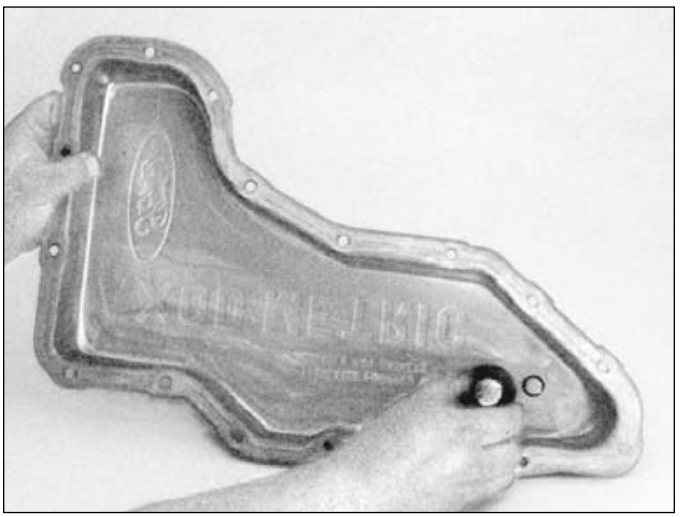
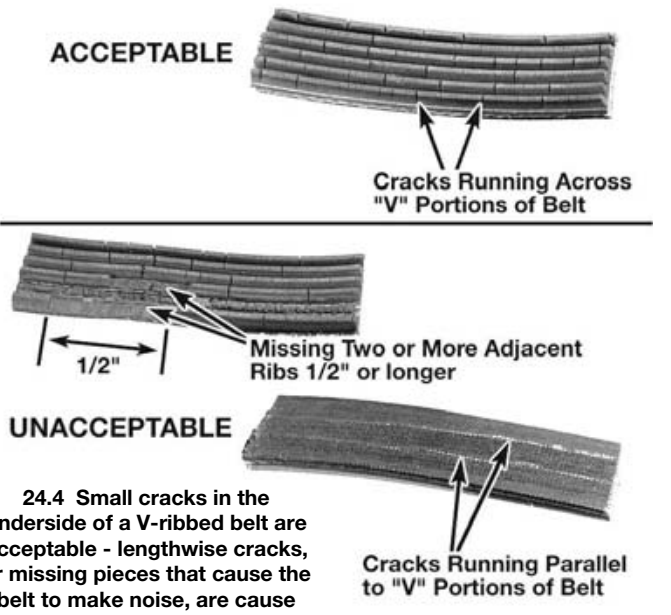
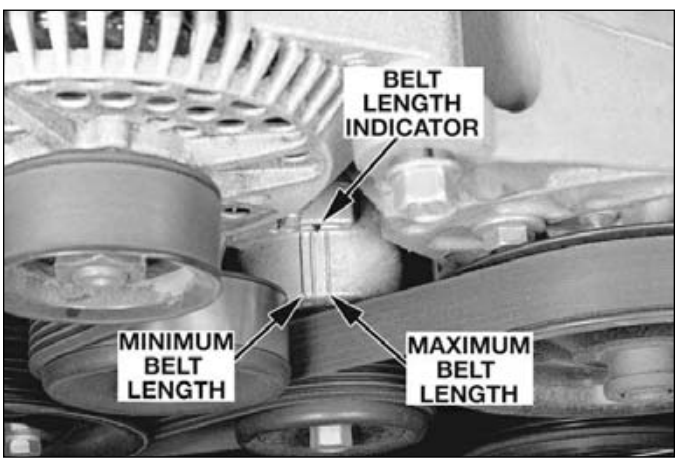


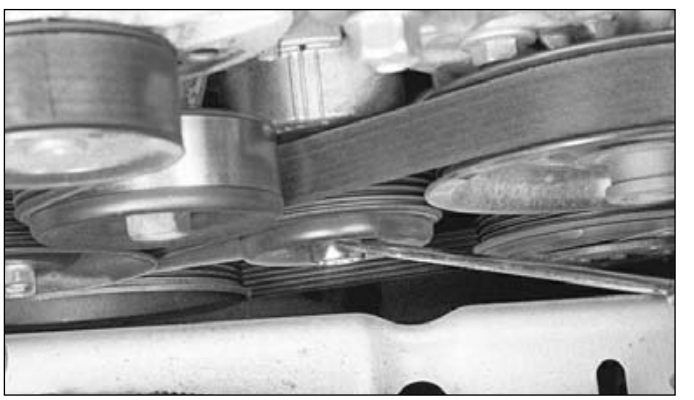
22.12b After cleaning the pan, place the magnet in position and install the new gasket



24.4 Small cracks in the underside of a V-ribbed belt are acceptable - lengthwise cracks, or missing pieces that cause the belt to make noise, are cause for replacement



24.5 Belt wear indicator marks are located on the side of the tensioner body - when the belt reaches the maximum wear mark it must be replaced



24.7 Rotate the tensioner arm to relieve belt tension (3.0L engine shown, 3.8L engine similar)

and a new gasket **(see illustrations)**. Put the pan in place against the transaxle and install the bolts. Working around the pan, tighten each bolt a little at a time until the final torque figure listed in this Chapter's Specifications is reached. Don't overtighten the bolts!

13 Lower the vehicle and add the specified amount of automatic transmission fluid through the filler tube (see Section 7).

14 With the shift lever in Park and the parking brake set, run the engine at a fast idle, but don't race it.

15 Move the shift lever through each gear and back to Park. Check the fluid level.

16 Check under the vehicle for leaks during the first few trips.

23 Brake fluid change (every 30,000 miles or 24 months)

Warning: *Brake fluid can harm your eyes and damage painted surfaces, so use extreme caution when handling or pouring it. Do not use brake fluid that has been standing open or is more than one year old. Brake fluid absorbs moisture from the air. Excess moisture can cause a dangerous loss of braking effectiveness.*

1 At the specified intervals, the brake fluid should be drained and replaced. Since the brake fluid may drip or splash when pouring it, place plenty of rags around the master cylinder to protect any surrounding painted surfaces.

2 Before beginning work, purchase the specified brake fluid (see *Recommended lubricants and fluids* at the beginning of this Chapter).

3 Remove the cap from the master cylinder reservoir.

4 Using a hand suction pump or similar device, withdraw the fluid from the master cylinder reservoir.

5 Add new fluid to the master cylinder until it rises to the base of the filler neck.

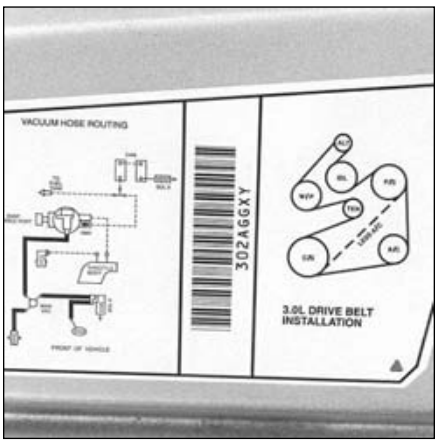
6 Bleed the brake system as described in Chapter 9 at all four brakes until new and uncontaminated fluid is expelled from the bleeder screw. Be sure to maintain the fluid level in the master cylinder as you perform the bleeding process. If you allow the master cylinder to run dry, air will enter the system.

7 Refill the master cylinder with fluid and check the operation of the brakes. The pedal should feel solid when depressed, with no sponginess. **Warning:** *Do not operate the vehicle if you are in doubt about the effectiveness of the brake system.*

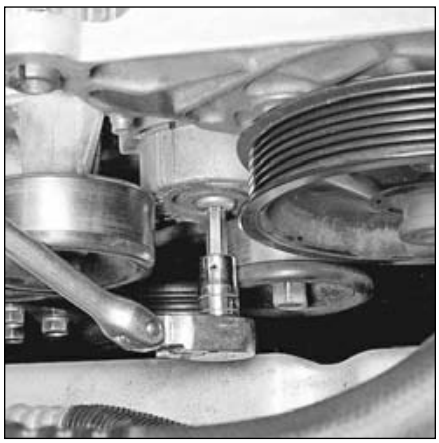
24 Drivebelt and drivebelt tensioner check and replacement (every 60,000 miles or 48 months)

Refer to illustrations 24.4, 24.5, 24.7, 24.9 and 24.10

1 The drivebelts are located at the front of the engine and play an important role in the overall operation of the vehicle and its components. Due to their function and material make-up, the drivebelts are prone to failure after a period of time and should be



24.9 The routing schematic for the serpentine belt is usually found on the fan shroud (this one's for the 3.0L engine)



24.10 Remove the retaining bolt from the center of the tensioner body (3.0L engine shown, 3.8L engine similar)

25.1 The PCV valve on 3.0L engines is located in the right (rear) valve cover and on 3.8L engines in the left (front) valve cover

inspected and adjusted periodically to prevent major engine damage.

2 The vehicles covered by this manual are equipped with a single self-adjusting serpentine drivebelt, which is used to drive all of the accessory components such as the alternator, power steering pump, water pump and air conditioning compressor.

Check

3 With the engine off, open the hood and locate the drivebelt at the front of the engine. Using your fingers (and a flashlight, if necessary), move along the belts checking for cracks and separation of the belt plies. Also check for fraying and glazing, which gives the belt a shiny appearance. Both sides of each belt should be inspected, which means you will have to twist the belt to check the underside.

4 Check the ribs on the underside of the belt. They should all be the same depth, with none of the surface uneven **(see illustration)**.

5 The tension of the belt is automatically adjusted by the belt tensioner and does not require any adjustments. Drivebelt wear can be checked visually by inspecting the wear indicator marks located on the side of the tensioner body. Locate the belt tensioner at the front of the engine on the right (passenger) side, adjacent to the lower crankshaft pulley, then find the tensioner operating marks **(see illustration)**. If the indicator mark is outside the operating range, the belt should be replaced.

6 To check the tensioner first remove the drivebelt (see Step 7). Then spin the pulley and listen for noise. Excessive noise from the pulley indicates a dry or faulty bearing which should be replaced. **Note:** *Often times the bearing and pulley can be replaced without replacing the entire tensioner assembly. Check your local auto parts store for these applications. Next rotate the tensioner body and check for a binding or frozen condition. if either conditions exist the tensioner should be replaced*.

Replacement

7 To replace the belt, place a wrench on the tensioner pulley bolt and rotate the tensioner body until tension on the belt is relieved **(see illustration)**.,

8 Remove the belt from the auxiliary components and carefully release the tensioner. On 3.8L engines, lock the belt tensioner out of the way with the spring clip.

9 Route the new belt over the various pulleys, again rotating the tensioner to allow the belt to be installed, then release the belt tensioner. Make sure the belt fits properly into the pulley grooves - it must be completely engaged. **Note:** *Most models have a drivebelt routing decal on the upper radiator panel to help during drivebelt installation* **(see illustration)**.

10 To replace the drive belt tensioner on 3.0L engines, simply remove the retaining bolt from the center of the tensioner body and remove it from the engine **(see illustration)**. 3.8L engines have three retaining bolts

11 Installation is the reverse of removal.

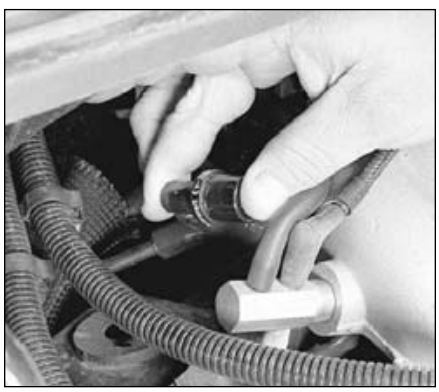
25 Positive Crankcase Ventilation (PCV) valve check (every 60,000 miles or 48 months)

Refer to illustrations 25.1 and 25.2

Note: *To maintain efficient operation of the PCV system, clean the hoses and check the PCV valve at the intervals recommended in the maintenance schedule. For additional information on the PCV system, refer to Chapter 6*.

1 The PCV valve on 3.0L engines is located in the right (rear) valve cover, adjacent to the firewall, and on 3.8L engines in the left (front) valve cover **(see illustration)**.

2 Start the engine and allow it to idle, then disconnect the PCV valve from the valve cover and feel for vacuum at the end of the valve **(see illustration)**. If vacuum is felt, the PCV valve/system is working properly (see Chapter 6 for additional PCV system information).



25.2 With the engine running at idle, remove the PCV valve and verify that vacuum can be felt at the end of the valve

3 If no vacuum is felt, remove the valve and check for vacuum at the hose. If vacuum is present at the hose but not at the valve, replace the valve. If no vacuum is felt at the hose, check for a plugged or cracked hose between the PCV valve and the intake plenum.

4 Check the rubber grommet in the valve cover for cracks and distortion. If it's damaged, replace it.

5 If the valve is clogged, the hose is also probably plugged. Remove the hose between the valve and the intake manifold and clean it with solvent.

6 After cleaning the hose, inspect it for damage, wear and deterioration. Make sure it fits snugly on the fittings.

7 If necessary, install a new PCV valve.

26 Spark plug check and replacement (every 60,000 miles or 48 months)

Refer to illustrations 26.2, 26.5a, 26.5b, 26.8, 26.9 and 26.10

Note 1: *Later model engines are equipped with two different type of platinum spark*

1