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### **CALIFORNIA Proposition 65 Warning**

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

#### **CONGRATULATIONS**

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

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

• In the United States: www.ford.com

• In Canada: www.ford.ca

• In Australia: www.ford.com.au

• In Mexico: www.ford.com.mx

Additional owner information is given in separate publications.

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

Remember to pass on the 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 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 1,600 km (1,000 miles) of new vehicle operation. Vary your speed to allow parts to adjust themselves to other parts.

Do not add friction modifier compounds or special break-in oils during the first few thousand kilometers (miles) 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 7.3L 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.

#### Special instructions

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

Please read the section Supplemental Restraint System (SRS) in the Seating and safety restraints chapter. Failure to follow the specific warnings and instructions could result in personal injury.

Front seat mounted rear facing child or infant seats should **NEVER** be used in front of a passenger side air bag unless the air bag can be and is turned OFF.

### **Data Recording**

Computers in your vehicle are capable of recording detailed data potentially including but not limited to information such as:

• the use of restraint systems including seat belts by the driver and passengers,

- information about the performance of various systems and modules in the vehicle, and
- information related to engine, throttle, steering, brake or other system status.

Any of this information could potentially include information regarding how the driver operates the vehicle, potentially including but not limited to information regarding vehicle speed, brake or accelerator application, or steering input. This information may be stored during regular operation or in a crash or near crash event.

This stored information may be read out and used by:

- Ford Motor Company.
- service and repair facilities.
- law enforcement or government agencies.
- others who may assert a right or obtain your consent to know such information.

#### Notice to owners of Cobra vehicles

Before you drive your vehicle, be sure to read the "SVT Cobra Owner's Guide 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 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 Guide for all other required information and warnings.

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

#### **Vehicle Symbol Glossary**

Safety Alert



See Owner's Guide



Fasten Safety Belt



Air Bag-Front



Air Bag-Side



Child Seat



Child Seat Installation Warning



Child Seat Lower Anchor



Child Seat Tether Anchor



Brake System



Anti-Lock Brake System



Brake Fluid -Non-Petroleum Based



Traction Control



 $Advance Trac^{\tiny \textcircled{\tiny 1D}}$ 



Master Lighting Switch



Hazard Warning Flasher



Fog Lamps-Front



Fuse Compartment



Fuel Pump Reset



Windshield Wash/Wipe



Windshield Defrost/Demist



Rear Window Defrost/Demist



Power Windows Front/Rear



Power Window Lockout



### **Vehicle Symbol Glossary**

Child Safety Door Lock/Unlock



Interior Luggage Compartment Release Symbol



Panic Alarm



Engine Oil



Engine Coolant



Engine Coolant Temperature



Do Not Open When Hot



Battery



Avoid Smoking, Flames, or Sparks



Battery Acid



Explosive Gas



Fan Warning



Power Steering Fluid



Maintain Correct Fluid Level



Emission System



Engine Air Filter



Passenger Compartment Air Filter



Jack



Check fuel cap



Low tire warning



#### **WARNING LIGHTS AND CHIMES**

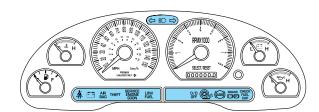
Base instrument cluster



### Optional instrument cluster



Mach 1 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.

10

2003 Mustang (mus) Owners Guide (post-2002-fmt) USA English (fus)

### Service engine soon:

The Service engine soon indicator light illuminates when the



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

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

### Check fuel cap:

Illuminates when the fuel cap may not be properly installed.

CHECK FUEL CAP

Continued driving with this light on may cause the Service engine soon light to come on. Refer to Fuel filler cap in the Maintenance and Specifications chapter.

Brake system warning light: To

BRAKE
(!)(P)

confirm the brake system warning light is

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

brake indicates low brake fluid level and the brake system should be inspected immediately by your servicing dealership.

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

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

Air bag readiness: If this light fails to BAG 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.

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

Overdrive off: 0/D Illuminates when the **OFF** 

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.

Traction Control® active: Illuminates when the Traction Control® system is active. If the light



remains on, have the system serviced immediately.

Anti-theft system: **THEFT** Flashes when the

Securilock® Passive

are turned on.

Anti-theft System has been activated.

Turn signal:  $\langle \neg \, c \rangle$ 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

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

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

### **GAUGES**

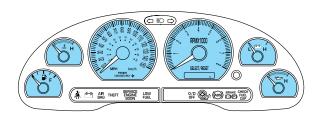
Base instrument cluster gauges



### Optional instrument cluster gauges



Mach 1 instrument cluster gauges



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

• Base instrument cluster



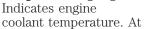
• Optional instrument cluster



• Mach 1 instrument cluster



# Engine coolant temperature gauge:





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 kilometers (miles) of the vehicle.



### Trip odometer:

Registers the kilometers (miles) of individual journeys. Press and release the reset button until a "T" appears in the display.



Press and hold the button for three seconds to reset.

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

• Base instrument cluster



• Optional instrument cluster



• Mach 1 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, have the vehicle's electrical system checked as soon as possible.

Engine oil pressure gauge: Indicates engine oil pressure. The needle should stay

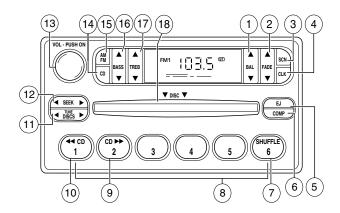


in the normal operating range (between "L" and "H"). If the needle falls below the normal range, stop the vehicle, turn off the engine and check the engine oil level. Add oil if needed. If the oil level is correct, have your vehicle checked at your dealership or by a qualified technician.

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.

### AM/FM STEREO / SINGLE CD RADIO

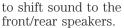


1. Balance:

Press  $\triangle$  /  $\nabla$  to shift sound to the left/right speakers.



2. **Fade:** Press  $\triangle$  /  $\bigvee$  to shift sound to the





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



CLK

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.

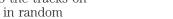


#### 6. **COMP**

(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



SHUFFLE 6

COMP

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 selection is reached.



10. **← CD:**Press and hold until desired selection is reached.



11. **Tune / Discs**: In TUNE DISCS radio mode, press to move up or down the

frequency band in individual increments. 12. Seek: Press and SEEK >



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.



16. **Bass:** 

Press  $\triangle$  /  $\bigvee$  to increase/decrease the bass output.

17. **Treble:** 

Press  $\triangle$  /  $\bigvee$  to increase/decrease the treble output.

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



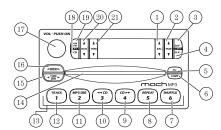








### MACH® MP3 AUDIO SYSTEM



1. Balance:

Press  $\triangle$  /  $\nabla$  to shift sound to the left/right speakers.

2. **Fade:** Press  $\triangle$  /  $\bigvee$  to shift sound to the rear/front speakers.





3. **Scan:** Press to hear a brief sampling of all listenable radio



stations, CD or MP3 tracks. Press again to stop.

4. **CLK:** To set the clock press and hold the CLK control for the following functions:



- To set the hour, press SEEK  $\triangleleft$  /  $\triangleright$  control to decrease or increase to the hours.
- To set the minutes, press TUNE DIR  $\triangleleft$  /  $\triangleright$  to decrease or increase the minutes.

Release CLK to save the clock settings. Press CLK again to return the display to radio mode.

5. **EJ (Eject):** Press to stop and eject a disc. If a disc is ejected and not removed, the player v



not removed, the player will automatically reload the disc and return to radio mode.

#### 6. **COMP**



(Compression): In CD

and MP3 mode, press

to adjust the soft and loud sounds together for a more consistent listening level. The compression icon (c) will illuminate in the display.

7. **Shuffle:** Press to engage random play on the CD or MP3 disc.



SHF then ON will briefly appear in the display. Press SEEK to select another random track on the disc. Press shuffle again to disable.

8. **Repeat:** Press to repeat the current track.



9. **CD** (Fast



forward): Press and hold until the desired

selection point is reached. This function is not

enabled in MP3 mode.

10. **< CD** (Rewind):



Press and hold until the desired selection

point is reached. This function is not enabled in MP3 mode.

#### 11. **MP3 directory:**



Allows you to listen to songs in MP3 flat file mode and MP3 directory mode.

- Insert a MP3 disc to engage in the flat file mode. The MP3 icon will be displayed.
- While in the MP3 flat file mode, press the MP3 DIR control to enter into the directory mode. Press the TUNE DIR control to change directories. The MP3 icon and the DIR icon will be displayed.

12. **Track:** Press to locate a specific MP3



track or directory.

TRAC will appear in the display. Rotate volume control to advance or reverse through the tracks or directories. The MP3 icon will flash in the display while the MACH® track function is enabled.

- 13. **Memory presets:** To set a station: Select frequency band AM/FM; tune to a station, press and hold a preset button until sound returns.
- 14. **CD door:** Insert a CD with the label side up.



15. Tune/Directory:



Press TUNE





the radio frequency down/up or change the MP3 directories.

16. **Seek:** Press and



release SEEK ◀ / ▶

for previous/next

strong station selection or CD and MP3 tracks.

#### 17. Power/volume:

Press to turn ON/OFF; turn to increase or decrease volume levels.



18. **CD:** Press CD to play a CD or MP3 disc. When the MP3 disc is



loaded, CD and LOAD will appear on the display. The display will briefly show the total number of tracks on the disc as TXXX (XXX=number of tracks).

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



20. **Bass:** 

Press  $\triangle$  /  $\bigvee$  to decrease/increase the bass output.



21. **Treble:** 

Press  $\blacktriangle$  /  $\blacktriangledown$  to decrease/increase the treble output.



#### **MP3 FUNCTIONS**

Your audio system is equipped with MP3 capability which allows you to listen to songs in MP3 flat file mode and MP3 directory mode.

To engage MP3 flat file mode, insert an MP3 disc. If an MP3 disc is already present in the player, press the CD control. The MP3 icon will display while the player is in MP3 mode.

While in MP3 flat file mode, press the MP3 DIR control to enter



into MP3 directory mode. The MP3 icon and the DIR icon will display while the player is in directory mode.

Your MACH® MP3 player is also equipped with an anti-shock buffer for MP3 discs.

#### MP3 FILE DIRECTORY STRUCTURE

The MACH® MP3 music system recognizes MP3 disc file and directory (folder) structure as follows:

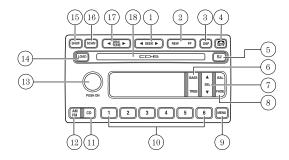
- There are two different modes for MP3 disc playback: MP3 flat file mode (default) and MP3 directory mode.
- MP3 flat file mode ignores any directory structure present on the MP3 disc. The player sequentially numbers each MP3 track on the disc (denoted by the .mp3 file extension) from T001 to T255.
- MP3 directory mode represents a directory structure consisting of one level of directories (folders). The CD player sequentially numbers all MP3 tracks on the disc (denoted by .mp3 extension) and all directories containing MP3 files, from 01–01 to 99–99. The first two digits denote the directory number and the last two digits denote the track number within that directory.
- Creating discs with only one level of subdirectories will help with navigation through the disc files.

#### **ERROR MESSAGES**

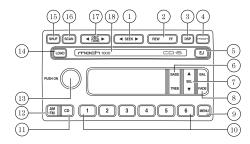
You may experience an error message for the following situations:

- NO DISC when the CD control is pressed and there is not a CD present.
- DISC ERR when there is a damaged or unreadable disc. Such as, data discs containing no .mp3 files, or for data discs containing more than 255 files or directories.
- CD ERR for any other disc malfunction.

# MACH® 460 SOUND SYSTEM RADIO (CD CHANGER COMPATIBLE)



# MACH® 1000 SOUND SYSTEM RADIO (CD CHANGER COMPATIBLE)



Your vehicle may be equipped with the **MACH**  $1000^{\circ}$  audio system. This system is equipped with a rack of amplifiers and subwoofers in the trunk of the vehicle. Do not store or rest items on the amplifier rack, as this could cause damage to the amplifiers and void your warranty.

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

1. **Seek:** Press and



release SEEK 🗹 / 🕨

for previous/next strong station, selection or track.

2. **Rewind:** In CD mode, press until desired selection is reached.



**Fast forward:** In CD mode, press until



desired selection is reached.

3. **DSP:** (Digital Signal Processing) Press DSP and SEL to select from



the DSP modes – NEWS, JAZZ CLUB, HALL, CHURCH, STADIUM. Press DSP a second time and SEL to optimize sound for ALL SEATS, DRIVER SEAT or REAR SEAT.

- ALL SEATS Enhances acoustic sound for all seating locations.
- DRIVER SEAT Enhances acoustic sound for the driver. Rear seat and passenger seat performance may be compromised in favor of the driver.
- REAR SEAT Enhances acoustic sound for the rear seat passengers.
- 4. **MACH** (MACH 1000 only): Press to ongage



only): Press to engage MACH 1000 mode.

MACH 1000 mode enhances acoustic sound for all seating locations and increases the signal to the trunk mounted speakers and amplifiers for enhanced bass performance. Press again to return to previously set occupancy mode.

**Mute:** (MACH 460 only): Press to mute the playing media.



5. **Eject:** Press EJ and choose the corresponding



preset (1-6) to eject the desired CD. Press and hold to

eject all loaded discs.

6. Bass: Press BASS; then press
SEL \(\neg / \) to decrease/increase the bass output.

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

7. Select: Use with
Bass Treble Balance

Bass, Treble, Balance and Fade controls to adjust levels.

8. **Balance:** Press BAL; then press SEL  $\bigwedge$  /  $\bigvee$  to shift

sound to the left/right speakers.

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

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

**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:** Brings soft and loud CD passages together for a more consistent listening level.

10. **Memory presets:** 

1 2 3 4 5 6

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 access the desired disc.

11. **CD:** Press to select

nde

CD mode.

12. **AM/FM:** Press to select AM/FM

frequency band.



AM CD

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

Press and hold the volume control for five seconds. Then press SEL to increase ( $\blacktriangle$ ) or decrease ( $\blacktriangledown$ ) the volume setting. The level will appear in the display.

14. **Load:** Press LOAD and the corresponding preset (1–6) to load a



CD into the desired slot. Press and hold to load up to six discs at once.

SHUF

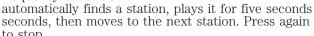
SCAN

15. **Shuffle:** Press to play tracks/discs in random order. Press

SHUF to cycle through SHUF DISC, SHUF TRAC or

SHUF OFF.

16. **Scan:** Press to move up the radio frequency band. SCAN



**CD:** Press to sample CD selections for eight seconds. Press again to stop.

17. **Disc/Tune:** Radio:

Press or to

manually tune down or

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



**▼ DISC** ►

#### **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.

#### **CD PLAYER CARE**

All audios are CD changer compatible. See your dealer for further details.

Do:

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

#### Don't:

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

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

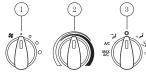
### **AUDIO SYSTEM WARRANTY AND SERVICE**

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

### **Climate Controls**

# MANUAL HEATING AND AIR CONDITIONING SYSTEM

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 through the instrument panel registers to cool the vehicle. This mode is more noisy than A/C, but is more economical and efficient. May reduce undesirable odors from entering the vehicle.

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

**;** Distributes outside air through the instrument panel vents.

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

: Distributes outside air through the floor vents.

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

: Distributes outside air through the windshield defroster vents.

### **Climate Controls**

#### **OPERATING TIPS**

- To reduce fog build up on the windshield during humid weather, place the air flow selector in the www position.
- To reduce humidity build up inside the vehicle: during **cold weather**, do not drive with the air flow selector in the OFF or MAX A/C position. during **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 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 air flow to the back seats.
- Remove any snow, ice or leaves from the air intake area at the base of the windshield.

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

# REAR WINDOW DEFROSTER W

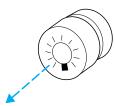
Ensure that the ignition is in the ON position.

Press the control to clear the rear window of thin ice and fog. The LED will illuminate.

The defroster turns off automatically after 10 minutes or when the ignition is turned OFF. To manually turn off the defroster before 10 minutes, push the control again.

# HEADLAMP CONTROL ☼

- The first position turns on the parking, tail, license plate and side marker lamps.
- The outer position turns on the headlamps.



### Foglamp control (if equipped) ≢0

The foglamps can be turned on when the headlamp control is in either of the following positions:



- Parking lamps
- Low beams

Press the foglamp control to activate the foglamps. Press the foglamp control again to deactivate the foglamps.

When the highbeams are activated, the foglamps will not operate.

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

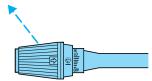
Turns the headlamps on with a reduced output. To activate:

- the ignition must be turned on
- the headlamp control is in the OFF or Parking lamps position
- the high beam headlamps must be turned off
- the parking brake is released

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

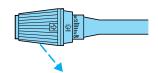
# High beams ≣○

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



### Flash to pass

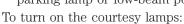
Pull toward you slightly to activate and release to deactivate.



### PANEL DIMMER CONTROL (2)

To adjust the brightness of the instrument panel:

Rotate clockwise/
 counterclockwise
 when the headlamp
 control is in the
 parking lamp or low-beam position.



 $\bullet\,$  Rotate fully counterclockwise.

### 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.

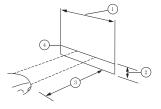
### Headlamp vertical aim adjustment

- 1. Park the vehicle on a level surface approximately 7.6 meters (25 feet) from a vertical wall or screen directly in front of it.
- (1) Eight feet
- (2) Center height of lamp to ground
- (3) Twenty five feet

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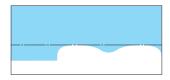
2003 Mustang (mus) Owners Guide (post-2002-fmt) USA English (fus)

- (4) Horizontal reference line
- 2. Measure the height from the center of your headlamp to the ground and mark a 2.4 meter (8 foot) horizontal reference line on the



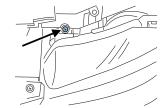
vertical wall or screen at this height (a piece of masking tape works well). The center of the lamp is marked by a 3.0 mm circle on the headlamp lens.

- 3. Turn on the low beam headlamps to illuminate the wall or screen and open the hood.
- 4. On the wall or screen you will observe a light pattern with flat edges at the top of the beam pattern. If the flat edges are not at the horizontal reference line, the beam



reference line, the beam will need to be adjusted.

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



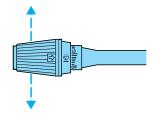
6. HORIZONTAL AIM IS NOT REQUIRED

FOR THIS VEHICLE AND IS NON-ADJUSTABLE.

7. Close the hood and turn off the lamps.

### TURN SIGNAL CONTROL ♦♦

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



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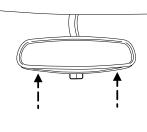
2003 Mustang (mus) Owners Guide (post-2002-fmt) USA English (fus)

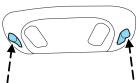
#### **INTERIOR LAMPS**

### Map lamps (if equipped)

If equipped with a convertible top the map lamps and controls are located on the rearview mirror. Press the controls on the bottom of the mirror to activate the lamps.

For coupes the map lamps are located on the interior roof. Press the controls on either side of the lamp to turn the light on.





### **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                                  | Trade Number    |
|---|-----------------|
| Tail lamp, brakelamp, turn lamp           | 3157K           |
| Park lamp, turn lamp, side marker (front) | 3157 AK (amber) |
| Backup lamp                               | 3156K           |
| License plate lamp                        | 168             |
| High-mount brakelamp                      | 906             |

# Lights

| Function   | Trade Number |
|--|--------------|
| Headlamps  | 9007         |
| Luggage compartment lamp                                     | 906          |
| Dome lamp  | 575          |
| Map lamp   | 575          |
| Visor vanity lamp  | 74           |
| Glove compartment  | 194          |
| Rearview mirror map lamps                                    | 192          |
| Fog lamp   | 899          |
| All replacement bulbs are clear in color except where noted. |              |
| To replace all instrument panel lights - see your dealer.    |              |

#### Interior bulbs

Check the operation of all bulbs frequently.

#### Map lamps

For bulb replacement, see a qualified service technician or your dealer.

#### Replacing headlamp bulbs

To remove the headlamp bulb:

- 1. Make sure headlamp switch is in the OFF position, then open the hood.
- 2. At the back of the headlamp, pull two retainer pins up to release the headlamp assembly.
- 3. Pull headlamp assembly forward and disconnect the electrical connector from the bulb by pulling rearward.
- 4. Remove the bulb retaining ring by rotating it counterclockwise and slide off the plastic base.



# Lights

5. Remove the old bulb from the lamp assembly by pulling it straight out of the lamp assembly.



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

Install the new bulb in reverse order.

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

- 1. Make sure the headlamp control is in the OFF position and open the hood.
- 2. At the back of the headlamp, pull two retainer pins up to release the headlamp assembly.
- release the headlamp assembly.

  3. Pull headlamp assembly forward and rotate the bulb socket

counterclockwise and remove from lamp assembly.

4. Pull the bulb straight out from the socket and push in the new bulb.

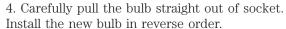


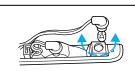
Install the new bulb in reverse order.

# Lights

#### Replacing high-mount brakelamp bulbs

- 1. Make sure the headlamp switch is in the OFF position and then open the trunk.
- 2. Inside trunk, locate access hole under the rear decklid.
- 3. Rotate the bulb socket counterclockwise and pull it out of the lamp assembly.



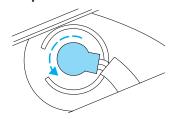


#### Replacing foglamp bulbs

- 1. Make sure the headlamp switch is in the OFF position.
- 2. Rotate the foglamp bulb socket counterclockwise and remove from foglamp.
- 3. Disconnect the electrical connector and pull the bulb straight out. Install the new bulb in reverse order.

#### Replacing license plate lamp bulbs

1. Make sure the headlamp switch is in the OFF position and then open trunk and remove bulb socket from the trunk lid by turning it counterclockwise.



2. Pull the bulb straight out of the socket.

Install the new bulb in reverse order.

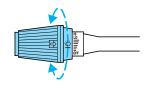
#### Replacing tail lamp/backup bulbs

For bulb replacement, see a dealer or qualified technician.

#### **MULTI-FUNCTION LEVER**

#### Windshield wiper:

Rotate the end of the control away from you to increase the interval speed of the wipers; rotate towards you to

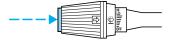


decrease the interval speed of the wipers.

• Top two positions are for LO and HI speed constant wipe.

#### Windshield washer:

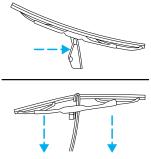
Push the end of the stalk:



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

#### **CHANGING THE WIPER BLADES**

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



- 2. Attach the new wiper to the wiper arm and press it into place until a click is heard.
- 3. Replace wiper blades every 6 months for optimum performance.

#### **TILT STEERING WHEEL (IF EQUIPPED)**

To adjust the steering wheel:

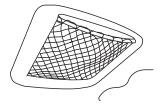
- 1. Pull and hold the steering wheel release control toward you.
- 2. Move the steering wheel up or down until you find the desired location.
- 3. Release the steering wheel release control. This will lock the steering wheel in position.



Never adjust the steering wheel when the vehicle is moving.

#### **OVERHEAD STORAGE NET (IF EQUIPPED)**

Be sure to secure objects when placed in the storage net in order to help reduce the risk that they become projectiles in the event of a collision.



#### **AUXILIARY POWER POINT 12V**

The power point is an additional power source for electrical accessories.

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.



A power point is located in front of the center console storage bin.

#### **POWER WINDOWS**

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





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

#### One touch down

Allows the driver's window to open fully without holding the control down. Press completely down on the bottom part of the



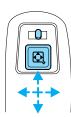


rocker switch and release quickly. Press again to stop.

# POWER SIDE VIEW MIRRORS (IF EQUIPPED) →

To adjust your mirrors:

1. Move the mirror selector control all the way to the left to adjust the left mirror or all the way to the right to adjust the right mirror.



- 2. Move the control in the direction you wish to tilt the mirror.
- 3. Return the control to the center position.

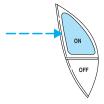
#### SPEED CONTROL (IF EQUIPPED)

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

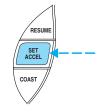
Do not use the speed control in heavy traffic or on roads that are winding, slippery or unpaved.

#### 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.

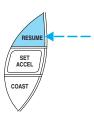


#### Note:

- 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 16 km/h (10 mph) below your set speed on an uphill, your speed control will disengage.

#### Resuming a set speed

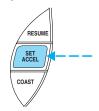
Press the RESUME control and release it. This will automatically return the vehicle to the previously set speed. The RESUME control will not work if the vehicle speed is not faster than 48 km/h (30 mph).



#### 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 1.6 km/h (1 mph).

• 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

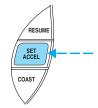
There are two ways to reduce a set speed:

 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 1.6 km/h (1 mph).

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

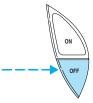


#### Turning off speed control

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.



#### **CENTER CONSOLE**

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

- Dual cupholders
- Auxiliary power point
- Coin holder slots (if equipped)
- Convertible top control (if equipped)



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

#### Cell phone use

The use of Mobile Communications Equipment has become increasingly important in the conduct of business and personal affairs. However, drivers must not compromise their own or others' safety when using such equipment. Mobile Communications can

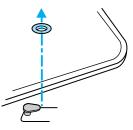
enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits.

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

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

# 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.

#### INTERIOR TRUNK CONTROL

The remote trunk release control is located in the glove compartment. Press to open trunk.

#### **CONVERTIBLE (IF EQUIPPED)**

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

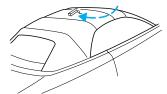
#### Lowering the convertible top

The convertible top can be lowered with the side windows either up or down.

The convertible top **will not operate** unless the parking brake is engaged. Do not lower the top while the vehicle is moving because the top may be severely damaged. Also, do not lower the top when the top material is wet.

To lower the convertible top:

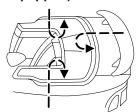
- 1. Bring vehicle to a complete stop. Engage the parking brake. Key must be in the ON position.
- 2. Check the convertible top stowage compartment behind the rear seat to be sure it is empty and ready to receive the top.
- 3. Unclamp the top from the windshield header at both the right and left sides by pulling each clamp rearward until the hook in the windshield header is free. The clamps are flush with the header when in the closed position.
- 4. Close the windshield header clamps immediately after disengagement, to avoid cutting the top material and to permit installation of the vinyl boot.
- 5. If the top has not been lowered for some time and sticks to the windshield header, push the front of the top up slightly with your hand to loosen it.
- 6. Push the convertible top switch on the console in front of the armrest and hold until the top is completely stored.
- 7. Disengage the parking brake.



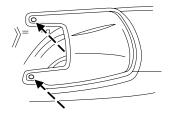


### Installation of the boot (if equipped)

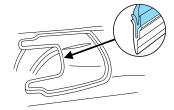
1. Push boot rearward and engage boot under the body molding at the rear and sides.



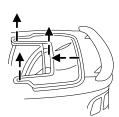
2. Fasten boot to quarter trim panel with snap or pivot latch on both sides of the vehicle.



3. Insert boot tongue into groove located on rear of seat.



- 4. To remove, unfasten the snaps or pivot latches and the boot tongue.
- 5. Pull forward and lift off.



#### Raising the convertible top

The convertible top **will not operate** unless the parking brake is engaged. Do not raise the top while the vehicle is moving because the top may be severely damaged.

To raise the convertible top:

- 1. Bring the vehicle to a complete stop. Engage the parking brake. Key must be in the ON position.
- 2. Remove the boot cover and store it in the luggage compartment.
- 3. Lower the front and rear side windows.
- 4. Push the convertible top button, holding it until the top unfolds and moves forward toward the windshield header.
- 5. Open both top clamps before the top meets the windshield header
- 6. Continue to use the top motor to raise the top until it has reached the fully closed position flush to the header.
- 7. The two pins under the forward edge of the top should seat themselves in the matching holes in the header.
- 8. To fasten both clamps securely, push the clamp handles into the header on the top until they are flush with the header. Pulling down on the header at the center grip while closing the latches may assist in fastening the clamps.
- 9. Raise the front and rear side windows.
- 10. Disengage the parking brake.

#### **KEYS**

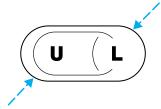
The key operates all locks on your vehicle. In case of loss, replacement keys are available from your dealer.

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

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

#### **POWER DOOR LOCKS**

Press U to unlock all doors and L to lock all doors.



# INTERIOR LUGGAGE COMPARTMENT RELEASE

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

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

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



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

Keep vehicle doors and luggage compartment locked and keep keys and remote transmitters out of a child's reach. Unsupervised children could lock themselves in the trunk and risk injury. Children should be taught not to play in vehicles.



On hot days, the temperature in the trunk or vehicle interior can rise very quickly. Exposure of people or animals to these high temperatures for even a short time can cause death or serious heat-related injuries, including brain damage. Small children are particularly at risk.

#### 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.

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

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



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

# Unlocking the doors

- 1. Press **1** and release to unlock the driver's door. **Note:** The interior lamps will illuminate.
- 2. Press **1** and release again within three seconds to unlock the passenger door.

# Locking the doors

1. Press and release to lock all the doors. **Note:** The interior lamps will turn off (unless the dome lamp control is in the full-up position), and the headlamps and parking lamps 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 and parking lamps will flash.

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

#### Sounding a panic alarm

Press () to activate the alarm. The horn will sound for a maximum of 30 seconds and the parklamps will flash for a maximum of 3 minutes. Press again or turn the ignition to ON to deactivate, or wait for the alarm to timeout in 3 minutes.

**Note:** The panic alarm will only operate when the ignition is in the OFF or ACC position.

#### Opening the trunk

Press once to open the trunk.

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

#### Replacing the battery

The remote entry transmitter uses one coin type three-volt lithium battery CR2032 or equivalent. The typical operating range for your remote entry transmitter is approximately 10 meters (33 feet). A decrease in the operating range could be caused by:

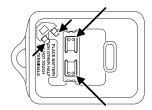
- weather conditions,
- nearby radio towers,
- structures around the vehicle and
- other vehicles parked next to the vehicle.

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 HO

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.
- 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.

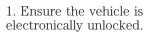
**Note:** Replacement of the battery will **not** cause the remote transmitter to become deprogrammed from your vehicle. The remote transmitter should operate normally after battery replacement.

#### Replacing lost remote entry transmitters

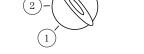
If you would like to have your remote entry transmitter reprogrammed because you lost one, or would like to buy additional remote entry transmitters, you can either reprogram them yourself, or take **all remote entry transmitters** to your authorized dealer for reprogramming.

**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:



2. Put the key in the ignition.



3. Turn the key from the 2 (LOCK) position to 3 (OFF).

4. Cycle eight times rapidly (within 10 seconds) between the 3 (OFF) position and 4 (ON). **Note:** The eighth turn must end in the 4 (ON) position.

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

6. Within 20 seconds press any button on the remote entry transmitter. **Note:** If more than 20 seconds have passed you will need to start the procedure over again.

7. The doors will lock, then unlock, to confirm that this remote entry transmitter has been programmed.

8. Repeat Step 6 to program each additional remote entry transmitter.

9. Turn the ignition to the 3 (OFF) position after you have finished programming all of the remote entry transmitters. **Note:** After 20 seconds, you will automatically exit the programming mode.

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

#### Illuminated entry

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

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

• the ignition switch is turned to the ON position, or

 $\bullet\,$  the remote transmitter lock control is pressed, or

• after 25 seconds of illumination.

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The dome lamp control (if equipped) must **not** be set to the OFF position for the illuminated entry system to operate.

The inside lights will not turn off if:

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

The battery saver will shut off the interior lamps 30 minutes after the ignition has been turned to the OFF position, 10 minutes after if the last door is left open, and 30 minutes after if the trunk is left open or the dome lamp switch is left on.

#### SECURILOCK® PASSIVE ANTI-THEFT SYSTEM

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

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

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

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

remove all objects on the key chain away from the coded key and restart the engine.

#### Theft indicator

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

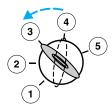
- When the ignition is in the OFF position, the indicator will flash once every 2 seconds to indicate the SecuriLock® system is functioning as a theft deterrent.
- When the ignition is in the RUN position, the indicator will glow for 3 seconds to indicate normal system functionality.

If a problem occurs with the SecuriLock system, the indicator will flash rapidly or glow steadily when the ignition is in the RUN 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.

- 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.

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#### 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.

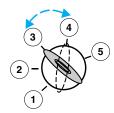
Replacing coded keys can be very costly. Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. Please visit an authorized dealer to purchase additional spare or replacement keys.

#### 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 keys.
- You must have two previously programmed coded keys (keys that already operate your vehicle's engine) and the new unprogrammed key(s) readily accessible.
- If no previously programmed coded keys are available, you must take your vehicle to your dealer to have the spare key(s) programmed.
- 1. Insert a previously programmed coded key into the ignition.
- 2. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON)



position for at least one second, but no more than 10 seconds.

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

- 4. Within ten seconds of removing the previously programmed coded key, insert the other previously programmed coded key into the ignition.
- 5. Turn the ignition from the 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.
- 6. Turn the ignition to the 3 (OFF) position, and remove the second key from the ignition.
- 7. Within twenty seconds of removing the previously programmed coded key, insert the unprogrammed key (new/valet key) into the ignition.
- 8. Turn the ignition from the 3 (OFF) position to the 4 (ON) position. Keep the ignition in the 4 (ON) position for at least one second.
- 9. Your new unprogrammed key is now programmed.

If the key has been successfully programmed it will start the vehicle's engine and the theft indicator light will illuminate for three seconds and then go out. If the key was not successfully programmed, it will not start your vehicle's engine and the theft indicator light will flash on and off rapidly. If failure repeats, bring your vehicle to your 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**

#### **Notes:**

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

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

#### Adjustable head restraints

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

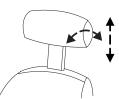
The head restraints can be moved up and down.



#### 4-way head restraints (if equipped)

Your vehicle may have head restraints that can be moved in four directions:

- up and down
- forward or backward



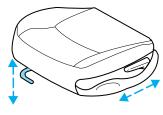
#### Adjusting the front manual seat (if equipped)



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

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

Lift handle to move seat forward or backward.

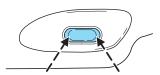


Pull lever up to adjust seatback.



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

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



Press one side of the control to adjust firmness.

Press the other side of the control to adjust softness.

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



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

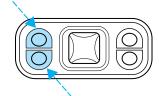
Do not pile cargo higher than the seatbacks to avoid injuring people in a collision or sudden stop.

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

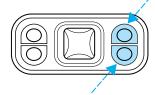
Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a collision.

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

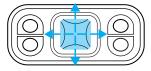
Press front to raise or lower the front portion of the seat cushion.



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

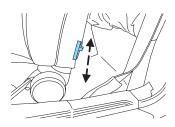


Press the control to move the seat forward, backward, up or down.



#### **REAR SEATS**

Use the seatback release to fold the back of the front seat forward for rear seat passenger entry or exit. This release handle is located on the lower outboard back of the seat. The seatback



locks automatically when returned to the normal position.

The rotating boot on the front seat belt is designed to allow rear seat entry/exit. To enter the rear seat:

- 1. Remove safety belt from safety belt guide on top of front seat.
- 2. Rotate the safety belt boot rearward.



- 3. Enter the rear seat in front of the safety belt.
- 4. Rotate the safety belt boot forward and place the belt in the belt guide on the seat back to allow use by the front driver/passenger.

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

One or both rear seatbacks can be folded down to provide additional cargo space.

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



When raising the seatback(s), make sure you hear the seat latch into place.

#### **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 where they can be properly restrained.

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

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

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

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

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

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

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

#### Combination lap and shoulder belts

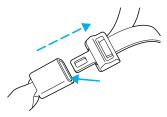
Before fastening the safety belt, make sure the shoulder belt passes through the belt guide on the top of the seatback.

Coupe shown, convertible is similar and safety belt must also pass through the belt guide.

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

is securely fastened in the buckle.

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



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

#### **Energy Management Feature**

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

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

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

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

#### Vehicle sensitive mode

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

#### **Automatic locking mode**

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

#### When to use the automatic locking mode

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt. The automatic locking mode is not available on the driver safety belt.

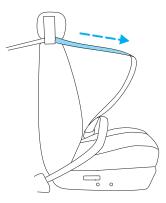
This mode should be used **any time** a child safety seat is installed in a passenger front or outboard rear seating position (if equipped). Children 12 years old and under should be properly restrained in the rear seat whenever possible. Refer to *Safety restraints for children* or *Safety seats for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

#### How to use the automatic locking mode

• Buckle the combination lap and shoulder belt.



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



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

#### How to disengage the automatic locking mode

Ford Motor Company recommends that all safety belt assemblies and attaching hardware should be inspected by a qualified technician after any collision. Safety belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

Disconnect the combination lap/shoulder belt and allow it to retract completely to disengage the automatic locking mode and activate the vehicle sensitive (emergency) locking mode.

After any vehicle collision, the front passenger and rear outboard seat belt systems must be checked by 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 warning light and indicator chime Å

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

#### **Conditions of operation**

| If   | Then   |
|--|--|
| The driver's safety belt is<br>not buckled before the<br>ignition switch is turned<br>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 will turn on for 3 seconds and then turn off. The indicator chime will remain off. |

#### BeltMinder

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

| If  | Then  |
|---|---|
| The driver's safety belt is<br>not buckled<br>approximately 5 seconds<br>after the safety belt<br>warning light has turned<br>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<br>buckled while the safety<br>belt indicator light is<br>illuminated and the safety<br>belt warning chime is<br>sounding | The BeltMinder feature will not activate.   |

|   | If                          | Then                            |
|---|-----------------------------|---------------------------------|
| ı | The driver's safety belt is | The BeltMinder feature will not |
|   |                             | activate.                       |
| ı | ignition switch is turned   |                                 |
| ı | to the ON position          |                                 |

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</i> in 4 of us will be seriously injured in a crash during our lifetime.                                   |
| "I'm not going far"        | <b>3 of 4</b> fatal crashes occur within <b>25</b> miles of home.   |
| "Belts are uncomfortable"  | We design our safety belts to<br>enhance comfort. If you are<br>uncomfortable - try different<br>positions for the safety belt<br>upper anchorage and seatback<br>which should be as upright as<br>possible; this can improve<br>comfort. |
| "I was in a hurry"         | Prime time for an accident. BeltMinder reminds us to take a few seconds to buckle up.   |
| "Safety belts don't work"  | Safety belts, when used properly, reduce risk of death to front seat occupants by 45% in cars, and by 60% in light trucks.  |
| "Traffic is light"         | Nearly 1 of 2 deaths occur in single-vehicle crashes, many when no other vehicles are around.   |
| "Belts wrinkle my clothes" | Possibly, but a serious crash can do much more than wrinkle your clothes, particularly if you are unbelted.   |

| Reasons given                             | Consider  |
|---|---|
| "The people I'm with<br>don't wear belts" | Set the example, teen deaths occur 4 times more often in vehicles with TWO or MORE people. Children and younger brothers/sisters imitate behavior they see.   |
| "I have an air bag"                       | Air bags offer greater protection<br>when used with safety belts.<br>Frontal airbags are not designed<br>to inflate in rear and side<br>crashes or rollovers. |
| "I'd rather be thrown<br>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.

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- 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).

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.

#### Safety belt extension assembly

If the safety belt is too short when fully extended, there is a 20 cm (8 inch) 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

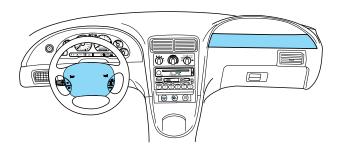
Inspect the safety belt systems periodically to make sure they work properly and are not damaged. Inspect the safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All safety belt assemblies, including retractors, buckles, front seat belt buckle assemblies, buckle support 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 used in vehicles involved in a collision be replaced. However, if the collision was minor and a qualified technician finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a collision should also be inspected and replaced if either damage or improper operation is noted.

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

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

## 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 (SRS) is provided.

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

The National Highway Traffic Safety
Administration (NHTSA) recommends a
minimum distance of at least 25 cm (10 inches)
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.

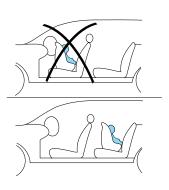
Do not put anything on or over the air bag module. Placing objects on or over the air bag inflation area may cause those objects to be propelled by the air bag into your face and torso causing serious injury.

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

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.

#### Children and air bags

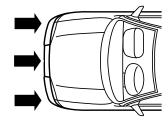
Children must always be properly restrained. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position. Failure to follow these instructions may increase the risk of injury in a collision.



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.

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

The air bag SRS is designed to activate when the vehicle sustains a longitudinal deceleration sufficient to cause the air bag sensors to close an electrical circuit that initiates air bag



inflation. 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 sufficient enough to cause activation. Air bags are designed to inflate in frontal and near-frontal collisions, not rollover, side-impact, or rear-impacts unless the collision causes sufficient longitudinal deceleration.

The 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 or sodium compounds which may



irritate the skin and eyes, but none of the residue is toxic.

While the SRS is designed to help reduce serious injuries, contact with a deploying air bag may also cause abrasions, swelling or temporary hearing loss. Because air bags must inflate rapidly and with considerable force, there is the risk of death or serious injuries such as fractures, facial and eye injuries or internal injuries, particularly to occupants who are not properly restrained or are otherwise out

of position at the time of air bag deployment. It is extremely important that occupants be properly restrained as far away from the air bag module as possible while maintaining vehicle control.

The SRS consists of:

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

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

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

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

## Determining if the system is operational 🤌

The SRS uses a readiness light in the instrument cluster or a tone to indicate the condition of the system. Refer to *Air bag readiness* section in the *Instrument cluster* 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 light will either flash or stay lit.

AIR
BAG

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

If any of these things happen, even intermittently, have the SRS serviced at 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.

#### SAFETY RESTRAINTS FOR CHILDREN

See the following sections for directions on how to properly use safety restraints for children. Also see *Air bag supplemental restraint system (SRS)* in this chapter for special instructions about using air bags.

#### Important child restraint precautions

You are required by law to use safety restraints for children in the U.S. and Canada. If small children (generally children who are four years old or younger and who weigh 18 kg [40 lbs] or less) ride in your vehicle, you must put them in safety seats made especially for children. Check your local and state or provincial laws for specific requirements regarding the safety of children in your vehicle. 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 and are around 4 years of age. Although the lap/shoulder belt will provide some protection, these children are still too small for lap/shoulder belts to fit properly, which could increase the risk of serious injury.

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

Booster seats position a child so that safety belts fit better. They lift the child up so that the lap belt

rests low across the hips and the knees bend comfortably. Booster seats also make the shoulder belt fit better and more comfortably for growing children.

#### When children should use booster seats

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

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

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



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

#### Types of booster seats

There are two types of belt-positioning booster seats:

• Those that are backless.

If your backless booster seat has a removable shield, remove the shield and use the lap/shoulder belt. If a



seating position has a low seat back and no head restraint, a backless booster seat may place your child's head (top of ear level) above the top of the

seat. In this case, move the backless booster to another seating position with a higher seat back and lap/shoulder belts.

 Those with a high back.

If, with a backless booster seat, you cannot find a seating position that adequately supports your child's head, a



high back booster seat would be a better choice.

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

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 seatthe safest place for children to ride.



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

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

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

#### SAFETY SEATS FOR CHILDREN



#### Child and infant or child safety seats

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

When installing a child safety seat:

• Review and follow the information presented in the *Air* bag supplemental restraint system (SRS) section in this chapter.



• Use the correct safety belt buckle for that seating position (the buckle closest to the direction the tongue is coming from).

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- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to Automatic locking mode (passenger side front and outboard rear seating positions) (if equipped) section in this chapter.

Ford recommends the use of a child safety seat having a top tether strap. Install the child safety seat in a seating position with a tether anchor. For more information on top tether straps, refer to Attaching child safety seats with tether straps in this chapter.

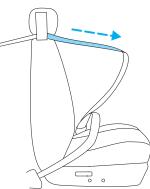
Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.



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

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

If you must use a forward facing child seat in the front seat (reminder - children 12 years old and under should always be properly restrained in the rear seat) the shoulder belt must be routed through the belt guide at the top of the seatback, refer to Safety Restraints earlier in this chapter for routing through the belt holder.



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

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



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

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



- 3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.
- 4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.
- 5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is extracted and a click is heard.







- 6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.
- 7. Pull the lap belt portion across the child seat toward the buckle and pull up on the shoulder belt while pushing down with your knee on the child seat



- 8. Allow the safety belt to retract to remove any slack in the belt.
- 9. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it



- side to side and forward. There should be no more than one inch of movement for proper installation.
- 10. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat steps two through nine.

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

## Attaching child safety seats with tether straps in addition to the safety belt

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

The rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats on the package tray behind the speakers (coupe) or on the lower backside of the seatback (convertible).

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

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

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



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

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

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



#### For Coupe only:

4. Open the tether anchor covers.



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



### For Convertible only:

The tether anchors on the convertible are located on the lower backside of the seatback.



- 4. Access tether anchors located behind the seatback and pull away vinyl flap to expose anchors.
- 5. Clip the tether strap to the anchor as shown.





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

- 6. Refer to the *Installing child safety seats in combination lap and shoulder belt seating positions* section of this chapter for further instructions to secure the child safety seat.
- 7. Tighten the child safety seat tether strap according to the manufacturer's instructions.

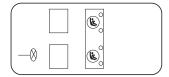
If the safety seat is not anchored properly, the risk of a child being injured in a collision greatly increases.

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

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 safety 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.

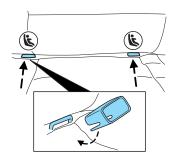
Your vehicle has LATCH anchors for child seat installation at the seating positions marked with the child seat symbol.

The center of the rear seat is **NOT** designed as a seating position. The LATCH anchors were not designed to be used with a child seat in the center position and there is no tether anchor available at the center. Putting a child seat in the center would also block access to the safety restraint buckles. Use as a seating position, with or without a child restraint, may increase the risk of injury or death.



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

The lower anchors for child seat installation are located at the rear section of the rear seat between the cushion and seat back. The LATCH anchors are below the locator symbols on the seat back. One pair of anchors are provided



for each rear designated seating position.

Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments. Two plastic LATCH guides can be obtained at no charge from any Ford or Lincoln-Mercury dealer. They snap onto the LATCH lower anchors in the seat to help attach a child seat with rigid attachments. The guides hold the seat trim away to expose the anchor and make it easier to attach some child seats.



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.

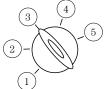
Each time you use the safety seat, check that the seat is properly attached to the lower anchors and tether anchor. Try to tilt the child seat from side to side. Also try to tug the seat forward. Check to see if the anchors hold the seat in place.

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

- 4. ON, all electrical circuits operational. Warning lights illuminated. Key position when driving.
- 5. START, cranks the engine. Release the key as soon as the engine starts.

#### Preparing to start your vehicle

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

When starting a fuel-injected engine, don't press the accelerator before or during starting. Only use the

accelerator when you have difficulty starting the engine. For more information on starting the vehicle, refer to *Starting the engine* in this chapter.

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

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

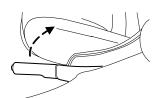
When the engine starts, the idle RPM runs faster to warm the engine. If the engine idle speed does not slow down automatically, have the vehicle checked.

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.

If starting a vehicle with an automatic transmission:

• Make sure the parking brake is set.

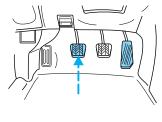


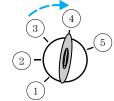
 Make sure the gearshift is in P (Park).

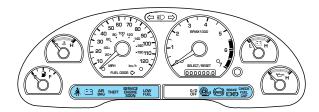


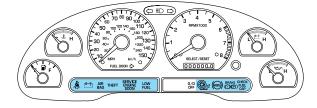
If starting a vehicle with a manual transmission:

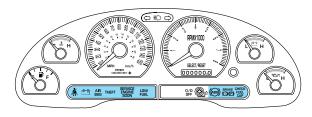
- 1. Make sure the parking brake is set.
- 2. Push the clutch pedal to the floor.
- Turn the key to 4 (ON) without turning the key to 5 (START).











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

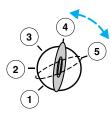
• If the driver's safety belt is fastened, the Å light may not illuminate.

#### Starting the engine

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

2. Turn the key to 5 (START), then release the key as soon as the engine starts.

Excessive cranking could damage the starter.



**Note:** If the engine does not start within five seconds on the first try, turn the key to 3 (OFF), wait 10 seconds and try again. If the engine still fails to start, press the accelerator to the floor and try again; this will allow the engine to crank with the fuel shut off in case the engine is flooded with fuel.

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

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 -23° C (-10° F) 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 2.5 cm (one inch) or adjust the heating or air conditioning to bring in fresh air.

#### **BRAKES**

Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings may be worn-out and should be inspected by a qualified service technician. If the vehicle has continuous vibration or shudder in the steering wheel while braking, the vehicle should be inspected by a qualified service technician.

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

Your vehicle may be equipped with an Anti-lock Braking System (ABS). This system helps you maintain steering control during emergency stops by keeping the brakes from locking. Noise from the ABS pump motor and brake pedal pulsation may be observed during ABS braking; any pulsation or mechanical noise you may feel or hear is normal.

## ABS warning lamp (ABS)

The (ABS) lamp in the instrument cluster momentarily illuminates when the ignition is turned to ON. If the light does not illuminate during start up, remains on or flashes, the ABS may be disabled and may need to be serviced.

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

### **Using ABS**

When hard braking is required, apply continuous force on the brake pedal; do not pump the brake pedal since this will reduce the effectiveness of the ABS and will increase your vehicle's stopping distance. The ABS will be activated immediately, allowing you to retain full steering control during hard braking and on slippery surfaces. However, the ABS does not decrease stopping distance.

## Hydraulic brake booster system (Hydroboost) (if equipped)

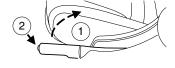
The Hydroboost system receives fluid pressure from the power steering pump to provide power assist during braking.

For Hydroboost-equipped vehicles operating under normal conditions, the noise of the fluid flowing through the booster may be heard whenever the brake is applied. This condition is normal; vehicle service is not required.

If braking performance or pedal response becomes very poor, even when the pedal is strongly depressed, it may indicate the presence of air in the hydraulic system or leakage of fluid. Stop the vehicle safely as soon as possible and seek service immediately.

## Parking brake (P)

To set the parking brake (1), pull the parking brake handle up as far as possible.



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



To release, press and hold the button (2), pull the handle up slightly, then push the handle down.

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

#### **STEERING**

To prevent damage to the power steering system:

- Never hold the steering wheel at its furthest turning points (until it stops) for more than a few seconds when the engine is running.
- Do not operate the vehicle with a low power steering pump fluid level (below the MIN mark on the reservoir).

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

If the steering wanders or pulls, check for:

- an improperly inflated tire
- uneven tire wear
- loose or worn suspension components
- loose or worn steering components
- improper steering alignment

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

### TRACTION CONTROL® (IF EQUIPPED)

Your vehicle may be equipped with a Traction Control system. This system helps you maintain the stability and steerability of your vehicle, especially on slippery road surfaces such as snow- or ice-covered roads and gravel roads. The system will allow your vehicle to make better use of available traction in these conditions.

During Traction Control<sup>®</sup> operation, the traction control active light will



illuminate, you may hear an electric motor type of sound coming from the engine compartment and the engine will not "rev-up" when you push further on the accelerator. This is normal system behavior and should be no reason for concern.

The Traction Control<sup>®</sup> switch, located below the radio, illuminates when the system is off. The Traction Control<sup>®</sup> system will



automatically turn on every time the ignition is turned OFF and ON.

If you should become stuck in snow or ice or on a very slippery road surface, try switching the Traction Control<sup>®</sup> system off. This may allow excess wheel spin to "dig" the vehicle out and enable a successful "rocking" maneuver.

The traction control on/off status is shown by an indicator lamp on the traction control switch. If the system is off, the indicator will be illuminated. If a system fault is detected while the traction control system in on, the indicator lamp on the traction control switch will be illuminated and your vehicle should be serviced.

Aggressive driving in any road conditions can cause you to lose control of your vehicle increasing the risk of severe personal injury or property damage. The occurrence of a Traction Control<sup>®</sup> event is an indication that at least some of the tires have exceeded their ability to grip the road; this may lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. If you experience a severe road event, SLOW DOWN.

#### TRACTION-LOK AXLE (IF EQUIPPED)

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

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

## AUTOMATIC TRANSMISSION OPERATION (IF EQUIPPED)

#### Brake-shift interlock

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

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 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.

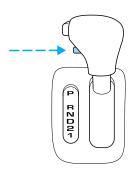
Always set the parking brake fully and make sure the gearshift is latched in P (Park). Turn the ignition to the LOCK position and remove the key whenever you leave your vehicle.

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 with an automatic overdrive transmission with console gearshift and O/D off switch

Your transmission is equipped with an adaptive learning strategy found in the vehicle computer. This feature is designed to increase durability and provide consistent shift feel over the life of the vehicle. A new vehicle or 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. Additionally, whenever the battery is disconnected or a new battery installed, the strategy must be relearned.

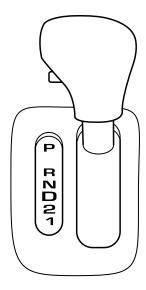
Your automatic overdrive transmission provides fully automatic operation in either D (Overdrive) or with the O/D OFF switch depressed. Driving with the gearshift lever in D (Overdrive) gives the best fuel economy for normal driving



conditions. For manual control, start in 1 (First) and then shift manually.

To put your vehicle in gear, start the engine, depress the brake pedal, then move gearshift lever out of P (Park). Once you place the gearshift lever securely into position, gradually release the brake pedal and use the accelerator as necessary.

Understanding the gearshift positions of the 4-speed automatic transmission



#### 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)

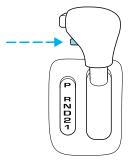
With the gearshift lever in N (Neutral), the vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

#### D (Overdrive)

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



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



This will illuminate the O/D OFF lamp and activate Drive.

#### O/D OFF

#### **Drive** (not shown)

Drive is activated when the transmission control switch is pressed.

- This position allows for all forward gears except overdrive.
- O/D OFF lamp is illuminated.
- Provides engine braking.

- Use when driving conditions cause excessive shifting from O/D to other gears. Examples: city traffic, hilly terrain, heavy loads, trailer towing and when engine braking is required.
- To return to O/D (overdrive mode), press the transmission control switch. The O/D OFF lamp will not be illuminated.
- O/D (Overdrive) is automatically returned each time the key is turned off.

#### 2 (Second)

This position allows for second gear only.

- Provides engine braking.
- Use to start-up on slippery roads.
- To return to D (Overdrive), move the gearshift lever into the D (Overdrive) position.
- Selecting 2 (Second) at higher speeds will cause the transmission to downshift to second gear at the appropriate vehicle speed.

#### 1 (First)

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

#### Forced downshifts

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

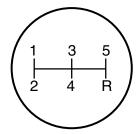
#### If your vehicle gets stuck in mud or snow

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

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

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

# MANUAL TRANSMISSION OPERATION (IF EQUIPPED)



# Using the clutch

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

To start the vehicle:

- 1. Make sure the parking brake is fully set.
- 2. Press the clutch pedal to the floor, then put the gearshift lever in the neutral position.
- 3. Start the engine, then press the brake pedal and release the parking brake.
- 4. Move the gearshift lever to 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 and prematurely wear components in the transmission. Make sure the floor mat is properly positioned so it doesn't interfere with the full extension of the clutch pedal.

Do not drive with your foot resting on the clutch pedal or use the clutch pedal to hold your vehicle at

a standstill while waiting on a hill. These actions will reduce the life of the clutch.

#### Recommended shift speeds

Do not downshift into 1 (First) when your vehicle is moving faster than 24 km/h (15 mph). This will damage the clutch.

Upshift according to the following chart:

| Upshifts when accelerating (recommended for best fuel economy) |                  |  |
|--|------------------|--|
| Shift from:  |                  |  |
| 1 - 2  | 18 km/h (11 mph) |  |
| 2 - 3  | 31 km/h (19 mph) |  |
| 3 - 4  | 48 km/h (30 mph) |  |
| 4 - 5  | 64 km/h (40 mph) |  |

#### 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.



#### DRIVING THROUGH WATER

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

If driving through deep or standing water is unavoidable, proceed very slowly. Never drive through water that is higher than the bottom of the hubs (for trucks) or the bottom of the wheel rims (for cars).

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

Driving through deep water where the transmission vent tube is submerged may allow water into the transmission and cause internal transmission damage. Have the fluid checked and, if water is found, replace the fluid.

#### **VEHICLE LOADING**

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

- Base Curb Weight: Weight of the vehicle including any standard equipment, fluids, lubricants, etc. It does not include occupants or aftermarket equipment.
- Payload: Combined maximum allowable weight of cargo, occupants and optional equipment. The payload equals the gross vehicle weight rating minus base curb weight.
- GVW (Gross Vehicle Weight): Base curb weight plus payload weight. The GVW is not a limit or a specification.
- GVWR (Gross Vehicle Weight Rating):
  Maximum permissible total weight of the base vehicle, occupants, optional equipment and cargo.
  The GVWR is specific to each vehicle and is listed on the Safety Certification Label on the driver's door pillar.
- GAWR (Gross Axle Weight Rating): Carrying capacity for each axle system. The GAWR is specific to each vehicle and is listed on the Safety Certification Label on the driver's door pillar.
- GCW (Gross Combined Weight): The combined weight of the towing vehicle (including occupants and cargo) and the loaded trailer.
- GCWR (Gross Combined Weight Rating):
  Maximum permissible combined weight of towing vehicle (including occupants and cargo) and the loaded trailer
- Maximum Trailer Weight Rating: Maximum weight of a trailer the vehicle is permitted to tow. The maximum trailer weight rating is determined by subtracting the vehicle curb weight for each engine/transmission combination, any required option weight for trailer towing and the weight of the driver from the GCWR for the towing vehicle.
- **Maximum Trailer Weight:** Maximum weight of a trailer the loaded vehicle (including occupants

and cargo) is permitted to tow. It is determined by subtracting the weight of the loaded trailer towing vehicle from the GCWR for the towing vehicle.

• **Trailer Weight Range:** Specified weight range that the trailer must fall within that ranges from zero to the maximum trailer weight rating.

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



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

Do not use replacement tires with lower load carrying capacities than the originals because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the originals do not increase the GVWR and GAWR limitations.

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

Always ensure that the weight of occupants, cargo and equipment being carried is within the weight limitations that have been established for your vehicle including both gross vehicle weight and front and rear gross axle weight rating limits. Under no circumstance should these limitations be exceeded.

Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle, loss of vehicle control, vehicle rollover, and/or personal injury.

#### TRAILER TOWING

Your vehicle is not equipped to tow. No towing packages are available through Ford or Lincoln/Mercury dealers.

# RECREATIONAL TOWING (ALL WHEELS ON THE GROUND)

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

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

#### All Rear Wheel Drive (RWD) vehicles:

This applies to all cars and 4x2 trucks/sport utilities with rear wheel drive capability.

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

If a distance of 80 km (50 miles) or a speed of 56 km/h (35 mph) must be exceeded, you must disconnect the driveshaft. 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.

#### **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 60,000 km (36,000 miles), whichever occurs first on Ford and Mercury vehicles, and four years or 80,000 km (50,000 miles) 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 56.3 km (35 miles) of the nearest Ford Motor Company dealership (one tow per disablement). Even non-warranty related tows, like accidents or getting stuck in the mud or snow, are covered (some exclusions apply, such as impound towing or repossession).

# Canadian customers refer to your Owner Information Guide for information on:

- coverage period
- exact fuel amounts
- towing of your disabled vehicle
- emergency travel expense reimbursement
- travel planning benefits

#### **USING ROADSIDE ASSISTANCE**

Complete the roadside assistance identification card and place it in your wallet for quick reference. In the United States, this card is found in the Owner Guide portfolio in the glove compartment in Ford vehicles and is mailed to you if you own a Mercury or Lincoln. In Canada, the card is found in the Owner Information Guide in the glove compartment.

U.S. Ford or Mercury vehicle customers who require roadside assistance, call 1–800–241–3673; Lincoln vehicle customers call 1–800–521–4140.

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

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

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

# ROADSIDE COVERAGE BEYOND BASIC WARRANTY

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

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

# HAZARD FLASHER 🛕

The hazard flasher is located on the steering column, just behind the steering wheel. The hazard flashers will operate when the ignition is in any position.



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.

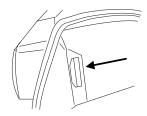
**Note:** With extended use, the flasher may run down your battery.

# 

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.

The fuel pump shut-off switch is located on the left side of the trunk between the left rear tail light and the trunk liner, and to the left of the hole in the trunk liner



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 of leaks.

### **FUSES AND RELAYS**

#### **Fuses**

If electrical components in the vehicle are not working, a fuse may have blown. Blown



fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.

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

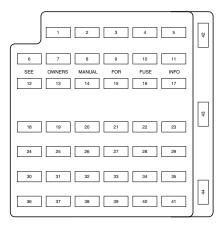
# Standard fuse amperage rating and color

| COLOR       |               |                        |               |                                 |                                |
|-------------|---------------|------------------------|---------------|---------------------------------|--------------------------------|
| Fuse rating | Mini<br>fuses | Stan-<br>dard<br>fuses | Maxi<br>fuses | Car-<br>tridge<br>maxi<br>fuses | Fuse<br>link<br>car-<br>tridge |
| 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.



The fuses are coded as follows:

| Fuse/Relay<br>Location | Fuse Amp<br>Rating | Passenger Compartment<br>Fuse Panel Description |
|------------------------|--------------------|---|
| 1                      | 20A                | Cigar lighter                                   |
| 2                      | 20A                | Engine controls                                 |
| 3                      | _                  | Not used  |
| 4                      | 10A                | Right-hand low beam<br>headlamp                 |
| 5                      | 15A                | Instrument cluster, Traction control switch     |
| 6                      | 20A                | Starter motor relay                             |
| 7                      | 15A                | GEM, Interior lamps                             |
| 8                      | 20A                | Engine controls                                 |
| 9                      | 30A                | Mach 460 subwoofers                             |
| 10                     | 10A                | Left-hand low beam<br>headlamp                  |

| Fuse/Relay<br>Location | Fuse Amp<br>Rating | Passenger Compartment<br>Fuse Panel Description  |
|------------------------|--------------------|--|
| 11                     | 15A                | Back-up lamps  |
| 12                     | 2A                 | Heated PCV   |
| 13                     | 15A                | Electronic flasher   |
| 14                     | _                  | Not used   |
| 15                     | 15A                | Power lumbar   |
| 16                     | _                  | Not used   |
| 17                     | 15A                | Speed control servo, Shift lock actuator   |
| 18                     | 15A                | Electronic flasher   |
| 19                     | 15A                | Power mirror switch, GEM,<br>Anti-theft relay, Power door<br>locks, Door ajar switches |
| 20                     | 15A                | Convertible top switch   |
| 21                     | 5A                 | Instrument cluster and engine control memory   |
| 22                     |                    | Not used   |
| 23                     | 15A                | A/C clutch, Defogger switch  |
| 24                     | 30A                | Climate control blower motor   |
| 25                     | 25A                | Luggage compartment lid release  |
| 26                     | 30A                | Wiper/Washer motor, Wiper relays   |
| 27                     | 20A                | Radio  |
| 28                     | 15A                | GEM, Overdrive cancel switch   |
| 29                     | 15A                | Anti-lock Brake System (ABS) module  |
| 30                     | 15A                | Daytime Running Lamps<br>(DRL) module  |
| 31                     | 10A                | Data link connector  |
| 32                     | 15A                | Radio, GEM   |
| 33                     | 15A                | Stop lamp switch, Speed control deactivation switch                                    |

| Fuse/Relay<br>Location | Fuse Amp<br>Rating | Passenger Compartment<br>Fuse Panel Description  |
|------------------------|--------------------|--|
| 34                     | 20A                | Instrument Cluster, CCRM,<br>Data link connector,<br>Securilock transceiver<br>module          |
| 35                     | 15A                | Shift lock actuator,<br>Powertrain Control Module<br>(PCM), Speed control servo,<br>ABS module |
| 36                     | 15A                | Air bag control module   |
| 37                     | 5A                 | Adjustable illumination  |
| 38                     | 20A                | High beams   |
| 39                     | 5A                 | GEM  |
| 40                     | _                  | Not used   |
| 41                     | 15A                | Brake lamp   |
| 42                     | _                  | Not used   |
| 43                     | 20A CB             | Power windows  |
| 44                     | _                  | Not used   |

### Power distribution box

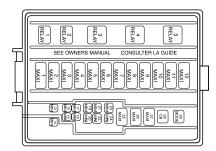
The power distribution box is located in the engine compartment. The power distribution box contains high-current fuses that protect your vehicle's main electrical systems from overloads.



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.



The high-current fuses are coded as follows.

| Fuse/Relay<br>Location | Fuse Amp<br>Rating                | Power Distribution Box<br>Description                     |
|------------------------|-----------------------------------|---|
| Relay 1                | _                                 | Fog lamp interrupt  |
| Relay 2                | _                                 | Interval wiper  |
| Relay 3                | _                                 | Wiper HI/LO   |
| Relay 4                | _                                 | Starter   |
| Relay 5                | _                                 | Fog lamps   |
| 1                      | 50A** (4.6L),<br>30A CB<br>(3.8L) | Electric cooling fan motor                                |
| 2                      | 30A**                             | Headlamps   |
| 3                      | 40A**                             | Starter motor relay, Ignition switch                      |
| 4                      | 40A**                             | Ignition switch   |
| 5                      | 40A**                             | Ignition switch   |
| 6                      | 40A**                             | Instrument cluster,<br>Powertrain Control Module<br>(PCM) |
| 7                      | _                                 | Not used  |
| 8                      | 50A**                             | Anti-lock Brake System (ABS) module                       |
| 9                      | 20A**                             | Auxiliary power point                                     |
| 10                     | 30A**                             | Parklamps   |
| 11                     | 30A**                             | Rear window defrost control                               |
| 12                     | 40A**                             | Power locks   |

| Fuse/Relay<br>Location     | Fuse Amp<br>Rating | Power Distribution Box<br>Description                   |
|----------------------------|--------------------|---|
| 13                         | 30A*               | MACH 1000 left amplifiers                               |
| 14                         | 20A*               | Fuel pump   |
| 15                         | 30A*               | MACH 1000 right amplifiers                              |
| 16                         | 20A*               | Horn  |
| 17                         | 20A*               | ABS   |
| 18                         | 30A*               | Power seats   |
| 19                         | 10A*               | Intercooler pump (Cobra only)                           |
| 20                         | 20A*               | Alternator  |
| 21                         | _                  | Not used  |
| 22                         | _                  | Not used  |
| 23                         | _                  | Not used  |
| 24                         | 20A*               | A/C pressure  |
| 25                         | _                  | Not used  |
| 26                         | 30A**              | PCM   |
| 27                         | 20A**              | Daytime Running Lamps<br>(DRL) module, Foglamp<br>relay |
| 28                         | 25A CB             | Convertible top circuit<br>breaker                      |
| 29                         |                    | Not used  |
| * Mini Fuses ** Maxi Fuses |                    |   |

# **CHANGING A FLAT TIRE**

If you get a flat tire while driving:

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



The use of tire sealants is not recommended and may compromise the integrity of your

### Temporary spare tire information

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

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

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

- use more than one temporary spare tire at a time
- exceed 80 km/h (50 mph) or drive further than 3,200 km (2,000 miles) total under any circumstances
- load the vehicle beyond maximum vehicle load rating listed on the tire pressure label on the inside of the glove compartment door
- tow a trailer
- use tire chains
- drive through an automatic car wash, because of the vehicle's reduced ground clearance
- try to repair the temporary spare tire or remove it from its wheel
- use the wheel for any other type of vehicle

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

- handling, stability and braking performance
- comfort and noise
- ground clearance and parking at curbs
- Winter driving capability

### How to change a flat tire

When one of the front wheels is off the ground, the transmission alone will not prevent the vehicle from moving or slipping off the jack, even if the vehicle is in P (Park) (automatic transmission) or R (Reverse) (manual transmission).

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



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

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

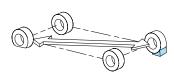
Before changing the tire:

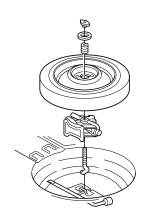
- 1. Park on a level surface.
- 2. Activate the hazard flashers.
- 3. Place the gearshift lever in P (Park) (automatic transmission) or R (Reverse) (manual transmission).
- 4. Set the parking brake.
- 5. Turn off the ignition.

To change the tire:

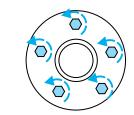
**Note:** Passengers should not remain in the vehicle when the vehicle is being jacked.

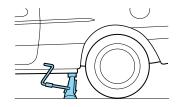
- 1. Block both the front and rear of the wheel diagonally opposite the flat tire. For example, if the left front tire is flat, block the right rear wheel.
- 2. Remove the spare tire, jack and lug wrench.





- 3. Remove the center ornament (if equipped) from the wheel. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.
- 4. Put the jack in the jack notch next to the tire you are changing. Turn the jack handle clockwise until the wheel is completely off the ground.





# Never use the rear differential as a jacking point.

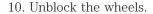
To lessen the risk of personal injury, do not put any part of your body under the vehicle while changing a tire. Do not start the engine when your vehicle is on the jack. The jack is only meant for changing the tire.

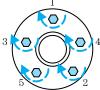


- 5. Remove the lug nuts with the lug wrench.
- 6. Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.

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

- 7. Lower the wheel by turning the jack handle counterclockwise.
- 8. Remove the jack and fully tighten the lug nuts in the order shown.
- 9. Put flat tire, wheel ornament (if equipped), jack and lug wrench away. Make sure jack is fastened so it does not rattle when you drive.





# Anti-theft lug nuts (if equipped)

If your vehicle is equipped with this feature, one of the lug nuts on each wheel must be removed and replaced with a special key. The key and registration card are attached to the lug wrench and stored with the spare tire. If you lose the key, send the registration card to the manufacturer (not the dealer) to get a replacement key. If the lug wrench/lug nut key assembly is lost, see your nearest Ford or Lincoln Mercury dealer who has access to the master set of keys. **Do not use an impact wrench with the anti-theft key.** 

To remove the anti-theft lug nut:



1. Insert the key over the locking lug nut.

Make sure you hold the key square to the lug nut. If you hold the key at an angle, you could damage the key and the lug nut.

- 2. Place the lug nut wrench over the lug nut key and apply pressure on the key with the wrench.
- 3. Turn the wrench in a counterclockwise direction to remove the lug nut.  $\,$

To install the anti-theft lug nut:

- 1. Insert the key over the locking lug nut.
- 2. Place the lug nut wrench over the lug nut key and apply pressure on the key with the wrench.
- 3. Install the lug nut by turning the wrench clockwise.

#### JUMP STARTING YOUR VEHICLE

The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in injury or vehicle damage.



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

Do not attempt to push-start your vehicle. Automatic transmissions do not have push-start capability; doing so may damage the catalytic converter.

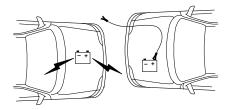
### Preparing your vehicle

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

# 1. Use only a 12-volt supply to start your vehicle.

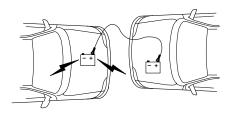
- 2. Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.
- 3. Park the booster vehicle close to the hood of the disabled vehicle making sure the two vehicles **do not** touch. Set the parking brake on both vehicles and stay clear of the engine cooling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

# Connecting the jumper cables

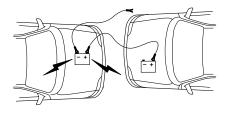


1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

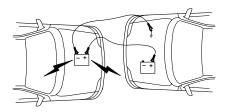
**Note:** In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.



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



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



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

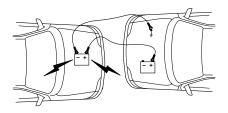
Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

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

#### Jump starting

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

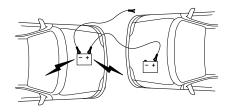
# Removing the jumper cables



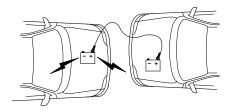
# Remove the jumper cables in the reverse order that they were connected.

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

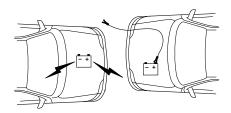
**Note:** In the illustrations, *lightning bolts* are used to designate the assisting (boosting) battery.



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



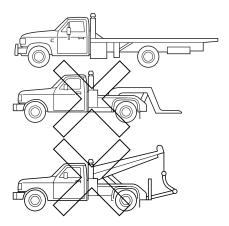
3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.



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

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

# WRECKER TOWING



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

It is recommended that your vehicle be towed with flatbed equipment. Do not tow with slingbelt or wheel lift equipment. Ford Motor Company has not approved a slingbelt or wheel lift equipment towing procedure.

# If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

Ford Motor Company produces a towing manual for all authorized tow truck operators. Have your tow truck operator refer to this manual for proper hook-up and towing procedures for your vehicle.

#### **GETTING THE SERVICES YOU NEED**

#### At home

Ford Motor Company and Ford of Canada have authorized dealerships to service your vehicle. It is preferred that you return to the authorized dealer where your vehicle was purchased when warranty repairs are needed. However, you may also take your vehicle to another Ford Motor Company or Ford of Canada dealership authorized for warranty repairs. Certain warranty repairs require special training though, so not all dealers are authorized to perform all warranty repairs. That means that depending on the warranty repair needed, the vehicle may need to be taken to another dealer. If a particular dealership cannot assist you, then contact the Customer Relationship Center.

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 Manageror Service Manager at the dealership.
- 3. If the inquiry or concern cannot be resolved at the dealership level, please contact the Ford Customer Relationship Center.

#### 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, Michigan 48121 1-800-392-3673 (FORD) (TDD for the hearing impaired: 1-800-232-5952) www.ford.com, click on "contact us"

In Canada:

Customer Relationship Centre Ford Motor Company of Canada, Limited P.O. Box 2000 Oakville, Ontario L6J 5E4 1-800-565-3673 (FORD) www.ford.ca

If you own a Lincoln vehicle and are away from home when your vehicle needs service, or if you need more help than the dealership could provide, after following the steps described above, contact the Ford Customer Relationship Center to find an authorized dealership to help you.

In the United States:
Ford Motor Company
Customer Relationship Center
P.O. Box 6248
Dearborn, Michigan 48121
1-800-521-4140
(TDD for the hearing impaired: 1-800-232-5952)
www.ford.com, click on "contact us"

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)

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- 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)

If you still have a complaint involving a warranty dispute, you may wish to contact the Dispute Settlement Board (U.S.).

In some states (in the U.S.) you must directly notify Ford in writing before pursuing remedies under your state's warranty laws. Ford is also allowed a final repair attempt in some states.

In the United States, a warranty dispute must be submitted to the Dispute Settlement Board before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

#### FORD EXTENDED SERVICE PLAN

You can get more protection for your new car or light truck by purchasing Ford Extended Service Plan (Ford ESP) coverage. Ford ESP is an optional service contract which is backed by Ford Motor Company or Ford Motor Service Company (in the U.S.) and Ford of Canada (in Canada). It provides the following:

- Benefits during the warranty period depending on the plan you purchase (such as: reimbursement for rentals; coverage for certain maintenance and wear items).
- Protection against covered repair costs after your Bumper-to-Bumper Warranty expires.

You may purchase Ford ESP from any participating Ford and Lincoln Mercury and Ford of Canada

dealer. There are several plans available in various time, distance and deductible combinations which can be tailored to fit your own driving needs. Ford ESP also offers reimbursement benefits for towing and rental coverage.

When you buy Ford ESP, you receive Peace-of-Mind protection throughout the United States and Canada, provided by a network of more than 5,000 participating Ford or Lincoln Mercury and Ford of Canada dealers.

If you did not take advantage of the Ford Extended Service Plan at the time of purchasing your vehicle, you may still be eligible. Since this information is subject to change, please ask your dealer for complete details about Ford Extended Service Plan coverage options, or visit the Ford ESP website at www.ford-esp.com.

# THE DISPUTE SETTLEMENT BOARD (U.S. ONLY)

The Dispute Settlement Board is:

- an independent, third-party arbitration program for warranty disputes.
- available free to owners and lessees of qualifying Ford Motor Company vehicles.

The Dispute Settlement Board may not be available in all states. Ford Motor Company reserves the right to change eligibility limitations, modify procedures and/or to discontinue this service without notice and without incurring obligations per applicable state law

#### What kinds of cases does the Board review?

Unresolved warranty repair concerns or vehicle performance concerns as on Ford and Lincoln Mercury cars and Ford and Lincoln Mercury light trucks which are within the terms of any applicable written new vehicle warranty are eligible for review, except those involving:

- a non-Ford product
- a non-Ford dealership

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- sales disputes between customer and dealer except those associated with warranty repairs or concerns with the vehicle's performance as designed
- a request for reimbursement of consequential expenses unless a service or product concern is being reviewed
- items not covered by the New Vehicle Limited Warranty (including maintenance and wear items)
- alleged personal injury/property damage claims
- cases currently in litigation
- vehicles not used primarily for family, personal or household purposes (except in states where the Dispute Settlement Board is required to review commercial vehicles)
- vehicles with non-U.S. warranties

Concerns are ineligible for review if the New Vehicle Limited Warranty has expired at receipt of your application and, in certain states eligibility is dependent upon the customer's possession of the vehicle.

Eligibility may differ according to state law. For example, see the unique brochures for California, West Virginia, Georgia and Wisconsin purchasers/lessees.

#### **Board membership**

The Board consists of:

- Three consumer representatives
- A Ford or Lincoln Mercury dealership representative

Consumer candidates for Board membership are recruited and trained by an independent consulting firm. The dealership Board member is chosen from Ford and Lincoln Mercury dealership management, recognized for their business leadership qualities.

#### What the Board needs

To have your case reviewed you must complete the application in the DSB brochure and mail it to the address provided on the application form. Some states will require you to use certified mail, with return receipt requested.

Your application is reviewed and, if it is determined to be eligible, you will receive an acknowledgment indicating:

- The file number assigned to your application.
- The toll-free phone number of the DSB's independent administrator.

Your dealership and a Ford Motor Company representative will then be asked to submit statements.

To properly review your case, the Board needs the following information:

- Legible copies of all documents and maintenance or repair orders relevant to the case.
- The year, make, model, and Vehicle Identification Number (VIN) listed on your vehicle ownership license.
- The date of repair(s) and mileage at the time of occurrence(s).
- The current mileage.
- The name of the dealer(s) who sold or serviced the vehicle.
- A brief description of your unresolved concern.
- A brief summary of the action taken by the dealer(s) and Ford Motor Company.
- The names (if known) of all the people you contacted at the dealership(s).
- A description of the action you expect to resolve your concern.

You will receive a letter of explanation if your application does not qualify for Board review.

#### Oral presentations

If you would like to make an oral presentation, indicate YES to question 6 on the application. While it is your right to make an oral presentation before the Board, this is not a requirement and the Board will decide the case whether or not an oral presentation is made. An oral presentation may be requested by the Board as well.

#### Making a decision

Board members review all available information related to each complaint, including oral presentations, and arrive at a fair and impartial decision. Board review may be terminated at any time by either party.

Every effort is made to decide the case within 40 days of the date that all requested information is received by the Board. Since the Board generally meets once a month, it may take longer for the Board to consider some cases.

After a case is reviewed, the Board mails you a decision letter and a form on which to accept or reject the Board's decision. The decisions of the Board are binding on Ford (and, in some cases, on the dealer) but not on consumers who are free to pursue other remedies available to them under state or federal law.

#### To request a DSB Brochure/Application

For a brochure/application, speak to your dealer or write/call to the Board at the following address/phone number:

Dispute Settlement Board P.O. Box 5120 Southfield, MI 48086–5120 1–800–428–3718

You may also contact the North American Customer Relationship Center at 1-800-392-3673 (Ford), TDD for the hearing impaired: 1-800-232-5952 or by writing to the Center at the following address:

Ford Motor Company Customer Relationship Center P.O. Box 6248 Dearborn, Michigan 48121

# UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)

In those cases where you continue to feel that the efforts by Ford and the dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight-forward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final; the arbitrator's award is binding both to you and Ford of Canada.

CAMVAP services are available in all territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685.

# GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel.

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact a district or owner relations/customer relationship office.

The use of leaded fuel in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company/Ford of Canada is not responsible for any damage caused by use of improper fuel.

In the United States, using leaded fuel may also result in difficulty importing your vehicle back into the U.S.

If your vehicle must be serviced while you are traveling or living in Central or South America, the Caribbean, or the Middle East, contact the nearest Ford dealership. If the dealership cannot help you, write or call:

FORD MOTOR COMPANY WORLDWIDE DIRECT MARKET OPERATIONS 1555 Fairlane Drive Fairlane Business Park #3 Allen Park, Michigan 48101 U.S.A.

Telephone: (313) 594-4857 FAX: (313) 390-0804

If you are in another foreign country, contact the nearest Ford dealership. If the dealership employees cannot help you, they can direct you to the nearest Ford affiliate office.

If you buy your vehicle in North America and then relocate outside of the U.S. or Canada, register your vehicle identification number (VIN) and new address with Ford Motor Company Worldwide Direct Market Operations.

# ORDERING ADDITIONAL OWNER'S LITERATURE

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

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

Or call:

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

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

Helm, Incorporated can also be reached by their website: www.helminc.com.

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

#### Obtaining a French owner's guide

French Owner's Guides can be obtained from your dealer or by writing to Ford Motor Company of Canada, Limited, Service Publications, P.O. Box 1580, Station B, Mississauga, Ontario L4Y 4G3.

#### IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 29,000 km (18,000 miles), whichever occurs first:

- 1. Two or more repair attempts are made on the same nonconformity 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 carwash mitt with plenty of water for best results.
- Dry the vehicle with a chamois or soft terry cloth towel in order to eliminate water spotting.
- It is especially important to wash the vehicle regularly during the winter months, as dirt and road salt are difficult to remove and cause damage to the vehicle.
- Immediately remove items such as gasoline, diesel fuel, bird droppings and insect deposits because they can cause damage to the vehicle's paintwork and trim over time.
- Remove any exterior accessories, such as antennas, before entering a car wash.
- Suntan lotions and insect repellents can damage any painted surface; if these substances come in contact with your vehicle, wash off as soon as possible.

#### **WAXING**

Applying a polymer paint sealant to your vehicle every six months will assist in reducing minor scratches and paint damage.

- Wash the vehicle first.
- Do not use waxes that contain abrasives.
- Do not allow paint sealant to come in contact with any non-body (low-gloss black) colored trim, such as grained door handles, roof racks, bumpers, side

moldings, mirror housings or the windshield cowl area. The paint sealant will "gray" or stain the parts over time.

#### **PAINT CHIPS**

Your dealer has touch-up paint and sprays to match your vehicle's color. Take your color code (printed on a sticker in the driver's door jam) to your dealer to ensure you get the correct color.

- Remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout before repairing paint chips.
- Always read the instructions before using the products.

#### **ALUMINUM WHEELS AND WHEEL COVERS**

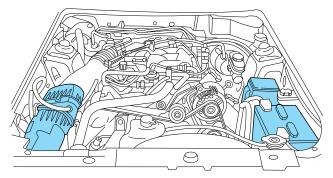
Aluminum wheels and wheel covers are coated with a clearcoat paint finish. In order to maintain their shine:

- Clean weekly with Motorcraft Wheel and Tire Cleaner (ZC-37–A), which is available from your dealer. Heavy dirt and brake dust accumulation may require agitation with a sponge. Rinse thoroughly with a strong stream of water.
- Never apply any cleaning chemical to hot or warm wheel rims or covers.
- Some automatic car washes may cause damage to the finish on your wheel rims or covers.
   Chemical-strength cleaners, or cleaning chemicals, in combination with brush agitation to remove brake dust and dirt, could wear away the clearcoat finish over time.
- Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergent.
- To remove tar and grease, use Motorcraft Bug and Tar Remover (ZC-42), available from your dealer.

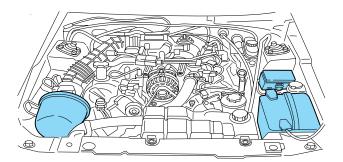
#### **ENGINE**

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

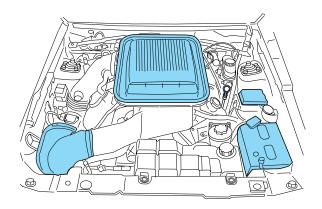
- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser (ZC-20) on all parts that require cleaning and pressure rinse clean.
- Cover the highlighted areas to prevent water damage when cleaning the engine.



• 3.8L OHV V6 engine



## • 4.6L SOHC V8 engine



#### • 4.6L 4V engine (Mach I)

• 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).

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#### WINDOWS AND WIPER BLADES

The windshield, rear window and wiper blades should be cleaned regularly. If the wiper does not wipe properly, substances on the windshield, rear window 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 or rear window 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.

#### CONVERTIBLE TOP AND PADDED MOLDING

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

- Do not use stiff bristle brushes or abrasive materials or cleaners.
- Hot waxes applied by commercial car washes can affect the cleanability of vinyl material.
- Using high water pressure or wand-type car washes against the convertible top and windows may cause water leaks and possible seal damage.

#### **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**

For fabric, carpets, cloth seats and safety belts:

- Remove dust and loose dirt with a vacuum cleaner
- Remove light stains and soil with Motorcraft Extra Strength Upholstery Cleaner (ZC-41).
- If grease or tar is present on the material, spot-clean the area first with Motorcraft Spot and Stain Remover (ZC-14).
- Never saturate the seat covers with cleaning solution.
- Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.

Do not use cleaning solvents, bleach or dye on the vehicle's seatbelts, as these actions may weaken the belt webbing.

#### **LEATHER SEATS (IF EQUIPPED)**

Your leather seating surfaces have a clear, protective coating over the leather.

- To clean, use a soft cloth with Motorcraft Deluxe Leather and Vinyl Cleaner (ZC-11-A). Dry the area with a soft cloth.
- To help maintain its resiliency and color, use the Motorcraft Deluxe Leather Care Kit (ZC-11–D), available from your authorized dealer.

 Do not use household cleaning products, alcohol solutions, solvents or cleaners intended for rubber, vinyl and plastics, or oil/petroleum-based leather conditioners. These products may cause premature wearing of the clear, protective coating.

#### **UNDERBODY**

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free from packed dirt.

# FORD, LINCOLN AND MERCURY CAR CARE PRODUCTS

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

Motorcraft Custom Clearcoat Polish (ZC-8-A)

Motorcraft Custom Vinyl Protectant (not available in Canada) (ZC-40–A)

Motorcraft Vinyl Cleaner (Canada only) (CXC-93)

Motorcraft Vinyl Conditioner (Canada only) (CXC-94)

Motorcraft Deluxe Leather and Vinyl Cleaner (not available in Canada) (ZC-11-A)

Motorcraft Bug and Tar Remover (ZC-42)

Motorcraft Extra Strength Upholstery Cleaner (not available in Canada) (ZC-41)

Motorcraft Custom Bright Metal Cleaner (ZC-15)

Motorcraft Wheel and Tire Cleaner (ZC-37-A)

Motorcraft Dash and Vinyl Cleaner (ZC-38-A)

Motorcraft Car Care Kit (ZC-26)

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)

#### SERVICE RECOMMENDATIONS

To help you service your vehicle:

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

If your vehicle requires professional service, your dealership can provide the necessary parts and service. Check your *Warranty Guide/Owner Information Guide* to find out which parts and services are covered.

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

# PRECAUTIONS WHEN SERVICING YOUR VEHICLE

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning (cigarettes) material away from the battery and all fuel related parts.

#### Working with the engine off

- Automatic transmission:
- 1. Set the parking brake and shift to P (Park).
- 2. Turn off the engine and remove the key.
- 3. Block the wheels.

- Manual transmission:
- 1. Set the parking brake, depress the clutch and place the gearshift in 1 (First).
- 2. Turn off the engine and remove the key.
- 3. Block the wheels.

#### Working with the engine on

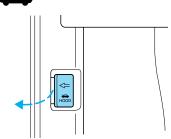
- Automatic transmission:
- 1. Set the parking brake and shift to P (Park).
- 2. Block the wheels.
- Manual transmission:
- 1. Set the parking brake, depress the clutch and place the gearshift in N (Neutral).
- 2. Block the wheels.

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

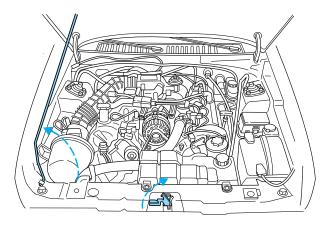
#### OPENING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the bottom left corner of the instrument

panel.



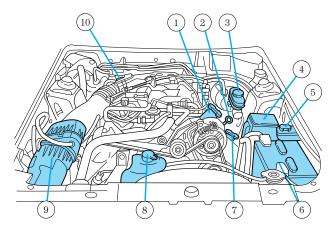
2. Go to the front of the vehicle and release the auxiliary latch that is located under the front center of the hood.



3. Lift the hood and secure it with the prop rod.

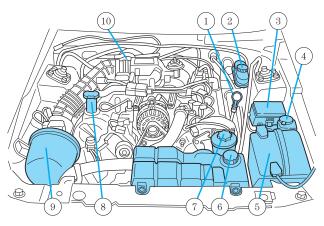
# IDENTIFYING COMPONENTS IN THE ENGINE COMPARTMENT

## 3.8L OHV V6 engine



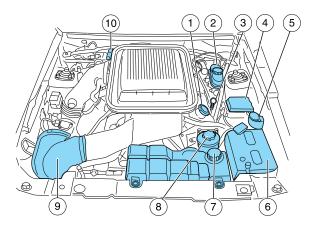
- 1. Engine oil filler cap
- 2. Engine oil dipstick
- 3. Brake fluid reservoir
- 4. Power distribution box
- 5. Windshield washer fluid reservoir
- 6. Battery
- 7. Power steering fluid reservoir
- 8. Engine coolant reservoir
- 9. Air filter assembly
- 10. Automatic transmission fluid dipstick (if equipped)

# 4.6L SOHC V8 engine



- 1. Engine oil dipstick
- 2. Brake fluid reservoir
- 3. Power distribution box
- 4. Windshield washer fluid reservoir
- 5. Battery
- 6. Engine coolant reservoir
- 7. Power steering fluid reservoir
- 8. Engine oil filler cap
- 9. Air filter assembly
- 10. Automatic transmission fluid dipstick (if equipped)

# 4.6L 4V V8 (Mach 1) engine



- 1. Engine oil filler cap
- 2. Brake fluid reservoir
- 3. Engine oil dipstick
- 4. Power distribution box
- 5. Windshield washer fluid reservoir
- 6. Battery
- 7. Engine coolant reservoir
- 8. Power steering fluid reservoir
- 9. Air filter assembly
- 10. Automatic transmission fluid dipstick (if equipped)

## 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 4.5° C (40° F), 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

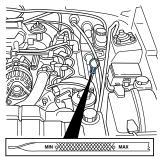
Refer to the scheduled maintenance guide for the appropriate intervals for checking the engine oil.

- 1. Make sure the vehicle is on level ground.
- 2. Turn the engine off and wait 5 to 10 minutes for the oil to drain into the oil pan.
- 3. Set the parking brake and ensure the gearshift is securely latched in P (Park) (automatic transmissions) or 1 (First) (manual transmissions).

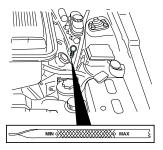
- 4. Open the hood. Protect yourself from engine heat.
- 5. Locate and carefully remove the engine oil level indicator (dipstick).
- 3.8L V6 engine



• 4.6L SOHC V8 engine

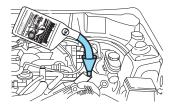


• 4.6L 4v V8 engine (Mach 1)

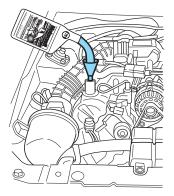


6. Wipe the indicator clean. Insert the indicator fully, then remove it again.

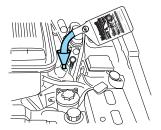
- If the oil level is **between the MIN—MAX marks**, the oil level is acceptable. **DO NOT ADD OIL**.
- If the oil level is below the MIN mark, add enough oil to raise the level within the MIN—MAX range.
- 3.8L V6 engine



• 4.6L SOHC V8 engine



• 4.6L 4v V8 engine (Mach 1)



- 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.

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#### Adding engine oil

- 1. Check the engine oil. For instructions, refer to *Checking the engine oil* in this chapter.
- 2. If the engine oil level is not within the normal range, add only certified engine oil of the recommended viscosity. Remove the engine oil filler cap and use a funnel to pour the engine oil into the opening.
- 3. Recheck the engine oil level. Make sure the oil level is not above the MAX mark on the engine oil level indicator (dipstick).
- 4. Install the indicator and ensure it is fully seated.
- 5. Fully install the engine oil filler cap by turning the filler cap clockwise 1/4 of a turn until three clicks are heard or until the cap is fully seated.

To avoid possible oil loss, DO NOT operate the vehicle with the engine oil level indicator and/or the engine oil filler cap removed.

#### Engine oil and filter recommendations

Look for this certification trademark.



#### Use SAE 5W-20 engine oil.

Only use oils "Certified For Gasoline Engines" by the American Petroleum Institute (API). To protect your engine's warranty use Motorcraft SAE 5W-20 or an equivalent 5W-20 oil meeting Ford specification WSS-M2C153-H. SAE 5W-20 oil provides optimum fuel economy and durability performance meeting all requirements for your vehicle's engine.

Do not use supplemental engine oil additives, cleaners or other engine treatments. They are

unnecessary and could lead to engine damage that is not covered by Ford warranty.

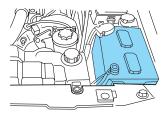
Change your engine oil according to the appropriate schedule listed in the scheduled maintenance guide.

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

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

# BATTERY - +

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



However, for severe usage or in high temperature climates, check the battery electrolyte level. Refer to the scheduled maintenance guide for the service interval schedules.

# Keep the electrolyte level in each cell up to the "level indicator". Do not overfill the battery cells.

If the electrolyte level in the battery is low, you can add plain tap water to the battery, as long as you do not use hard water (water with a high mineral or alkali content). If possible, however, try to only fill the battery cells with distilled water. If the battery needs water often, have the charging system checked.

If your battery has a cover/shield, make sure it is reinstalled after the battery has been cleaned or replaced.

For longer, trouble-free operation, keep the top of the battery clean and dry. Also, make certain the battery cables are always tightly fastened to the battery terminals.

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide proper ventilation.

When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and/or damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.

Keep batteries out of reach of children.
Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.

Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.** 

Because your vehicle's engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the

battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance. To begin this process:

- 1. With the vehicle at a complete stop, set the parking brake.
- 2. Put the gearshift in P (Park) (automatic transmission) or the neutral position (manual transmission), turn off all accessories and start the engine.
- 3. Run the engine until it reaches normal operating temperature.
- 4. Allow the engine to idle for at least one minute.
- 5. Turn the A/C on and allow the engine to idle for at least one minute.
- 6. Drive the vehicle to complete the relearning process.
- The vehicle may need to be driven 16 km (10 miles) or more to relearn the idle and fuel trim strategy.
- If you do not allow the engine to relearn its idle trim, the idle quality of your vehicle may be adversely affected until the idle trim is eventually relearned.

When the battery is disconnected or a new battery installed, the transmission must relearn its adaptive strategy. As a result of this, the transmission may shift firmly. This operation is considered normal and will not affect function or durability of the transmission. Over time the adaptive learning process will fully update transmission operation to its optimum shift feel.

If the battery has been disconnected or a new battery has been installed, the clock and the preset radio stations must be reset once the battery is reconnected.

• Always dispose of automotive batteries in a responsible manner. Follow your local authorized standards for disposal. Call your local authorized



recycling center to find out more about recycling automotive batteries.

# ENGINE COOLANT

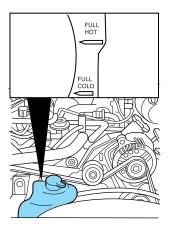
# Checking engine coolant

The concentration and level of engine coolant should be checked at the mileage intervals in the scheduled maintenance guide. The coolant concentration should be maintained at 50/50 coolant and water, which equates to a freeze point of -36° C (-34° F). 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 "cold full" of "cold fill range" level 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 -36° C (-34° F)
- boiling protection up to 129° C (265° F)
- protection against rust and other forms of corrosion
- enables calibrated gages to function properly

• 3.8L OHV V6 engine



• 4.6L SOHC V8 / 4.6L 4v V8 (Mach 1) engines



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

- The engine coolant should be at the "cold fill level" as listed on the engine coolant reservoir.
- Refer to the scheduled maintenance guide for service interval schedules.
- Be sure to read and understand *Precautions* when servicing your vehicle in this chapter.

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If the engine coolant has not been checked at the recommended interval, the engine coolant reservoir may become low or empty. If the reservoir is low or empty, add engine coolant to the reservoir. Refer to *Adding engine coolant* in this chapter.

**Note:** Automotive fluids are not interchangeable; do not use engine coolant, antifreeze or windshield washer fluid outside of its specified function and vehicle location.

#### Adding engine coolant

When adding coolant, make sure it is a 50/50 mixture of engine coolant and distilled water. Add the mixture to the coolant reservoir, **when the engine is cool**, until the appropriate fill level is obtained.

Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

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

• Add Motorcraft Premium Gold Engine Coolant (yellow-colored), VC-7-A (VC-7-B in Oregon), 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 or 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.

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.

If you must remove the pressure relief cap or radiator cap (depending upon engine application), follow these steps to avoid personal injury:

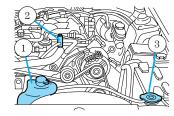
- 1. Before you remove the cap, turn the engine off and let it cool.
- 2. When the engine is cool, wrap a thick cloth around the cap. Slowly turn cap counterclockwise until pressure begins to release.
- 3. Step back while the pressure releases.
- 4. When you are sure that all the pressure has been released, use the cloth to turn it counterclockwise and remove the cap.

#### Engine coolant refill procedure-3.8L V6 engine

**Note:** Use the following procedure when refilling the cooling system of a vehicle equipped with a 3.8L V6 engine. Failure to follow this procedure may result in damage to the engine and engine cooling system.

The following procedure should be used when refilling the cooling system of a 3.8L V6 engine after it has been drained or become extremely low.

- 1. Remove the cap from the engine coolant reservoir.
- 2. Open the cooling system vent plug.
- 3. Remove the radiator cap as previously outlined.



- 4. Add a **50/50 mixture** of engine coolant and distilled water to the radiator until full.
- 5. Add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the "cold fill level" as listed on the reservoir.
- 6. Close the cooling system vent plug.
- 7. Reinstall the engine coolant reservoir cap.
- 8. Reinstall the radiator cap.
- 9. Start the engine and run it at 2000–2500 rpm until the upper radiator hose is warm (this indicates the thermostat is open and coolant is flowing through the entire system).
- 10. Shut the engine off and allow it to cool.
- 11. Wrap a thick cloth around the radiator cap and cautiously remove the radiator cap.
- 12. Add a **50/50 mixture** of engine coolant and distilled water to the radiator until full.
- 13. Reinstall the radiator cap.
- 14. Check the coolant level in the reservoir before you drive your vehicle the next few times (with the engine cool).

15. If necessary, add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the "cold fill level" as listed on the reservoir.

If you are unsure of how to operate the cooling system vent plug when adding engine coolant to the 3.8L V6 engine, contact your dealer.

#### Engine coolant refill procedure-4.6L V8 engine

The following procedure should be used when refilling the cooling system of a 4.6L V8 engine after it has been drained or become extremely low.

- 1. Remove the pressure relief cap from the engine coolant reservoir as previously outlined.
- 2. Slowly add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the "cold fill level" as listed on the reservoir.
- 3. Reinstall the pressure relief cap.
- 4. Start and idle the engine until the upper radiator hose is warm (this indicates the thermostat is open and coolant is flowing through the entire system).
- 5. Shut the engine off and let it cool.
- 6. Remove the pressure relief cap from the engine coolant reservoir as previously outlined.
- 7. Add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the "cold fill level" as listed on the reservoir.
- 8. Reinstall the pressure relief cap.
- 9. Check the coolant level in the reservoir before you drive your vehicle the next few times (with the engine cool).
- 10. If necessary, add a **50/50 mixture** of engine coolant and distilled water to the engine coolant reservoir until the coolant level is at the "cold fill level" as listed on the reservoir.

After any coolant has been added, check the coolant concentration see Checking Engine Coolant section).

If the concentration is not 50/50 (protection to  $-34^{\circ}$  F/ $-36^{\circ}$  C), drain some coolant and adjust the concentration. It may take several drains and additions to obtain a 50/50 coolant concentration.

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

If you have to add more than 1.0 liter (1.0 quart) of engine coolant per month, have your dealer check the engine cooling system. Your cooling system may have a leak. Operating an engine with a low level of coolant can result in engine overheating and possible engine damage.

#### Recycled engine coolant

Ford Motor Company does NOT recommend the use of recycled engine coolant in vehicles originally equipped with Motorcraft Premium Gold Engine Coolant since a Ford-approved recycling process is not yet available.

Used engine coolant should be disposed of in an appropriate manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

#### Coolant refill capacity

To find out how much fluid your vehicle's cooling system can hold, refer to *Refill capacities* in this chapter.

Fill your engine coolant reservoir as outlined in *Adding engine coolant* in this chapter.

#### Severe climates

If you drive in extremely cold climates (less than -36° C [-34° F]):

• It may be necessary to increase the coolant concentration above 50%.

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

If you drive in extremely hot climates:

- It is still necessary to maintain the coolant concentration above 40%.
- NEVER decrease the coolant concentration below 40%.
- Decreased engine coolant concentrations below 40% will decrease the corrosion protection characteristics of the engine coolant and may cause engine damage.
- Decreased engine coolant concentrations below 40% will decrease the freeze protection characteristics of the engine coolant and may cause engine damage.
- Refer to the chart on the coolant container to ensure the coolant concentration in your vehicle will provide adequate protection at the temperatures in which you drive.

Vehicles driven year-round in non-extreme climates should use a 50/50 mixture of engine coolant and distilled water for optimum cooling system and engine protection.

# WHAT YOU SHOULD KNOW ABOUT AUTOMOTIVE FUELS ■

#### Important safety precautions

Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.

The fuel system may be under pressure. If the fuel filler cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the fuel filler cap. Otherwise, fuel may spray out and injure you or others.

If you do not use the proper fuel filler cap, excessive pressure or vacuum in the fuel tank may damage the fuel system or cause the fuel cap to disengage in a collision, which may result in possible personal injury.



Automotive fuels can cause serious injury or death if misused or mishandled.



Gasoline may contain benzene, which is a cancer-causing agent.

Observe the following guidelines when handling automotive fuel:

 Extinguish all smoking materials and any open flames before fueling your vehicle.



- Always turn off the vehicle before fueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent

injury. If fuel is swallowed, call a physician immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.

- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin and/or clothing, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking "Antabuse" or other forms of disulfiram for the treatment of alcoholism. Breathing gasoline vapors, or skin contact could cause an adverse reaction. In sensitive individuals, serious personal injury or sickness may result. If fuel is splashed on the skin, promptly wash skin thoroughly with soap and water. Consult a physician immediately if you experience an adverse reaction.

When refueling always shut the engine off and never allow sparks or open flames near the filler neck. Never smoke while refueling. Fuel vapor is extremely hazardous under certain conditions. Care should be taken to avoid inhaling excess fumes.

The flow of fuel through a fuel pump nozzle can produce static electricity, which can cause a fire if fuel is pumped into an ungrounded fuel container.

Use the following guidelines to avoid static build-up when filling an ungrounded fuel container:

- Place approved fuel container on the ground.
- DO NOT fill a fuel container while it is in the vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container while filling.
- DO NOT use a device that would hold the fuel pump handle in the fill position.

#### **Fuel Filler Cap**

Your fuel tank filler cap has an indexed design with a 1/8 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.

"Check Fuel Cap" illuminates when the ignition is turned to the ON position to ensure your bulb is working. When this light turns on, check the fuel filler cap. Continuing to operate the vehicle with the Check Fuel Cap light on, can activate the Service Engine Soon warning. When the fuel filler cap is properly re-installed, the light(s) will turn off after a period of normal driving. It may take a long period of time for the system to detect an improperly installed fuel filler cap.

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.

Do not use fuel containing methanol. It can damage critical fuel system components.

Your vehicle was not designed to use fuel or fuel additives with metallic compounds, including manganese-based additives.

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.

#### Mach 1

Your vehicle is designed to use "Premium" unleaded gasoline with an



(R+M)/2 octane rating of 91 or higher for optimum performance. The use of gasolines with lower octane ratings may degrade performance. We do not recommend the use of gasolines labeled as "Premium" in high altitude areas that are sold with octane ratings of less than 91.

If your engine knocks 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 during a cold start, try a different brand of unleaded gasoline. "Premium" unleaded gasoline is not recommended for vehicles designed to use "Regular" unleaded gasoline because it may cause these problems to become more pronounced. If the problems persist, see your dealer or a qualified service technician.

It should not be necessary to add any aftermarket products to your fuel tank if you continue to use high quality fuel of the recommended octane rating. Aftermarket products could cause damage to the fuel system. Repairs to correct the effects of using an aftermarket product in your fuel may not be covered by your warranty.

Many of the world's automakers approved the World-wide Fuel Charter that recommends gasoline specifications to provide improved performance and emission control system protection for your vehicle. Gasolines that meet the World-wide Fuel Charter should be used when available. Ask your fuel supplier about gasolines that meet the World-wide Fuel Charter.

#### Cleaner air

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

#### Running out of fuel

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

If you have run out of fuel:

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

#### **Fuel Filter**

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

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

#### **ESSENTIALS OF GOOD FUEL ECONOMY**

#### Measuring techniques

Your best source of information about actual fuel economy is you, the driver. You must gather information as accurately and consistently as possible. Fuel expense, frequency of fill-ups or fuel gauge readings are NOT accurate as a measure of fuel economy. We do not recommend taking fuel economy measurements during the first 1,600 km (1,000 miles) of driving (engine break-in period). You will get a more accurate measurement after 3,000 km–5,000 km (2,000 miles-3,000 miles).

#### Filling the tank

The advertised fuel capacity of the fuel tank on your vehicle is equal to the rated refill capacity of the fuel tank as listed in the *Refill capacities* section of this chapter.

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

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

For consistent results when filling the fuel tank:

- Turn the engine/ignition switch to the off position prior to refueling, an error in the reading 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.

Keep a record for at least one month and record the type of driving (city or highway). This will provide an accurate estimate of the vehicle's fuel economy under current driving conditions. Additionally, keeping records during summer and winter will show how temperature impacts fuel economy. In general, lower temperatures give lower fuel economy.

# Driving style — good driving and fuel economy habits

Give consideration to the lists that follow and you may be able to change a number of variables and improve your fuel economy.

#### Habits

- Smooth, moderate operation can yield up to 10% savings in fuel.
- Steady speeds without stopping will usually give the best fuel economy.
- Idling for long periods of time (greater than one minute) may waste fuel.
- Anticipate stopping; slowing down may eliminate the need to stop.

- Sudden or hard accelerations may reduce fuel economy.
- Slow down gradually.
- Driving at reasonable speeds (traveling at 88 km/h [55 mph] uses 15% less fuel than traveling at 105 km/h [65 mph]).
- Revving the engine before turning it off may reduce fuel economy.
- Using the air conditioner or defroster may reduce fuel economy.
- You may want to turn off the speed control in hilly terrain if unnecessary shifting between third and fourth gear occurs. Unnecessary shifting of this type could result in reduced fuel economy.
- Warming up a vehicle on cold mornings is not required and may reduce fuel economy.
- Resting your foot on the brake pedal while driving may reduce fuel economy.
- Combine errands and minimize stop-and-go driving.

#### Maintenance

- Keep tires properly inflated and use only recommended size.
- Operating a vehicle with the wheels out of alignment will reduce fuel economy.
- Use recommended engine oil. Refer to *Lubricant* specifications in this chapter.
- Perform all regularly scheduled maintenance items. Follow the recommended maintenance schedule and owner maintenance checks found in your vehicle scheduled maintenance guide.

#### **Conditions**

- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Carrying unnecessary weight may reduce fuel economy (approximately 0.4 km/L [1 mpg] is lost for every 180 kg [400 lb] of weight carried).

- Adding certain accessories to your vehicle (for example bug deflectors, rollbars/light bars, running boards, ski/luggage racks) may reduce fuel economy.
- 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.
- Close windows for high speed driving.

#### **EPA** window sticker

Every new vehicle should have the EPA window sticker. Contact your dealer if the window sticker is not supplied with your vehicle. The EPA window sticker should be your guide for the fuel economy comparisons with other vehicles.

It is important to note the box in the lower left corner of the window sticker. These numbers represent the Range of L/100 km (MPG) expected on the vehicle under optimum conditions. Your fuel economy may vary depending upon the method of operation and conditions.

## EMISSION CONTROL SYSTEM

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

- Use only the specified fuel listed.
- Avoid running out of fuel.
- Do not turn off the ignition while your vehicle is moving, especially at high speeds.

 Have the items listed in your scheduled maintenance guide performed according to the specified schedule.

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

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

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

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

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

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

Please consult your *Warranty Guide* for complete emission warranty information.

#### On board diagnostics (OBD-II)

Your vehicle is equipped with a computer that monitors the engine's emission control system. This system is commonly known as the On Board Diagnostics System (OBD-II). This OBD-II system protects the environment by ensuring that your vehicle continues to meet government emission standards. The OBD-II system also assists the service technician in properly servicing your vehicle. When the *Check Engine/Service Engine Soon* light illuminates, the OBD-II system has detected a malfunction. Temporary malfunctions may cause your *Check Engine/Service Engine Soon* light to illuminate. Examples are:

- 1. The vehicle has run out of fuel. (The engine may misfire or run poorly.)
- 2. Poor fuel quality or water in the fuel.
- 3. The fuel cap may not have been securely tightened.

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

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

# Readiness for Inspection/Maintenance (I/M) testing

In some localities, it may be a legal requirement to pass an I/M test of the on-board diagnostics system. If your "Check Engine/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 "Check Engine/Service Engine Soon" light on.

If the vehicle's powertrain system or its battery has just been serviced, the on-board diagnostics system is reset to a "not ready for I/M test" condition. To ready the on-board diagnostics system for I/M testing, a minimum of 30 minutes of city and highway driving is necessary as described below:

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

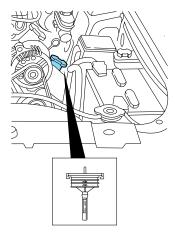
Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once started, do not turn off the engine until the above driving cycle is complete.

# 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.

If your vehicle is equipped with the 3.8L V6 engine, check the power steering fluid level with the engine at normal operating temperature.

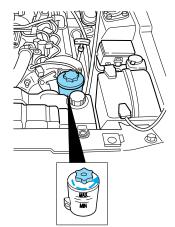
1. Start the engine and let it run until it reaches normal operating temperature (the engine coolant temperature gauge indicator will be near the center of the normal area between H and C).



- 2. While the engine idles, turn the steering wheel left and right several times.
- 3. Turn the engine off.
- 4. Check the fluid level on the dipstick. It should be within the FULL HOT range. Do not add fluid if the level is within this range.
- 5. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the correct operating range. Be sure to put the cap back on the reservoir.

If your vehicle is equipped with a 4.6L V8 engine, check the power steering fluid level with the engine at ambient temperature. Allow at least one-half hour after driving for the power steering fluid to cool.

- 1. Start the engine and allow the engine to idle.
- 2. 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 within this range.
- 5. If the fluid is low, add fluid in small amounts, continuously checking the level until it reaches the correct operating range. Be sure to put the cap back on the reservoir.



#### **BRAKE FLUID RESERVOIR**

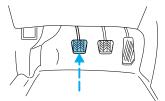
The fluid level will drop slowly as the brakes wear, and will rise when the brake components are



replaced. Fluid levels 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 ADJUSTMENT (IF EQUIPPED)**

Check the clutch adjustment. Refer to the scheduled maintenance guide for the service interval schedules.



The clutch on your vehicle is operated by a

cable. As necessary, adjust the clutch as described below.

- 1. Turn the engine off and shift into 1 (First).
- 2. Put your foot under the clutch pedal and gently pull it up until the pedal stops.
- 3. Push the clutch pedal down slowly. You will hear a click as the clutch adjusts itself.

#### TRANSMISSION FLUID

# Checking automatic transmission fluid (if equipped)

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

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

- 1. Drive the vehicle 30 km (20 miles) or until it reaches normal operating temperature.
- 2. Park the vehicle on a level surface and engage the parking brake.
- 3. With the parking brake engaged and your foot on the brake pedal, start the engine and move the gearshift lever through all of the gear ranges. Allow sufficient time for each gear to engage.
- 4. Latch the gearshift lever in P (Park) and leave the engine running.
- 5. Remove the dipstick, wiping it clean with a clean, dry lint free rag. If necessary, refer to *Identifying components in the engine compartment* in this chapter for the location of the dipstick.
- 6. Install the dipstick making sure it is fully seated in the filler tube.
- 7. Remove the dipstick and inspect the fluid level. The fluid should be in the designated area for normal operating temperature or ambient temperature.

#### Low fluid level

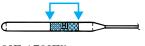
Do not drive the vehicle if the fluid level is at the bottom of the dipstick and the ambient temperature is above 10°C (50°F).

#### Correct fluid level

The transmission fluid should be checked at normal operating temperature 66°C-77°C (150°F-170°F) on a level surface. The normal operating temperature can be reached after approximately 30 km (20 miles) of driving.

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

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



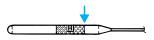
The transmission fluid should be in this range if at ambient



temperature (10°C-35°C [50°F-95°F]).

#### High fluid level

Fluid levels above the safe range may result in transmission failure.



An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

High fluid levels can be caused by an overheating condition.

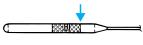
#### Adjusting automatic transmission fluid levels

Before adding any fluid, make sure the correct type is used. The type of fluid used is normally indicated on the dipstick and also in the Lubricant specifications section in this chapter.

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

If necessary, add fluid in 250 ml (1/2 pint) increments through the filler tube until the level is correct.

If an overfill occurs. excess fluid should be removed by a qualified technician.

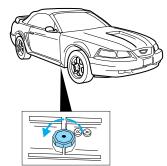


An overfill condition of transmission fluid may cause shift and/or engagement concerns and/or possible damage.

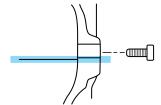
Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

# Checking and adding manual transmission fluid (if equipped)

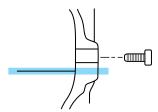
- 1. Clean the filler plug.
- 2. Remove the filler plug and inspect the fluid level.



- 3. Note: There are two different manual transmissions used in this vehicle and they have different fluid levels. For vehicles equipped with a V6 engine and Cobra the correct manual transmission fill level is at the lower edge of the filler hole. For vehicles equipped with a V8 engine (except Cobra) the correct manual transmission fill level is 1.3 cm (1/2 inch) below the edge of the filler hole
- Fill level for V6 and Cobra



• Fill level for V8 (except Cobra)

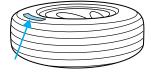


- 4. Add enough fluid through the filler opening to bring the fluid up to the recommended levels.
- 5. Install and tighten the fill plug securely.

Use only fluid that meets Ford specifications. Refer to  $Lubricant\ Specifications$  in this chapter.

## INFORMATION ABOUT UNIFORM TIRE QUALITY GRADING

New vehicles are fitted with tires that have a rating on them called Tire Quality Grades. The Quality grades can be found where



applicable on the tire sidewall between tread shoulder and maximum section width. For example:

#### • Treadwear 200 Traction AA Temperature A

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

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

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

#### **Treadwear**

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

#### Traction AA A B C

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

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

#### Temperature A B C

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

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

### **SERVICING YOUR TIRES**

#### Checking the tire pressure

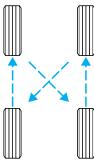
- Use an accurate tire pressure gauge.
- Check the tire pressure when tires are cold, after the vehicle has been parked for at least one hour or has been driven less than 5 km (3 miles).
- Adjust tire pressure to recommended specifications found on the certification label on the driver side door latch pillar.

Improperly inflated tires can affect vehicle handling and can fail suddenly, possibly resulting in loss of vehicle control.

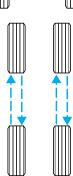
#### Tire rotation

Because your vehicle's tires perform different jobs, they often wear differently. To make sure your tires wear evenly and last longer, rotate them as indicated in the scheduled maintenance guide. If you notice that the tires wear unevenly, have them checked.

• 16 inch four tire rotation

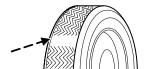


• 17 inch four tire rotation



#### Replacing the tires

Replace the tires when the wear band is visible through the tire treads.



When replacing full size tires, never mix radial bias-belted, or bias-type tires. Use only the tire sizes that are listed on the tire pressure decal. Make sure that all tires are the same size, speed rating, and load-carrying capacity. Use only the tire combinations recommended on the label. If you do not follow these precautions, your vehicle may not drive properly and safely.

Make sure that all replacement tires are of the same size, type, load-carrying capacity and tread design (e.g., "All Terrain", etc.), as originally offered by Ford.

Make sure that all replacement tires are of the same size, type, load-carrying capacity and tread design (e.g., "All Terrain", "Touring", etc.), as originally offered by Ford.

Failure to follow these precautions may adversely affect the handling of the vehicle, and increase the risk of loss of vehicle control, vehicle rollover and/or personal injury.

Tires that are larger or smaller than your vehicle's original tires may also affect the accuracy of your speedometer.

#### **SNOW TIRES AND CHAINS**

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

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

The tires on your vehicle have all weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and chains. Use chains on the tires only in an emergency or if the law requires them.

Follow these guidelines when using snow tires and chains:

• Chains may damage aluminum wheels.

- Use only Cable Type chains with size P225/55R16 or 245/45ZR17 tires. Use of SAE Class S chains may damage your vehicle.
- Install chains securely, verifying that the chains do not touch any wiring, brake lines or fuel lines.
- Drive cautiously. If you hear the chains rub or bang against your vehicle, stop and re-tighten the chains. If this does not work, remove the chains to prevent damage to your vehicle.
- If possible, avoid fully loading your vehicle.
- Remove the tire chains when they are no longer needed. Do not use tire chains on dry roads.
- 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             | 3.8L OHV<br>V6 engine | 4.6L SOHC<br>V8 engine | 4.6L 4v V8<br>engine<br>(Mach 1) |
|-----------------------|-----------------------|------------------------|----------------------------------|
| Air filter<br>element | FA-1611               | FA-1634                | FA-1634                          |
| Fuel filter           | FG-986                | FG-986                 | FG-986                           |
| Battery               | BXT-59                | BXT-59                 | BXT-59                           |
| Oil filter            | FL-400S               | FL-820S                | FL-820S                          |
| PCV valve             | EV-152                | EV-98                  | EV-261                           |
| Spark plugs*          | AGSF-42FM**           | AGSF-32PM              | AGS F-32WM                       |

<sup>\*</sup> Refer to Vehicle Emissions Control Information (VECI) decal for spark plug gap information.

<sup>\*\*</sup>If a spark plug is removed for inspection, it must be reinstalled in the same cylinder. If a spark plug needs to be replaced, use only spark plugs with the same service part number suffix letter as shown on the engine decal.

## **REFILL CAPACITIES**

| Fluid   | Ford Part<br>Name   | Application   | Capacity   |
|---|---|---|--|
| Brake fluid   | Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid | All   | Fill to line on<br>reservoir                               |
| Engine oil<br>(includes<br>filter<br>change) <sup>6</sup> | Motorcraft<br>SAE 5W-20<br>Premium<br>Synthetic             | 3.8L OHV V6<br>engine                                       | 4.7 L (5.0 quarts)   |
|   | Blend Motor<br>Oil (US)<br>Motorcraft<br>SAE 5W-20          | 4.6L SOHC<br>V8 engine                                      | 5.7L (6.0<br>quarts)                                       |
|   | Super<br>Premium<br>Motor Oil<br>(Canada)                   | 4.6L 4v V8<br>(Mach 1)                                      | 5.7L (6.0 quarts)  |
| Engine<br>coolant <sup>1</sup>                            |   | 3.8L OHV V6<br>engine                                       | 11.2L (11.8<br>quarts)                                     |
|   |   | 4.6L SOHC<br>V8 engine                                      | 13.3L (14.1<br>quarts)                                     |
|   |   | 4.6L 4v V8<br>(Mach 1)<br>with<br>Automatic<br>Transmission | 15.2L (16.1<br>quarts)                                     |
|   |   | 4.6L 4v V8<br>(Mach 1)<br>with Manual<br>Transmission       | 15.2L (16.1 quarts)  |
| Power<br>steering<br>fluid                                | Motorcraft<br>MERCON®<br>ATF                                | 3.8L OHV V6<br>engine                                       | Keep in<br>FULL HOT<br>range on<br>dipstick                |
|   |   | 4.6L SOHC<br>V8/4.6L 4v V8<br>(Mach 1)<br>engine            | Fill to<br>between MIN<br>and MAX<br>lines on<br>reservoir |

| Fluid                               | Ford Part<br>Name   | Application   | Capacity                            |
|-------------------------------------|---|---|-------------------------------------|
| Rear axle<br>lubricant <sup>2</sup> | Motorcraft<br>SAE 80W-90<br>Premium Rear<br>Axle Lubricant    | 7 .5 inch axle  | 1.5L (3.25 pints)                   |
|                                     | Motorcraft<br>SAE 75W-140<br>Synthetic Rear<br>Axle Lubricant | 8.8 inch axle   | 2.0L (4.25 pints)                   |
| Fuel tank                           | N/A   | All   | 59.4L (15.7 gallons)                |
| Transmission fluid <sup>3</sup>     | Motorcraft<br>MERCON®V<br>ATF                                 | Automatic<br>with 3.8L<br>OHV V6<br>engine                            | 13.1L (13.9 quarts) <sup>4</sup>    |
|                                     |   | Automatic<br>with 4.6L<br>SOHC<br>V8/4.6L 4v V8<br>(Mach 1)<br>engine | 12.0L (12.8<br>quarts) <sup>4</sup> |
|                                     | Motorcraft<br>MERCON®<br>ATF                                  | Manual with<br>3.8L OHV V6<br>engine                                  | 2.6L (5.6 pints) <sup>5</sup>       |
|                                     | Synthetic<br>MERCON®<br>ATF                                   | Manual with<br>4.6L SOHC<br>V8/4.6L 4v V8<br>(Mach 1)<br>engine       | 3.8L (8.0 pints) <sup>5</sup>       |
| Windshield<br>washer fluid          | Motorcraft<br>Premium<br>Windshield<br>Washer<br>Concentrate  | All   | 3.8L (4.0 quarts)                   |

Add the coolant type originally equipped in your vehicle.

<sup>&</sup>lt;sup>2</sup>Rear axle lubricants do not need to be checked or changed unless a leak is suspected, service is required or the axle assembly has been submerged in water. The axle lubricant should be changed any time the rear axle has been submerged in water. Fill 6 mm to 14 mm (1/4 inch to 9/16 inch) below bottom of fill hole. Add 118 ml (4 oz.) of Additive

Friction Modifier XL-3 or equivalent meeting Ford specification EST-M2C118–A for complete refill of Traction-Lok axles.

<sup>3</sup>Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. MERCON® and MERCON® V are not interchangeable. DO NOT mix MERCON® and MERCON® V. Refer to your scheduled maintenance guide to determine the correct service interval.

<sup>4</sup>Indicates only approximate dry-fill capacity. Some applications may vary based on cooler size and if equipped with an in-tank cooler. The amount of transmission fluid and fluid level should be set by the indication on the dipstick's normal operating range.

<sup>5</sup>Service refill capacity is determined by filling the transmission to the bottom of the filler hole with the vehicle on a level surface.

<sup>6</sup>Use of synthetic or synthetic blend motor oil is not mandatory. Engine oil need only meet the requirements of Ford specification WSS-M2C153–H and the API Certification mark.

#### **LUBRICANT SPECIFICATIONS**

| Item                  | Ford part<br>name   | Ford part<br>number | Ford specification       |
|-----------------------|---|---------------------|--------------------------|
| Brake fluid           | Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid | PM-1                | ESA-M6C25-A<br>and DOT 3 |
| Door<br>weatherstrips | Silicone<br>Lubricant                                       | F5AZ-19553-AA       | ESR-M13P4-A              |

| Ti   | T 1 4   | D 1 4   | п 1   |
|--|---|---|---|
| Item   | Ford part name  | Ford part<br>number                               | Ford specification                                |
| Door latch,<br>hood latch,<br>auxiliary<br>hood latch,<br>door hinges,<br>striker<br>plates, seat<br>tracks and<br>fuel filler<br>door hinge | Multi-Purpose<br>Grease   | XG-4 or XL-5                                      | ESR-M1C159-A<br>or<br>ESB-M1C93-B                 |
| Engine<br>coolant  | Motorcraft<br>Premium Gold<br>Engine Coolant<br>(yellow-colored)  | VC-7–A  | WSS-M97B51-A1                                     |
| Engine oil   | Motorcraft SAE 5W-20 Super Premium Motor Oil (US) Motorcraft SAE 5W-20 Super Premium Motor Oil (Canada) | XO-5W20-QSP<br>(US)<br>CXO-5W20-LSP12<br>(Canada) | WSS-M2C153-H<br>with API<br>Certification<br>Mark |
| Lock<br>cylinders  | Penetrating<br>and Lock<br>Lubricant  | Motorcraft<br>XL-1                                | none  |
| Power<br>steering fluid<br>and<br>convertible<br>top fluid (if<br>equipped)  | Motorcraft<br>MERCON®<br>ATF  | XT-2-QM   | MERCON®   |

| Item                                 | Ford part<br>name  | Ford part<br>number | Ford specification |
|--------------------------------------|--|---------------------|--------------------|
| Rear Axle<br>Lubricant               | Motorcraft<br>SAE 80W-90<br>Premium<br>Rear Axle<br>Lubricant <sup>1</sup> | XY-80W90-QL         | WSP-M2C197-A       |
|                                      | Motorcraft<br>SAE 75W-140<br>Synthetic Rear<br>Axle Lubricant              | XY-75W140-QL        | WSP-M2C192-A       |
| Automatic<br>transmission<br>fluid   | Motorcraft<br>MERCON®V<br>ATF <sup>2</sup>                                 | XT-5-QM             | MERCON®V           |
| 3.8L Manual<br>transmission<br>fluid | Motorcraft<br>MERCON®<br>ATF   | XT-2-QDX            | MERCON®            |
| 4.6L Manual<br>transmission<br>fluid | Motorcraft<br>MERCON®<br>ATF   | XT-2-QM             | MERCON®            |
| Disc brake<br>caliper rails          | Motorcraft Silicone Brake Caliper Grease and Dielectric Compound           | XG-3                | ESE-M1C171-A       |
| Windshield<br>washer fluid           | Motorcraft<br>Premium<br>Windshield<br>Washer<br>Concentrate               | ZC-32-A             | WSB-M8B16-A2       |

<sup>1</sup>Add 118 ml (4 oz.) of Additive Friction Modifier XL-3 or equivalent meeting Ford specification EST-M2C118-A for complete refill of Traction-Lok axles.

Ford design rear axles contain a synthetic lubricant that does not require changing unless the axle has been submerged in water.

<sup>2</sup>Ensure the correct automatic transmission fluid is used. Transmission fluid requirements are indicated on the dipstick or on the dipstick handle. MERCON® and MERCON® V are not interchangeable. DO NOT mix MERCON® and MERCON® V. Refer to your scheduled maintenance guide to determine the correct service interval.

### **ENGINE DATA**

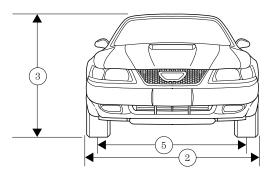
| Engine             | 3.8L OHV<br>V6 engine                | 4.6L SOHC<br>V8 engine               | 4.6L 4v V8<br>engine<br>(Mach 1)     |
|--------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Cubic inches       | 232                                  | 281                                  | 281                                  |
| Required fuel      | 87 octane                            | 87 octane                            | 91 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                      |
| Spark plug<br>gap  | 1.3-1.4 mm<br>(0.052-00.056<br>inch) | 1.3-1.4 mm<br>(0.052-00.056<br>inch) | 1.3-1.4 mm<br>(0.052-00.056<br>inch) |
| Ignition<br>system | EDIS                                 | Coil on plug                         | Coil on plug                         |
| Compression ratio  | 9.4:1                                | 9.4:1                                | 10.0:1                               |

#### **VEHICLE DIMENSIONS**

| Vehicle<br>dimensions | Coupe mm (in)              | Convertible mm<br>(in)     |
|-----------------------|----------------------------|----------------------------|
| (1) Overall length    | 4653.3 (183.2)             | 4653.3 (183.2)             |
| (2) Overall width     | 1856.7 (73.1)              | 1856.7 (73.1)              |
| (3) Overall height    | 1348.7 (53.1)              | 1351.3 (53.2)              |
| (4) Wheelbase         | 2573.0 (101.3)             | 2573.0 (101.3)             |
| (5) Track - Front     | 1534.2 (60.4) <sup>1</sup> | 1534.2 (60.4) <sup>1</sup> |
| (5) Track - Rear      | 1539.2 (60.6) <sup>2</sup> | 1539.2 (60.6) <sup>2</sup> |

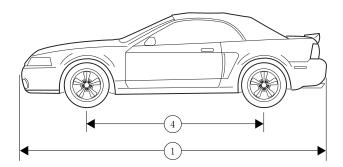
 $<sup>^{1}</sup>$  1521.5 mm (59.9 in) for Mustang GT

 $<sup>^2</sup>$  1526.5 mm (60.1 in) for Mustang GT  $\,$ 



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#### **IDENTIFYING YOUR VEHICLE**

#### **Certification label**

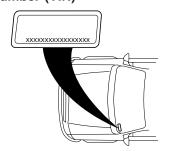
The National Highway Traffic Safety Administration Regulations require that a Certification label be affixed to a vehicle and prescribe where the Certification label may be located. The Certification label is located on the front



door latch pillar on the driver's side.

#### 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.)



## **Engine number**

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

#### 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 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 20,000 km (12,000 miles) (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 60,000 km (36,000 miles) (whichever occurs first). Contact your dealer for details and a copy of the warranty.

#### Not all accessories are available for all models.

Following is a list of several Ford Genuine Accessory products. Not all accessories are available for all models. To find out what accessories are available for your vehicle, please contact your dealer or visit our online store at: www.fordaccessoriesstore.com.

#### **Vehicle Security**

Air bag anti-theft locks Styled wheel locks Vehicle security systems

#### Comfort and convenience

Cargo nets

Cargo organizers

Cargo tray

Dash trim, brushed aluminum-look,

Electrochromic mirror with compass

Electrochromic mirror with compass and

temperature display

Engine block heaters

Remote start system

Smoker's Pack

#### **Travel equipment**

Auto headlamps with daytime running lights (DRL)

Daytime running lights (DRL)

First aid kit

Fog lights

Highway safety kit

Removable luggage rack

Removable luggage rack adapters (Bike, ski, snowboard)

Speed control

#### Protection and appearance equipment

All-weather floor mats

Car cover

Cargo liners, interior

Carpet floor mats

Door edge guards

Door sill scuff plates, stainless

Flat splash guards

Front end covers (full and mini)

Gearshift knob

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Leather steering wheel

Molded splash guards

Pedal covers (manual transmission only)

Seat belt extenders

Side rocker extensions

Side window deflector

Spoiler

Styled hood deflector

Tonneau cover (mini, for convertible top)

Universal floor mats

Wheels (chrome and painted)

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 or are not properly installed. When operated, such systems may cause the engine to stumble or stall or cause the transmission to be damaged or operate improperly. In addition, such systems may be damaged or their performance may be affected

by operating your vehicle. (Citizens band [CB] transceivers, garage door openers and other transmitters with outputs of five watts or less will not ordinarily affect your vehicle's operation.)

• Ford cannot assume responsibility for any adverse effects or damage that may result from the use of such equipment.

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