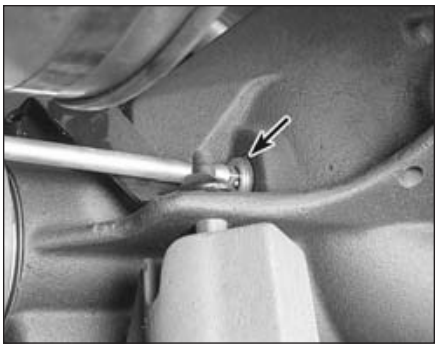


20.2 Use a 3/8-inch drive ratchet or breaker bar and an extension to remove the differential fill plug (arrow)

supported only by the jack!

2 Remove the check/fill plug from the differential **(see illustration)**.

3 Use your little finger as a dipstick to make sure the lubricant level is even with the bottom of the plug hole. If not, use a syringe to add the recommended lubricant until it just starts to run out of the opening. On some models a tag is located in the area of the plug which gives information regarding lubricant type, particularly on models equipped with a limited slip differential.

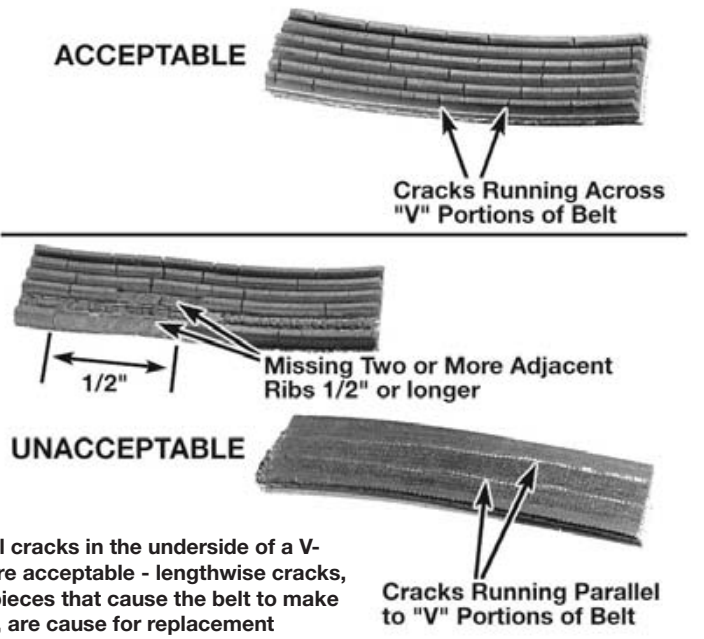
4 Install the plug and tighten it securely.

21 Drivebelt check and replacement (every 30,000 miles or 24 months)

Refer to illustrations 21.4, 21.5, 21.6 and 21.8

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 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.



21.4 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

Inspection

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.

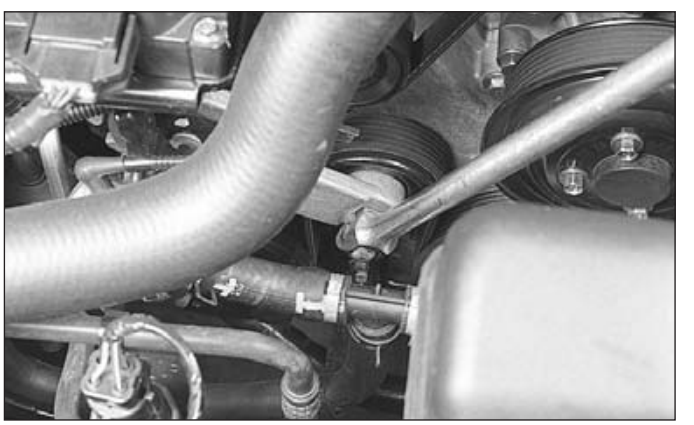
Replacement

6 To replace the belt, Insert a 1/2 inch breaker bar or ratchet into the square hole located in the tensioner body **(see illustration)**. Rotate the tensioner clockwise to relieve the tension on the belt.

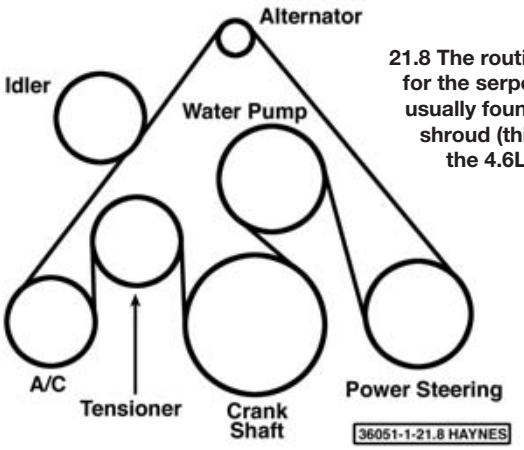
7 Remove the belt from the auxiliary components and carefully release the tensioner.

8 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*

21.5 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



21.6 Insert a 1/2 inch breaker bar into the tensioner arm, then rotate it clockwise to relieve belt tension



21.8 The routing schematic for the serpentine belt is usually found on the fan shroud (this one's for the 4.6L engine)

22.8 Remove each spark plug wire from the ignition coil packs or distributor on 5.0L engines - Check for corrosion and a tight fit

help during drivebelt installation **(see illustration)**.

22 Ignition system component check and replacement (every 30,000 miles or 24 months)

Refer to illustrations 22.8, 22.13 and 22.14

Spark plug wires

Note: *Every time a spark plug wire is detached from a spark plug, the distributor cap or the coil, silicone dielectric compound (a white grease available at auto parts stores) must be applied to the inside of each boot before reconnection. Use a small standard screwdriver to coat the entire inside surface of each boot with a thin layer of the compound.*

1 The spark plug wires should be checked and, if necessary, replaced at the same time new spark plugs are installed.

2 The easiest way to identify bad wires is to make a visual check while the engine is running. In a dark, well-ventilated garage, start the engine and look at each plug wire. Be careful not to come into contact with any moving engine parts. If there is a break in the wire, you will see arcing or a small spark at the damaged area. If arcing is noticed, make a note to obtain new wires.

3 The spark plug wires should be inspected one at a time, beginning with the spark plug for the number one cylinder, (the cylinder closest to the radiator on the right bank), to prevent confusion. Clearly label each original plug wire with a piece of tape marked with the correct number. The plug wires must be reinstalled in the correct order to ensure proper engine operation.

4 Disconnect the plug wire from the first spark plug. A removal tool can be used, or you can grab the wire boot, twist it slightly and pull the wire free. Do not pull on the wire itself, only on the rubber boot.

5 Push the wire and boot back onto the end of the spark plug. It should fit snugly. If it doesn't, detach the wire and boot once more and use a pair of pliers to carefully crimp the metal connector inside the wire boot until it does.

6 Using a clean rag, wipe the entire length of the wire to remove built-up dirt and grease.

7 Once the wire is clean, check for burns, cracks and other damage. Do not bend the wire sharply or you might break the conductor.

8 Disconnect the wire from the coil pack or distributor on 5.0L engines. Pull only on the rubber boot. Check for corrosion and a tight fit **(see illustration).** Reinstall the wire.

9 Inspect each of the remaining spark plug wires, making sure that each one is securely fastened on each end.

10 If new spark plug wires are required, purchase a set for your specific engine model. Pre-cut wire sets with the boots already installed are available. Remove and replace the wires one at a time to avoid mix-ups in the firing order. Should a mix up occur refer to the Specifications at the beginning this Chapter.

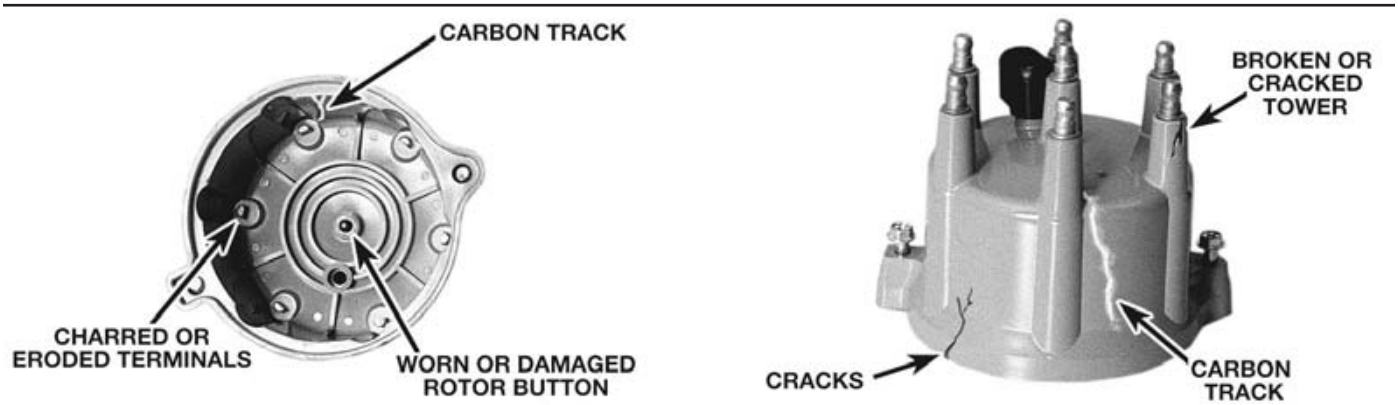
Ignition coil packs

11 Clean the coil packs with a dampened cloth and dry them thoroughly.

12 Inspect each coil pack for cracks, damage and carbon tracking. If damage exists refer to Chapter 5 for the replacement procedure.

Distributor cap and rotor (5.0L V8 models)

Note: *It's common practice to install a new distributor cap and rotor each time new spark plug wires are installed. If you're planning to install new wires, install a new cap and rotor also. But if you're planning to reuse the existing wires, be sure to inspect the cap and rotor*



22.13 Shown here are some the common defects to look for when inspecting the distributor cap (if in doubt about its condition, install a new one)