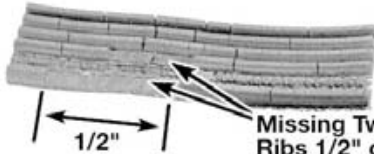


ACCEPTABLE

Cracks Running Across "V" Portions of Belt

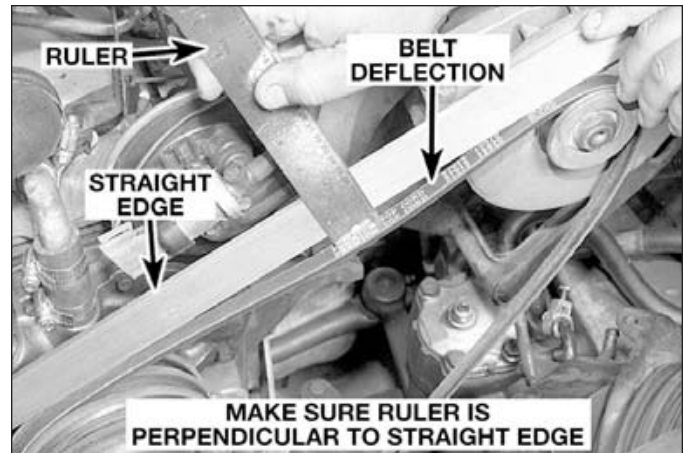


Missing Two or More Adjacent Ribs 1/2" or longer

UNACCEPTABLE

Cracks Running Parallel to "V" Portions of Belt

19.3 Here are some of the more common problems associated with drivebelts (check the belts very carefully to prevent an untimely breakdown)



19.4 Measure the drivebelt deflection with a straightedge and ruler - make sure the ruler is perpendicular to the straightedge



19.13 Place a wrench on the tensioner pulley lug and rotate it to relieve the belt tension (V6 engine shown)

and air conditioning compressor. The power steering pump is driven by its own belt. The V6 engines use a single serpentine belt to drive all the components.

Check

Refer to illustrations 19.3 and 19.4

3 With the engine off, open the hood and use your fingers (and a flashlight, if necessary), to move along the belt checking for cracks and separation of the belt plies. Also check for fraying and glazing, which gives the belt a shiny appearance. Also check the ribs on the underside of the belt. They should all be the same depth, with none of the surface uneven (see illustration).

4 The power steering belt tension on four-cylinder models is checked by pushing on it at a distance halfway between the pulleys. Apply about 20 pounds of force with your thumb and see how much the belt moves down (deflects). Measure the deflection with a ruler (see illustration). The belt should deflect about 1/4-inch if the distance between pulleys is between 7 and 11 inches and around 1/2-inch if the distance is between 12 and 16 inches.

5 The alternator/air conditioning compressor belt tension is adjusted by an automatic tensioner.

Adjustment (four-cylinder engine power steering belt)

6 Loosen the power steering pump mounting bolt and nut, then turn the adjuster bolt to set the belt tension. When you have obtained the desired tension, tighten the pump fasteners securely.

Replacement

Note: Since belts tend to wear out more or less at the same time, it's a good idea to replace both of them at the same time (four-cylinder models).

7 Apply the parking brake, loosen the right (passenger's side) front wheel lug nuts, raise the front of the vehicle and support it securely on jackstands. Remove the wheel, then remove the drivebelt splash shield.

Power steering belt (four-cylinder models)

8 Follow Step 6 for drivebelt adjustment, but loosen the belt and slip the belt off the pulleys and remove it.

9 When installing the belt, make sure the belt is centered on the pulleys.

10 Adjust the belt as described in Step 6.

11 Install the drivebelt splash shield, wheel and lug nuts. Lower the vehicle and tighten the lug nuts to the torque listed in this Chapter's Specifications.

Alternator/air conditioning compressor belt

Refer to illustration 19.13

12 If you're working on a four-cylinder engine, remove the power steering belt (see Step 8).

13 The automatic tensioner must be released to allow drivebelt replacement. Place a wrench on the tensioner pulley lug and rotate it clockwise on four-cylinder engines or counterclockwise on V6 engines until the belt can be removed (see illustration). Remove the belt and slowly release the tensioner.

14 Installation is the reverse of removal. When installing the belt, make sure the belt is centered on the pulleys.

15 If you're working on a four-cylinder engine, install and adjust the power steering belt.

16 Install the drivebelt splash shield, wheel and lug nuts. Lower the vehicle and tighten the lug nuts to the torque listed in this Chapter's Specifications.

Automatic tensioner replacement

Refer to illustration 19.18

17 Remove the alternator/air conditioning compressor drivebelt (see Steps 12 and 13).



19.18 The drivebelt tensioner is secured by a single bolt

18 Unscrew the tensioner mounting bolt and remove the tensioner (see illustration).

19 Install the new tensioner assembly by reversing the removal procedure. Tighten the mounting bolt to the torque listed in this Chapter's Specifications.

20 Install the drivebelt as described previously in this Section.

21 Install the drivebelt splash shield, wheel and lug nuts. Lower the vehicle and tighten the lug nuts to the torque listed in this Chapter's Specifications.

20 Brake fluid change (every 30,000 miles or 30 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 cyl-

inder 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.

21 Spark plug check and replacement (see Maintenance schedule for intervals)

Refer to illustrations 21.2, 21.5, 21.7, 21.9, 21.11 and 21.12

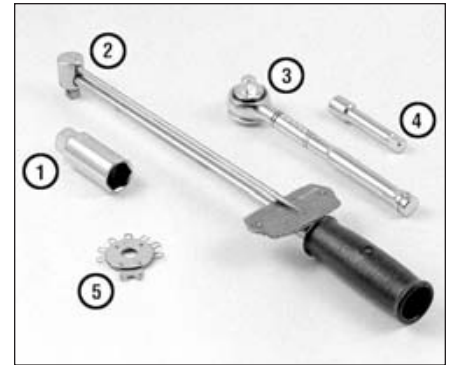
1 The spark plugs are located in the cylinder head(s).

2 In most cases the tools necessary for spark plug replacement include a spark plug socket which fits onto a ratchet (this special socket is padded inside to protect the porcelain insulators on the new plugs and hold them in place), various extensions and a feeler gauge to check and adjust the spark plug gap (see illustration). Since these engines are equipped with an aluminum cylinder head, a torque wrench should be used when tightening the spark plugs.

3 The best approach when replacing the spark plugs is to purchase the new spark plugs beforehand, adjust them to the proper gap and then replace each plug one at a time. When buying the new spark plugs, be sure to obtain the correct plug for your specific engine. This information can be found in the Specification Section at the front of this Chapter, in your owner's manual or on the Vehicle Emissions Control Information (VECI) label located under the hood. If differences exist between the sources, purchase the spark plug type specified on the VECI label as it was printed for your specific engine.

4 Allow the engine to cool completely before attempting to remove any of the plugs. During this cooling off time, each of the new spark plugs can be inspected for defects and the gaps can be checked.

5 The gap is checked by inserting the proper thickness gauge between the electrodes at the tip of the plug (see illustration). The gap between the electrodes should be as listed in this Chapter's Specifications or in



21.2 Tools required for changing spark plugs

- 1 **Spark plug socket** - This will have special padding inside to protect the spark plug porcelain insulator
- 2 **Torque wrench** - Although not mandatory, use of this tool is the best way to ensure that the plugs are tightened properly
- 3 **Ratchet** - Standard hand tool to fit the plug socket
- 4 **Extension** - Depending on model and accessories, you may need special extensions and universal joints to reach one or more of the plugs
- 5 **Spark plug gap gauge** - This gauge for checking the gap comes in a variety of styles. Make sure the gap for your engine is included

your owner's manual. The wire should touch each of the electrodes. **Caution:** The manufacturer recommends against checking the gap on platinum-tipped spark plugs; the platinum coating could be scraped off. Also, at this time check for cracks in the spark plug body (if any are found, the plug must not be used).

6 Cover the fender to prevent damage to the paint. Fender covers are available from auto parts stores but an old blanket will work just fine.

7 Using a twisting motion, detach one of the spark plug wires from the spark plug. Pull only on the boot at the end of the wire - do not pull on the wire (see illustration).

8 If compressed air is available, use it to blow any dirt or foreign material away from the spark plug area. **Warning:** Wear eye



21.5 Spark plug manufacturers recommend using a wire-type gauge when checking the gap - the wire should slide between the electrodes with a slight drag