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## Introduction

### CALIFORNIA Proposition 65 Warning



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

### CONGRATULATIONS

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

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

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

Additional owner information is given in separate publications.

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

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



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

### SAFETY AND ENVIRONMENT PROTECTION



#### Warning symbols in this guide

How can you reduce the risk of personal injury and prevent possible damage to others, your vehicle and its equipment? In this guide, answers

## Introduction

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.

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.

## Introduction

### 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.

## Introduction



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

### 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.

### Notice to owners of natural gas fueled vehicles

Before you drive your vehicle, be sure to read the *Dedicated Natural Gas Vehicle* supplement. This book contains important operation and maintenance information.

## MIDDLE EAST/NORTH AFRICA VEHICLE SPECIFIC INFORMATION

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

## Introduction

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

### Vehicle Symbol Glossary

Safety Alert		See Owner's Guide	
Fasten Safety Belt		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 <sup>™</sup>	
Master Lighting Switch		Hazard Warning Flasher	
Fog Lamps-Front		Fuse Compartment	
Fuel Pump Reset		Windshield Wash/Wipe	
Windshield Defrost/Demist		Rear Window Defrost/Demist	

## Introduction

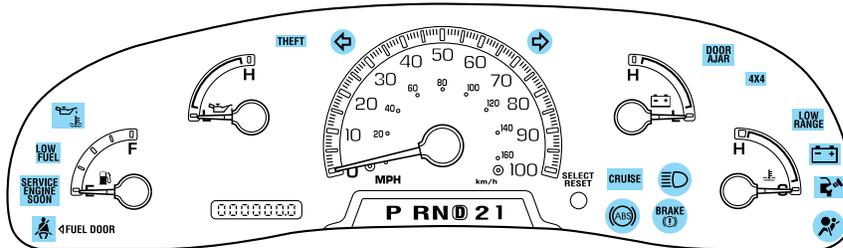
### Vehicle Symbol Glossary

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

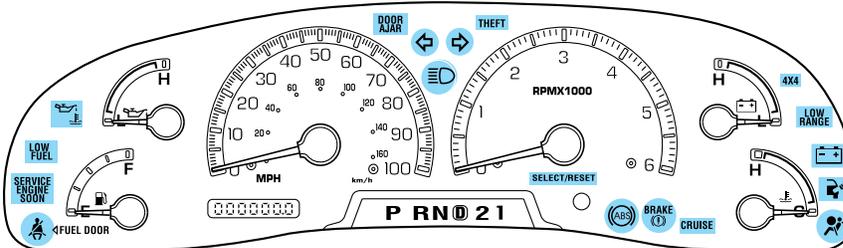
## Instrument Cluster

### WARNING LIGHTS AND CHIMES

#### Standard instrument cluster



#### Optional 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

**SERVICE  
ENGINE  
SOON**

## Instrument Cluster

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.

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



**Brake system warning light:** To confirm the brake system warning light is functional, it will momentarily illuminate when the ignition is turned to the ON position when the engine is not running, or in a position between ON and START, or by applying the parking brake when the ignition is turned to the ON position. If the brake system warning light does not illuminate at this time, seek service immediately from your 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.



## Instrument Cluster

**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.



**Oil pressure/Engine coolant:** Illuminates when any of the following conditions has occurred:

- The engine coolant temperature is high.
- The engine oil pressure is low.



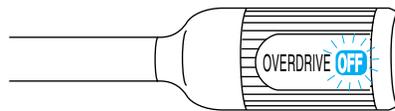
**Low fuel:** Illuminates when the fuel level in the fuel tank is at or near empty (refer to *Fuel gauge* in this chapter).

**LOW  
FUEL**

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

**CRUISE**

**Transmission control indicator light (TCIL):** 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.



## Instrument Cluster

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

**LOW  
RANGE**

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

**4x4**

**Anti-theft system (if equipped):** Flashes when the Securilock<sup>™</sup> Passive Anti-theft System has been activated.

**THEFT**

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

**DOOR  
AJAR**

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



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



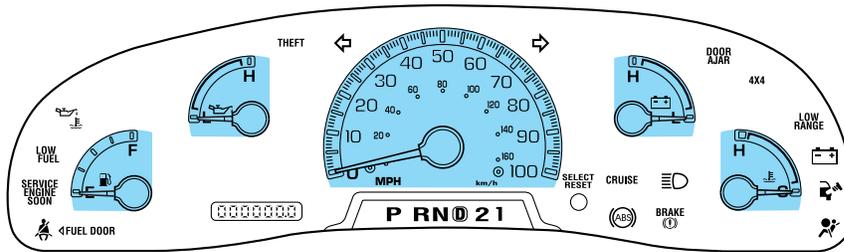
**Key-in-ignition warning chime:** Sounds when the key is left in the ignition in the OFF/LOCK or ACCESSORY position and the driver's door is opened.

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

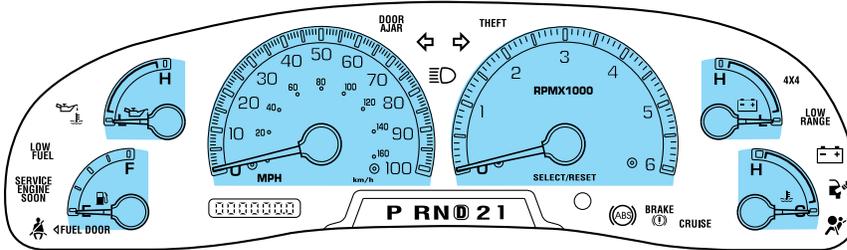
## Instrument Cluster

### GAUGES

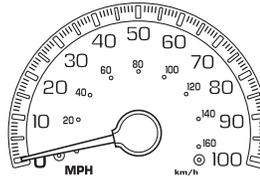
#### Standard instrument cluster gauges



#### Optional instrument cluster gauges

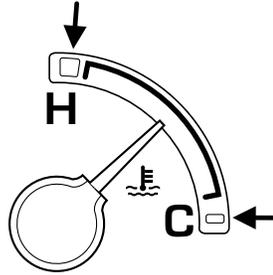


**Speedometer:** Indicates the current vehicle speed.



## Instrument Cluster

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



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

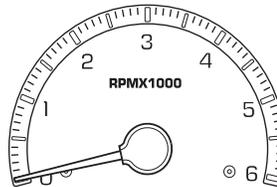
**Odometer:** Registers the total miles (kilometers) of the vehicle.



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

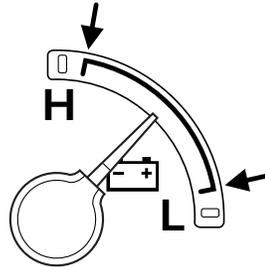


**Tachometer (if equipped):** Indicates the engine speed in revolutions per minute. Driving with your tachometer pointer continuously at the top of the scale may damage the engine.

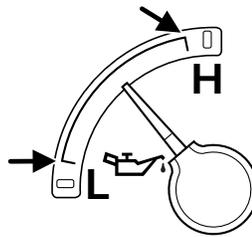


## Instrument Cluster

**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.

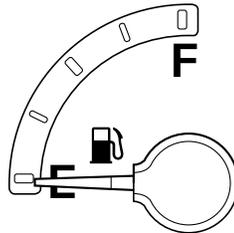


**Engine oil pressure gauge:** Indicates engine oil pressure. The needle should stay in the normal operating range (between "L" and "H"). If the needle falls below the normal range, stop the vehicle, turn off the engine and check the engine oil level. Add oil if needed. If the oil level is correct, have your vehicle checked at your dealership or by a qualified technician.



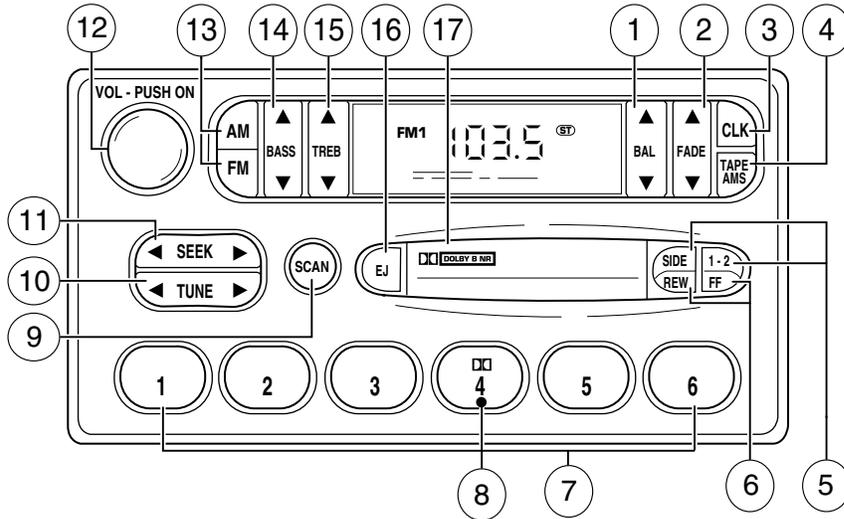
**Fuel gauge:** Indicates approximately how much fuel is left in the fuel tank (when the ignition is in the ON position). The fuel gauge may vary slightly when the vehicle is in motion or on a grade.

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



## Entertainment Systems

### AM/FM STEREO CASSETTE (IF EQUIPPED)



1. **Balance:** Press to shift sound to the left/right speakers.



2. **Fade:** Press to shift sound to the rear/front speakers.



3. **CLK:** To set the hour, press and hold CLK. Then press SEEK to decrease ◀ or increase ▶ the hours.



To set the minute, press and hold CLK and press TUNE to decrease ◀ or increase ▶ the minutes.

## Entertainment Systems

4. **Tape AMS:** In tape mode, press and hold to activate Automatic Music Search (allows you to quickly locate the beginning of the tape selection being played or to skip to the next selection). Then, press REW (for the beginning of the current selection) or FF (to advance to the next selection). The tape MUST have a blank section of at least four seconds duration between programs.



5. **Side 1-2:** Press to change tape direction.



6. **REW (rewind):** Press to rewind the tape.



**FF (fast forward):** Press to advance the tape.



7. **Memory preset buttons:** To set a station: Select frequency band AM/FM1/FM2; tune to a station, press and hold a preset button until sound returns.



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

9. **Scan:** Press SCAN to hear a brief sampling of all listenable radio stations or all tape selections. Press again to stop.



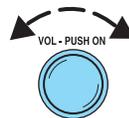
10. **Tune:** Works in radio mode only. Press TUNE ◀/▶ to change frequency down/up



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

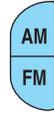


12. **Power/volume:** Press to turn ON/OFF; turn to increase or decrease volume levels.



## Entertainment Systems

13. **AM/FM:** Press to choose a frequency band in radio mode.



14. **Bass:** Press ▼ / ▲ to decrease/increase the bass output.



15. **Treble:** Press ▼ / ▲ to decrease/increase the treble output.

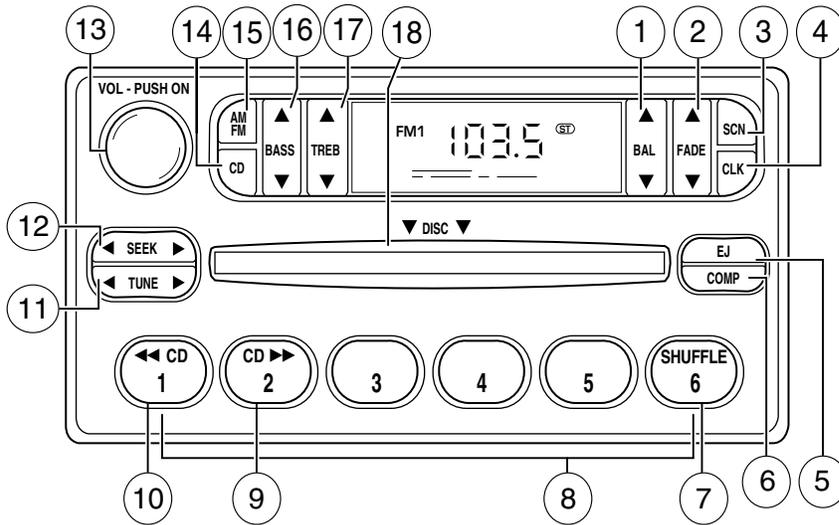


16. **EJ (Eject):** Press to eject a tape.



17. **Cassette door:** Insert a cassette into the cassette door.

### AM/FM STEREO / SINGLE CD RADIO (IF EQUIPPED)



## Entertainment Systems

1. **Balance:** Press ▲ / ▼ to shift sound to the left/right speakers.



2. **Fade:** Press ▲ / ▼ to shift sound to the front/rear speakers.



3. **SCN (Scan):** Press to hear a brief sampling of all listenable stations or CD tracks. Press again to stop.



4. **CLK:** To set the hour, press and hold CLK and press SEEK to decrease ◀ or increase ▶ the hours.



To set the minute, press and hold CLK and press TUNE to decrease ◀ or increase ▶ the minutes.

5. **EJ (eject):** Press to eject a CD.



6. **COMP (Compression):** In CD mode, press to bring louder and softer levels into more comfortable listening level. The compression icon (c) will appear in the display.



7. **Shuffle:** Press to listen to the tracks on the CD in random order. Press again to turn off.



8. **Memory presets:** To set a station: Select frequency band AM/FM; tune to a station. Press and hold a preset button until sound returns. This radio is equipped with six station memory preset controls which allow you to set up to six AM stations and 12 FM stations (six in FM1 and six in FM2).



9. **CD: ▶▶** Press and hold until desired point of a selection is reached.



10. **◀◀ CD:** Press and hold until desired point of a selection is reached.



## Entertainment Systems

11. **Tune:** In radio mode, press to move up or down the frequency band in individual increments.



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



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



14. **CD:** Press to enter CD mode or to play a CD already loaded into the system.



15. **AM/FM:** Press to choose a frequency band in radio mode.



16. **Bass:** Press ▲ / ▼ to increase/decrease the bass output.



17. **Treble:** Press ▲ / ▼ to increase/decrease the treble output.



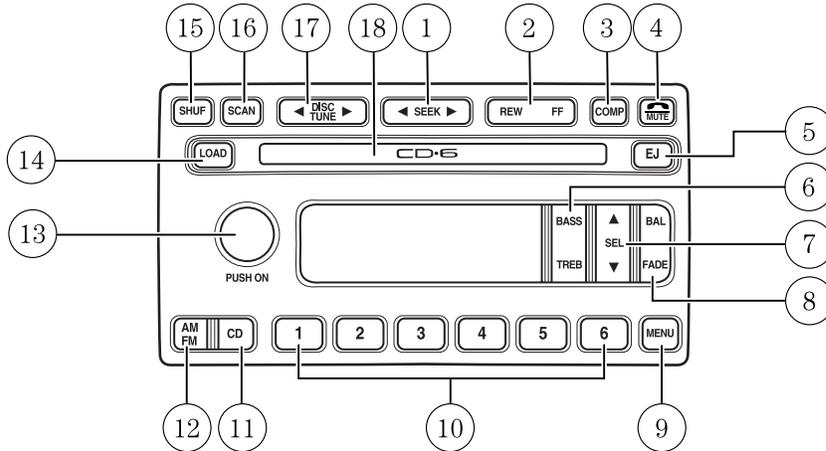
18. **CD door:** Insert a CD printed side up.



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

## Entertainment Systems

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



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



2. **Rewind:** Press and hold until the desired point in the selection is reached.



**Fast forward:** Press and hold until the desired point in the selection is reached.



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

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



5. **Eject:** Press to eject a CD. Press and hold to auto eject all loaded discs.



## Entertainment Systems

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



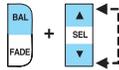
**Treble:** Press TREB; then press SEL ▼ / ▲ to decrease/increase the treble output.



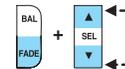
7. **Select:** Use with Bass, Treble, Balance and Fade controls to adjust levels. Use with MENU to set the clock and engage RDS.



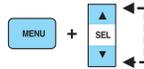
8. **Balance:** Press BAL; then press SEL ▲ / ▼ to shift sound to the left/right speakers.



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



9. **Menu:** Press MENU repeatedly to scroll through the following options. Use SEL (▲ / ▼) to make adjustments within those selections.



**Traffic:** Allows you to hear traffic broadcasts. With the feature ON, press 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 Program type:** Allows you to search RDS-equipped stations for a certain category of music format: Classic, Country, Info, Jazz, Oldies, R&B, Religious, Rock, Soft, Top 40.

**Show TYPE:** Displays the station's call letters and format.

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

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

## Entertainment Systems

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



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

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



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

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



**Autoset:** Allows you to set the strongest local radio stations without losing your original manually set preset stations for AM/FM1/FM2. Press and momentarily hold AM/FM. AUTOSET will flash on the display. When the six strongest stations are filled, the station stored in preset 1 will begin playing. If there are less than six strong stations, the system will store the last one in the remaining presets. Press again to disengage.

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



**Speed sensitive volume (if equipped):** Radio volume changes automatically and slightly with vehicle speed to compensate for road and wind noise. Press and hold the volume control for five seconds (with the radio on). SPEED VOL will appear in the display, then press SEL to increase/decrease the compensation.

14. **Load:** Press to load a CD. Press and hold to load up to six discs.



15. **Shuffle:** Press to play tracks in random order. Press SHUF to cycle through SHUFFLE DISC, SHUFFLE TRK or SHUFFLE OFF.



## Entertainment Systems

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



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

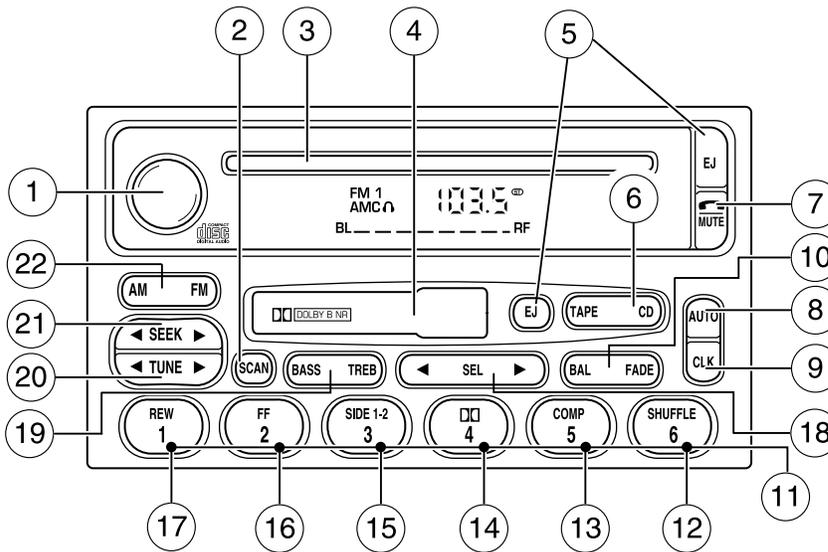


CD: Press ◀ or ▶ to select the previous or next track on the CD.

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



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



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



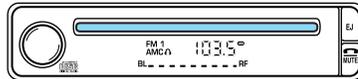
## Entertainment Systems

2. **Scan:** Press SCAN to move up the radio frequency band. SCAN automatically finds a station, plays it for five seconds, then moves to the next station. Press again to stop.

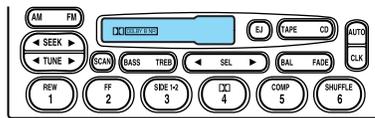


**Tape/CD:** Press SCAN to sample tape/CD selections for eight seconds. Press again to stop.

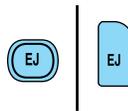
3. **CD Door:** Insert the disc with the playing side down and printed side up.



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



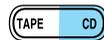
5. **Eject:** Press to eject the cassette/CD. The radio will resume playing.



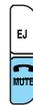
6. **Tape:** Press to stop tape during rewind/fast forward. Press to begin tape play when changing from radio or CD play.



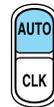
**CD:** Press to start CD play. With the dual media audio, press CD to toggle between single CD and CD changer play.



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

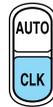


8. **Auto:** Press to set first six strong stations into AM, FM1 or FM2 memory buttons; press again to return to normal stations.



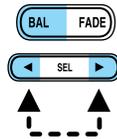
## Entertainment Systems

9. **CLOCK:** Press and release the CLK control until SELECT HOUR is displayed then press SEL ◀ to decrease the hours or ▶ to increase the hours.

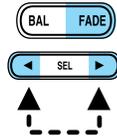


To set the minute, press and release the CLK control until SELECT MIN is displayed then press SEL ◀ to decrease the minutes or ▶ to increase the minutes.

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



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



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



12. **Shuffle (CD):** Press to play tracks in random order.



13. **Compression (CD):** Press to bring soft and loud passages together for a more consistent listening level.



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



15. **Side 1-2:** Press to play reverse side of the tape.



## Entertainment Systems

16. **Fast Forward (FF):** Press to fast forward the tape.



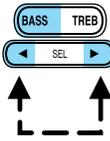
17. **Rewind (REW):** Press to rewind the tape.



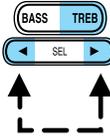
18. **Select (SEL):** Use with Bass, Treble, Balance, Fade and Clock controls.



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



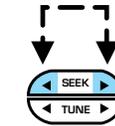
**Treble:** Press TREB; then press SEL ◀ / ▶ to decrease/increase the treble output.



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



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



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



## Entertainment Systems

### **RADIO FREQUENCIES**

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

AM - 530, 540–1600, 1610 kHz

FM- 87.7, 87.9–107.7, 107.9 MHz

### **RADIO RECEPTION FACTORS**

There are three factors that can effect 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.

## Entertainment Systems

### 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 changers.
- 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.

## Climate Controls

### HEATER ONLY SYSTEM (IF EQUIPPED)

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

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

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

**PANEL:** Distributes outside air through the instrument panel vents.

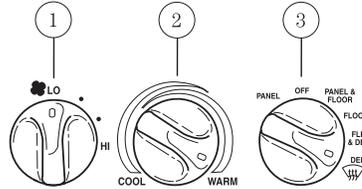
**OFF:** Outside air is shut out and the fan will not operate.

**PANEL&FLOOR:** Distributes outside air through the instrument panel vents and the floor vents.

**FLOOR:** Distributes outside air through the floor vents.

**FLR&DEF:** Distributes outside air through the windshield defroster vents, floor vents and demister vents.

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



### OPERATING TIPS

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

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

1. Select PANEL&FLOOR.
2. Set the temperature control to maintain comfort.
3. Set the fan speed to HI.

## Climate Controls

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.



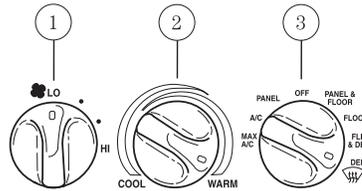
Do not place objects on top of the instrument panel as these objects may become projectiles in a collision or sudden stop.

### MANUAL HEATING AND AIR CONDITIONING SYSTEM (IF EQUIPPED)

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

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

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



**MAX A/C:** Uses recirculated air to cool the vehicle. Air flows from the instrument panel vents.

**A/C:** Uses outside air to cool the vehicle. Air flows from the instrument panel vents.

**PANEL:** Distributes outside air through the instrument panel vents.

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

**PANEL&FLOOR:** Distributes outside air through the instrument panel vents and the floor vents.

**FLOOR:** Distributes outside air through the floor vents.

**FLR&DEF:** Distributes outside air through the windshield defroster vents, floor vents and demister vents.

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

## Climate Controls

### OPERATING TIPS

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the  position.
- To reduce humidity build up inside the vehicle: do not drive with the air flow selector in the OFF position.
- Under normal weather conditions, do not leave the air flow selector in MAX A/C or OFF when the vehicle is parked. This allows the vehicle to “breathe” using the outside air inlet vents.
- 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 aid in side window defogging/demisting in cold weather:

1. Select PANEL&FLOOR.
2. Set the temperature control to maintain comfort.
3. Set the fan speed to HI.
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.

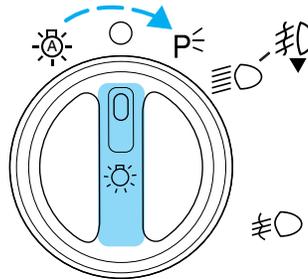
## Lights

### HEADLAMP CONTROL ☀

○ Turns the lamps off.

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

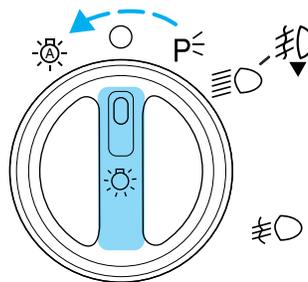
☀☀ Turns the headlamps on.



### Autolamp control (if equipped) ☀

The autolamp system sets the headlamps to turn on and off automatically. It also keeps the lights on for approximately 20 seconds after the ignition switch is turned to the OFF position.

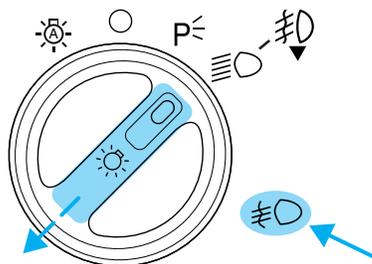
- To turn autolamps on, rotate the control counterclockwise.
- To turn autolamps off, rotate the control clockwise to the OFF position.
- Foglamps are not controlled by the autolamps. In order to turn on the foglamps, you must turn the lamp switch to the ☀☀ position and pull toward you for foglamps.



### Foglamp control (if equipped) ☀

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

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



## Lights

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

Turns the headlamps on with a reduced output.

To activate:

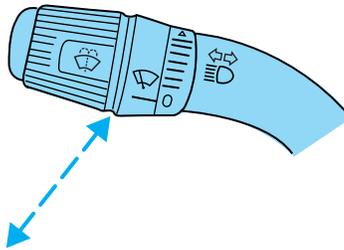
- the ignition must be in the ON position,
- the headlamp control is in the OFF or parking lamp position and
- the parking brake must be disengaged.



Always remember to turn on your headlamps at dusk or during inclement weather. The Daytime Running Lamp (DRL) system does not activate 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.

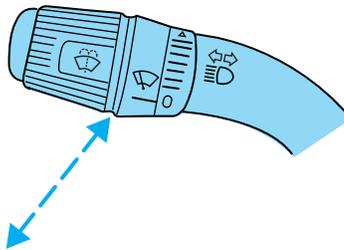
### High beams

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.



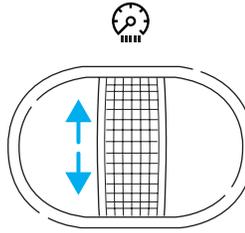
## Lights

### 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 turn off the interior lamps.

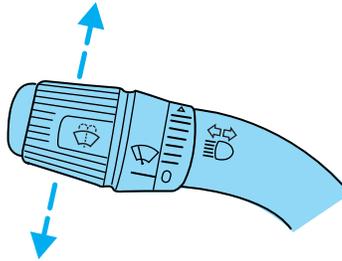


### AIMING THE HEADLAMPS

The headlamps on your vehicle are properly aimed at the assembly plant. If your vehicle has been in an accident the alignment of your headlamps should be checked by a qualified service technician.

### TURN SIGNAL CONTROL ⇐⇒

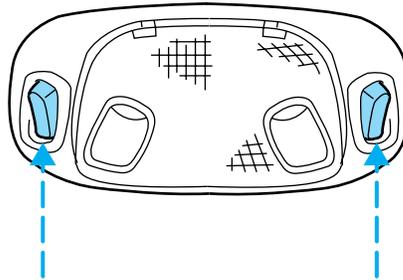
- Push down to activate the left turn signal.
- Push up to activate the right turn signal.



### INTERIOR LAMPS

#### Map lamps

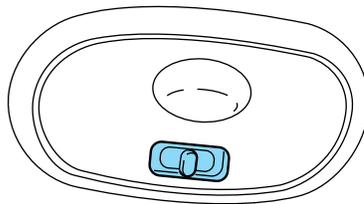
To turn on the map lamps, press the control next to each lamp.



#### 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.

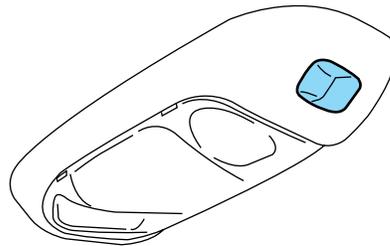
The rear dome lamp can be turned ON (center) or OFF (right) by sliding the control.



#### Courtesy/reading lamps

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 reading lamps can be turned on by pressing the rocker controls next to each lamp.

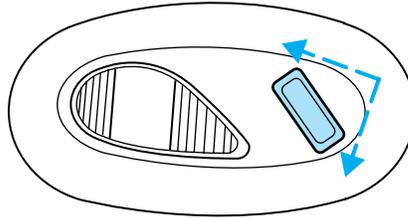


## Lights

### Rear door lamps (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 door lamps can be turned on by pressing the rocker controls next to each lamp.



### 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.

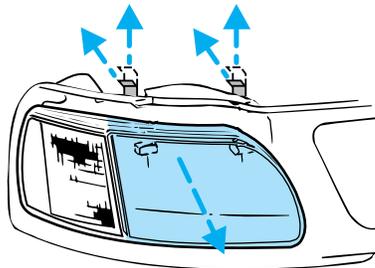
Function	Number of bulbs	Trade number
Headlamps	2	9007
Front park/turn lamps	2	3157 K
Front park/turn lamps (Lightning only)	2	3157 AK (amber)
Foglamps	2	9145
Backup lamp	2	3156K
Rear stop/turn/sidemarkers/tail lamp (styleside & Lightning)	2	3157K
Rear stop/turn/sidemarkers/tail lamp (flareside)	2	3457K
High-mount brakelamp	1	912

## Lights

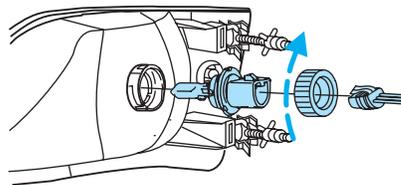
Function	Number of bulbs	Trade number
Cargo lamp	2	912
License plate lamp	2	194
Running board lamp (if equipped)	4	168
All replacement bulbs are clear in color except where noted.		
To replace all instrument panel lights - see your dealer		

### Replacing headlamp bulbs

1. Make sure that the headlamp control is in the OFF position and open the hood.
2. At the back of the headlamp, pull clips rearward and up (about  $\frac{3}{4}$  inch) to release the headlamp assembly.
3. Slide headlamp assembly forward and off of guide ribs to expose the back of the bulb and wiring connector.



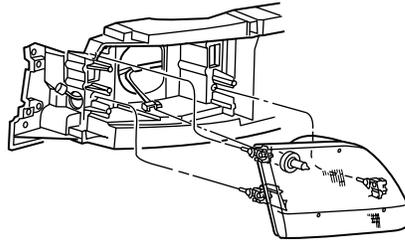
4. Disconnect the electrical connector from the bulb by pulling rearward.
5. Remove bulb retainer ring by turning it counterclockwise, then slide the ring off the plastic base.
6. Without turning, carefully pull bulb assembly out of headlamp assembly and replace.



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.

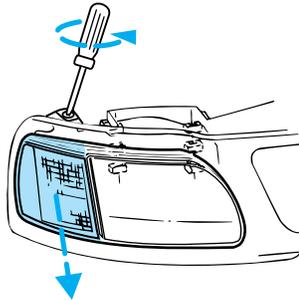
## Lights

7. Insert the glass end of the new bulb into the headlamp assembly. When the grooves in the plastic base are aligned, push the bulb into the lamp assembly until the plastic base contacts the rear of the lamp assembly.
8. Install bulb retaining ring over the plastic base and lock the ring into the socket by turning it clockwise until you feel a “stop.”
9. Connect the electrical connector into the plastic base until it “snaps.”
10. Straighten alignment pins, making them parallel with the outer edges of the attachment standoff.
11. Carefully insert the headlamp assembly into the vehicle making sure the alignment pins are inserted into the proper holes and into the guide ribs.
12. Hold the headlamp assembly snugly against the vehicle and push down on the clips to lock the lamp into place.



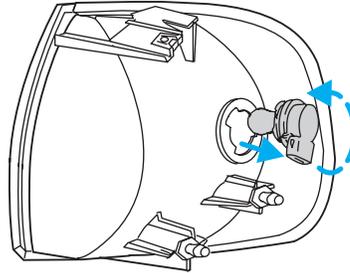
### **Replacing front parking lamp/turn signal bulbs**

1. Make sure the headlamp switch is in the OFF position and remove screw from the lamp assembly.
2. Disengage lamp assembly (it has a snap fit) by pulling straight forward.

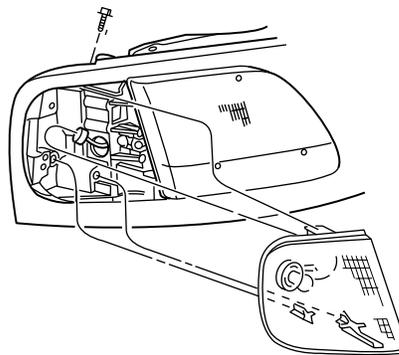


## Lights

3. Remove bulb socket from the parking lamp assembly by turning it counterclockwise.
4. Pull bulb straight out of socket and press in the new bulb.
5. Install the bulb socket into the lamp assembly by turning clockwise.



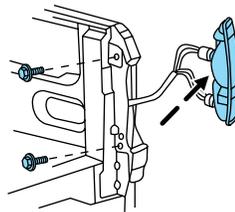
6. Align top and bottom ribs of parking lamp assembly with corresponding slots on front of vehicle.
7. Push gently until parking lamp assembly seats (you will hear a snap).
8. Install screw on lamp assembly.



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

The tail/brake/turn signal and backup lamp bulbs are located in the tail lamp assembly, one just below the other. Follow the same steps to replace either bulb:

1. Make sure the headlamp switch is in the OFF position and then open the tailgate to expose the lamp assembly screws.
2. Remove the two bolts from the tail lamp assembly.
3. Carefully pull the lamp assembly 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.



## Lights

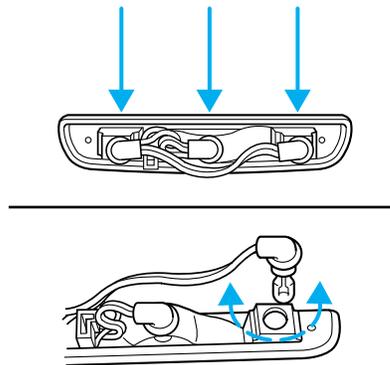
5. Pull bulb straight out of socket and press in the new bulb.
6. Install the bulb socket into the lamp assembly by turning clockwise.
7. Carefully install the tail lamp assembly on tailgate pillar snapping the two snap-in retainers into place. (Flare side tail lamps do not snap into place but have two tabs which fit into slots.)
8. Secure the tail lamp on the vehicle with two bolts.

### **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.



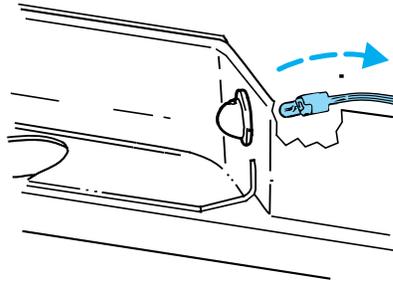
### **Replacing signal mirror lamp bulbs (if equipped)**

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:

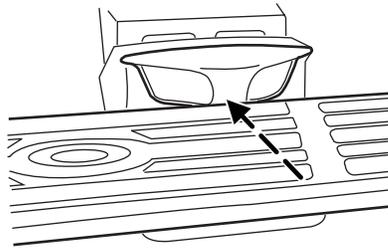
1. Reach behind the rear bumper to locate the bulb.
2. Twist the bulb socket counterclockwise and carefully pull to remove it from the lamp assembly.
3. Pull out the old bulb from the socket and push in the new bulb.
4. Install the bulb socket in lamp assembly by turning it clockwise.



### **Replacing running board lamp bulbs (if equipped)**

The running board bulbs are located behind the running board.

1. Reach behind the center bracket of the running board 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.
- Install the new bulb in reverse order.



## Driver Controls

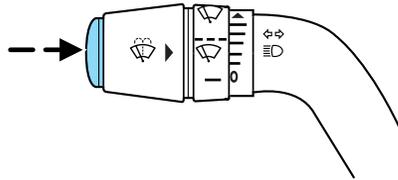
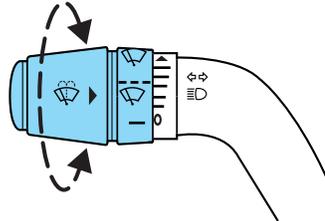
### MULTI-FUNCTION LEVER

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

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

**Windshield washer:** Push the end of the stalk:

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

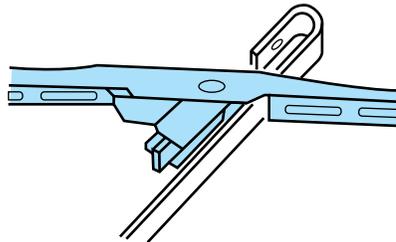


### CHANGING THE WIPER BLADES

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.

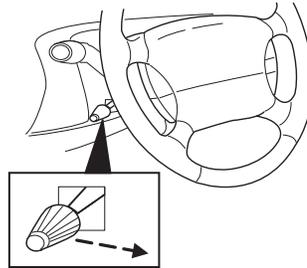


## Driver Controls

### TILT STEERING WHEEL (IF EQUIPPED)

To adjust the steering wheel:

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



Never adjust the steering wheel when the vehicle is moving.

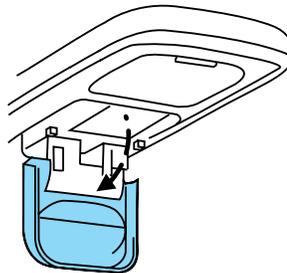
### OVERHEAD CONSOLE (IF EQUIPPED)

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

#### Storage compartment (if equipped)

Press the release on the door to open the storage compartment.

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

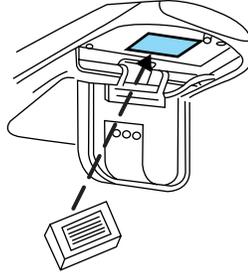


#### Installing a garage door opener (if equipped)

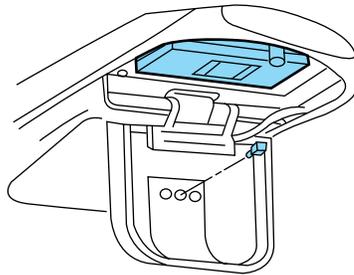
The storage compartment can be converted to accommodate a variety of aftermarket garage door openers:

## Driver Controls

1. Place Velcro hook onto side of aftermarket transmitter opposite of actuator control.
2. Place the transmitter into storage compartment, control down.



3. Place the provided height adaptors onto the back of the garage control as needed.
4. Press the garage control to activate the transmitter.

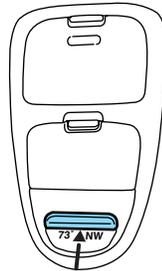


### Electronic compass/temperature display (if equipped)

#### Outside air temperature

The outside temperature display is contained in the overhead console.

The temperature display can be turned off and on by pressing the SELECT control on the overhead console. The temperature can be displayed in Centigrade or Fahrenheit by pressing the SELECT control. The ignition key must be in the ON or ACCESSORY position.



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

#### Compass

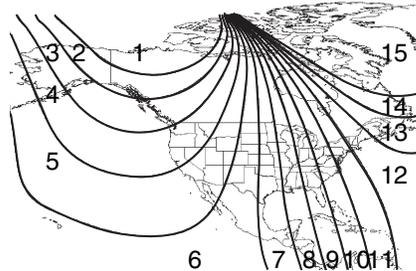
The compass display is contained in the overhead console. The vehicle heading is displayed as one of N, NE, E, SE, S, SW, W and NW.

## Driver Controls

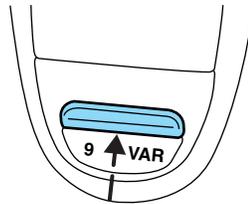
The compass reading may be affected when you drive near large buildings, bridges, power lines and powerful broadcast antenna. Magnetic or metallic objects placed in or on the vehicle may also affect compass accuracy. Adjustments may need to be made to the zone and calibration of the compass.

### **Compass zone adjustment**

1. Determine which magnetic zone you are in by referring to the zone map.
2. Turn the ignition to the ON position.



3. Press and hold the SELECT control until VAR appears in the display, then release. The display should show the current zone number.

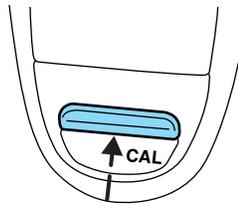


4. Press the SELECT control until the desired zone number appears. The display will flash and then return to normal operation. The zone is now updated.

### **Compass calibration adjustment**

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

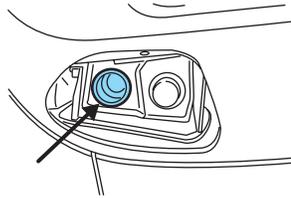
- Press and hold the SELECT control until CAL appears in the display (approximately eight seconds) and release.
- Drive the vehicle slowly (less than 5 km/h [3 mph]) in circles until CAL indicator turns off in about 2–3 complete circles.
- The compass is now calibrated.



## Driver Controls

### 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.

### CENTER CONSOLE (IF EQUIPPED)

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

- Large utility compartment
- Cupholders
- PalmPilot<sup>™</sup>/PDA holder
- Tissue holder
- Cassette/CD organizer slots



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

## Driver Controls

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.

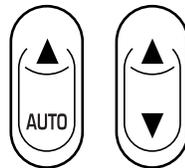
 A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communications Equipment.

### 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.

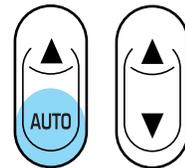
 When closing the power windows, you should verify they are free of obstructions and ensure that children and/or pets are not in the proximity of the window openings.

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 AUTO and release quickly. Press again to stop.



## Driver Controls

### Accessory delay (if equipped)

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

### MIRRORS

#### Power side view mirrors (if equipped)

To adjust your mirrors:

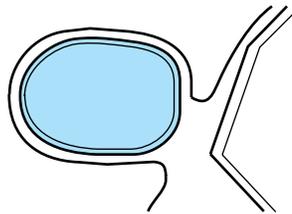
1. Select **L** to adjust the left mirror or **R** to adjust the right mirror.
2. Move the control in the direction you wish to tilt the mirror.
3. Return to the center position to disable the adjust function.



#### Heated outside mirrors (if equipped)

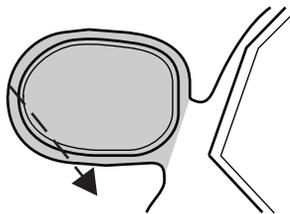
Both mirrors are heated automatically to remove ice, mist and fog. The mirrors are activated when the vehicle is running and the glass is below freezing.

**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.**



#### Fold-away mirrors

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



## Driver Controls

### 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 toward you or 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).

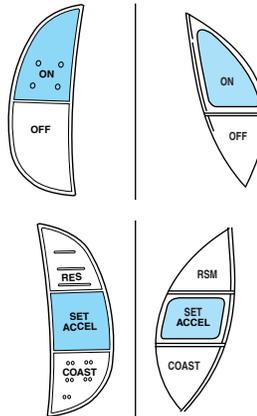


Do not use the speed control in heavy traffic or on roads that are winding, slippery or unpaved.

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



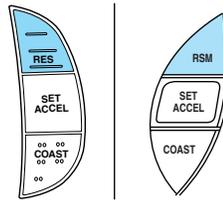
## Driver Controls

### 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

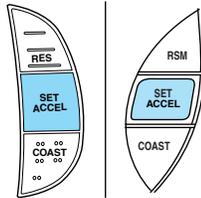
Press the RES/RSM (resume) control and release it. This will automatically return the vehicle to the previously set speed. The RES/RSM control will not work if the vehicle speed is not faster than 30 mph (48 km/h).



### Increasing speed while using speed control

There are two ways to set a higher speed:

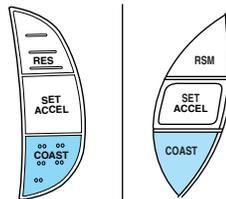
- Press and hold the SET ACCEL control until you get to the desired speed, then release the control. You can also use the SET ACCEL control to operate the Tap-Up function. Press and release this control to increase the vehicle set speed in small amounts by 1 mph (1.6 km/h).
- Use the accelerator pedal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



### Reducing speed while using speed control

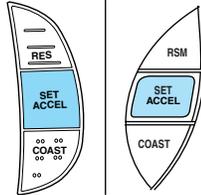
There are two ways to reduce a set speed:

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



## Driver Controls

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

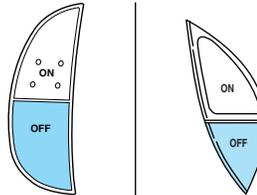


### Turning off speed control

There are two ways to turn off the speed control:

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

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



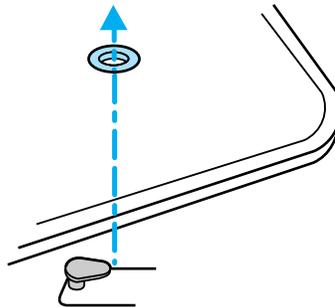
### Indicator light

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

## CRUISE

### POSITIVE RETENTION FLOOR MAT (IF EQUIPPED)

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

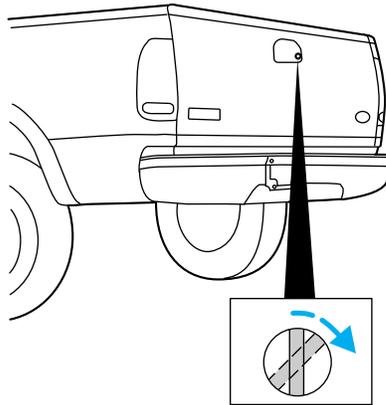


## Driver Controls

### TAILGATE LOCK (IF EQUIPPED)

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

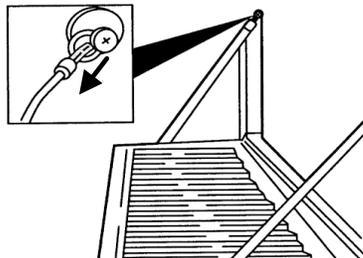
- Insert ignition key and turn to the right to engage lock.
- Turn ignition key to the left to unlock.



### 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.
5. Lift right side off of its hinge.
6. Lift left side off of its hinge.



To install, follow the removal procedures in reverse order.

## Locks and Security

### KEYS

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

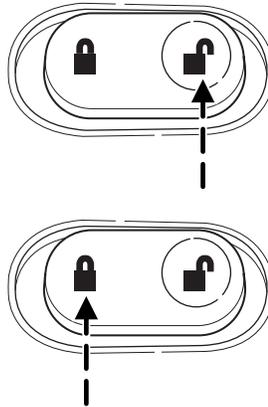
You should always carry a second key with you in a safe place in case you require it in an emergency.

Refer to *SecuriLock<sup>®</sup> Passive Anti-Theft System* for more information.

### POWER DOOR LOCKS (IF EQUIPPED)

Press control to unlock all vehicle doors.

Press control to lock all vehicle doors.



### 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.**

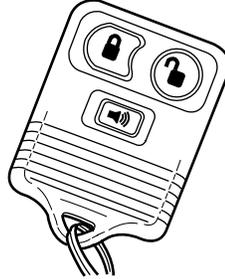
The typical operating range for your remote entry transmitter is approximately 33 feet (10 meters). A decrease in operating range could be caused by:

- 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:

## Locks and Security

- 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 headlamps 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 headlamps will flash once more.

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

### Power door lock disable feature (if equipped)

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

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

The UNLOCK  feature will work again after:

- a door has become ajar,

## Locks and Security

- the ignition is turned to the 4 (ON) position, or
- using the UNLOCK  control on your remote entry transmitter or unlocking via the keyless entry keypad (if equipped).

### **Power door lock disable feature — activation/deactivation**

Please see your dealer in order to activate/deactivate this feature.

### **Sounding a panic alarm**

Press  to activate the alarm. Press again or turn the ignition to 1 (ACCESSORY) or 4 (ON) to deactivate.

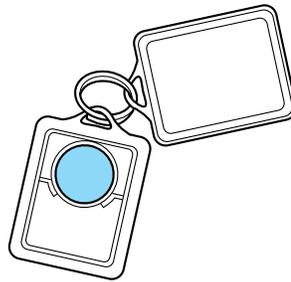
**Note:** The panic alarm will only operate when the ignition is in the 3 (OFF) position.

### **Replacing the battery**

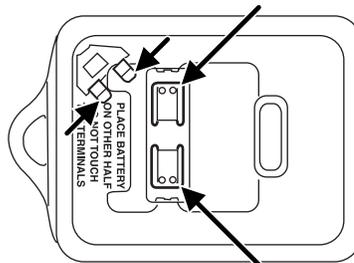
The remote entry transmitter uses one coin type three-volt lithium battery CR2032 or equivalent.

To replace the battery:

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



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.

## Locks and Security

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

5. Snap the two halves back together.

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

### Replacing lost remote entry transmitters

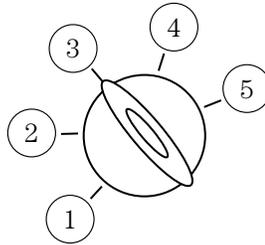
If you would like to have your remote entry transmitter reprogrammed because you lost one, or would like to buy additional remote entry transmitters, you can either reprogram them yourself, or take **all remote entry transmitters** to your authorized dealer for reprogramming.

### How to reprogram your remote entry transmitters

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

To reprogram the remote entry transmitters:

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



## Locks and Security

10. The doors will lock, then unlock, to confirm that the programming mode has been exited.

### **Illuminated entry**

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

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

- the ignition switch is turned to the 4 (ON) position, or
- the vehicle is locked using the keyless entry keypad (if equipped),
- the remote transmitter lock control is pressed, or
- after 25 seconds of illumination.

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

The inside lights will not turn off if:

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

The battery saver will shut off the interior lamps 30 minutes after the last door is closed, even if the dimmer control is on.

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

This feature will automatically lock all the doors when:

- all the doors are closed,
- the ignition is in the 4 (ON) position,
- the gearshift lever is shifted into R (Reverse) or a forward gear and
- the brake pedal is released.

This feature will also automatically relock all the doors when:

- the ignition is running and any door is opened then closed, and
- you put the vehicle in motion by releasing the brake pedal.

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

Before following the procedure, make sure that the ignition is in the 3 (OFF) position and all vehicle doors are closed.

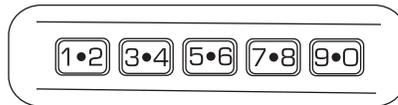
You must complete Steps 1-7 within 30 seconds or the procedure will have to be repeated. If the procedure needs to be repeated, you must wait 30 seconds.

## Locks and Security

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

### KEYLESS ENTRY SYSTEM (IF EQUIPPED)

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



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

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

### Programming a personal entry code

To create your own personal entry code:

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

#### Tips:

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

## Locks and Security

- 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.

### Anti-scan feature

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

The anti-scan feature will turn off after:

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

### Unlocking and locking the doors using keyless entry 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.

## Locks and Security

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

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

### Theft indicator

The theft indicator is located in the instrument cluster.

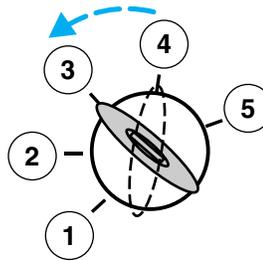
- When the ignition is in the 2 (LOCK) position, the **THEFT** indicator will flash once every 2 seconds to indicate the SecuriLock<sup>™</sup> system is functioning as a theft deterrent.
- When the ignition is in the 4 (ON) position, the **THEFT** indicator will glow for 3 seconds, then turn off to indicate normal system functionality.

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

### Automatic arming

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

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



### Automatic disarming

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

## Locks and Security

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

### Replacement keys

If your keys are lost or stolen and you don't have an extra coded key, you will need to have your vehicle towed to 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.

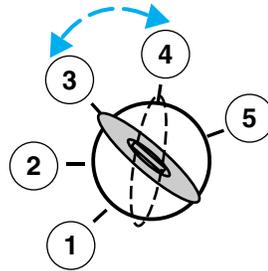
### Programming spare keys

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

#### Tips:

- A maximum of eight keys can be coded to your vehicle.
- Only use Securilock<sup>™</sup> keys.
- You must have two previously programmed coded keys (keys that already operate your vehicle's engine) and the new unprogrammed key(s) readily accessible.
- If two previously programmed coded keys are not available, you must take your vehicle to your dealer to have the spare key(s) programmed.

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



## Locks and Security

2. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second, but no more than 10 seconds.
3. Turn the ignition to the 3 (OFF) position.
4. Remove the previously programmed coded key from the ignition.
5. Within ten seconds of removing the previously programmed coded key, insert the other previously programmed coded key into the ignition.
6. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second but not more than 10 seconds.
7. Turn the ignition to the 3 (OFF) position.
8. Remove the previously programmed coded key from the ignition.
9. Within twenty seconds of removing the previously programmed coded key, insert the unprogrammed key (new/valet key) into the ignition.
10. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second, but no more than 10 seconds.
11. Your new, unprogrammed key is now programmed.

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

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

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

## Seating and Safety Restraints

### SEATING

#### Notes:



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

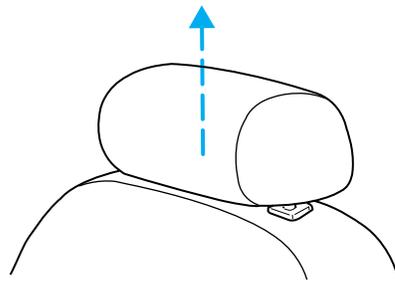


Do not pile cargo higher than the seatbacks to reduce the risk of injury in a collision or sudden stop.

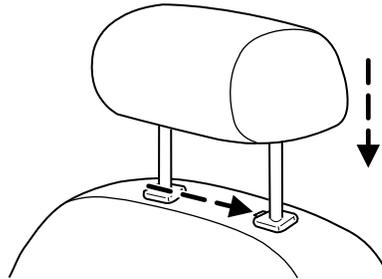
#### Adjustable head restraints (if equipped)

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.



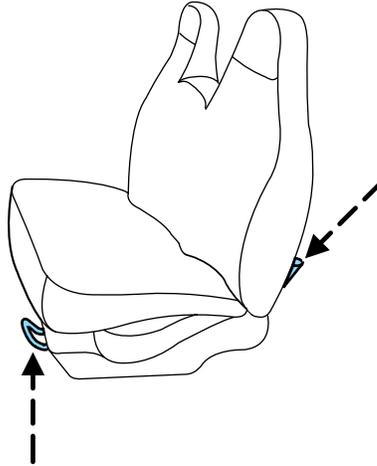
Push control to lower head restraint.



## Seating and Safety Restraints

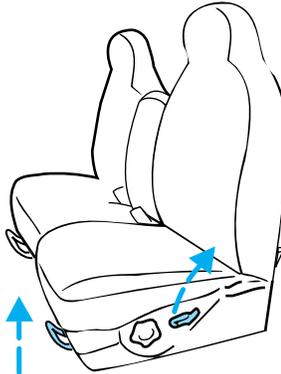
### Full bench seat (if equipped)

- Lift the release bar to move the seat forward or backward. Ensure that the seat is related into place.
- Pull up on the lever located at the bottom of the seatback to quickly fold the seatback forward.
- Push down the release lever (if equipped) located on the back of the seat to quickly fold the seatback forward.



### 60/40 split bench seat (if equipped)

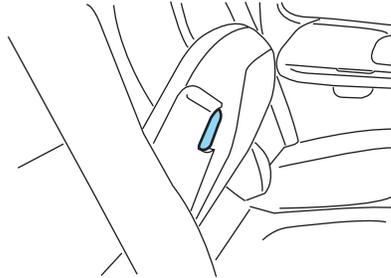
- Lift the release bar to move the seat forward or backward. Ensure the seat is related into place.
- Pull the seatback handle up to move the seat back forward or backward.



## Seating and Safety Restraints

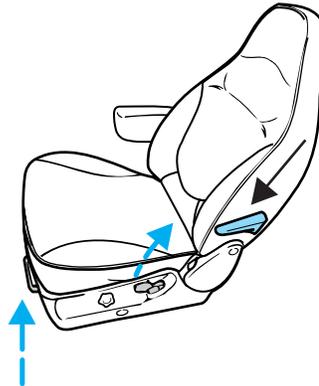
### Using the armrest (if equipped)

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



### Captain's chair (if equipped)

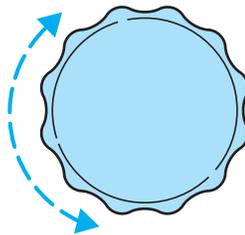
- Lift the track release bar to move the seat forward or rearward. Make sure that the seat is relatched into place.
- Pull the release lever handle located on the side of the seat up to move the seat back forward or backward.
- Push down the release lever (if equipped) located at the bottom of the seatback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



### Using the manual lumbar support

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

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



## Seating and Safety Restraints

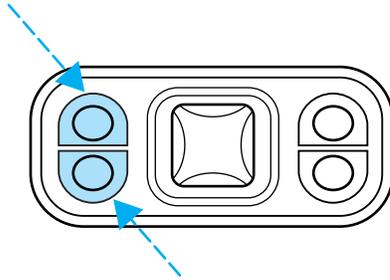
### Adjusting the front power seat (if equipped)

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

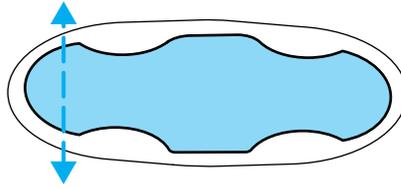
Your vehicle will only be equipped with one of the two controls shown.

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

- Type A

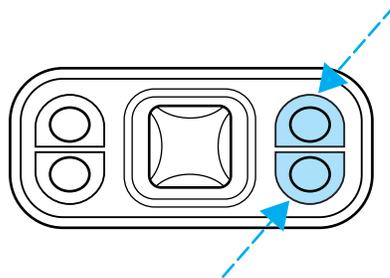


- Type B

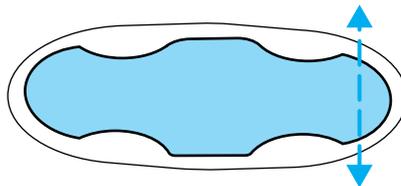


Press to raise or lower the rear portion of the seat cushion.

- Type A



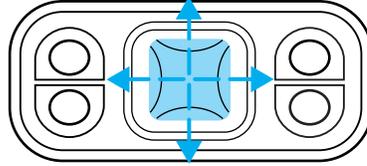
- Type B



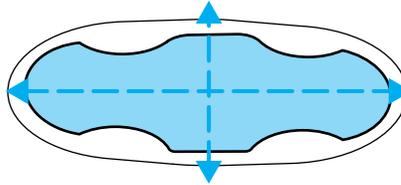
## Seating and Safety Restraints

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

- Type A



- Type B

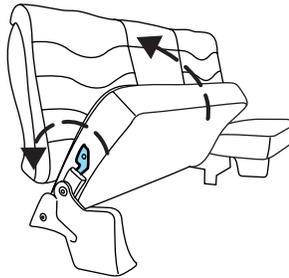


### REAR SEATS

#### Folding up the rear seats (if equipped — SuperCab only)

The rear seatback has a split 60/40 seat. 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.

## Seating and Safety Restraints

### SAFETY RESTRAINTS

#### Safety restraints precautions



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



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



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



All occupants of the vehicle, including the driver, should always properly wear their safety belts, even when an 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.

## Seating and Safety Restraints

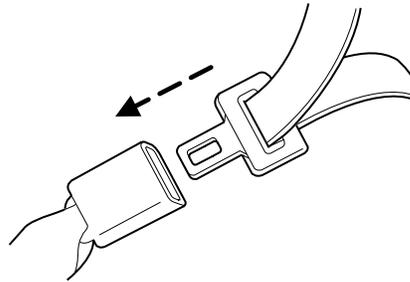


Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check seat covers and buckles before you place a child anywhere near them.

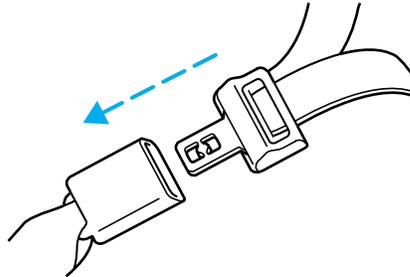
### Combination lap and shoulder belts

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



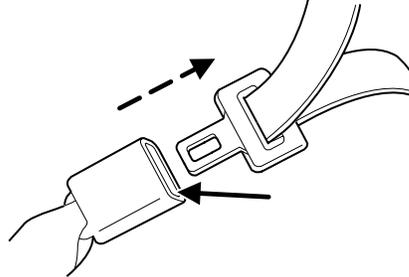
- Rear seats (if equipped)



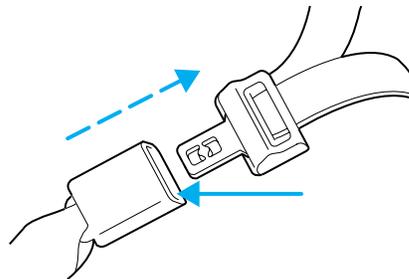
2. To unfasten, push the release button and remove the tongue from the buckle.

## Seating and Safety Restraints

- Front seats



- Rear seats (if equipped)



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

### Vehicle sensitive mode

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.

## Seating and Safety Restraints

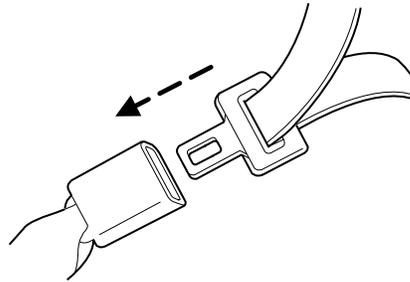
### **When to use the automatic locking mode**

- **Anytime** a child safety seat is installed in a passenger front or outboard rear seating position. Children 12 years old and under should be properly restrained in the rear seat whenever possible. Refer to *Safety Restraints for Children* or *Safety Seats for Children* later in this chapter.

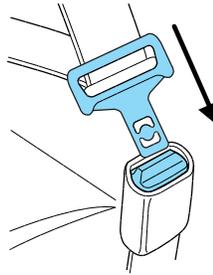
### **How to use the automatic locking mode**

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.



## Seating and Safety Restraints

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 pretensioners at the driver and front outboard passenger seating positions.

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 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.

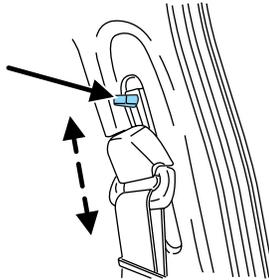
## Seating and Safety Restraints

### Front safety belt height adjustment (if equipped)

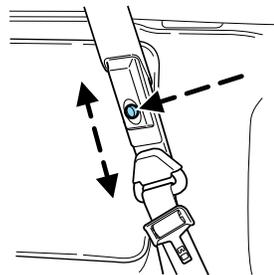
If your vehicle has seat integrated restraints you will not have a safety belt height adjuster.

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

- Regular Cab



- 4-door SuperCab (Bench seats only)



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

 Position the 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.

## Seating and Safety Restraints

### Lap belts

#### Adjusting the lap belt



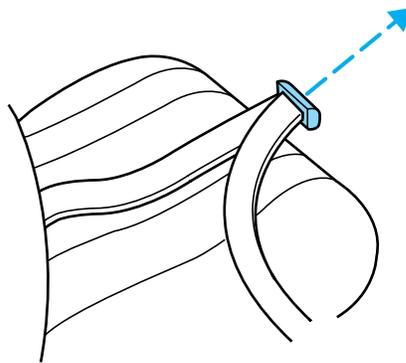
The lap belt should fit snugly and as low as possible around the hips, not across the waist.

The center lap belt tongues are 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.

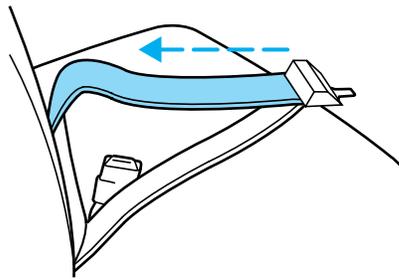
- **1st row center and 2nd row center (SuperCab) seating position**

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.

## Seating and Safety Restraints

### Conditions of operation

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

### BeltMinder (if equipped)

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

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

## Seating and Safety Restraints

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

Reasons given...	Consider...
"Crashes are rare events"	<b>36700 crashes occur every day.</b> The more we drive, the more we are exposed to "rare" events, even for good drivers. <i>1 in 4 of us will be seriously injured in a crash during our lifetime.</i>
"I'm not going far"	<b>3 of 4</b> fatal crashes occur within <b>25</b> miles (40 km) of home.
"Belts are uncomfortable"	We design our safety belts to enhance comfort. If you are uncomfortable - try different positions for the safety belt upper anchorage and seatback which should be as upright as possible; this can improve comfort.
"I was in a hurry"	<b>Prime time for an accident.</b> BeltMinder reminds us to take a few seconds to buckle up.
"Safety belts don't work"	<b>Safety belts</b> , when used properly, <b>reduce risk of death</b> to front seat occupants by <b>45% in cars</b> , and by <b>60% in light trucks</b> .
"Traffic is light"	<b>Nearly 1 of 2 deaths occur in single-vehicle crashes</b> , many when no other vehicles are around.
"Belts wrinkle my clothes"	Possibly, but a serious crash can do much more than wrinkle your clothes, particularly if you are unbelted.
"The people I'm with don't wear belts"	Set the example, teen deaths occur 4 times more often in vehicles with TWO or MORE people. Children and younger brothers/sisters imitate behavior they see.

## Seating and Safety Restraints

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

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

### **One time disable**

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

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

*Read steps 1 - 9 thoroughly before proceeding with the deactivation/activation programming procedure.*

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

Before following the procedure, ensure that the following conditions are met:

- The parking brake is set.
- The gearshift is in P (Park) (automatic transmission) or the neutral position (manual transmission).
- The ignition switch is in the OFF position.
- All vehicle doors are closed.
- The driver's safety belt is unbuckled.
- The parklamps/headlamps are in OFF position (If vehicle is equipped with Autolamps, this will not affect the procedure).

## Seating and Safety Restraints



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

### **BeltMinder activation and deactivation procedure**

1. Turn the ignition switch to the RUN (or ON) position. (DO NOT START THE ENGINE.)
2. Wait until the safety belt warning light turns off. (Approximately 1–2 minutes.)
  - Steps 3–5 must be completed within 60 seconds or the procedure will have to be repeated.
3. Buckle then unbuckle the safety belt three times, ending with the safety belt unbuckled. This can be done before or during BeltMinder warning activation.
4. Turn on the parklamps/headlamps, turn off the parklamps/headlamps.
5. Buckle then unbuckle the safety belt three times, ending with the safety belt unbuckled.
  - After step 5 the safety belt warning light will be turned on for three seconds.
6. Within seven seconds of the safety belt warning light turning off, buckle then unbuckle the safety belt.
  - This will disable BeltMinder if it is currently enabled, or enable BeltMinder if it is currently disabled.
7. Confirmation of disabling BeltMinder is provided by the safety belt warning light flashing four times per second for three seconds.
8. Confirmation of enabling BeltMinder is provided by:
  - The safety belt warning light flashing four times per second for three seconds.
  - Followed by three seconds with the safety belt warning light off.
  - Once again, the safety belt warning light will flash four times per second for three seconds.
9. After receiving confirmation, the deactivation/activation procedure is complete.

## Seating and Safety Restraints

### Safety belt extension assembly

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

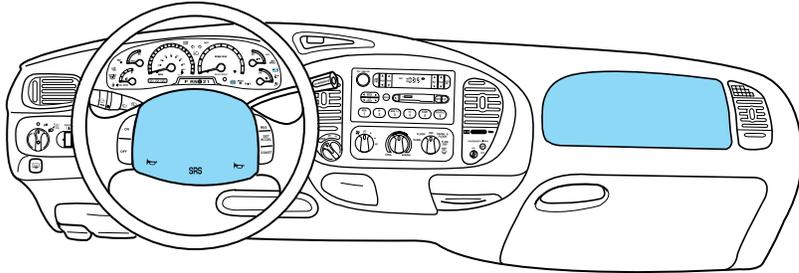


Failure to inspect and if necessary replace the safety belt assembly under the above conditions could result in severe personal injuries in the event of a collision.

Refer to *Interior* in the *Cleaning* chapter.

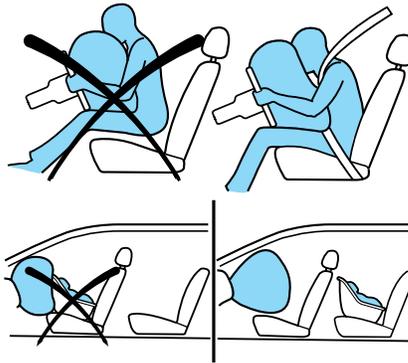
## Seating and Safety Restraints

### AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



#### Important SRS precautions

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



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

 Always transport children 12 years old and under in the back seat if your vehicle has a back seat. If a child in a rear facing infant seat must be transported in front, the passenger air bag must be turned OFF. This is because the back of the infant seat is too close to the inflating air bag and the risk of a fatal injury to the infant when the air bag inflates is substantial.

## Seating and Safety Restraints

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

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

To properly position yourself away from the air bag:

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

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

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

 The front passenger air bag is not designed to offer protection to 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.

## Seating and Safety Restraints

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



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

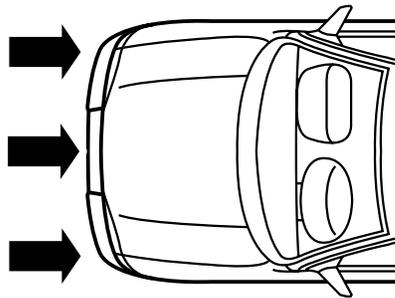
### How does the air bag supplemental restraint system work?

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

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

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

While the system is designed to help reduce serious injuries, it may also cause minor 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



## Seating and Safety Restraints

internal injuries, particularly to occupants who are not properly restrained or are otherwise out of position at the time of air bag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the air bag module as possible while maintaining vehicle control.



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



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

The SRS consists of:

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

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

### Determining if the system is operational

The SRS uses readiness lights in the instrument cluster and the passenger air bag deactivate switch or a tone to indicate the condition of the system. Refer to the *Air bag readiness* section in the *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.



## Seating and Safety Restraints

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

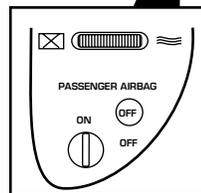
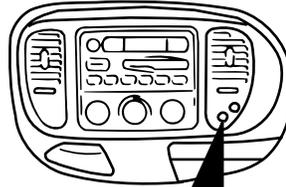
If any of these things happen, even intermittently, have the SRS serviced at your dealership or by a qualified technician immediately. Unless serviced, the system may not function properly in the event of a collision.

### 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.

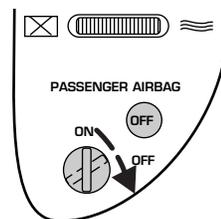
### Passenger air bag ON/OFF switch (if equipped)

 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 OFF light illuminates briefly, momentarily shuts off and then turns back on. This indicates that the passenger air bag is deactivated.



## Seating and Safety Restraints

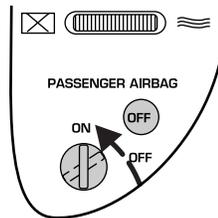
 If the OFF light fails to illuminate when the passenger airbag ON/OFF switch is in the OFF position and the ignition switch is in ON, have the passenger airbag ON/OFF switch serviced at your Ford or Lincoln-Mercury dealer immediately.

 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 OFF light will briefly illuminate when the ignition is turned to ON. This indicates that the passenger air bag is operational.



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

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

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

## Seating and Safety Restraints



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

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

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

### ***NHTSA deactivation criteria (excluding Canada)***

1. **Infant.** An infant (less than 1 year old) must ride in the front seat because:
  - the vehicle has no rear seat;
  - the vehicle has a rear seat too small to accommodate a rear-facing infant seat; or
  - the infant has a medical condition which, according to the infant's physician, makes it necessary for the infant to ride in the front so that the driver can constantly monitor the child's condition.
2. **Child age 1 to 12.** A child age 1 to 12 must ride in the front seat because:
  - the vehicle has no rear seat;
  - although children ages 1 to 12 ride in the rear seat(s) whenever possible, children ages 1 to 12 sometimes must ride in the front because no space is available in the rear seat(s) of the vehicle; or

## Seating and Safety Restraints

- 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:
- my vehicle has no rear seat;
  - the rear seat in my vehicle cannot accommodate a rear-facing infant seat; or
  - the infant has a medical condition which, according to the infant's physician, makes it necessary for the infant to ride in the front 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:
- my vehicle has no rear seat;
  - although children age 12 and under ride in the rear seat whenever possible, children age 12 and under have no option but to sometimes ride in the front 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.

## Seating and Safety Restraints

### 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.

## Seating and Safety Restraints

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.

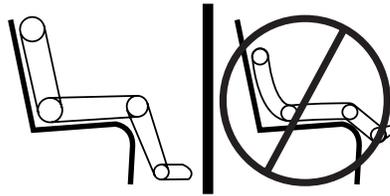
Booster seats position a child so that safety belts fit better. They lift the child up so that the lap belt rests low across the hips and the knees bend comfortably. Booster seats also make the shoulder belt fit better and more comfortably for growing children.

### 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.



## Seating and Safety Restraints

- Those with a high back.

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



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

## Seating and Safety Restraints

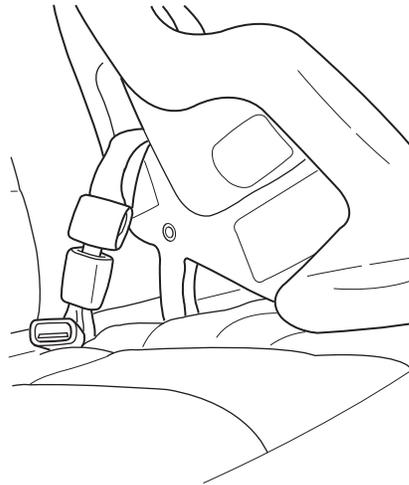
### SAFETY SEATS FOR CHILDREN

#### Child and infant or child safety seats

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

When installing a child safety seat:

- Review and follow the information presented in the *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 and outboard rear seating positions) (if equipped).
- LATCH lower anchors are recommended for use by children up to 48 pounds (22 kg) in a child restraint. Top tether anchors can be used for children up to 60 pounds (27 kg) in a child restraint, and to provide upper torso restraint for children up to 80 pounds (36 kg) using an upper torso harness and a belt-positioning booster.



## Seating and Safety Restraints

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

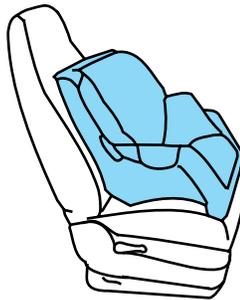


Air bags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active air bag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.



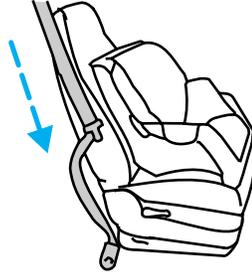
Children 12 and under should be properly restrained in the rear seat whenever possible.

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

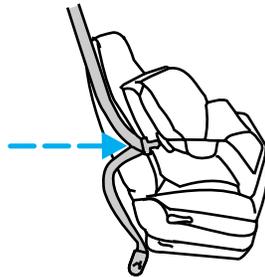


## Seating and Safety Restraints

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



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

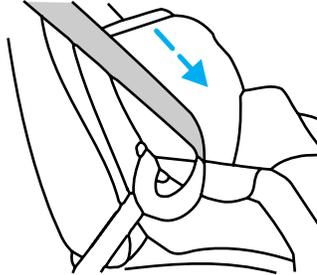


4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



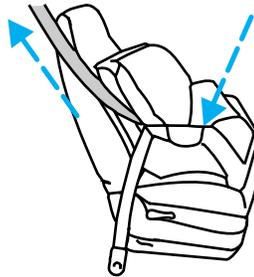
## Seating and Safety Restraints

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



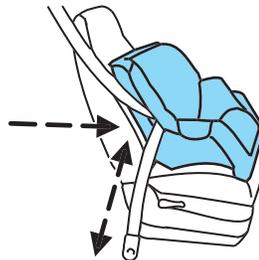
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

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.

## Seating and Safety Restraints

### **Installing child safety seats in the front row lap belt seating positions**

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. 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 6, or properly install the child seat in a different position.

### **Installing child safety seat in the second row center seating position with an automatic locking retractor lap belt**

1. Place the child safety seat in the center seating position.
2. In a continuous motion, pull out enough webbing from the retractor to route the tongue through the child seat.
3. While holding the webbing to prevent it from retracting, route the webbing through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.
4. Insert the tongue into the correct buckle for that seating position until you hear and feel the buckle engage. Make sure the buckle is latched securely by pulling on the webbing.
5. If you have not pulled out enough webbing to reach, allow the webbing to fully retract before attempting to pull it out again and repeat steps 2 through 4.
6. Pull the webbing through the child seat toward the retractor while pushing down with your knee on the child seat.
7. Allow the safety belt to retract to remove any slack in the belt. It will make a clicking noise while doing this.
8. Before placing the child in the seat, forcibly move the seat forward and side-to-side to make sure the seat is securely held in place.

## Seating and Safety Restraints

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

### Attaching child safety seats with tether straps

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

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

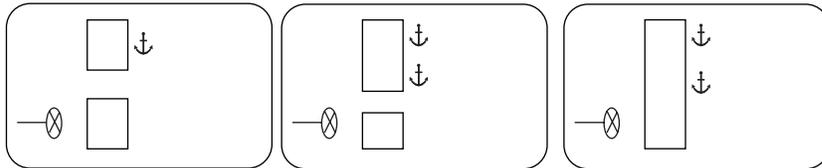
The tether anchors in your vehicle may be straps on the seatback or an anchor bracket on the rear edge of the seat cushion.

The rear seat of the SuperCab has three straps behind 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):

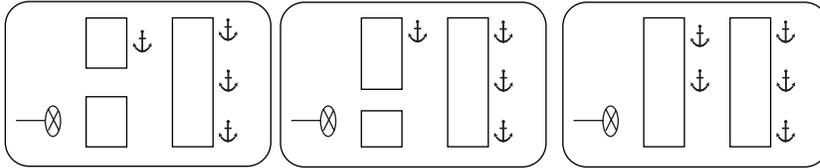
 Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.

#### • Regular cab

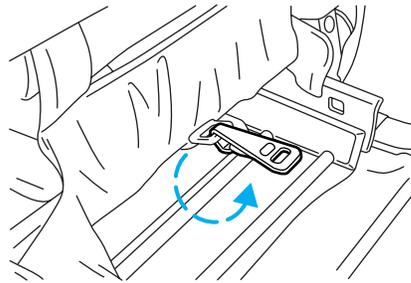


## Seating and Safety Restraints

- **SuperCab**



1. Position the child safety seat on the seat cushion.
2. Route the child safety seat tether strap over the back of the seat.
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. Refer to the *Folding Down The Rear Seats* section in this chapter for information on how to operate the rear seats.
4. Clip the tether strap to the anchor as shown.
  - Front seat



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.

## Seating and Safety Restraints

### ***Tether strap attachment rear SuperCab only***

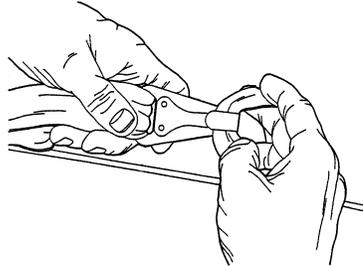
There are three loops of webbing just above the back of the rear seat (along the bottom edge of the rear window) in the SuperCab. These loops are to be used as both routing loops and anchor loops for child safety seat tether straps. For example, the center loop can be used as a routing loop for a child 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 through the loop directly behind the child seat.

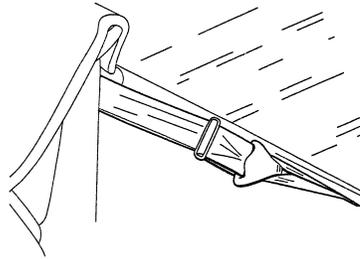


2. Attach the strap hook onto the loop behind an adjacent seating position.



## Seating and Safety Restraints

3. Install the child safety seat tightly using the safety belts. Follow the instructions in this chapter.
4. Tighten the tether strap according to the child seat manufacturer's instructions.

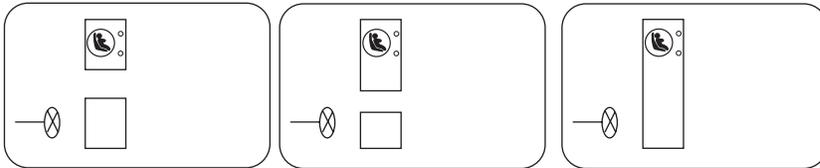


### Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments for child seat anchors

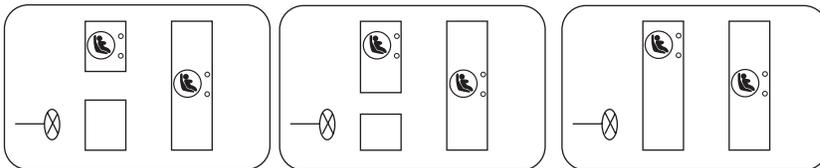
Some child safety seats have two rigid or webbing mounted attachments that connect to two anchors at certain seating positions in your vehicle. This type of child seat eliminates the need to use seat belts to attach the child seat. For forward-facing child seats, the tether strap must also be attached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

Your vehicle be equipped with LATCH anchors for child seat installation at the following seating positions:

- **Regular cab**

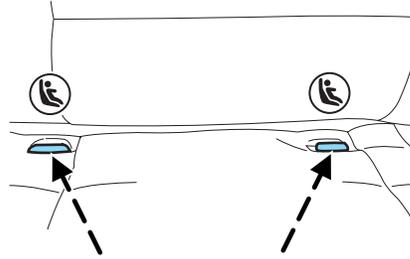


- **SuperCab**



## Seating and Safety Restraints

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 symbols (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.



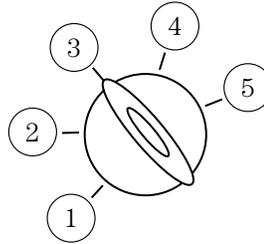
If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

### STARTING

#### Positions of the ignition

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

2. LOCK, locks the steering wheel, automatic transmission gearshift lever and allows key removal. For vehicles equipped with a manual transmission, you must depress the ignition release lever to release the key.



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



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

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

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

#### Preparing to start your vehicle

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

When starting a fuel-injected engine, don't press the accelerator before or during starting. Only use the accelerator when you have difficulty starting the engine. For more information on starting the vehicle, refer to *Starting the engine* in this chapter.

## Driving



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**

When the engine starts, the idle RPM runs faster to warm the engine. If the engine idle speed does not slow down automatically, have the vehicle checked.

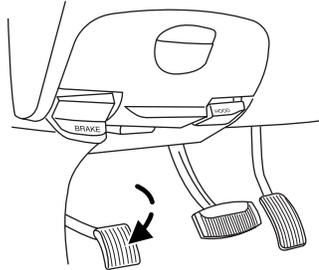
Before starting the vehicle:

1. Make sure all occupants buckle their safety belts. For more information on safety belts and their proper usage, refer to the *Seating and Safety Restraints* chapter.
2. Make sure the headlamps and electrical accessories are off.

## Driving

If starting a vehicle with an automatic transmission:

- Make sure the parking brake is set.

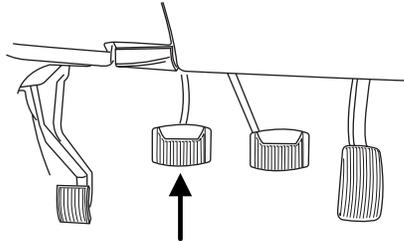


- Make sure the gearshift is in P (Park).



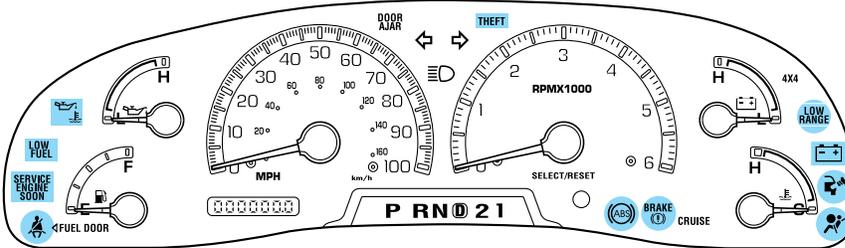
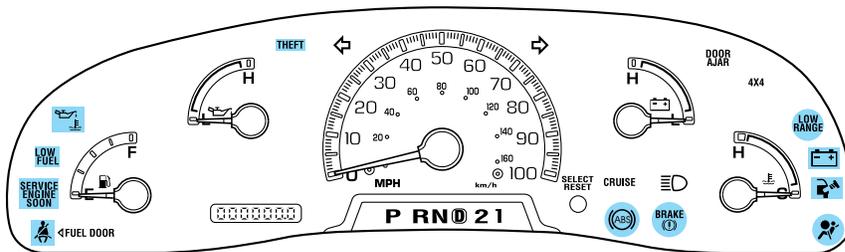
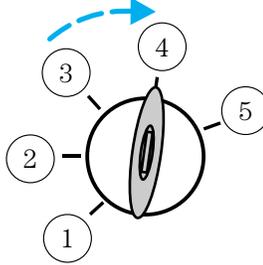
If starting a vehicle with a manual transmission:

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



## Driving

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

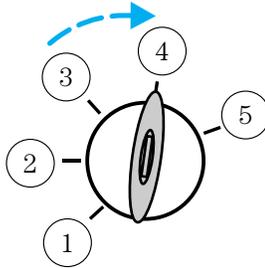


Make sure the corresponding lights illuminate or illuminate briefly. If a light fails to illuminate, have the vehicle serviced.

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

### Starting the engine

1. Turn the key to 4 (ON) without turning the key to 5 (START). If there is difficulty in turning the key, rotate the steering wheel until the key turns freely.
2. Turn the key to 5 (START), then release the key as soon as the engine starts. Excessive cranking could damage the starter.



**Note:** If the engine does not start within five seconds on the first try, turn the key to OFF, wait 10 seconds and try again. If the engine still fails to start, press the accelerator to the floor and try again; this will allow the engine to crank with the fuel shut off in case the engine is flooded with fuel.

### Using the engine block heater (if equipped)

An engine block heater warms the engine coolant which aids in starting and heater/defroster performance. Use of an engine block heater is strongly recommended if you live in a region where temperatures reach  $-10^{\circ}\text{F}$  ( $-23^{\circ}\text{C}$ ) or below. For best results, plug the heater in at least three hours before starting the vehicle. The heater can be plugged in the night before starting the vehicle.



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

### Guarding against exhaust fumes

Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.



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

### Important ventilating information

If the engine is idling while the vehicle is stopped for a long period of time, open the windows at least one inch (2.5 cm) or adjust the heating or air conditioning to bring in fresh air.

## Driving

### **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)**

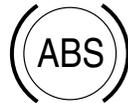
Your vehicle is equipped with an Anti-lock Braking System (ABS). This system helps you maintain steering control during emergency stops by keeping the brakes from locking. Noise from the ABS pump motor and brake pedal pulsation may be observed during ABS braking; this is normal and should be no reason 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.

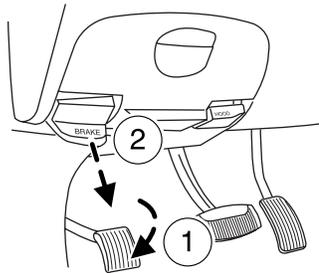


Even when the ABS is disabled, normal braking is still effective. (If your BRAKE warning lamp illuminates with the parking brake released, have your brake system serviced immediately.)



### Parking brake

To set the parking brake (1), press the parking brake pedal down until the pedal stops.



The BRAKE warning lamp will illuminate and will remain illuminated until the parking brake is released.

**BRAKE**  
(!)

To release, pull the lever (2).



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

### 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.

## Driving

### 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 (IF EQUIPPED)

#### Brake-shift interlock

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

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

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



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

3. Start the vehicle.

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



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



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



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

## Driving

### Understanding the gearshift positions of the 4-speed automatic transmission



This vehicle is equipped with an adaptive Transmission Shift Strategy. Adaptive Shift Strategy offers the optimal transmission operation and shift quality. When the vehicle's battery has been disconnected for any type of service or repair, the transmission will need to relearn the normal shift strategy parameters, much like having to reset your radio stations when your vehicle battery has been disconnected. The Adaptive Transmission Strategy allows the transmission to relearn these operating parameters. This learning process could take several transmission upshifts and downshifts; during this learning process, slightly firmer shifts may occur. After this learning process, normal shift feel and shift scheduling will resume.

#### **P (Park)**

This position locks the transmission and prevents the rear wheels from turning.

To put your vehicle in gear:

- Start the engine
- Depress the brake pedal
- Move the gearshift lever into the desired gear

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)**

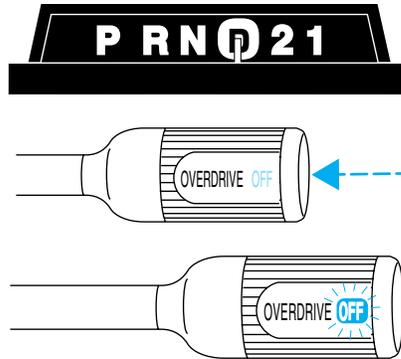
With the gearshift lever in N (Neutral), the vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

### **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.

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



### **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.

## Driving

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

### 1 (First)

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

### Forced downshifts

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

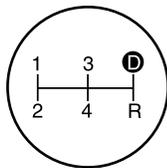
### ***If your vehicle gets stuck in mud or snow***

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

**Do not rock the vehicle if the engine is not at normal operating temperature or damage to the transmission may occur.**

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

### MANUAL TRANSMISSION OPERATION (IF EQUIPPED)



### Using the clutch

The manual transmission has a starter interlock that prevents cranking the engine unless the clutch pedal is fully depressed.

To start the vehicle:

1. Make sure the parking brake is fully set.
2. Press the clutch pedal to the floor, then put the gearshift lever in the neutral position.

## Driving

3. Start the engine, then press the brake pedal and release the parking brake.

4. Move the gearshift lever to the desired gear, then slowly release the clutch pedal while slowly pressing on the accelerator.

During each shift, the clutch pedal must be fully depressed to the floor. Failure to fully depress the clutch pedal to the floor may cause increased shift efforts, prematurely wear transmission components or damage the transmission. Make sure the floor mat is properly positioned so it doesn't interfere with the full extension of the clutch pedal.

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

### Recommended shift speeds

Upshift and downshift according to the following charts for your specific engine/drivetrain combination:

<b>Upshifts when accelerating (recommended for best fuel economy)</b>		
Shift from:	Transfer case position (if equipped)	
	2H or 4H	4L
1 - 2	15 mph (24 km/h)	9 mph (14 km/h)
2 - 3	25 mph (40 km/h)	12 mph (19 km/h)
3 - 4	37 mph (60 km/h)	15 mph (24 km/h)
4	45 mph (72 km/h)	18 mph (29 km/h)
- <b>D</b> (Overdrive)		

<b>Upshifts when cruising (recommended for best fuel economy)</b>		
Shift from:	Transfer case position (if equipped)	
	2H or 4H	4L
1 - 2	11 mph (18 km/h)	5 mph (8 km/h)
2 - 3	21 mph (34 km/h)	11 mph (18 km/h)
3 - 4	31 mph (50 km/h)	14 mph (23 km/h)
4	43 mph (69 km/h)	17 mph (27 km/h)
- <b>D</b> (Overdrive)		

## Driving

Maximum downshift speeds <sup>1</sup>		
Shift from:	Transfer case position (if equipped)	
	2H or 4H	4L
Ⓧ (Overdrive) - 4	55 mph (89 km/h)	21 mph (34 km/h)
4 - 3	45 mph (72 km/h)	17 mph (27 km/h)
3 - 2	35 mph (56 km/h)	13 mph (21 km/h)
2 - 1	20 mph (32 km/h)	7 mph (11 km/h)

<sup>1</sup>Downshift at lower speeds when driving on slippery surfaces.

### Reverse

1. Make sure that your vehicle is at a complete stop before you shift into R (Reverse). Failure to do so may damage the transmission.
2. Move the gearshift lever into the neutral position and wait at least three seconds before shifting into R (Reverse).
  - The gearshift lever can only be moved into R (Reverse) by moving it from left of 3 (Third) and 4 (Fourth) before shifting into R (Reverse). This is a lockout feature that protects the transmission from accidentally being shifted into R (Reverse) from 5 (Overdrive).

### Parking your vehicle

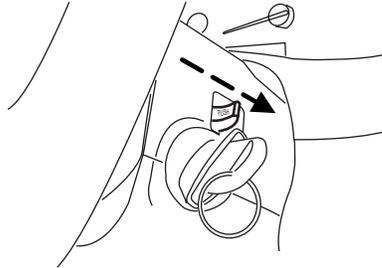
1. Apply the brake and shift into the neutral position.
2. Fully apply the parking brake, then shift into 1 (First).
3. Turn the ignition off.



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

### Removing the key

Turn the ignition off, push the release lever (located above the ignition), then turn the key toward you and remove the key.



### 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.

#### 4WD system indicator lights

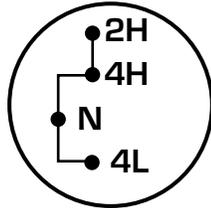
- **4X4** - Momentarily illuminates when the vehicle is started. Illuminates when 4WD Low or 4WD High is selected.
- **LOW RANGE** - Momentarily illuminates when the vehicle is started. Illuminates when 4WD Low is selected.

**4x4**

**LOW  
RANGE**

## Driving

### 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.

## Driving

4. Move the transfer case lever through N (Neutral) directly to the desired position. The LOW RANGE indicator will illuminate once the transfer case has engaged.

- If the transfer case **will not** engage into 4L (4WD Low), drive 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 into the 4L (4WD Low) positions and that the LOW RANGE light is illuminated.

### **Using the N (Neutral) position**

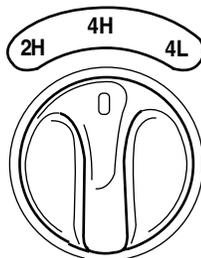
**The transfer case N (Neutral) position overrides the transmission and puts the vehicle in neutral regardless of transmission gearshift lever position. The vehicle can move forward or backward.**

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.

## Driving

**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 LOW RANGE light in the instrument cluster to turn **on** indicating the shift is complete.
  - If shifting out of 4L (4WD Low), wait for the LOW RANGE light in the instrument cluster 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.

## Driving

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.

## Driving



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

### ***If 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.

## Driving



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

- If the vehicle goes from one type of surface to another (i.e., from concrete to gravel) there will be a change in the way the vehicle responds to a maneuver (steering, acceleration or braking). Again, avoid these abrupt inputs.

### **Parking**

On some 4WD vehicles, when the transfer case is in the N (Neutral) position, the engine and transmission are disconnected from the rest of the driveline. Therefore, the vehicle is free to roll even if the automatic transmission is in P (Park) 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.



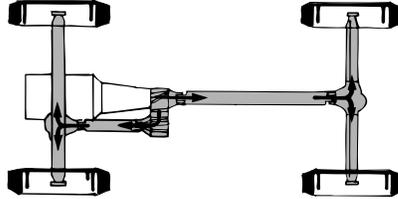
If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. See your dealer or a qualified service technician.

### **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.

## Driving

Power is supplied to all four wheels through a transfer case. On 4WD vehicles, the transfer case allows you to select 4WD when necessary. Information on transfer case operation and shifting procedures can be found in the *Driving* chapter. Information on transfer case maintenance can be found in the *Maintenance and Specifications* chapter. You should become thoroughly familiar with this information before you operate your vehicle.



### **Normal characteristics**

On some 4WD models, the initial shift from two-wheel drive to 4x4 while the vehicle is moving can cause some momentary clunk and ratcheting sounds. This is the front drivetrain coming up to speed and the automatic locking hubs engaging and is not cause for concern.

### **Sand**

When driving over sand, try to keep all four wheels on the most solid area of the trail. Avoid reducing the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid spinning the wheels.

If you must reduce the tire pressure for whatever reason in sand, make sure you re-inflate the tires as soon as possible.

Avoid excessive speed because vehicle momentum can work against you and cause the vehicle to become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

### **Mud and water**

If you must drive through high water, drive slowly. Traction or brake capability may be limited.

When driving through water, determine the depth; avoid water higher than the bottom of the hubs (if possible) and proceed slowly. If the ignition system gets wet, the vehicle may stall.



## Driving

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

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even 4WD vehicles can lose traction in slick mud. As when you are driving over sand, apply the accelerator slowly and avoid spinning your wheels. If the vehicle does slide, steer in the direction of the slide until you regain control of the vehicle.

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

### **Driving through deep water may damage the transmission.**

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.

## Driving

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.

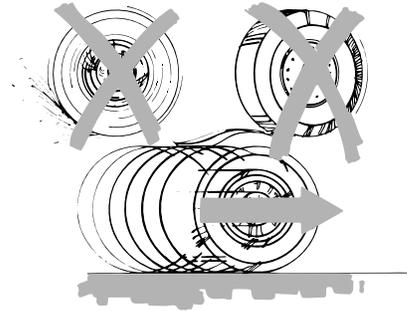
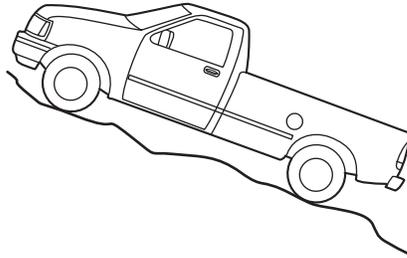
If your vehicle has anti-lock brakes, apply the brakes steadily. Do not "pump" the brakes.

### **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.



## Driving

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, avoid locking of the wheels. Use a "squeeze" technique, push on the brake pedal with a steadily increasing force which allows the wheels to brake yet continue to roll so that you may steer in the direction you want to travel. If you lock the wheels, release the brake pedal and repeat the squeeze technique. If your vehicle is equipped with a Four Wheel Anti-Lock Brake System (ABS), apply the brake steadily. Do not "pump" the brakes. Refer to the *Brakes* section of this chapter for additional information on the operation of the anti-lock brake system.

Never drive with chains on the front tires of 4WD vehicles without also putting them on the rear tires. This could cause the rear to slide and swing around during braking.

### **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.

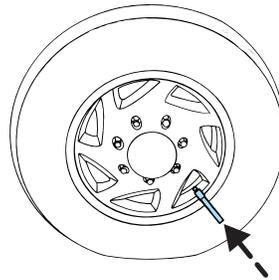
These "aftermarket lift kits" could adversely affect the vehicle's handling characteristics, which could lead to loss of vehicle control or rollover and serious injury.

## Driving

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).

## Driving

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.

## Driving



**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.

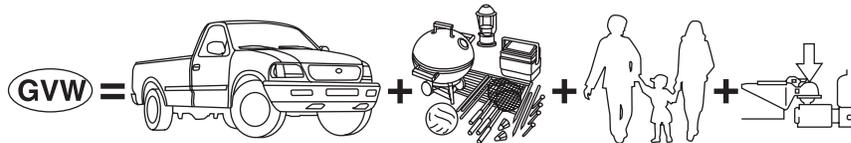
**GAWR (Gross Axle Weight Rating)** – is the maximum allowable weight that can be carried by a single axle (front or rear). **These numbers are shown on the Safety Compliance Certification Label located on the driver's door or door pillar. The total load on each axle must never exceed its GAWR.**



Exceeding the Safety Certification Label axle weight rating limits could result in substandard vehicle handling, 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.

## Driving



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

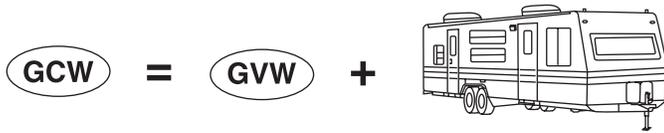
**GVWR (Gross Vehicle Weight Rating)** – is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). **The GVWR is shown on the Safety Compliance Certification Label located on the driver's door or door pillar. The GVW must never exceed the GVWR.**

Sample Safety Compliance Certification Label <small>(Refer to actual label on your vehicle)</small>			
Front GAWR	GVWR	Rear GAWR	
<b>MFD. BY FORD MOTOR CO. IN U.S.A.</b>			
DATE: 06/95	GVWR: 6250 LB/2834 KG		
FRONT GAWR: 3450 LB 1564KG	WITH 1713KG	REAR GAWR: 3777 LB	WITH TIRES
P265/75R15SL	TIRES P265/75R15SL		RIMS
15X7.5J	RIMS 15X7.5J		
AT 30 PSI COLD	AT 30 PSI COLD		
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.			
XXXXXXXXXXXX	VIN: 1FTEX14H0SKB 00000	F0018	
	TYPE: XXXXXXXXXXXXXXX	TC183	
EXT PNT: XXXXXXXXXX			DSO
WD	TYPE-GVW	BODY	TRANS
155		REM	E
			HB
			TAPE
			SPRINGS
			MM



Exceeding the Safety Certification Label axle weight rating limits could result in substandard vehicle handling, performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.

## Driving

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


**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.

## Driving



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, wheel size and rear axle ratio.
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 or III trailer provided the maximum trailer weight is less than or equal to the maximum trailer weight listed for your engine and rear axle ratio on the following charts.

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

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

**Exceeding the maximum GCWR could result in extensive damage to your vehicle and personal injury.**

## Driving



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.

Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>Regular Cab 4x2 w/automatic transmission</b>			
4.2L	3.31	9000 (4077)	4600 (2087)
4.2L	3.55	10000 (4536)	5700 (2585)
4.6L	3.08	10000 (4536)	2000 (907)
4.6L	3.31	10500 (4763)	6100 (2767)
4.6L	3.55	11500 (5216)	7100 (3221)
5.4L	3.73	13500 (6123)	8400 (3810)

Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs (kg)
<b>Regular Cab 4x2 w/manual transmission</b>			
4.2L	3.08	6500 (2944)	2000 (907)
4.2L	3.55	7800 (3538)	3500 (1588)
4.6L	3.08	6500 (2944)	2000 (907)
4.6L	3.31	7200 (3266)	2900 (1315)
4.6L	3.55	7800 (3538)	3500 (1588)

## Driving

Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>Regular Cab 4x4 w/automatic transmission</b>			
4.2L	3.55	10000 (4536)	5400 (2449)
4.6L	3.31	10500 (4763)	5800 (2631)
4.6L <sup>1</sup>	3.55	11500 (5216)	6800 (3084)
4.6L <sup>2</sup>	3.55	11000 (4990)	6300 (2858)
5.4L	3.73	13500 (6123)	8000 (3629)
<sup>1</sup> 16" tires			
<sup>2</sup> 17" tires			
Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>Regular Cab 4x4 w/manual transmission</b>			
4.2L	3.31	7200 (3265)	2500 (1134)
4.2L	3.55	7800 (3538)	3200 (1452)
4.6L	3.31	7200 (3265)	2500 (1134)
4.6L	3.55	7800 (3538)	3100 (1406)
Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>SuperCab 4x2 w/automatic transmission</b>			
4.2L	3.31	9000 (4077)	4500 (2041)
4.2L	3.55	10000 (4536)	5500 (2495)
4.6L	3.08	10000 (4536)	2000 (907)
4.6L	3.31	10500 (4763)	5900 (2676)
4.6L	3.55	11500 (5216)	6900 (3130)
5.4L	3.73	13500 (6123)	8200 (3719)

## Driving

Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>SuperCab 4x2 w/manual transmission</b>			
4.2L	3.08	6500 (2944)	2000 (907)
4.2L	3.55	7800 (3538)	3300 (1497)
4.6L	3.08	6500 (2944)	2000 (907)
4.6L	3.31	7200 (3266)	2600 (1179)
4.6L	3.55	7800 (3538)	3200 (1451)

Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>SuperCab 4x4 w/automatic transmission</b>			
4.6L	3.31	10500 (4763)	5500 (2495)
4.6L <sup>1</sup>	3.55	11500 (5216)	6500 (2948)
4.6L <sup>2</sup>	3.55	11000 (4990)	6000 (2722)
5.4L	3.73	13500 (6123)	7800 (3538)
<sup>1</sup> 16" tires			
<sup>2</sup> 17" tires			

Engine	Rear axle ratio	Maximum GCWR - lbs. (kg)	Maximum trailer weight - lbs. (kg)
<b>SuperCab 4x4 w/manual transmission</b>			
4.6L	3.31	7200 (3266)	2300 (1043)
4.6L	3.55	7800 (3538)	2900 (1315)

Trailer frontal area considerations:

- Not to exceed towing vehicle frontal area without Class III trailer towing package
- Not to exceed 60 square feet (5.52 square meters) with Class III 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  $\frac{1}{2}$ " (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.

## Driving

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.

## Driving

### **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**

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.

## Roadside Emergencies

### GETTING ROADSIDE ASSISTANCE

To fully assist you should you have a vehicle concern, Ford Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty. The service is available:

- 24-hours, seven days a week
- for the New Vehicle Limited Warranty period of three years or 36,000 miles (60,000 km), whichever occurs first on Ford and Mercury vehicles, and four years or 50,000 miles (80,000 km) on Lincoln vehicles.

Roadside assistance will cover:

- 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.

## Roadside Emergencies

Canadian customers who require roadside assistance, call 1-800-665-2006.

If you need to arrange roadside assistance for yourself, Ford Motor Company will reimburse a reasonable amount. To obtain reimbursement information, U.S. Ford or Mercury vehicles customers call 1-800-241-3673; Lincoln vehicle customers call 1-800-521-4140.

Canadian customers who need to obtain reimbursement information, call 1-800-665-2006.

### ROADSIDE COVERAGE BEYOND BASIC WARRANTY

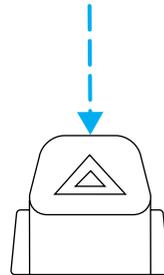
In the United States, you may purchase additional roadside assistance coverage beyond this period through the Ford Auto Club by contacting your Ford or Lincoln Mercury dealer.

Similarly in Canada, for uninterrupted Roadside Assistance coverage, you may purchase extended coverage prior to your Basic Warranty's Roadside Assistance expiring. For more information and enrollment, contact 1-877-294-2582 or visit our website at [www.ford.ca](http://www.ford.ca).

### HAZARD FLASHER

The hazard flasher is located on the steering column, just behind the steering wheel. The hazard flashers will operate when the ignition is in any position or if the key is not in the ignition.

Push in the flasher control and all front and rear direction signals will flash. Press the flasher control again to turn them off. Use it when your vehicle is disabled and is creating a safety hazard for other motorists.



**Note:** With extended use, the flasher may run down your battery.

### FUEL PUMP SHUT-OFF SWITCH

This device stops the electric fuel pump from sending fuel to the engine when your vehicle has had a substantial jolt.

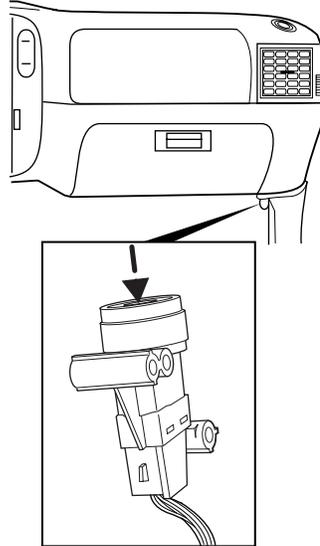
After an accident, if the engine cranks but does not start, this switch may have been activated.

## Roadside Emergencies

This switch is located in the front passenger's footwell, behind the kick panel access cover.

To reset the switch:

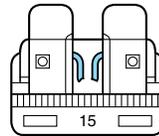
1. Turn the ignition OFF.
2. Check the fuel system for leaks.
3. If no leaks are apparent, reset the switch by pushing in on the reset button.
4. Turn the ignition ON.
5. Wait a few seconds and return the key to OFF.
6. Make another check for leaks.



## FUSES AND RELAYS

### Fuses

If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.



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

## Roadside Emergencies

### *Standard fuse amperage rating and color*

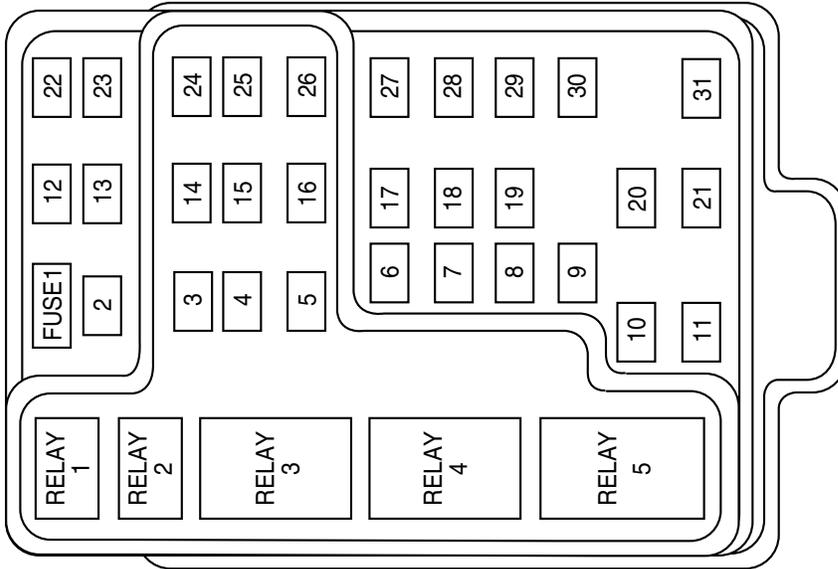
COLOR					
Fuse rating	Mini fuses	Standard fuses	Maxi fuses	Cartridge maxi fuses	Fuse link cartridge
2A	Grey	Grey	—	—	—
3A	Violet	Violet	—	—	—
4A	Pink	Pink	—	—	—
5A	Tan	Tan	—	—	—
7.5A	Brown	Brown	—	—	—
10A	Red	Red	—	—	—
15A	Blue	Blue	—	—	—
20A	Yellow	Yellow	Yellow	Blue	Blue
25A	Natural	Natural	—	—	—
30A	Green	Green	Green	Pink	Pink
40A	—	—	Orange	Green	Green
50A	—	—	Red	Red	Red
60A	—	—	Blue	—	Yellow
70A	—	—	Tan	—	Brown
80A	—	—	Natural	—	Black

### **Passenger compartment fuse panel**

The fuse panel is located below and to the left of the steering wheel by the brake pedal. Remove the panel cover to access the fuses.

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

## Roadside Emergencies



The fuses are coded as follows.

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
1	15A	Audio
2	5A	Powertrain Control Module (PCM), Cluster
3	20A	Cigar lighter, Data link connector
4	5A	Power mirror switch
5	15A	Speed control module, Reverse lamp, Climate mode switch, Daytime Running Lamps (DRL) relay, Digital Transmission Range (DTR) sensor
6	5A	Cluster, Brake shift interlock solenoid, GEM
7	—	Not used

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
8	5A	Radio, GEM
9	—	Not used
10	—	Not used
11	30A	Front washer pump relay, Wiper run/park relay, Wiper HI/LO relay, Windshield wiper motor
12	—	Not used
13	20A	Stop lamp switch (Lamps), Turn/Hazard flasher
14	15A	Battery saver relay, Interior lamp relay
15	5A	Stop lamp switch (speed control, brake shift interlock), GEM
16	20A	Headlamps (hi beams), Cluster (hi beam indicator)
17	—	Not used
18	5A	Instrument illumination (dimmer switch power)
19	—	Not used
20	5A	Audio, GEM, PCM, Transmission range sensor
21	15A	DTR sensor, Clutch switch, Starter relay, I/P fuse 20
22	10A	Air bag module, Passenger air bag deactivation module
23	10A	Trailer tow battery Charge relay, Turn/Hazard flasher, 4x4 solenoids, 4x4 relays, Overhead console, 4-Wheel Anti-lock Brake System (4WABS) module
24	10A	Function selector switch assembly
25	—	Not used

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Passenger Compartment Fuse Panel Description
26	10A	Right-hand low beam headlamp
27	5A	Foglamp relay and foglamp indicator, Main light switch (upstream)
28	10A	Left-hand low beam headlamp
29	5A	Autolamp module, Transmission overdrive control switch, Central security module, Beltminder
30	30A	Passive Anti-theft transceiver, Cluster, Ignition coils, PCM relay, Coil on plugs, Radio noise capacitor, ECC diode
31	—	Not used
Relay 1	—	Interior lamp relay
Relay 2	—	Battery saver relay
Relay 3	—	Not used
Relay 4	—	One-touch down window relay
Relay 5	—	Accessory delay relay

### Power distribution box

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

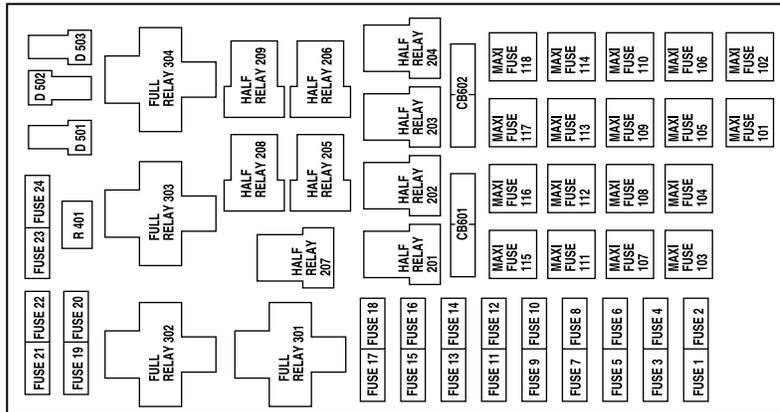


Always disconnect the battery before servicing high current fuses.

### Always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs

If the battery has been disconnected and reconnected, refer to the *Battery* section of the *Maintenance and Specifications* chapter.

## Roadside Emergencies



The high-current fuses are coded as follows.

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
1	20A *	Power point
2	30A*	Powertrain Control Module (PCM)
3	30A*	Main light switch, Headlamp relay, Multifunction switch
4	—	Not used
5	20A*	Trailer tow back-up/park lamps
6	15A*	Main light switch, Park lamp relay
7	20A*	Horn
8	15A*	Power door locks, Central Security Module (CSM), Lock relays
9	15A*	Daytime Running Lamps (DRL), Fog lamps
10	20A*	Fuel pump
11	20A*	Alternator field
12	—	Not used

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
13	15A*	A/C clutch
14	—	Not used
15	—	Not used
16	15A*	Bi-fuel injector module, fuel selector switch and alternative fuel injectors (Bi-fuel vehicles only)
17	2A*	Speed control
18	15A*	PCM, Fuel injectors, Fuel pump relay, Mass air flow sensor
19	10A*	Trailer/Camper adapter (right stop/turn lamp)
20	10A*	Trailer/Camper adapter (left stop/turn lamp)
21	—	Not used
22	—	Not used
23	15A*	HEGO sensor, Automatic transmission
24	—	Not used
101	30A**	Trailer tow battery charge
102	50/20A**	Four-wheel Anti-lock Brake System (4WABS) module/Rear-wheel Anti-lock Brake System (RABS) module, Ignition switch
103	50A**	Central junction box
104	30A**	4x4 shift motor & clutch
105	40A**	Climate control front blower
106	20A**	Intercooler pump (supercharged engine only)
107	—	Not used
108	30A**	Trailer tow electric brake

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
109	—	Not used
110	30A**	Accessory delay relay
111	40A**	Ignition switch battery feed (start and run circuits)
112	30A**	Drivers power seat, Adjustable pedal switch
113	40A**	Ignition switch battery feed (run and accessory circuits)
114	—	Not used
115	—	Not used
116	—	Not used
117	—	Not used
118	—	Not used
201	—	Trailer tow park lamp relay
202	—	Front wiper run/park relay
203	—	Trailer tow backup lamp relay
204	—	A/C clutch relay
205	—	Horn relay
206	—	Fog lamp relay
207	—	Front washer pump relay
208	—	Intercooler pump relay (supercharged engine only)
209	—	Front wiper HI/LO relay
301	—	Fuel pump relay
302	—	Trailer tow battery charge relay
303	—	Not used
304	—	PCM relay
305	—	Fuel pump HI/LO relay (supercharged engine only)
306	—	Inertia switch relay (supercharged engine only)
401	—	Not used

## Roadside Emergencies

Fuse/Relay Location	Fuse Amp Rating	Power Distribution Box Description
501	—	PCM diode
502	—	A/C compressor diode
503	—	Not used
601	Circuit breaker	Power windows
602	—	Not used

\*Mini fuses \*\*Maxi fuses

### CHANGING THE TIRES

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



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

## Roadside Emergencies

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.

### Spare tire information

Your vehicle is equipped with a spare tire that may be used as a spare or a regular tire. The spare tire or wheel may not match the road tire or wheel, and is not equipped with wheel trim. The wheel trim from the wheel/ tire may be used on the spare if the wheels match.



If your vehicle is equipped with 4WD, a spare tire of a different size than the road tires should not be used. Use of such a tire could result in damage to driveline components and an increased risk of loss of vehicle control, vehicle rollover, personal injury or death.

## Roadside Emergencies

### Location of the spare tire and tools

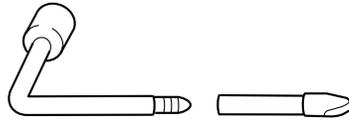
The spare tire and tools for your vehicle are stowed in the following locations:

Tool	Location
Spare tire	Under the vehicle, just forward of the rear bumper
Jack, lug nut wrench	Under the seat on the passenger side
Jack handle	On top of the radiator support at the front of the engine compartment
Key, spare tire lock	In the glove box

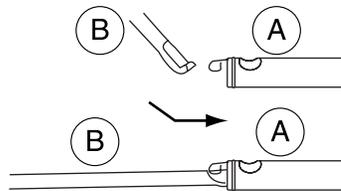
### Removing the spare tire

1. If equipped with a two piece lug wrench, assemble the lug wrench as shown in the illustration.

- To assemble, screw the parts together. To disassemble, unscrew.



2. Attach the spare tire lock key (A) to the jack handle (B).

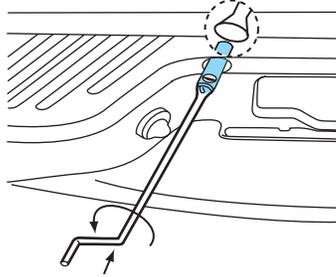


## Roadside Emergencies

3. Fully insert the jack handle through the bumper hole and into the guide tube. The key and lock will engage with a slight push and counterclockwise turn. Some resistance will be felt when turning the jack handle assembly.

4. Turn the handle counterclockwise until tire is lowered to the ground, the tire can be slid rearward and the cable is slightly slack.

5. Remove the retainer from the spare tire.



### Tire change procedure

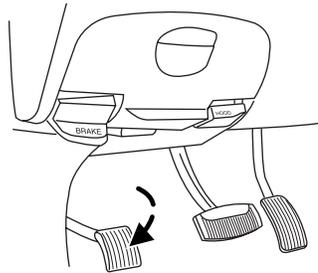
 To help prevent the vehicle from moving when you change a tire, be sure the parking brake is set, then block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.

 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.

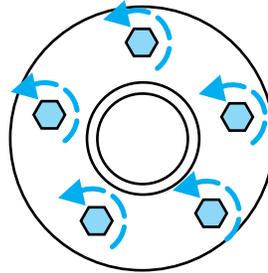
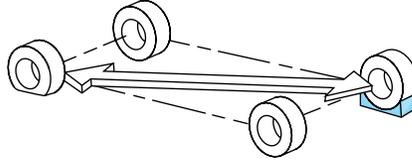
1. Park on a level surface, activate hazard flashers and set the parking brake.

2. Place gearshift lever in P (Park) (automatic transmission) or in the reverse gear (manual transmission) and turn engine OFF.



## Roadside Emergencies

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.

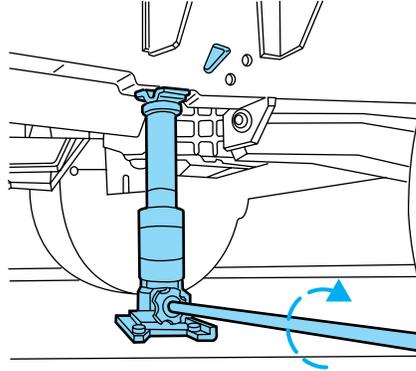


7. Position the jack according to the following guides and turn the jack handle clockwise until the wheel is completely off the ground.

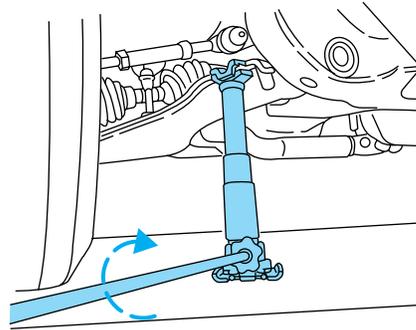
 When one of the rear wheels is off the ground, the transmission alone will not prevent the vehicle from moving or slipping off the jack, even if the transmission is in P (Park) or in the reverse gear (manual transmission). To prevent the vehicle from moving when you change the tire, be sure that the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

## Roadside Emergencies

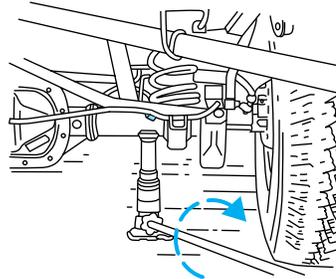
- Front (4x2)



- Front (4x4)



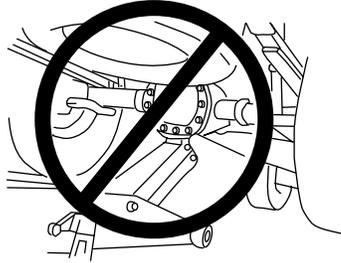
- Rear



## Roadside Emergencies



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.

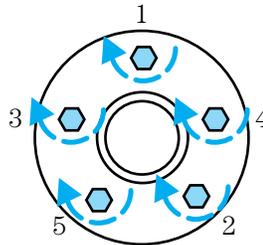


- **Never use the front or rear differential as a jacking point.**

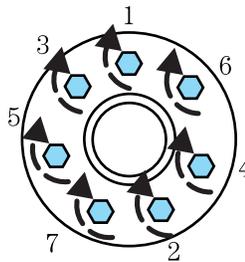
8. Remove the lug nuts with the lug wrench.
9. Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall the lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.
10. Lower the wheel by turning the 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):

- Five 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.

## Roadside Emergencies

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.).

## Roadside Emergencies

Bolt size	Wheel lug nut torque*	
	lb.ft.	N•m
F-150 (five lug nut wheel): M14 x 2.0	150	200
F-150 with Heavy Payload Package (seven lug nut wheel): M12 x 1.75	100	135

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

 When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the 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.**

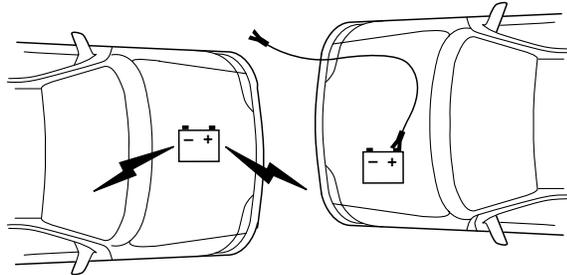
## Roadside Emergencies

### Preparing your vehicle

When the battery is disconnected or a new battery is installed, the transmission must relearn its shift strategy. As a result, the transmission may have firm and/or soft shifts. This operation is considered normal and will not affect function or durability of the transmission. Over time, the adaptive learning process will fully update transmission operation.

1. **Use only a 12-volt supply to start your vehicle.**
2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.
3. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles **do not** touch. Set the parking brake on both vehicles and stay clear of the engine cooling fan and other moving parts.
4. Check all battery terminals and remove any excessive corrosion before you attach the battery cables. Ensure that vent caps are tight and level.
5. Turn the heater fan on in both vehicles to protect any electrical surges. Turn all other accessories off.

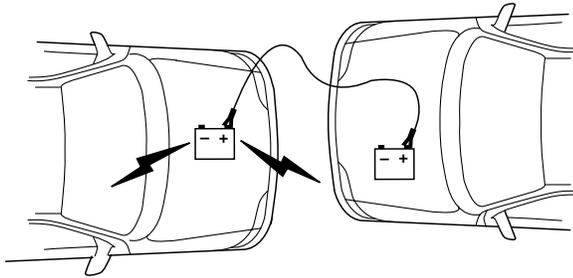
### Connecting the jumper cables



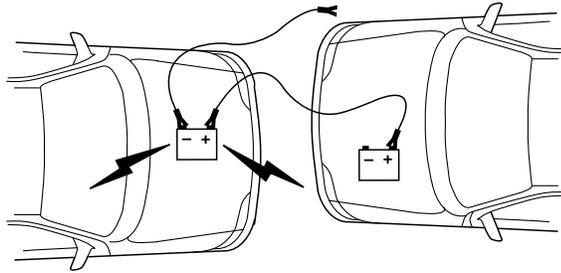
1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

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

## Roadside Emergencies

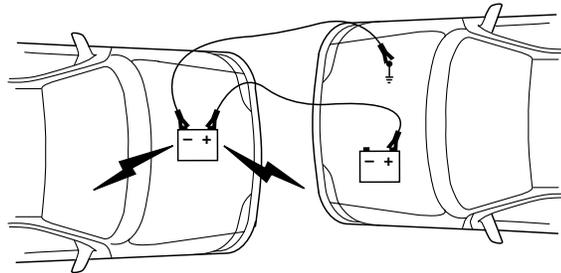


2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.



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

## Roadside Emergencies



4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the carburetor/fuel injection system. **Do not** use fuel lines, engine rocker covers or the intake manifold as *grounding* points.



Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

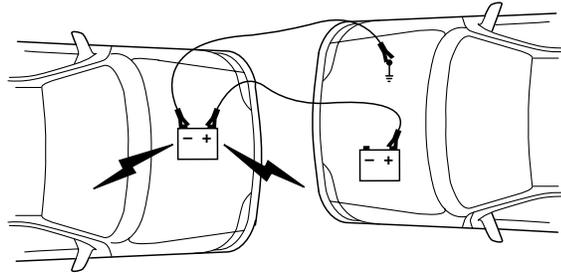
5. Ensure that the cables are clear of fan blades, belts, moving parts of both engines, or any fuel delivery system parts.

### Jump starting

1. Start the engine of the booster vehicle and run the engine at moderately increased speed.
2. Start the engine of the disabled vehicle.
3. Once the disabled vehicle has been started, run both engines for an additional three minutes before disconnecting the jumper cables.

## Roadside Emergencies

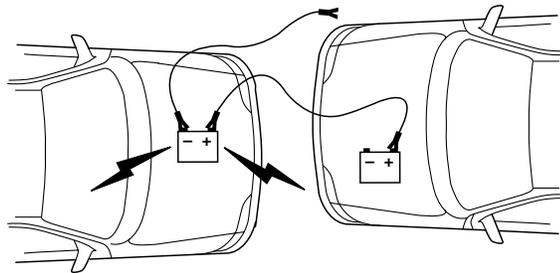
### Removing the jumper cables



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

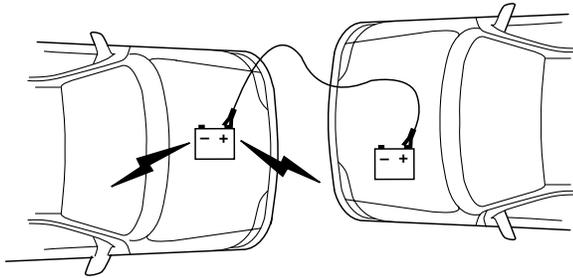
1. Remove the jumper cable from the *ground* metal surface.

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

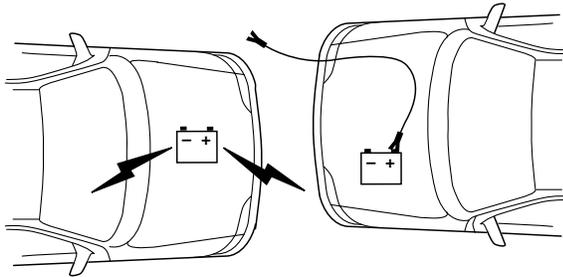


2. Remove the jumper cable on the negative (-) connection of the booster vehicle's battery.

## Roadside Emergencies



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

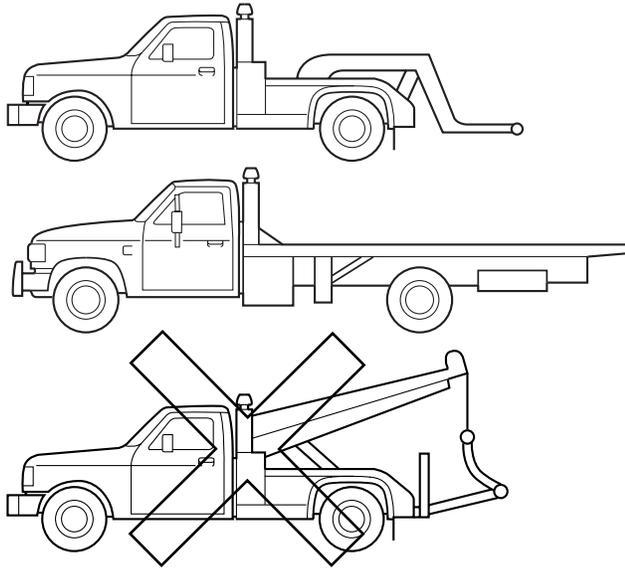


4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

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

## Roadside Emergencies

### WRECKER TOWING



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

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.

If equipped with air suspension, the air suspension control must be turned off.

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.**

## Customer Assistance

### 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](http://www.customersaskford.com)

In Canada:

Customer Relationship Centre

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## Customer Assistance

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.

## Customer Assistance

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](http://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.

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## Customer Assistance

### 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.

## Customer Assistance

### ***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.

## Customer Assistance

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

## Customer Assistance

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.

## Customer Assistance

### ORDERING ADDITIONAL OWNER'S LITERATURE

To order the publications in this portfolio, contact Helm, Incorporated at:

HELM, INCORPORATED  
P.O. Box 07150  
Detroit, Michigan 48207

Or call:

**For a free publication catalog, order toll free: 1-800-782-4356**

Monday-Friday 8:00 a.m. - 6:00 p.m. EST

Helm, Incorporated can also be reached by their website:  
[www.helminc.com](http://www.helminc.com).

*(Items in this catalog may be purchased by credit card, check or money order.)*

### Obtaining a French owner's guide

French Owner's Guides can be obtained from your 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

## Customer Assistance

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.

### 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.

## Cleaning

### 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:

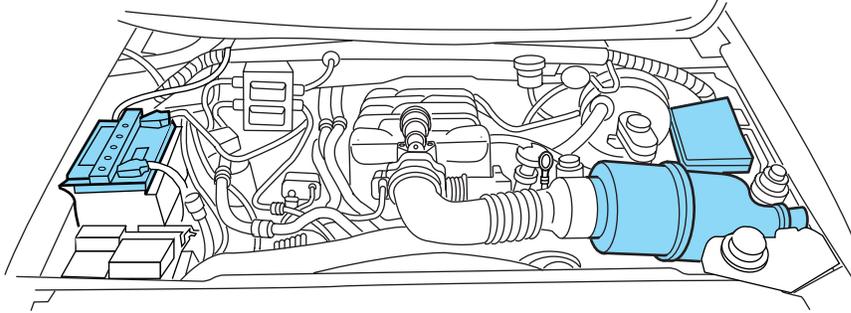
- Clean weekly with Motorcraft Wheel and Tire Cleaner (ZC-37-A), which is available from your dealer. Heavy dirt and brake dust accumulation may require agitation with a sponge. Rinse thoroughly with a strong stream of water.
- Never apply any cleaning chemical to hot or warm wheel rims or covers.
- 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

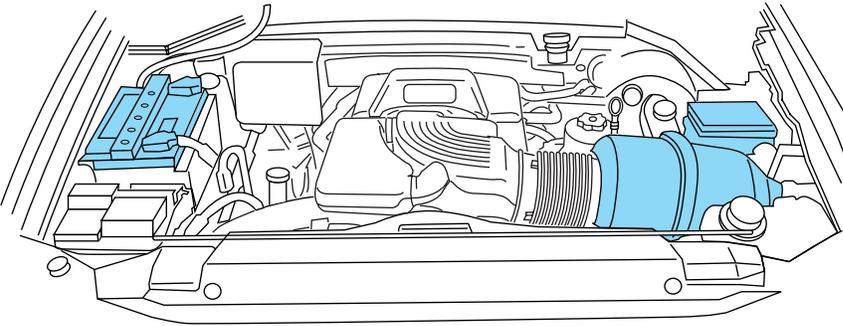
Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal. When washing:

- 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.

## Cleaning



- **4.2L V6 engine**



- **4.6L V8 and 5.4L V8 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).

## Cleaning

### 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.

### 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.

### 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).

## Cleaning

- 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.

### TONNEAU COVER (IF EQUIPPED)

Wash with Motorcraft Triple Clean (ZC-13), which is available from your dealer.

- Do not use any silicone based cleaner or conditioner.
- Do not use stiff bristle brushes or abrasive materials or cleaners.
- Hot waxes applied by commercial car washes can affect the cleanability of vinyl material.
- Using high water pressure or wand-type car washes against the vinyl cover and tonneau frame rails may cause water leaks and possible seal damage.

## Cleaning

### **FORD, LINCOLN AND MERCURY CAR CARE PRODUCTS**

Your Ford, Lincoln or Mercury dealer has many quality products available to clean your vehicle and protect its finishes. These quality products have been specifically engineered to fulfill your automotive needs; they are custom designed to complement the style and appearance of your vehicle. Each product is made from high quality materials that meet or exceed rigid specifications. For best results, use the following 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)
- Ford Premium Car Wash Concentrate (F2SZ-19523-WC)
- 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)

## Maintenance and Specifications

### SERVICE RECOMMENDATIONS

To help you service your vehicle:

- We highlight do-it-yourself items in the engine compartment for easy location.
- We provide a scheduled maintenance guide which makes tracking routine service easy.

If your vehicle requires professional service, your dealership can provide the necessary parts and service. Check your *Warranty Guide/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.

## Maintenance and Specifications

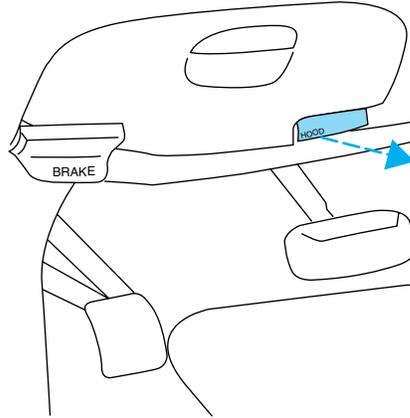
### Working with the engine on

- 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

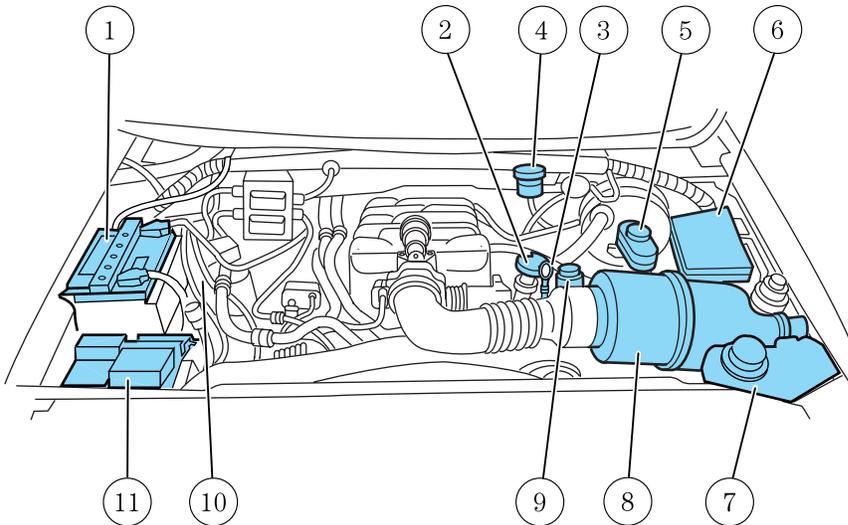
1. Inside the vehicle, pull the hood release handle located under the bottom of the instrument panel.
2. Go to the front of the vehicle and release the auxiliary latch that is located under the front center of the hood.
3. Lift the hood until the lift cylinders hold it open.



## Maintenance and Specifications

### IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

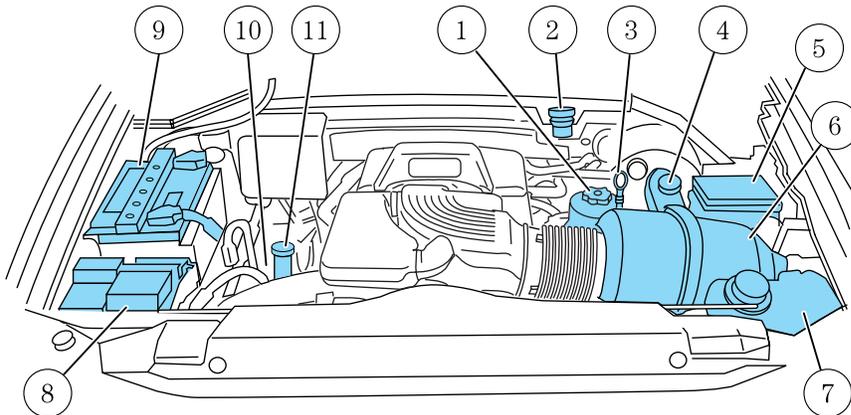
#### 4.2L V6 engine



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

## Maintenance and Specifications

### 4.6L V8/5.4L V8 engines



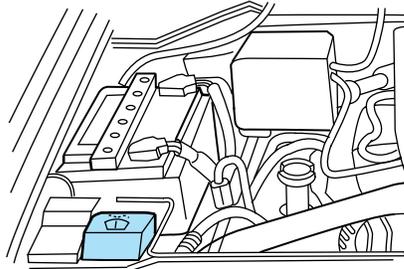
1. Power steering fluid reservoir
2. Clutch fluid reservoir (manual transmission)
3. Engine oil dipstick
4. Brake fluid reservoir
5. Power distribution box
6. Air filter assembly
7. Engine coolant reservoir
8. Windshield washer fluid reservoir
9. Battery
10. Transmission fluid dipstick (automatic transmission)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

## Maintenance and Specifications

### WINDSHIELD WASHER FLUID

Add fluid to fill the reservoir if the level is low. In very cold weather, do not fill the reservoir completely.

Only use a washer fluid that meets Ford specification WSB-M8B16-A2. 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

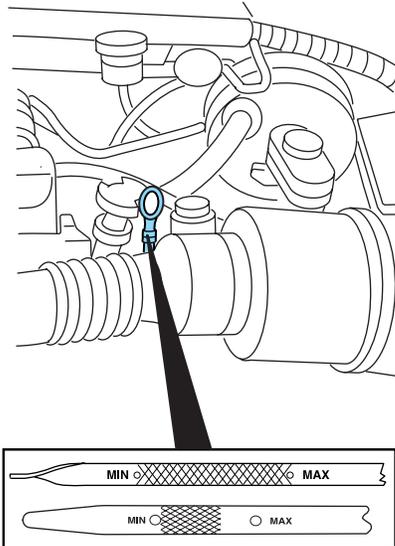
#### Checking the engine oil

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

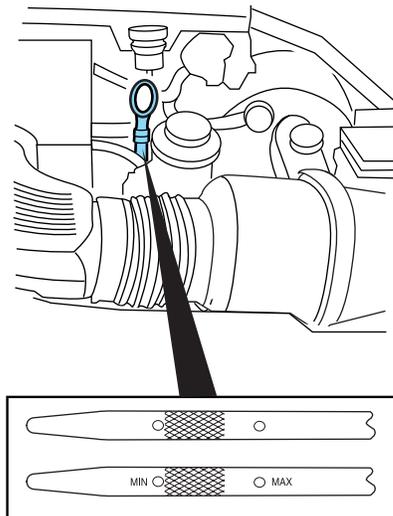
1. Make sure the vehicle is on level ground.
2. Turn the engine off and wait a few minutes for the oil to drain into the oil pan.
3. Set the parking brake and ensure the gearshift is securely latched in P (Park) (automatic transmission) or 1 (First) (manual transmission).
4. Open the hood. Protect yourself from engine heat.

## Maintenance and Specifications

- 4.2L engine

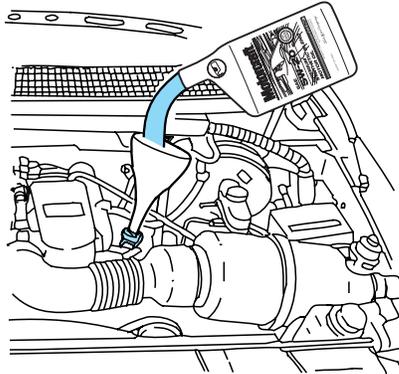


- 4.6L/5.4L engine



## Maintenance and Specifications

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.**

## Maintenance and Specifications

### 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.

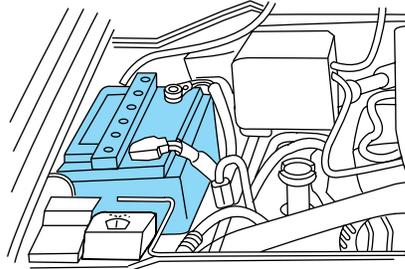
Ford production and aftermarket (Motorcraft) oil filters are designed for added engine protection and long life. If a replacement oil filter is used that does not meet Ford material and design specifications, start-up engine noises or knock may be experienced.

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

## Maintenance and Specifications

### BATTERY

Your vehicle is equipped with a Motorcraft maintenance-free battery which normally does not require additional water during its life of service.



**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.

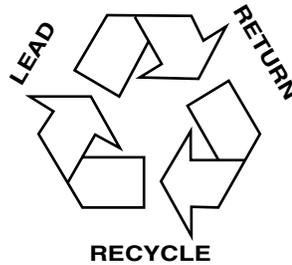
Because your vehicle's engine is also electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance.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

## Maintenance and Specifications

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

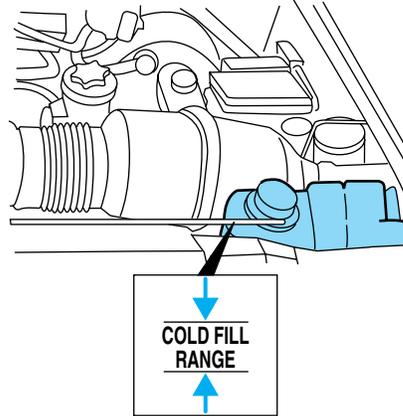
The concentration and level of engine coolant should be checked at the mileage intervals listed in the *Scheduled Maintenance Guide*. The coolant concentration should be maintained at 50/50 coolant and distilled water, which equates to a freeze point of  $-34^{\circ}\text{F}$  ( $-36^{\circ}\text{C}$ ). Coolant concentration testing is possible with a hydrometer or antifreeze tester (such as the Rotunda Battery and Antifreeze Tester, 014-R1060). The level of coolant should be maintained at the "FULL COLD" level or within the "COLD FILL RANGE" in the coolant reservoir. If the level falls below, add coolant per the instructions in the *Adding engine coolant* section.

Your vehicle was factory-filled with a 50/50 engine coolant and water concentration. If the concentration of coolant falls below 40% or above 60%, the engine parts could become damaged or not work properly. **A 50–50 mixture of coolant and water provides the following:**

- **Freeze protection down to  $-34^{\circ}\text{F}$  ( $-36^{\circ}\text{C}$ ).**
- **Boiling protection up to  $265^{\circ}\text{F}$  ( $129^{\circ}\text{C}$ ).**
- **Protection against rust and other forms of corrosion.**
- **Enables calibrated gauges to work properly.**

## Maintenance and Specifications

When the engine is cold, check the level of the engine coolant in the reservoir.



- The engine coolant should be at the “FULL COLD” level or within the “COLD FILL RANGE” as listed on the engine coolant reservoir (depending upon application).
- Refer to 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.

## Maintenance and Specifications



Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

- **Add Motorcraft Premium Gold Engine Coolant (yellow-colored), VC-7-A (U.S., except CA 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.

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

## Maintenance and Specifications



To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.

1. Before you begin, turn the engine off and let it cool.
2. When the engine is cool, wrap a thick cloth around the coolant pressure relief cap on the coolant reservoir (a translucent plastic bottle). Slowly turn cap counterclockwise (left) until pressure begins to release.
3. Step back while the pressure releases.
4. When you are sure that all the pressure has been released, use the cloth to turn it counterclockwise and remove the cap.
5. Fill the coolant reservoir slowly with the proper coolant mixture (see above), to within the “COLD FILL RANGE” or the “FULL COLD” level on the reservoir. If you removed the radiator cap in an overflow system, fill the radiator until the coolant is visible and radiator is almost full.
6. Replace the cap. Turn until tightly installed. (Cap must be tightly installed to prevent coolant loss.)

After any coolant has been added, check the coolant concentration, refer to *Checking engine coolant*. If the concentration is not 50/50 (protection to  $-34^{\circ}\text{F}/-36^{\circ}\text{C}$ ), drain some coolant and adjust the concentration. It may take several drains and additions to obtain a 50/50 coolant concentration.

Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add enough 50/50 concentration of engine coolant and distilled water to bring the liquid level to the proper level.

If you have to add more than 1.0 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.

## Maintenance and Specifications

### 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  $-36^{\circ}\text{C}$  [ $-34^{\circ}\text{F}$ ):

- **It may be necessary to increase the coolant concentration above 50%.**
- **NEVER increase the coolant concentration above 60%.**
- **Increased engine coolant concentrations above 60% will decrease the overheat protection characteristics of the engine coolant and may cause engine damage.**
- **Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate freeze protection at the temperatures in which you drive in the winter months.**

If you drive in extremely hot climates:

- **It is still necessary to maintain the coolant concentration above 40%.**
- **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)

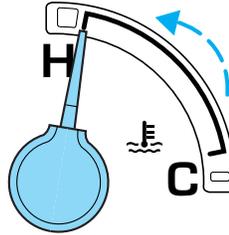
If the engine coolant supply is depleted, this feature allows the vehicle to be driven temporarily before incremental component damage is incurred. The "fail-safe" distance depends on ambient temperatures, vehicle load and terrain.

## Maintenance and Specifications

### How fail-safe cooling works

If the engine begins to overheat:

- The engine coolant temperature gauge will move to the red (hot) area.
- The  and the  symbol will illuminate.
- The *Service engine soon* indicator light will illuminate.



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

When this occurs the vehicle will still operate. However:

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

Continued operation will increase the engine temperature:

- 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.

## Maintenance and Specifications

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.



## Maintenance and Specifications

- 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.

## Maintenance and Specifications

### Fuel Filler Cap

Your fuel tank filler cap has an indexed design with a 1/8 turn on/off feature.

When fueling your vehicle:

1. Turn the engine off.
2. Carefully turn the filler cap counterclockwise 1/8 of a turn until it stops.
3. Pull to remove the cap from the fuel filler pipe.
4. To install the cap, align the tabs on the cap with the notches on the filler pipe.
5. Turn the filler cap clockwise 1/8 of a turn until it stops.

If the “Check Fuel Cap”  indicator comes on or if “Service Engine Soon/Check Engine” indicator comes on and stays on when you start the engine, the fuel filler cap may not be properly installed. Turn off the engine, remove the fuel filler cap, 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

## Maintenance and Specifications

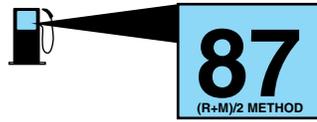
contains more metallic additives than regular fuel. We recommend using regular grade fuel. In Canada, many fuels contain metallic additives, but fuels free of such additives may be available; check with your local fuel dealer.

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.

## Maintenance and Specifications

### Cleaner air

Ford endorses the use of reformulated “cleaner-burning” gasolines to improve air quality.

### Running out of fuel

Avoid running out of fuel because this situation may have an adverse affect on powertrain components.

If you have run out of fuel:

- You may need to cycle the ignition from OFF to ON several times after refueling, to allow the fuel system to pump the fuel from the tank to the engine.
- Your *Service engine soon* indicator may come on. For more information on the *Service engine soon* indicator, refer to the *Instrument cluster* chapter.

### Fuel Filter

For fuel filter replacement, see your dealer or a qualified service technician. Refer to the scheduled maintenance guide for the appropriate intervals for changing the fuel filter.

**Replace the fuel filter with an authorized Motorcraft part. The customer warranty may be void for any damage to the fuel system if an authorized Motorcraft fuel filter is not used.**

## ESSENTIALS OF GOOD FUEL ECONOMY

### Measuring techniques

Your best source of information about actual fuel economy is you, the driver. You must gather information as accurately and consistently as possible. Fuel expense, frequency of 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.

## Maintenance and Specifications

The advertised capacity is the amount of the indicated capacity and the empty reserve combined. Indicated capacity is the difference in the amount of fuel in a full tank and a tank when the fuel gauge indicates empty. Empty reserve is the small amount of fuel remaining in the fuel tank after the fuel gauge indicates empty.

**The amount of usable fuel in the empty reserve varies and should not be relied upon to increase driving range. When refueling your vehicle after the fuel gauge indicates empty, you might not be able to refuel the full amount of the advertised capacity of the fuel tank due to the empty reserve still present in the tank.**

For consistent results when filling the fuel tank:

- Turn the engine/ignition switch to the off position prior to refueling, an error in the reading will result if the engine is left running.
- Use the same filling rate setting (low — medium — high) each time the tank is filled.
- Allow no more than 2 automatic click-offs when filling.
- Always use fuel with the recommended octane rating.
- Use a known quality gasoline, preferably a national brand.
- Use the same side of the same pump and have the vehicle facing the same direction each time you fill up.
- Have the vehicle loading and distribution the same every time.

Your results will be most accurate if your filling method is consistent.

### Calculating fuel economy

1. Fill the fuel tank completely and record the initial odometer reading (in kilometers or miles).
2. Each time you fill the tank, record the amount of fuel added (in liters or gallons).
3. After at least three to five tank fill-ups, fill the fuel tank and record the current odometer reading.
4. Subtract your initial odometer reading from the current odometer reading.
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.**

## Maintenance and Specifications

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.

## Maintenance and Specifications

- 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.

## Maintenance and Specifications

### EMISSION CONTROL SYSTEM

Your vehicle is equipped with various emission control components and a catalytic converter which will enable your vehicle to comply with applicable exhaust emission standards. To make sure that the catalytic converter and other emission control components continue to work properly:

- Use only the specified fuel listed.
- Avoid running out of fuel.
- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in your *Scheduled Maintenance Guide* performed according to the specified schedule.

The scheduled maintenance items listed in the *Scheduled Maintenance Guide* are essential to the life and performance of your vehicle and to its emissions system.

If other than Ford, Motorcraft or Ford-authorized parts are used for maintenance replacements or for service of components affecting emission control, such non-Ford parts should be equivalent to genuine Ford Motor Company parts in performance and durability.



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

Illumination of the *Service engine soon* light, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power, could indicate that the emission control system is not working properly.



Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal identifies engine displacement and gives some tune up specifications. Please consult your *Warranty Guide* for complete emission warranty information.

## Maintenance and Specifications

### 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:

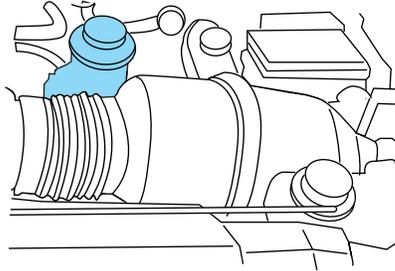
- First, at least 10 minutes of driving on an expressway or highway.
- Next, at least 20 minutes driving in stop-and-go, city-type traffic with at least four idle periods.

## Maintenance and Specifications

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.

## Maintenance and Specifications

### **BRAKE FLUID RESERVOIR**

The fluid level will drop slowly as the brakes wear, and will rise when the brake components are replaced. Fluid levels below the “MAX” line that do not trigger the brake system warning lamp are within the normal operating range, there is no need to add fluid. If the fluid levels are outside of the normal operating range, the performance of your brake system could be compromised, seek service from your dealer immediately.



### **CLUTCH FLUID (IF EQUIPPED)**

Check the fluid level. Refer to the scheduled maintenance guide for the service interval schedules.

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

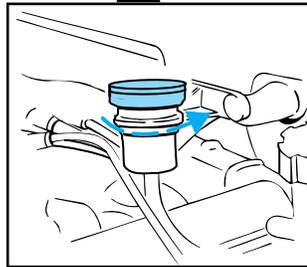
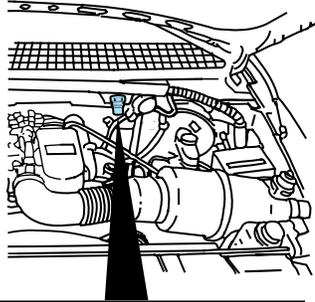
Use only a DOT 3 brake fluid designed to meet Ford specification ESA-M6C25-A. Refer to *Lubricant Specifications* in this chapter.



Brake fluid is toxic. If brake fluid contacts the eyes, flush eyes with running water for 15 minutes. Seek medical attention if irritation persists. If taken internally, drink water and induce vomiting. Seek medical attention immediately.

## Maintenance and Specifications

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



### 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.

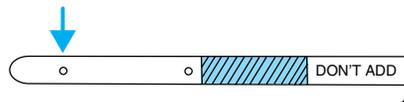
1. Drive the vehicle 30 km (20 miles) or until it reaches normal operating temperature.
2. Park the vehicle on a level surface and engage the parking brake.
3. With the parking brake engaged and your foot on the brake pedal, start the engine and move the gearshift lever through all of the gear ranges.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

## Maintenance and Specifications

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).



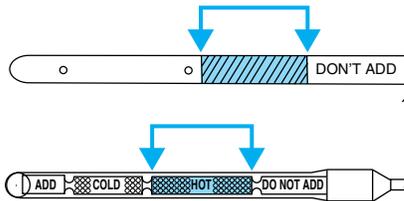
### Correct fluid level

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.



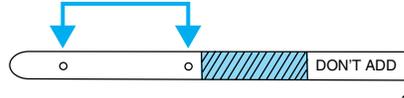
You can check the fluid without driving if the ambient temperature is above 10°C (50°F). However, if fluid is added at this time, an overfill condition could result when the vehicle reaches normal operating temperature.

The transmission fluid should be in this range if at normal operating temperature (66°C-77°C [150°F-170°F]).



## Maintenance and Specifications

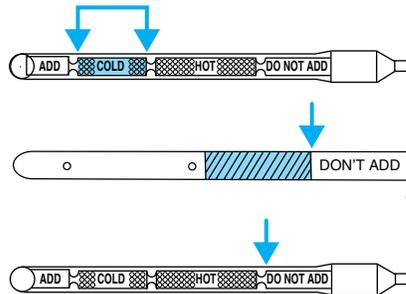
The transmission fluid should be in this range if at ambient temperature (10°C-35°C [50°F-95°F]).



### 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.

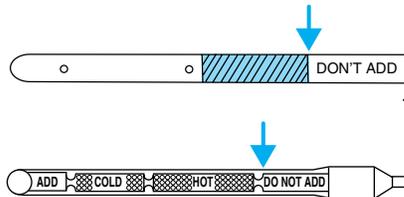
**Use of a non-approved automatic transmission fluid may cause internal transmission component damage.**

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.**

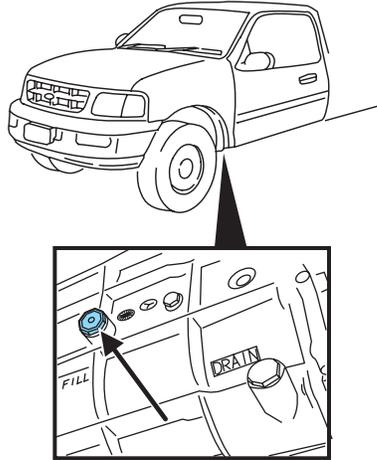
Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.



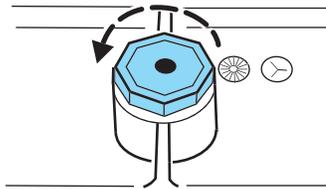
## Maintenance and Specifications

### Checking and adding manual transmission fluid (if equipped)

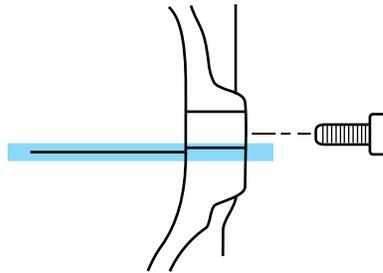
1. Clean the filler plug.



2. Remove the filler plug and inspect the fluid level.



3. Fluid level should be at bottom of the opening.
4. Add enough fluid through the filler opening so that the fluid level is at the bottom of the opening.
5. Install and tighten the fill plug securely.

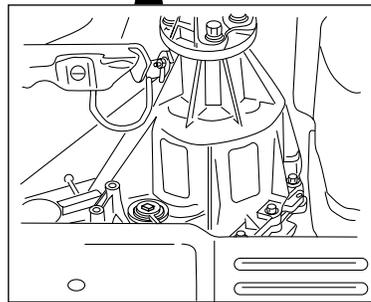
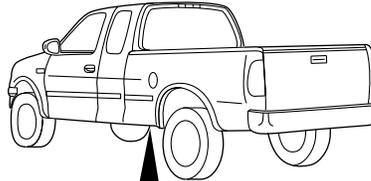


Use only fluid that meets Ford specifications. Refer to *Lubricant specifications* in this chapter.

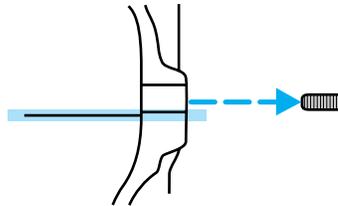
## Maintenance and Specifications

### 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.

## Maintenance and Specifications

### AIR FILTER MAINTENANCE

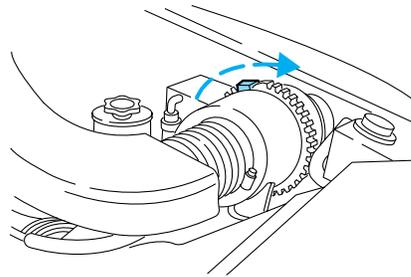
Refer to the scheduled maintenance guide for the appropriate intervals for changing the air filter element.

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.

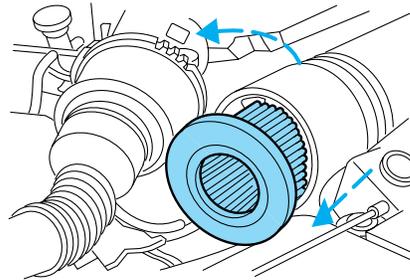
### Changing the air filter element

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.



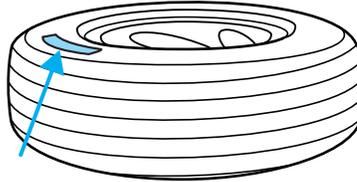
4. Install a new air filter element.

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.

## Maintenance and Specifications

### 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.

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## Maintenance and Specifications



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.

## Maintenance and Specifications

- **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

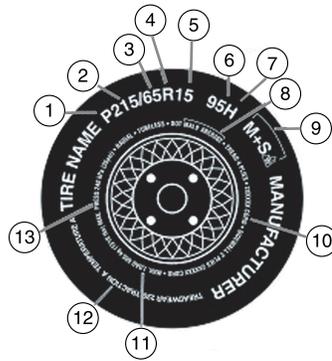
Federal law requires tire manufacturer's to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

#### 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).



## Maintenance and Specifications

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.

## Maintenance and Specifications

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 for 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.

## Maintenance and Specifications

**13. Maximum Permissible Inflation Pressure:** Tire manufacturer's maximum permissible pressure and/or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure which can be found on either the tire label or certification label which is located 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

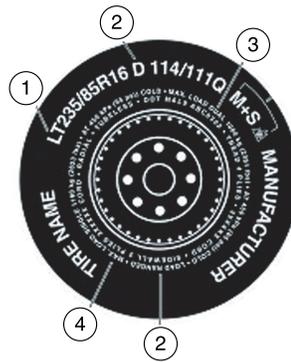
"LT" type tires have some additional information beyond those of "P" type tires; these differences are described below:

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.



## Maintenance and Specifications

### 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.

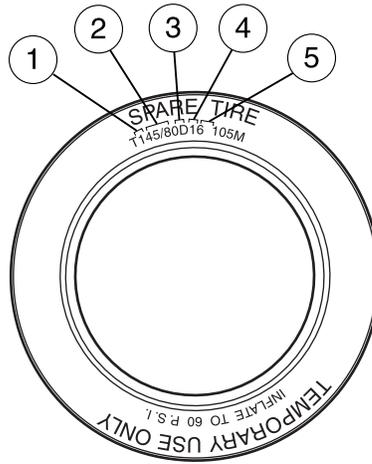
2. **145:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

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.

## Maintenance and Specifications

### 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.

## Maintenance and Specifications

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 require alignment of all four wheels.

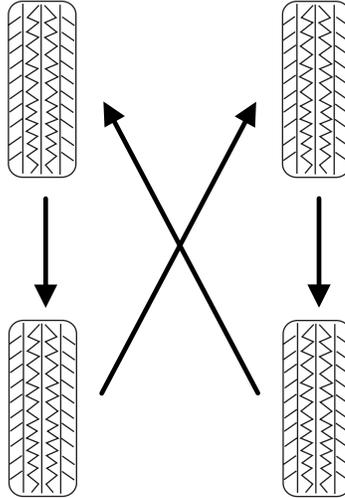
The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

### Tire rotation

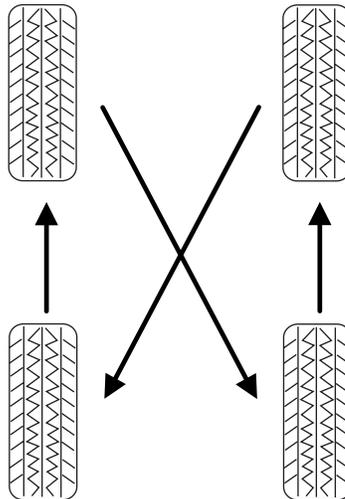
Rotating your tires at the recommended interval (as indicated in the *Scheduled Maintenance Guide* that comes with your vehicle) will help your tires wear more evenly, providing better tire performance and longer tire life. Unless otherwise specified, rotate the tires approximately every 5,000 miles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

## Maintenance and Specifications

- 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)



## Maintenance and Specifications

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.

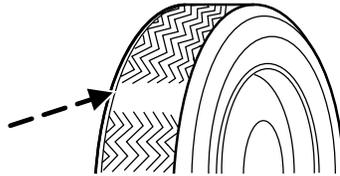
**Note:** After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.

### 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

## Maintenance and Specifications

- 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 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.

## Maintenance and Specifications



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.

## Maintenance and Specifications

- 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	4.2L V6 engine	4.6L V8 engine	5.4L V8 engine
Air filter element	FA-1632	FA-1632	FA-1632
Fuel filter	FG-986B	FG-986B	FG-986B
Oil filter	FL-400-S	FL-820-S	FL-820-S
PCV valve	<sup>1</sup>		
Battery (standard)	BXT-59	BXT-59	BXT-59
Battery (heavy duty)	BXT-65-650	BXT-65-650	BXT-65-650
Spark plugs-platinum	<sup>2</sup>		

<sup>1</sup>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.**

<sup>2</sup>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.

## Maintenance and Specifications

### 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 <sup>1</sup>	Motorcraft Premium Gold Engine Coolant (yellow-colored)	4.2L V6 engine	19.0L (20.1 quarts)
		4.6L V8 engine	19.5L (20.6 quarts)
		5.4L V8 engine	22.6L (23.9 quarts)
Engine oil (includes filter change) <sup>7</sup>	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	All	5.7L (6.0 quarts)
Fuel tank	N/A	4x4 Reg. Cab with short wheelbase	92.7L (24.5 gallons)
		4x2 Regular Cab, SuperCab with short wheelbase	94.6L (25.0 gallons)
		All long Wheelbase	113.6L (30.0 gallons)
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) <sup>2</sup>

## Maintenance and Specifications

Fluid	Ford Part Name	Application	Capacity
Transmission fluid (4R70/75 E-W) <sup>3</sup>	Motorcraft MERCON® ATF	5-speed manual	3.5L (3.75 quarts) <sup>4</sup>
		Automatic - 4R100 (4x2)	16.1L (17.0 quarts) <sup>4</sup>
		Automatic - 4R100 (4x4)	16.7L (17.7 quarts) <sup>4</sup>
	Motorcraft MERCON®V ATF	Automatic-4R70/75 E-W	13.2L (13.9 quarts) <sup>4</sup>
Front axle	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant	4x4 vehicles	2.0L (3.7 pints)
Rear axle <sup>5</sup>	Motorcraft SAE 75W-90 Fuel Efficient High Performance Synthetic Rear Axle Lubricant	8.8/9.75 inch axle	2.6L (5.5 pints) <sup>6</sup>
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	All	4.0L (4.25 quarts)

<sup>1</sup>Add the coolant type originally equipped in your vehicle.

<sup>2</sup>Service refill capacity is determined by filling the transfer case to the bottom of the filler hole with the vehicle on a level surface.

<sup>3</sup>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

## Maintenance and Specifications

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.**

<sup>4</sup>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.

<sup>5</sup>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.

<sup>6</sup>Service refill capacity is determined by filling the axle to 6-14 mm (1/4-9/16 inch) below the bottom of the filler hole with the vehicle on a level surface.

Add 118 ml (4 oz.) of FEHP Friction Modifier XL-7 or equivalent, for complete fill of 8.8 inch and 9.75 inch Traction-Lok axles.

<sup>7</sup>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.

## Maintenance and Specifications

### 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 <sup>1</sup>	XY-75W90-QFEHP	—
Brake fluid and clutch 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 (U.S., except CA and OR), VC-7-B (CA and OR only)	WSS-M97B51-A1
Engine oil	Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada)	XO-5W20-QSP (US) CXO-5W20-LSP12 (Canada)	WSS-M2C153-H and API Certification Mark

## Maintenance and Specifications

Item	Ford part name or equivalent	Ford part number	Ford specification
Hinges, latches, striker plates, fuel filler door hinge and seat tracks.	Multi-Purpose Grease	XG-4 or XL-5	ESR-M1C159-A or ESB-M1C93-B
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) and transmission fluid (manual)	Motorcraft MERCON® ATF	XT-2-QDX	MERCON®
Automatic transmission (4R100) <sup>2</sup>	Motorcraft MERCON® AT	XT-2-QDX	MERCON®
Automatic transmission (4R70/75 E-W) <sup>2</sup>	Motorcraft MERCON®V ATF	XT-5-QM	MERCON®V
Windshield washer fluid	Motorcraft Premium Windshield Washer Concentrate	ZC-32-A	WSB-M8B16-A2

## Maintenance and Specifications

<sup>1</sup>Add 118 ml (4 oz) of FEHP Friction Modifier XL-7 or equivalent, for complete refill of Traction-Lok axles.

<sup>2</sup>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	4.2L V6 engine	4.6L V8 engine	5.4L V8 engine
Cubic inches	256	281	330
Required fuel	87 octane	87 octane	87 octane
Firing order	1-4-2-5-3-6	1-3-7-2-6-5-4-8	1-3-7-2-6-5-4-8
Ignition system	EDIS	Coil on plug	Coil on plug
Compression ratio	9.3:1	9.37:1	9.0:1

## Maintenance and Specifications

### VEHICLE DIMENSIONS

#### Styleside

Dimension	Body Style			
	Regular Cab 4x2	Regular Cab 4x4	Super Cab 4x2	Super Cab 4x4
(1) Overall length	5256 mm (206.9 in) (SWB)	5264 mm (207.2 in) (SWB)	5728 mm (225.5 in) (SWB)	5735 mm (225.8 in) (SWB)
	5729 mm (225.5 in) (LWB)	5736 mm (225.8 in) (LWB)	6201 mm (244.1 in) (LWB)	6208 mm (244.4 in) (LWB)
(2) Overall width	1989mm (78.3 in) <sup>1</sup>	2019 mm (79.5 in) <sup>1</sup>	1989 mm (78.3 in) <sup>1</sup>	2019 mm (79.5 in) <sup>1</sup>
(3) Overall height	1846 mm (72.7 in) (SWB)	1915 mm (75.4 in) (SWB)	1849 mm (72.8 in) (SWB)	1918 mm (75.5 in) (SWB)
	1838 mm (72.4 in) (LWB)	1907 mm (75.1 in) (LWB)	1841 mm (72.5 in) (LWB)	1907 mm (75.1 in) (LWB)
(4) Wheel base	3045 mm (119.9 in) (SWB)	3053 mm (120.2 in) (SWB)	3518 mm (138.5 in) (SWB)	3526 mm (138.8 in) (SWB)
	3518 mm (138.5 in) (LWB)	3526 mm (138.8 in) (LWB)	3990 mm (157.1 in) (LWB)	3998 mm (157.4 in) (LWB)
(5) Track front/rear	1661 mm (65.4 in)	1661 mm (65.4 in)	1661 mm (65.4 in)	1661 mm (65.4 in)
	1661 mm (65.4 in)	1661 mm (65.4 in)	1661 mm (65.4 in)	1661 mm (65.4 in)

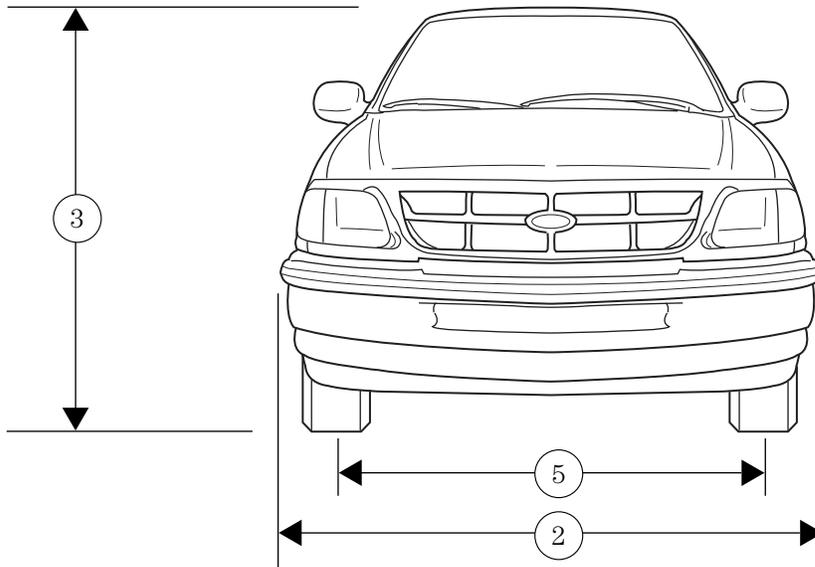
<sup>1</sup> Vehicle width, including mirrors: 2279 mm (89.7 in)

## Maintenance and Specifications

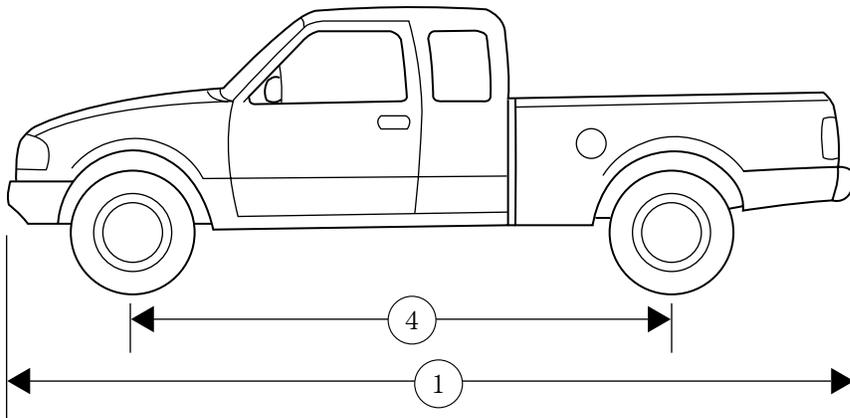
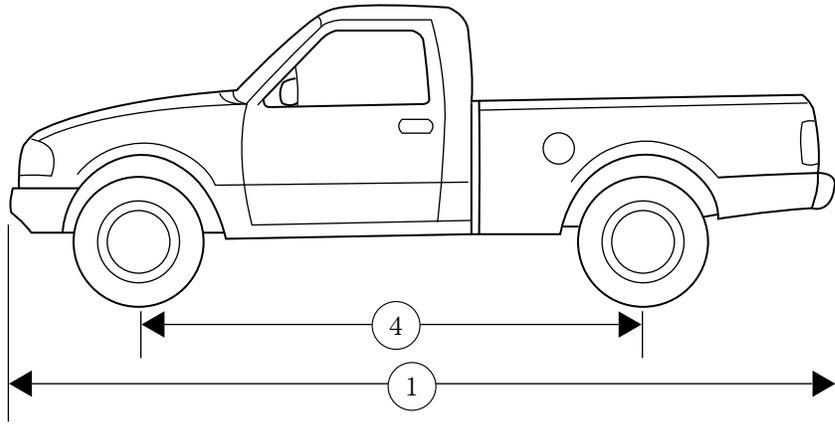
### Flareside

Dimension	Body Style			
	Regular Cab 4x2	Regular Cab 4x4	Super Cab 4x2	Super Cab 4x4
(1) Overall length	5255 mm (206.9 in)	5263 mm (207.2 in)	5728 mm (225.5 in)	5735 mm (225.8 in)
(2) Overall width	2014 mm (79.3 in) <sup>1</sup>	2030 mm (79.9 in) <sup>1</sup>	2014 mm (79.3 in) <sup>1</sup>	2030 mm (79.9 in) <sup>1</sup>
(3) Overall height	1846 mm (72.7 in)	1915 mm (75.4 in)	1849 mm (72.8 in)	1918 mm (75.5 in)
(4) Wheel base	3046 mm (119.9 in)	3053 mm (120.2 in)	3518 mm (138.5 in)	3526 mm (138.8 in)
(5) Track front/rear	1661 mm (65.4 in)	1661 mm (65.4 in)	1661 mm (65.4 in)	1661 mm (65.4 in)

<sup>1</sup> Vehicle width, including mirrors: 2279 mm (89.7 in)



## Maintenance and Specifications



## Maintenance and Specifications

### IDENTIFYING YOUR VEHICLE

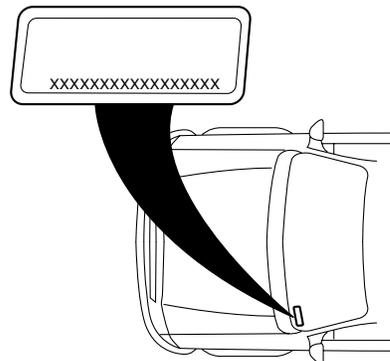
#### Certification label

The National Highway Traffic Safety Administration Regulations require that a Certification label be affixed to a vehicle and prescribe where the Certification label may be located. The Certification label is located on the structure by the trailing edge of the driver's door or the edge of the driver's door.

MFD. BY FORD MOTOR CO. IN U.S.A.			
DATE: XX/XX	GVWR: XXXXXLB/ XXXXXKG		
FRONT GAWR: XXXXL	REAR GAWR: XXXXLB		
XXXXKG	WITH	XXXXKG	WITH
XXXX/XXXXXXXX	TIRES	XXXX/XXXXXXXX	TIRES
XXXX.XX	RIMS	XXXX.XX	RIMS
AT XXX kPa/XX	PSI COLD	AT XXX kPa/XX	PSI COLD
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.			
VIN: XXXXXXXXXXXXXXXXX	XXXXX	XXXXX	XXXXX
TYPE: XXX			
			
EXT PNT: XX	RC: XX	DSO:	
WB ' BRK ' INT TR ' TP/PS ' R ' AXLE ' TR SPR ' XXXXX			
XXX X XX X XX X XX XXX			
XXXXXXXXXXXXX UTC V2USA-1520472-AA			

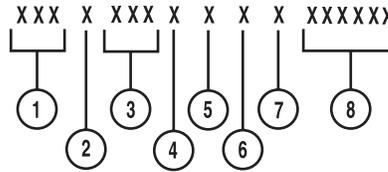
#### Vehicle identification number (VIN)

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.)



## Maintenance and Specifications

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



### Engine number

The engine number (the last eight numbers of the vehicle identification number) is stamped on the engine block and transmission.

### Transmission/Transaxle code designations

MFD. BY FORD MOTOR CO. IN U.S.A.									
DATE: XX/XX		GVWR: XXXXXLB/ XXXXXKG							
FRONT GAWR: XXXXL				REAR GAWR: XXXXLB					
XXXXKG		WITH		XXXXKG		WITH			
XXXX/XXXXXXXX		TIRES		XXXX/XXXXXXXX		TIRES			
XXXX.XX		RIMS		XXXX.XX		RIMS			
AT XXX kPa/XX		PSI COLD		AT XXX kPa/XX		PSI COLD			
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.									
VIN: XXXXXXXXXXXXXXXXXXXX								XXXXX	
TYPE: XXX								XXXXX	
EXT PNT: XX		RC: XX		DSO: _____					
WB	BRK	INT	TR	TP/PS	R	AXLE	TR	SPR	XXXXX
XXX	X	XX		X	XX	X	XX	XXX	XXX
XXXXXXXXXXXXX UTC									
V2USA-1520472-AA									

You can find a transmission/transaxle code on the vehicle certification label. The following table tells you which transmission or transaxle each code represents.

## Maintenance and Specifications

### Truck application:

Code	Transmission Description
	<i>Manual transmission</i>
M	Manual 5-speed (AKK)
C	Manual 5-speed overdrive (Close ratio)
W	Manual 5-speed overdrive (Dana ZF)
G	Manual 6-speed ZF
	<i>Automatic transmission</i>
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)
	<i>Electric</i>
H	One speed electric
D	Automatic 5-speed overdrive (5R44E)
R	Automatic 5-speed overdrive (5R55S)

### Passenger car application:

Code	Transmission/Transaxle Description
	<i>Front wheel drive manual transaxle</i>
R	5-speed overdrive (MTX75)
W	5-speed overdrive (M5)
	<i>Front wheel drive automatic transaxle</i>
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)
	<i>Rear wheel drive manual transaxle</i>
5	5-speed (Mazda M5)
	<i>Rear wheel drive automatic transmission</i>
U	4-speed overdrive (4R70W)
A	5-speed overdrive (5R55N)

## Accessories

### **GENUINE FORD ACCESSORIES FOR YOUR VEHICLE**

A wide selection of Genuine Ford Accessories are available for your vehicle through your local authorized Ford or Ford of Canada dealer. These quality accessories have been specifically engineered to fulfill your automotive needs; they are custom designed to complement the style and aerodynamic appearance of your vehicle. In addition, each accessory is made from high quality materials and meets or exceeds Ford's rigorous engineering and safety specifications. Ford Motor Company will repair or replace any properly dealer-installed Genuine Ford Accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessory. The accessory will be warranted for whichever provides you the greatest benefit:

- 12 months or 12,000 miles (20,000 km) (whichever occurs first), or
- the remainder of your new vehicle limited warranty.

This means that Genuine Ford Accessories purchased along with your new vehicle and installed by the 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](http://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

240

## 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

## Accessories

### Peace of mind

Airbag anti-theft locks

First aid and 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.

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