vehicle. In addition to the conditions listed in the *Owner Maintenance Checklist*, be alert for any unusual noise, vibration, or other indication that your vehicle may need service. If you do notice something unusual, see that your vehicle is serviced promptly.

Use only recommended fuels, lubricants, fluids, and service parts conforming to Ford specifications. Motorcraft parts are designed and built to provide the best performance in your vehicle. Using these parts for replacement is your assurance that Ford-built quality stays in your vehicle.

NOTE: Always dispose of used automotive fluids in a responsible manner. Follow your community's standards for disposing of these types of fluids. Call your local recycling center to find out about recycling automotive fluids.

# Precautions When Servicing Your Vehicle

Be especially careful when inspecting or servicing your vehicle. Here are some general precautions for your safety:

□ Do not work on a hot engine. The engine cooling fan may come on unexpectedly. Always turn the engine off and let it cool.

#### **WARNING**

The cooling fan is automatic and may come on at any time. Always disconnect the negative terminal of the battery before working near the fan. ☐ If you must work with the engine running, avoid wearing loose clothing or jewelry that could get caught in moving parts. Take appropriate precautions with long hair.

Do not work on a vehicle in an enclosed space with the engine running, unless you are sure you have enough ventilation.

□ Never get under a vehicle while it is supported only by a jack. If you must work under a vehicle, use safety stands.

☐ Keep all lit cigarettes and other smoking materials away from the battery and all fuel-related parts.

If you disconnect the battery, the engine must "relearn" its idle conditions before your vehicle will drive properly. To find out how the engine does this, see *Battery* in this chapter.

#### Working with the engine off:

- 1. Set the parking brake fully, block the wheels, and make sure that the gearshift is securely latched in P (Park) (automatic transmission) or 1 (First) (manual transmission).
- 2. Remove the key from the ignition after you turn the engine off.
- 3. Block the wheels. This will prevent your vehicle from moving unexpectedly.

#### Working with the engine on:

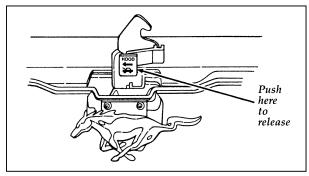
- 1. Set the parking brake fully, and make sure that the gearshift is securely latched in P (Park) (automatic transmission) or Neutral (manual transmission).
- 2. Block the wheels. This will prevent your vehicle from moving unexpectedly.

#### **WARNING**

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 located under the lower left corner of the instrument panel.
- 2. Go around to the front of the vehicle, and release the auxiliary catch that is located under the front edge of the hood at the center of the vehicle.



The auxiliary catch under the front edge of the hood

3. Lift the hood and secure it with the prop rod using only the hole marked "PROP".

Whenever you close the hood, make sure the prop rod is secured in its retainer and that the hood latches securely.

NOTE: Apply lubricant to the hood latch at six-month intervals to maintain smooth and trouble-free operation.

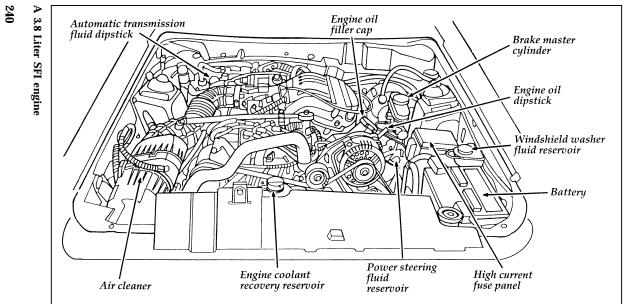
### **Engine Compartment**

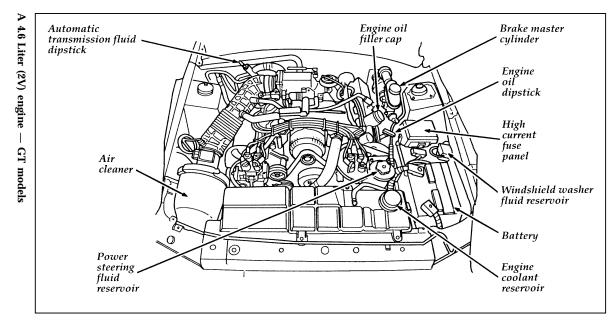
Your vehicle has one of these types of engines:

a 3.8 liter SFI engine

a 4.6 liter SFI engine

The following pages show diagrams of each engine type and where to find items that you should regularly service.





#### **Cleaning the Engine**

A clean engine is more efficient because a buildup of grease and dirt acts as an insulator, keeping the engine warmer than usual.

□ Extreme care must be used if a power washer is used to clean the engine. The high pressure fluid could penetrate sealed parts and assemblies causing damage or malfunctions.

□ In order to avoid possible cracking of the engine block or fuel injection pump, do not spray a hot engine or injection pump with cold water.

□ The alternator, distributor and air intake must be covered. Covering these components will help prevent water damage.

□ Never wash or rinse the engine while it is running. Water getting into the engine may cause internal damage.

## Filling the Fuel Tank

The fuel door is outside the car on the passenger side near the back. To fill the fuel tank:

1. After opening the fuel filler door, remove the cap carefully and slowly by turning it counterclockwise 1/2 to 3/4 turn.

#### 

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

- 2. Put the nozzle all the way inside the fuel filler pipe before pumping the fuel.
- NOTE: If you spill any fuel on the body of your vehicle, clean it off immediately. The fuel may dull or soften the paint if you do not wash it off.
- 3. Replace the fuel cap completely when you are finished. Turn it clockwise 1/4 turn until it is tight. It will click when it is fully tightened.
- 4. Push the fuel door closed.

#### **WARNING**

If you lose the fuel cap, replace it with a Motorcraft or equivalent fuel cap. If you do not use the proper fuel cap, the pressure in the fuel tank can damage the fuel system or cause it to work improperly in a collision, endangering you and your passengers.

NOTE: If you replace your fuel cap with an aftermarket fuel filler cap, the customer warranty may be void for any damage to the fuel tank and/or fuel system.

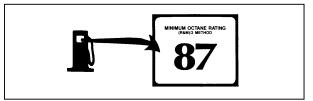
#### **Choosing the Right Fuel**

Use only UNLEADED FUEL in your vehicle. Using leaded fuel is prohibited by federal law. Your warranty may not apply if your vehicle is damaged because you used the wrong fuel.

Using a high-quality fuel makes your vehicle more responsive and maintain its good fuel economy and emissions. It should not be necessary to add any aftermarket products to your fuel tank if you continue to use a high-quality fuel.

#### **Octane recommendations**

Your engine is designed to use fuel with an octane rating of 87. In most cases it is not necessary to use a fuel with an octane rating higher than 87. At service stations, the octane rating is displayed in a label on the pumps.



Using a fuel with a lower octane rating can cause persistent and heavy knocking, which can damage the engine.

Do not be concerned if your vehicle sometimes knocks lightly when you drive up a hill or when you accelerate. However, see your dealer or a qualified service technician if persistent heavy knocking occurs because this can damage the engine.

If your vehicle has problems with starting, rough idle or hesitation problems when the engine is cold, it may be caused by fuel with low volatility. Try a different brand of fuel. If the condition persists, see your dealer or a qualified service technician.

#### Gasolines for clean air

Fuels in certain areas of the country are required to contain oxygenates to improve air quality. Common oxygenates are ethanol or grain alcohol (blended at no more than 10%), methanol or wood alcohol (blended at no more than 5% with cosolvents and additives), and MTBE or methyl tertiary butyl ether (blended at no more than 15%). Reformulated gasoline is also required in certain areas of the U.S. These fuels are designed to further reduce emissions from your vehicle.

Generally, you should not experience difficulties operating your vehicle on fuels containing oxygenates. We encourage you to use these fuels.

# Safety Information Relating to Automotive Fuels

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Automotive fuels can cause serious injury or death if misused or mishandled. To minimize the risk that you will be injured, please read the following information carefully and observe the recommended precautions.

Turn vehicle off when refueling

Do not smoke when refueling. Fuels are extremely flammable.

Do not siphon any fuel by mouth.

#### **WARNING**

Gasoline or gasoline blended with methanol can cause blindness and possible death when swallowed. If any fuel is swallowed, call a physician or poison control center immediately.

Avoid breathing vapors while refueling.

☐ If fuel is splashed on the skin, wash with soap and water.

☐ If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes, and seek medical attention.

Gasoline and gasoline blends may contain small amounts of carcinogens, such as benzene. Long-term exposure to unleaded gasoline vapors has caused cancer in laboratory animals.

If you are taking the medication "Antabuse" or other forms of disulfiram for the treatment of alcoholism, vapor or skin contact with a gasoline-methanol blend may cause the same kind of adverse reaction as drinking an alcoholic beverage. In sensitive individuals, serious personal injury or sickness could result. Consult a physician promptly if you experience an adverse reaction.

#### **Running Out of Fuel**

# NOTE: Avoid running out of fuel because this situation may have an adverse effect on modern powertrain components.

You may need to crank the engine several times before the fuel system starts to pump fuel from the tank to the engine.

## **Calculating Fuel Economy**

Fuel economy is an estimate of the efficiency of your vehicle, and can be calculated as Miles Per Gallon (MPG) or Liters Per 100 Kilometers (L/100K).

Do not calculate fuel economy during your vehicle's break-in period. This would not be an accurate estimate of how much fuel your vehicle will normally use.

To calculate fuel economy:

- 1. Fill the fuel tank completely and record the initial odometer reading.
- 2. Every time you buy fuel, record the amount (in gallons or liters) purchased.