# 26 Drivebelt check, adjustment and replacement

1 The drivebelts, or V-belts as they are often called, are located at the front of the engine and play an important role in the overall operation of the engine and accessories. Due to their function and material makeup, the belts are prone to failure after a period of time and should be inspected and adjusted periodically to prevent major engine damage. On four-cylinder engines V-belts drive the various components while on V6 models a single "serpentine" drivebelt is used.

## Four-cylinder engines

Refer to illustrations 26.3, 26.4 and 26.6

2 The number of belts used on a particular vehicle depends on the accessories installed. Drivebelts are used to turn the alternator, power steering pump, water pump and air conditioning compressor. Depending on the pulley arrangement, more than one of the components may be driven by a single belt.

3 With the engine off, locate the drivebelts 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 **(see illustration)**. Both sides of each belt should be inspected, which means you'll have to twist each belt to check the underside. Check the pulleys for nicks, cracks, distortion and corrosion.

4 The tension of each belt is checked by pushing on it at a distance halfway between the pulleys. Push firmly with your thumb and see how much the belt moves (deflects) (see illustration). A rule of thumb is that if the distance from pulley center-to-pulley center is between 7 and 11 inches, the belt should deflect 1/4-inch. If the belt travels between pulleys spaced 12-to-16 inches apart, the belt should deflect 1/2-inch.

5 If adjustment is needed, either to make the belt tighter or looser, it's done by moving

the belt-driven accessory on the bracket.

6 Each component usually has an adjusting bolt and a pivot bolt. Both bolts must be loosened slightly to enable you to move the component. To adjust the air conditioner compressor belt, loosen the locknut and turn the adjusting bolt on the idler pulley to change the belt tension (see illustration).

7 On components other than the air conditioning compressor, after the two bolts have been loosened, move the component away from the engine to tighten the belt or toward the engine to loosen the belt. Hold the accessory in position and check the belt tension. If it's correct, tighten the two bolts until just snug, then recheck the tension. If the tension is correct, tighten the bolts.

8 You may have to use some sort of pry bar to move the accessory while the belt is adjusted. If this must be done to gain the proper leverage, be very careful not to damage the component being moved or the part being pried against.

9 To replace a belt, follow the above procedures for drivebelt adjustment but slip the belt off the pulleys and remove it. Since belts tend to wear out more or less at the same time, it's a good idea to replace all of them at the same time. Mark each belt and the corresponding pulley grooves so the replacement belts can be installed properly.

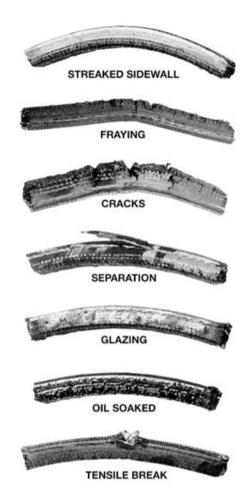
10 Take the old belts with you when purchasing new ones in order to make a direct comparison for length, width and design.

11 Adjust the belts as described earlier in this Section.

## V6 engines

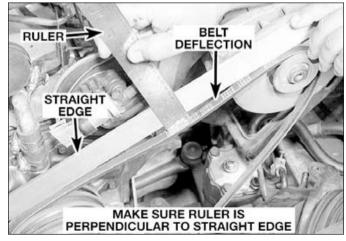
12 A single drivebelt, or serpentine belt as it is more often called, is located at the front of the engine and drives the alternator, power steering pump, water pump and air conditioning compressor. Belt tension does not need to be periodically adjusted so long as the belt is in good condition.

13 With the engine off, open the hood and use your fingers (and a flashlight, if necessary),

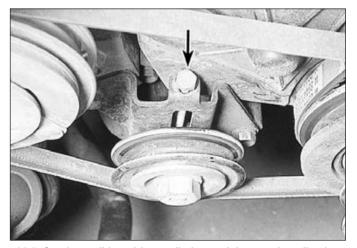


26.3 Here are some of the more common problems associated with drivebelts (check the belts very carefully to prevent an untimely breakdown)

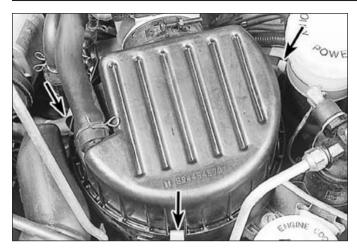
to move along the belt checking for cracks and separation of the belt plies. Also check for fraying and glazing, which gives the belt a shiny appearance. Both sides of the belt



26.4 Measuring drivebelt deflection with a straightedge and ruler



26.6 On air conditioned four-cylinder models, turn the adjusting bolt (arrow) on the idler pulley to adjust drivebelt tension



29.8 Detach the air cleaner housing cover clips (arrows) (fuel injected models)



29.9 With the hoses still attached, pull the cover up, then lift the element out of the housing

should be inspected, which means you will have to twist the belt to check the underside.14 Check the ribs on the underside of the belt. They should all be the same depth, with none of the surface uneven.

15 To replace the belt, place a wrench or socket over the tensioner bolt and rotate the tensioner counterclockwise to release belt tension. The tensioner will swing down when it's released.

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

17 Route the new belt over the various pulleys, again rotating the tensioner to allow the belt to be installed, then release the belt tensioner.

### 27 Seatbelt check

1 Check the seatbelts, buckles, latch plates and guide loops for any obvious damage or signs of wear.

2 Make sure the seatbelt reminder light comes on when the key is turned on.

3 The seatbelts are designed to lock up during a sudden stop or impact, yet allow free movement during normal driving. The retractors should hold the belt against your chest while driving and rewind the belt when the buckle is unlatched.

4 If any of the above checks reveal problems with the seatbelt system, replace parts as necessary.

#### 28 Power steering fluid replacement

1 Place a container under the power steering fluid reservoir.

2 Disconnect and plug the power steering hoses from the reservoir and allow the fluid in the reservoir to drain into the container.

3 Connect the hoses and fill the reservoir with the specified fluid.

4 Bleed the power steering system as described in Chapter 10.

#### 29 Air filter replacement

1 At the specified intervals, the air filter should be replaced with a new one. A thorough program of preventive maintenance would also call for the filter to be inspected periodically between changes, especially if the vehicle is often driven in dusty conditions.

2 The air filter is located inside the air cleaner housing, which is mounted on top of the carburetor or at the front of the engine compartment next to the battery on fuel injected models.

## Carbureted models

3 Remove the wing nut(s) that holds the top plate to the air cleaner body, release the clips and lift it off.

4 Lift the air filter out of the housing. If it's covered with dirt, it should be replaced.

5 Wipe the inside of the air cleaner housing with a rag.

6 Place the old filter (if in good condition) or the new filter (if replacement is necessary) into the air cleaner housing.

7 Reinstall the top plate on the air cleaner and tighten the wing nut(s), then snap the clips into place.

### Fuel injected models

Refer to illustrations 29.8 and 29.9

8 Detach the three filter cover retaining clips (see illustration).

9 Lift the cover up for access to the filter element **(see illustration)**.

10 Lower the new filter into the housing, seat the cover and snap the retaining clips into place.

#### 30 Fuel filter replacement

**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 natural gas-type appliance (such as a water heater or clothes dryer) with a pilot light is present. If you spill any fuel on your skin, rinse it off immediately with soap and water. When you perform any kind of work on the fuel tank, wear safety glasses and have a Class B type fire extinguisher on hand.

1 This job should be done with the engine cold (after sitting at least three hours). Place a metal container, rags or newspapers under the filter to catch spilled fuel.

### Carbureted models

2 Raise the vehicle and support it securely on jackstands. The fuel filter is located under the vehicle on the right side frame rail, adjacent to the fuel tank. **Warning:** Before attempting to remove the fuel filter, disconnect the negative cable from the battery and position it out of the way so it can't accidentally contact the battery post.

3 To replace the filter, loosen the clamps and slide them down the hoses, past the fittings on the filter.



30.7 Detach the hoses (arrows), then unbolt the fuel filter from the bracket (fuel injected models)