® ATF	All	Fill to between MIN and MAX lines on reservoir
Transfer case fluid	Motorcraft MERCON® ATF	4x4 vehicles	1.9L (2.0 quarts) [2]
Transmission fluid [3]	Motorcraft MERCON®V ATF	4R70/75 E-W	13.2L (13.9 quarts) [4]
Front axle	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant	4x4 vehicles	2.0L (3.7 pints)

Fluid	Ford Part Name	Application	Capacity
Rear axle [5]	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant	8.8/9.75 inch axle	2.6L (5.5 pints) [6]
Rear axle [5]	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant	10.25 inch axle	3.3L (6.9 pints) [7]
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	All	4.0L (4.25 quarts)

[1]Add the coolant type originally equipped in your vehicle.

[2]Service refill capacity is determined by filling the transfer case to the bottom of the filler hole with the vehicle on a level surface.

[3]Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. Check the container to verify the fluid being added is of the correct type. Refer to your *Scheduled Maintenance Guide* to determine the correct service interval.

Some transmission fluids may be labeled as dual usage, such as MERCON® and MERCON® V. These dual usage fluids are not to be used in an automatic transmission that requires use of the MERCON® type

fluid. However, these dual usage fluids may be used in transmissions that require the MERCON® V type fluid.

MERCON® and MERCON® V type fluids are not interchangeable. DO NOT mix MERCON® and MERCON® V. Use of a transmission fluid that indicates dual usage (MERCON® and MERCON® V) in an automatic transmission application requiring MERCON® may cause transmission damage. Use of any fluid other than the recommended fluid may cause transmission damage.

[4]Approximate dry fill capacity including transmission fluid cooling system, actual refill capacities will vary based on vehicle application and transmission fluid cooling system (i.e. coolers size, cooling lines. auxiliary cooler capacities). The amount of transmission fluid and fluid level should be set by the indication on the dipstick's normal operating range.

[5]Your vehicle's rear axle is filled with a synthetic rear axle lubricant and is considered lubricated for life. These lubricants do not need to be checked or changed unless a leak is suspected, service is required or the axle assembly has been submerged in water. The axle lubricant should be changed any time the rear axle has been submerged in water.

[6]Service refill capacity is determined by filling the axle to 1/4-9/16 inch (6-14 mm) below the bottom of the filler hole with the vehicle on a level surface.

Add 4 oz. (118 ml) of FEHP Friction Modifier, XL-7 or equivalent, for complete fill of 8.8 inch and 9.75 inch Traction-Lok axles.

[7]Service refill capacity is determined by filling the axle to the bottom of the filler hole with the vehicle on a level surface.

For 10.25 inch Traction-Lok axles, use 6.5 pints (3.1L) of Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant and 4 oz. (118 ml) of FEHP Friction Modifier XL-7 or equivalent.

[8]Use of synthetic or synthetic blend motor oil is not mandatory. Engine oil need only meet the requirements of Ford specification WSS-M2C153–H and the API Certification mark.

LUBRICANT SPECIFICATIONS

Item	Ford part name or equivalent	Ford part number	Ford specification
Front axle (4X4)	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant	XY-75W90-QFEHP	—
Rear axle	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant [1]	XY-75W90–QFEHP	—
Brake fluid	Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid	PM-1	ESA-M6C25-A and DOT 3
Engine coolant	Motorcraft Premium Gold Engine Coolant (yellow-colored)	VC-7–A	WSS-M97B51-A1
Engine oil	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	XO-5W20-QSP (US) CXO-5W20–LSP12 (Canada)	WSS-M2C153-H and API Certification Mark
Seat tracks	Multi-Purpose Grease	XG-4 or XL-5	ESR-M1C159-A or ESB-M1C93-B

Item	Ford part name or equivalent	Ford part number	Ford specification
Hinges, latches, striker plates, fuel filler door hinge and door check arm	Multi-Purpose Grease	XG-3	ESE-M1C171–A
Lock cylinders	Motorcraft penetrating and lock lubricant	Motorcraft XL-1	none
Transmission /steering/parking brake linkages and pivots, brake and clutch pedal shaft (if equipped)	Premium Long-Life Grease	XG-1-C or XG-1-K	ESA-M1C75-B
Power steering fluid, transfer case fluid (4X4)	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Automatic transmission (4R70/75 E-W) [2]	Motorcraft MERCON®V ATF	XT-5-QM	MERCON®V
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	ZC-32–A	WSB-M8B16–A2

[1]Add 4 oz (118 ml) of FEHP Friction Modifier XL-7 or equivalent for complete refill of Traction-Lok axles.

[2]Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. Check the container to verify the fluid being added is of the correct type. Refer to your *Scheduled Maintenance Guide* to determine the correct service interval.

Some transmission fluids may be labeled as dual usage, such as MERCON® and MERCON® V. These dual usage fluids are not to be used in an automatic transmission that requires use of the MERCON® type fluid. However, these dual usage fluids may be used in transmissions that require the MERCON® V type fluid.

MERCON® and MERCON® V type fluids are not interchangeable. DO NOT mix MERCON® and MERCON® V. Use of a transmission fluid that indicates dual usage (MERCON® and MERCON® V) in an automatic transmission application requiring MERCON® may cause transmission damage. Use of any fluid other than the recommended fluid may cause transmission damage.

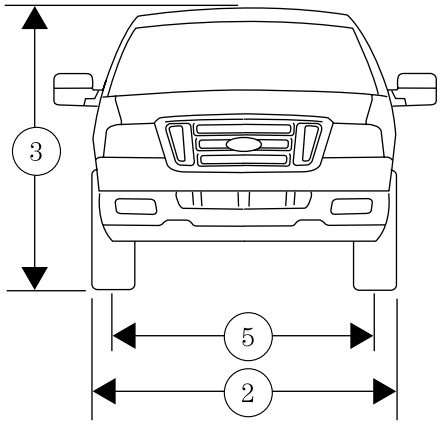
ENGINE DATA

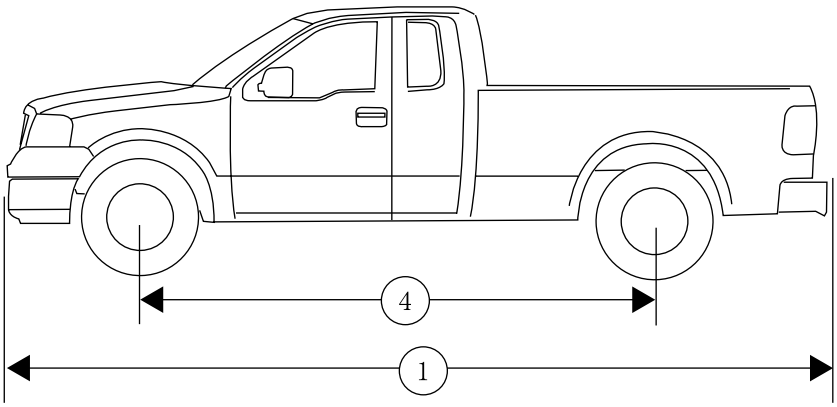
Engine	4.6L V8 engine	5.4L V8 engine
Cubic inches	281	330
Required fuel	87 octane	87 octane
Firing order	1-3-7-2-6-5-4-8	1-3-7-2-6-5-4-8
Ignition system	Coil on plug	Coil on plug
Compression ratio	9.37:1	9.85:1

[1]The 5.4L 3V spark plug gap CANNOT be adjusted.

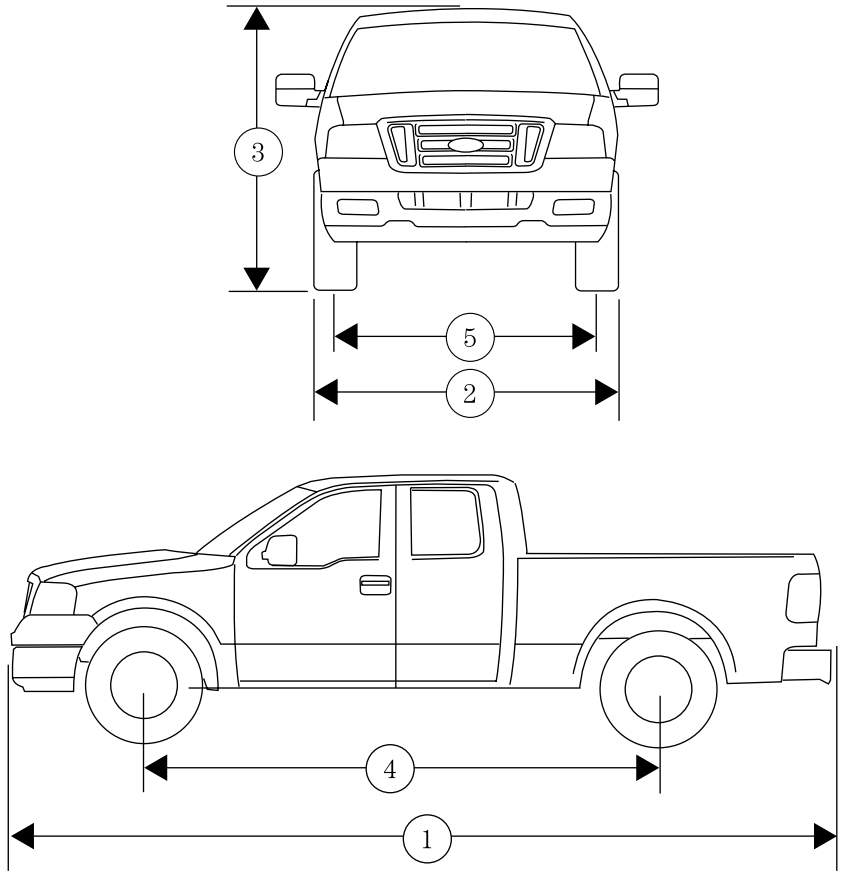
VEHICLE DIMENSIONS

Regular Cab			
Vehicle dimensions	**Styleside 6.5' box - inches (mm)**	**Flareside 6.5' box - inches (mm)**	**Styleside 8.0' box - inches (mm)**
(1) Overall length	211.5 (5371)	211.5 (5371)	230.1 (5844)
(2) Overall width	78.9 (2005)	78.9 (2005)	78.9 (2005)
(3) Overall height – 4x2/4x4	73.0 (1854) / 75.0 (1905)	73.0 (1854) / 75.0 (1905)	73.5 (1867) / 76.0 (1930)
(4) Wheelbase – 4x2/4x4	126.0 (3195) / 126.0 (3203)	126.0 (3195) / 126.0 (3203)	144.0 (3668) / 145.0 (3675)
(5) Track - Front	67.0 (1701)	67.0 (1701)	67.0 (1701)
(5) Track - Rear	67.0 (1701)	67.0 (1701)	67.0 (1701)



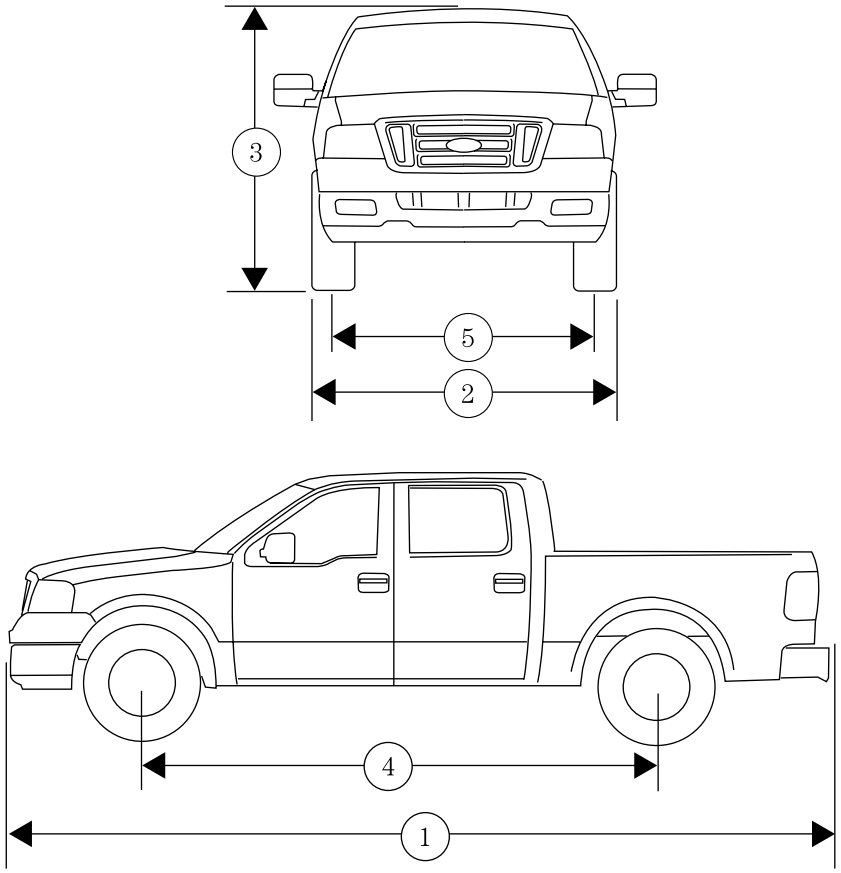


SuperCab			
Vehicle dimensions	**Styleside 5.5' box - inches (mm)**	**Styleside / Flareside 6.5' box - inches (mm)**	**Styleside 8.0' box - inches (mm)**
(1) Overall length	218.0 (5536)	230.0 (5841)	248.6 (6313)
(2) Overall width	78.9 (2005)	78.9 (2005)	78.9 (2005)
(3) Overall height – 4x2/4x4	73.0 (1854) / 75.5 (1918)	73.0 (1854) / 75.0 (1905)	73.5 (1867) / 75.5 (1918)
(4) Wheelbase – 4x2/4x4	132.0 (3363) / 133.0 (3371)	144.0 (3668) / 145.0 (3675)	163.0 (4140) / 163.0 (4148)
(5) Track - Front	67.0 (1701)	67.0 (1701)	67.0 (1701)
(5) Track - Rear	67.0 (1701)	67.0 (1701)	67.0 (1701)



Super Crew	
Vehicle dimensions	**Styleside 5.5' box - inches (mm)**
(1) Overall length	224.0 (5689)
(2) Overall width	78.9 (2005)
(3) Overall height – 4x2/4x4	73.5 (1867) / 75.5 (1918)

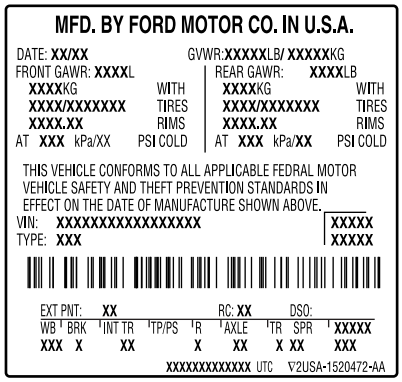
Super Crew	
Vehicle dimensions	**Styleside 5.5' box - inches (mm)**
(4) Wheelbase – 4x2/4x4	138.0 (3515) / 139.0 (3523)
(5) Track - Front	67.0 (1701)
(5) Track - Rear	67.0 (1701)



IDENTIFYING YOUR VEHICLE

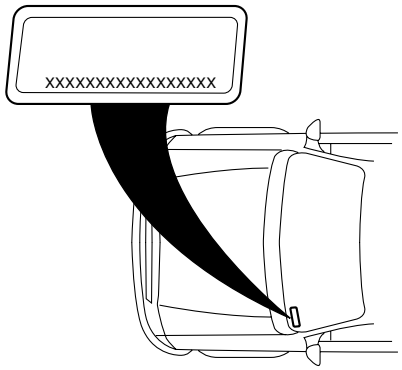
Certification label

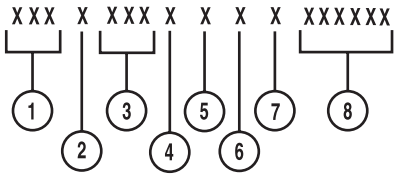
The National Highway Traffic Safety Administration Regulations require that a Certification label be affixed to a vehicle and prescribe where the Certification label may be located. The Certification label is located on the structure by the trailing edge of the driver's door or the edge of the driver's door.



Vehicle identification number (VIN)

The vehicle identification number is attached to a metal tag and is located on the driver side instrument panel. (Please note that in the graphic XXXX is representative of your vehicle identification number.)



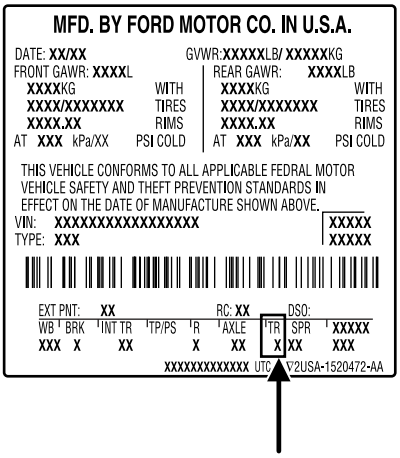


1. World manufacturer identifier
2. Brake type and gross vehicle weight rating (GVWR)
3. Vehicle line, series, body type
4. Engine type
5. Check digit
6. Model year
7. Assembly plant
8. Production sequence number

Engine number

The engine number (the last eight numbers of the vehicle identification number) is stamped on the engine block and transmission.

Transmission/Transaxle code designations



You can find a transmission/transaxle code on the vehicle certification label. The following table tells you which transmission or transaxle each code represents.

Truck application:

Code	Transmission Description
	Manual transmission
M	Manual 5–speed (AKK))
C	Manual 5–speed overdrive (Close ratio)
W	Manual 5–speed overdrive (Dana ZF)
G	Manual 6–speed ZF
	Automatic transmission
Y	Automatic 4–speed overdrive (CD4E)
U	Automatic 4–speed overdrive (4R70W)
T	Automatic 4–speed overdrive (4R44E)
E	Automatic 4–speed overdrive (4R100)
J	Automatic 5–speed overdrive (5R55E)
	Electric
H	One speed electric

Code	Transmission Description
D	Automatic 5–speed overdrive (5R44E)
R	Automatic 5–speed overdrive (5R55S)

Passenger car application:

Code	Transmission/Transaxle Description
	Front wheel drive manual transaxle
R	5–speed overdrive (MTX75)
W	5–speed overdrive (M5)
	Front wheel drive automatic transaxle
A	4–speed overdrive (4F27E)
E	4–speed overdrive (4FE)
J	3–speed (Mazda)
L	4–speed overdrive (AX4S)
P	4–speed overdrive (4F20E)
X	4–speed overdrive (4F50N)
Y	4–speed overdrive (CD4E)
	Rear wheel drive manual transaxle
5	5–speed (Mazda M5)
	Rear wheel drive automatic transmission
U	4–speed overdrive (4R70W)
A	5–speed overdrive (5R55N)

GENUINE FORD ACCESSORIES FOR YOUR VEHICLE

A wide selection of Genuine Ford Accessories are available for your vehicle through your local authorized Ford or Ford of Canada dealer. These quality accessories have been specifically engineered to fulfill your automotive needs; they are custom designed to complement the style and aerodynamic appearance of your vehicle. In addition, each accessory is made from high quality materials and meets or exceeds Ford's rigorous engineering and safety specifications. Ford Motor Company will repair or replace any properly dealer-installed Genuine Ford Accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessory. The accessory will be warranted for whichever provides you the greatest benefit:

- 12 months or 12,000 miles (20,000 km) (whichever occurs first), or
- the remainder of your new vehicle limited warranty.

This means that Genuine Ford Accessories purchased along with your new vehicle and installed by the dealer are covered for the full length of your New Vehicle's Limited Warranty — 3 years or 36,000 miles (60,000 km) (whichever occurs first). Contact your dealer for details and a copy of the warranty.

Not all accessories are available for all models.

The following is a list of several Genuine Ford Accessory products for your vehicle. Not all accessories are available for all models. For a complete listing of the accessories that are available for your vehicle, please contact your dealer or visit our online store at: www.fordaccessoriesstore.com.

Exterior style

Bug shields

Deflectors

Exterior trim

Fender flares

Front end covers

Grille inserts

Headlamps, taillamps, fog lights and Daytime Running Lamps (DRLs)

Running boards

Sliding rear windows - manual and power

Accessories

Splash guards
Step bars
Tonneau covers
Truck caps
Wheels

Interior style

Cell phone holders
Consoles
Electrochromatic compass/temperature interior mirrors
Floor mats
Interior trim kits
Leather wrapped steering wheels
Scuff plates
Speed control

Lifestyle

Bedliners and bedmats
Bed tents
Bike racks
Cargo organization and management
Diamond plate accessories
Engine block heaters and blankets
Rear seat entertainment systems
Toolboxes
Towing mirrors
TracRac and accessories
Trailer hitches, wiring harnesses and accessories

Peace of mind

Airbag anti-theft locks
First aid and highway safety kits
Full vehicle covers

Locking gas cap

Navigation systems

Remote start

Vehicle security systems

For maximum vehicle performance, keep the following information in mind when adding accessories or equipment to your vehicle:

- When adding accessories, equipment, passengers and luggage to your vehicle, do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Consult your dealer for specific weight information.
- The Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulate the use of mobile communications systems — such as two-way radios, telephones and theft alarms - that are equipped with radio transmitters. Any such equipment installed in your vehicle should comply with FCC or CRTC regulations and should be installed only by a qualified service technician.
- Mobile communications systems may harm the operation of your vehicle, particularly if they are not properly designed for automotive use.
- Electrical or electronic accessories or components that are non-Genuine Ford Accessories added to the vehicle by the dealer or the owner may adversely affect battery performance and durability.

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