

## 20 Drivebelt check, adjustment and replacement (60,000 miles [96,000 km] or 72 months)

### Check

Refer to illustrations 20.2 and 20.4

1 The drivebelt(s) are located at the front of the engine. The good condition and proper adjustment of the belts is critical to the operation of the engine. Because of their composition and the high stresses to which they are subjected, drivebelts stretch and deteriorate as they get older. They must therefore be periodically inspected.

2 With the engine off, open the hood and locate the drivebelts. With a flashlight, check each belt for separation of the adhesive rubber on both sides of the core, core separation from the belt side, a severed core, separation of the ribs from the adhesive rubber, cracking or separation of the ribs, and torn or worn ribs or cracks in the inner ridges of the ribs (*see illustration*).

3 Also check for fraying and glazing, which gives the belt a shiny appearance. Both sides of the belt should be inspected, which means you will have to twist the belt to check the underside. Use your fingers to feel the belt where you can't see it. If any of the above conditions are evident, replace the belt.

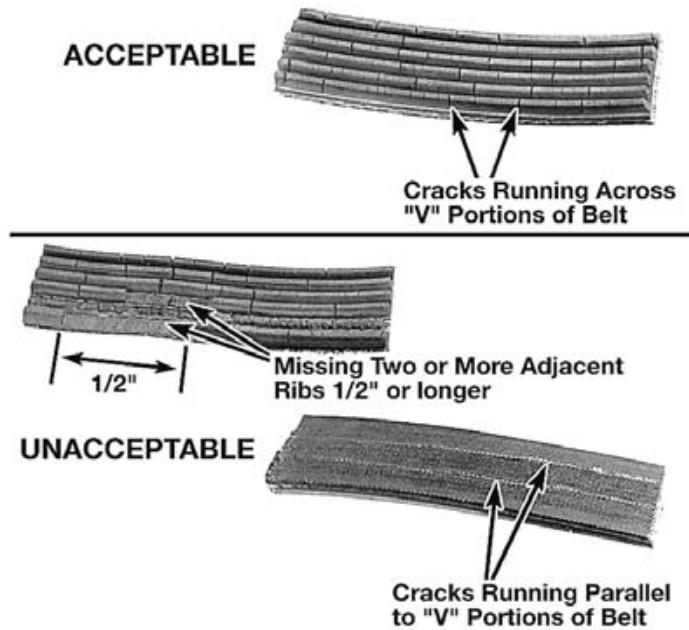
4 On 1999 through 2005 four-cylinder engines, the tension of each belt is checked by pushing on the belt at a distance halfway between the pulleys. Push firmly with your thumb and see how much the belt moves (deflects) (*see illustration*). The belt should deflect approximately 1/4-inch. All other models have a self-adjusting, spring-loaded tensioner.

### Adjustment (1999 through 2005 four-cylinder engines)

**Note:** 2006 and later four-cylinder and all V6 engines have self-adjusting belt tensioners.

#### Alternator belt

5 Loosen the lower alternator mounting bolt and the upper tension bolts.



20.2 Check a multi-ribbed belt for signs like these - if the belt looks worn, replace it

6 Carefully tension the belt by prying on the alternator housing. Tighten the upper tension and lock bolts and the lower bolt.

#### Power steering pump and air conditioning compressor belts

7 Loosen the lock bolt on the belt tensioner assembly. Use the adjacent adjustment bolt to adjust the tension on the belt.

8 Tighten the tensioner lock bolt.

### Replacement

9 Remove any interfering components such as engine covers and engine brackets.

#### Four-cylinder engines (1999 through 2005)

10 Release tension on the belt(s). Refer to the adjustment procedures above. Loosen the tension so that the belt(s) will slip off the pulleys.

#### Four-cylinder (2006 and later) and all V6 engines

11 These engines use a self-adjusting spring-loaded tensioner. Use a breaker bar or a long-handle ratchet to rotate the tensioner and release tension on the belt. Slip the belt from the pulleys while the tension is released.

#### All engines

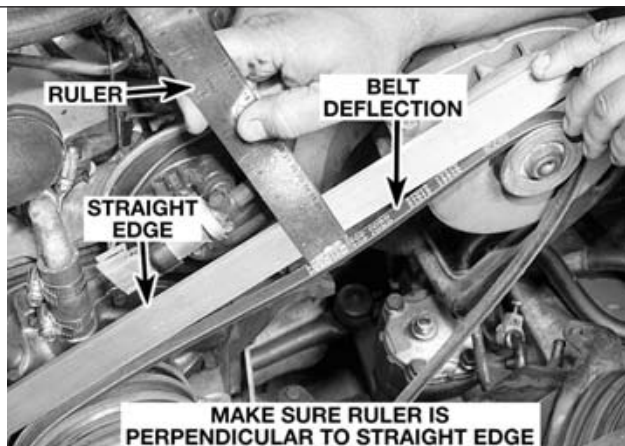
12 Take the old belt(s) to the parts store, if possible, in order to make a direct comparison for length, width and design.

13 After replacing the drivebelt, make sure that it fits properly in the ribbed grooves in the pulleys. It is essential that the belt be properly centered.

14 To replace a belt, follow the procedures for drivebelt adjustment, but slip the belt off the crankshaft pulley and remove it. Because belts tend to wear out more or less together, it is a good idea to replace both belts at the same time (on models so equipped). Mark each belt and its appropriate pulley groove so the replacement belts can be fitted in their proper positions.

15 On 1999 through 2005 four-cylinder engines, adjust the belt(s) in accordance with the procedures outlined earlier in this Section.

20.4 Measuring drivebelt deflection with a straightedge and ruler (typical - 2005 and earlier four-cylinder models)



## 21 Fuel filter replacement (every 60,000 miles [96,000 km] or 72 months)

**Warning:** Gasoline is extremely flammable, so take extra precautions when you work on any part of the fuel system. Don't smoke or allow open flames or bare light bulbs near the

work area, and don't work in a garage where a gas-type appliance (such as a water heater or a clothes dryer) is present. Since gasoline is carcinogenic, wear fuel resistant gloves when there's a possibility of being exposed to fuel, and, if you spill any fuel on your skin, rinse it off immediately with soap and water. Mop up any spills immediately and do not store fuel-soaked rags where they could ignite. The fuel system is under constant pressure, so, if any fuel lines are to be disconnected, the fuel pressure in the system must be relieved first (see Chapter 4, Section 2). When you perform any kind of work on the fuel system, wear safety glasses and have a Class B type fire extinguisher on hand.

**Note:** This procedure applies only to 1999 through 2005 models. Later vehicles use a fuel filter that is part of the fuel pump assembly.

- 1 Relieve the fuel system pressure (see Chapter 4, Section 2), then disconnect the cable from the negative terminal of the battery (see Chapter 5, Section 1).
- 2 Place rags or a drain pan under the fuel filter.
- 3 Raise the rear of the vehicle and support it securely on jackstands. **Note:** The fuel filter is mounted near the left front corner of the fuel tank.
- 4 Loosen the fitting nuts on the fuel lines. Be sure to hold the fuel filter fittings with a wrench.
- 5 Remove the bolt securing the filter mounting strap, then remove the filter.
- 6 Installation is the reverse of the removal procedure. Use new sealing washers and tighten the fitting nuts to the torque listed in this Chapter's Specifications.
- 7 Reconnect the battery, turn the ignition key to the On position, then check for leaks.

## 22 Automatic transaxle fluid change (60,000 miles [96,000 km] or 72 months)

Refer to illustration 22.7

- 1 At the specified time intervals, the automatic transaxle and differential fluid should be drained and replaced. **Note:** Although the manufacturer doesn't specify it, it is a good idea to replace the transaxle fluid filter periodically to remove accumulated dirt and metal particles.
- 2 Before beginning work, purchase the specified transaxle fluid (see *Recommended fluids and lubricants* at the front of this Chapter).
- 3 Other tools necessary for this job include jackstands to support the vehicle in a raised position, an appropriate wrench, a drain pan capable of holding at least eight pints, newspapers and clean rags.
- 4 The fluid should be drained immediately after the vehicle has been driven. Hot fluid is more effective than cold fluid at removing built up sediment. **Warning:** Fluid temperature can exceed 350-degrees F in a hot transaxle.

22.7 Automatic transaxle drain plug



Wear protective gloves.

- 5 After the vehicle has been driven to warm up the fluid, raise it and place it on jackstands for access to the transaxle and differential drain plugs.
- 6 Move the necessary equipment under the vehicle, being careful not to touch any of the hot exhaust components.
- 7 Place the drain pan under the transaxle drain plug and remove the drain plug (see illustration). Once the fluid is drained, reinstall the drain plug and tighten it to the torque listed in this Chapter's Specifications.
- 8 Lower the vehicle.
- 9 1999 through early-production 2001 models have a cartridge-type transmission fluid filter located on top of the transaxle case; remove the air filter housing for access (see Chapter 4). Using an oil filter wrench, unscrew the filter. Lubricate the O-ring of the new filter with clean transmission fluid, then install the new filter, tightening it hand-tight.
- 10 Add new fluid to the transaxle through the dipstick tube (see *Recommended fluids and lubricants* for the recommended fluid type and capacity). Use a funnel to prevent spills. It is best to add a little fluid at a time, continually checking the level with the dipstick (see Section 4). **Caution:** It's important not to overfill the transaxle.
- 11 Start the engine and shift into all positions from P through L, then shift into P and apply the parking brake.
- 12 With the engine idling, check the fluid level. Add fluid up to the Cool (or lower) level mark on the dipstick.
- 13 Drive the vehicle to warm up the transaxle to normal operating temperature, then recheck the fluid level.

## 23 Manual transaxle lubricant change (60,000 miles [96,000 km] or 72 months)

**Note:** This procedure applies only to vehicles that are used in rough service such as constant stop-and-go driving, towing, etc. Vehicles operated in typical conditions don't require manual transaxle lubricant changes

as a part of normal maintenance.

- 1 Operate the vehicle until the transaxle is warmed up.
- 2 Raise the vehicle and support it securely on jackstands.
- 3 Remove the transaxle fill plug on the side of the case and verify that the lubricant is near the bottom of the hole. If it isn't, find the cause of the leakage. It is not normal for a manual transaxle to need refilling.
- 4 Place a drain pan under the transaxle. If the transaxle has a drain plug, remove it and allow the fluid to run into the pan. Reinstall the drain plug and tighten it securely. If there is no drain plug, use a suction gun fitted with a hose to remove the lubricant through the fill hole.
- 5 Add fresh lubricant through the fill hole until it starts to run out. Be sure to use the correct grade of lubricant (refer to the Specifications in this Chapter).
- 6 Replace the plug and lower the vehicle.
- 7 Dispose of the old lubricant in a responsible manner. Check with your local auto parts store, disposal facility or environmental agency to see if they will accept the oil for recycling. After the oil has cooled it can be drained into a container (capped plastic jugs, topped bottles, milk cartons, etc.) for transport to one of these disposal sites. Don't dispose of the oil by pouring it on the ground or down a drain!
- 8 Lower the vehicle, drive it, then check for leaks.

## 24 Timing belt replacement (1999 through 2005 models) (60,000 miles [96,000 km] or 72 months)

**Note:** Timing belts are used on 1999 through 2005 models. Later models use timing chains that are not regularly serviced.

- 1 Refer to Chapter 2, Part A (four-cylinder engine) or Part B (V6 engines) for information on this procedure.
- 2 The timing belt should be inspected every 30,000 miles or whenever there is a possibility that oil leakage may have damaged it. Remove the upper timing belt cover and make sure that the belt is clean, oil-free and in good condition.