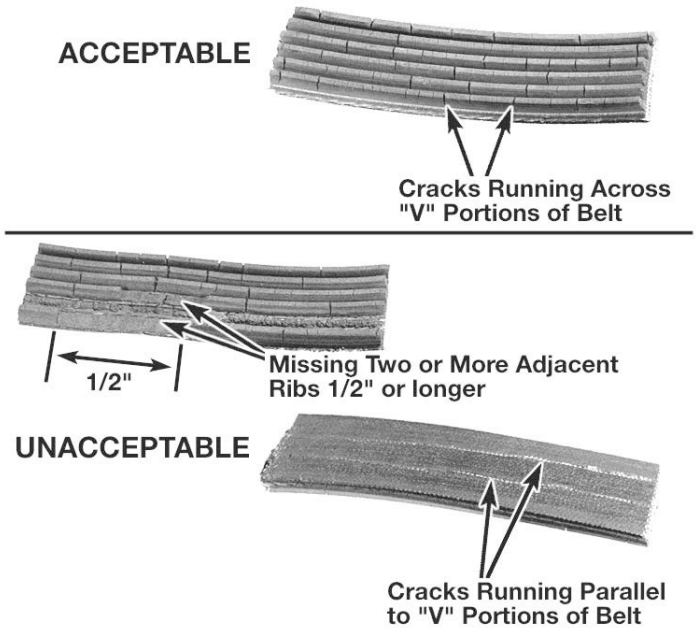


12.2 Check the belts for signs of wear like these - if it looks worn, replace it

expensive. For a faster charge, you can use a higher amperage charger, but don't use one rated more than 1/10th the amp/hour rating of the battery. Rapid boost charges that claim to restore the power of the battery in one to two hours are hardest on the battery and can damage batteries not in good condition. This type of charging should only be used in emergency situations.

13 The average time necessary to charge a battery should be listed in the instructions that come with the charger. As a general rule, a trickle charger will charge a battery in 12 to 16 hours.

14 Remove all the cell caps (if equipped) and cover the holes with a clean cloth to prevent spattering electrolyte. Disconnect the negative battery cable and hook the battery charger cable clamps up to the battery posts (positive to positive, negative to negative), then plug in the charger. Make sure it is set at 12-volts if it has a selector switch.

15 If you're using a charger with a rate higher than two amps, check the battery regularly during charging to make sure it doesn't overheat. If you're using a trickle charger, you can safely let the battery charge overnight after you've checked it regularly for the first couple of hours.

16 If the battery has removable cell caps, measure the specific gravity with a hydrometer every hour during the last few hours of the charging cycle. Hydrometers are available inexpensively from auto parts stores - follow the instructions that come with the hydrometer. Consider the battery charged when there's no change in the specific gravity reading for two hours and the electrolyte in the cells is gassing (bubbling) freely. The specific gravity reading from each cell should be very close to the others. If not, the battery probably has a bad cell(s).

17 Some batteries with sealed tops have built-in hydrometers on the top that indicate the state of charge by the color displayed in the hydrometer window. Normally, a bright-colored hydrometer indicates a full charge and a dark hydrometer indicates the battery still needs charging.

18 If the battery has a sealed top and no built-in hydrometer, you can hook up a digital voltmeter across the battery terminals to check the charge. A fully charged battery should read 12.5 volts or higher.

19 Further information on the battery and jump-starting can be found in Chapter 5 and at the front of this manual.

12 Drivebelt check, adjustment and replacement (every 6000 miles or 6 months)

Refer to illustrations 12.2, 12.4a, 12.4b, 12.5a and 12.5b

1 A serpentine belt is located at the front of the engine and plays an important role in the overall operation of the engine and its components. Due to its function and material make up, the belt is prone to wear and should be periodically inspected. The serpentine belt drives the alternator, power steering pump, water pump and air conditioning compressor. **Note:** *V6 models have one belt. V8 models have one main belt and a second, inner belt just for the air conditioning compressor (if equipped).*

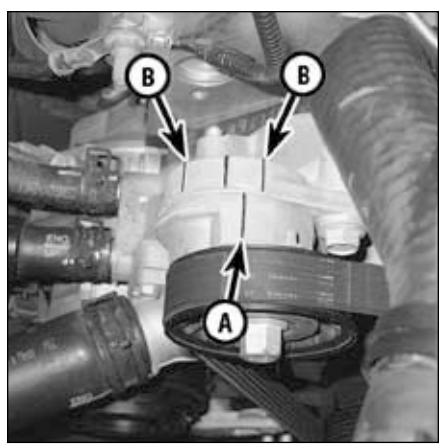
2 With the engine off, open the hood and use your fingers (and a flashlight, if necessary), to move along the belt checking for cracks and separation of the belt plies. Also check for fraying and glazing, which gives the belt a shiny appearance **(see illustration)**. Both sides of the belt should be inspected, which means you will have to twist the belt to check the underside.

3 Check the underside of the belt. They should be all the same depth, with none of the surfaces uneven.

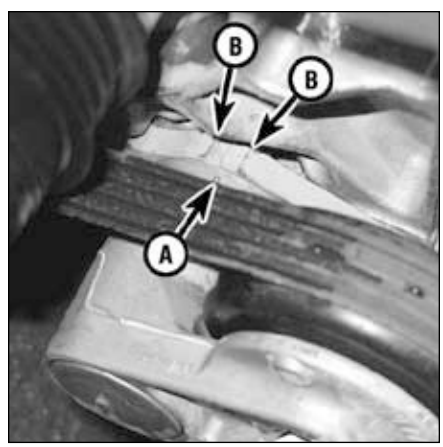
4 The tension of the belt is maintained by a spring-loaded tensioner assembly and isn't adjustable. The belt should be replaced when the mark on the moveable part of the tensioner moves out of the acceptable range on the on the stationary part of the tensioner **(see illustrations)**.

5 To replace the belt, rotate the tensioner to release belt tension **(see illustrations)**. **Note:** *Before removing the belt, make a sketch of how it is routed around the pulleys, if you don't think you can remember.*

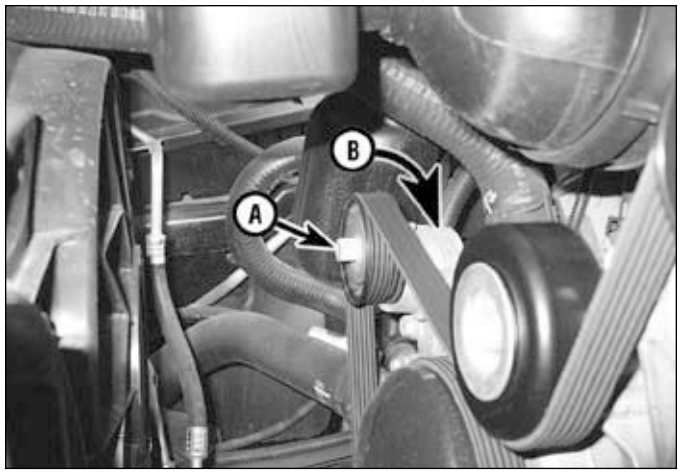
6 Remove the belt from the tensioner and auxiliary components and slowly release the tensioner.



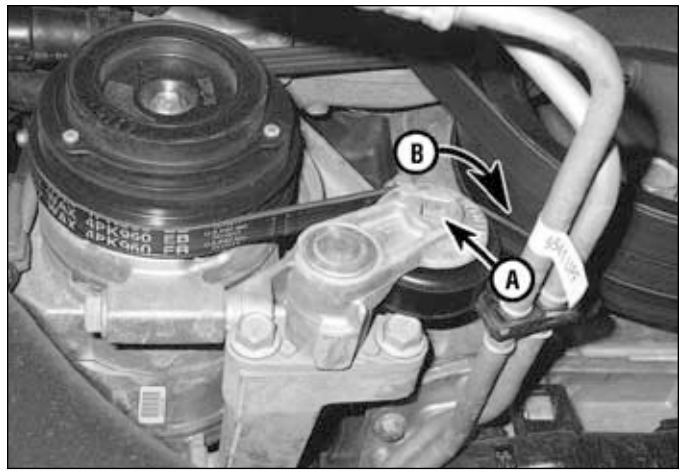
12.4a The mark (A) on the main belt's tensioner must remain between the marks (B) on the tensioner mount (V8 shown, main belt)



12.4b The tensioner for the air conditioning compressor drivebelt is harder to see. The mark (A) on the moveable part of the tensioner must be within the acceptable range marks (B)



12.5a Place a socket on the tensioner bolt (A) and turn the tensioner clockwise (B) for belt removal



12.5b On V8 models with air conditioning, the inner belt tensioner is best accessed from below - use a 3/8-inch-drive tool in the tensioner's square hole (A) to rotate it (B) for belt removal

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

Tensioner replacement

Refer to illustrations 12.8a and 12.8b

8 To replace a tensioner that has lost its spring tension, exhibits binding or has a worn-out pulley/bearing, remove the mounting bolts **(see illustrations)**.

9 Installation is the reverse of the removal procedure.

13 Underhood hose check and replacement (every 6000 miles or 6 months)

General

Caution: *Replacement of air conditioning hoses must be left to a dealer service department or air conditioning shop that has the equipment to depressurize the system safely and recover the refrigerant. Never remove air conditioning components or hoses until the system has been depressurized.*

1 High temperatures in the engine compartment can cause the deterioration of the rubber and plastic hoses used for engine, accessory and emission systems operation. Periodic inspection should be made for cracks, loose clamps, material hardening and leaks. Information specific to the cooling system hoses can be found in Section 14.

2 Some, but not all, hoses are secured to their fittings with clamps. Where clamps are used, check to be sure they haven't lost their tension, allowing the hose to leak. If clamps aren't used, make sure the hose has not expanded and/or hardened where it slips over the fitting, allowing it to leak.

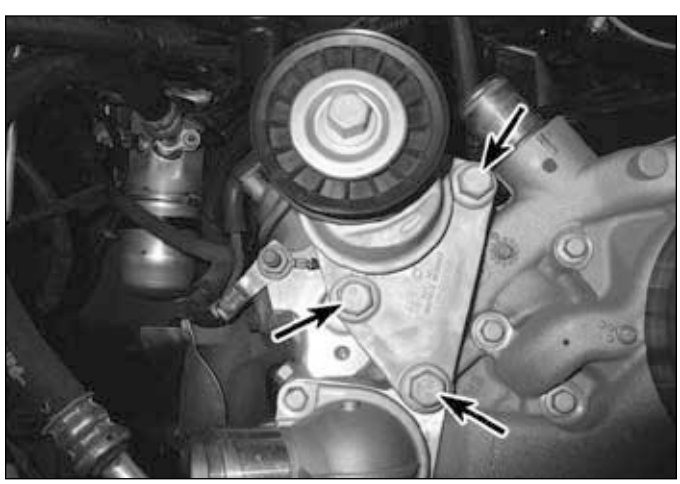
Vacuum hoses

3 It's quite common for vacuum hoses, especially those in the emissions system, to be color-coded or identified by colored stripes molded into them. Various systems require hoses with different wall thickness, collapse resistance and temperature resistance. When replacing hoses, be sure the new ones are made of the same material.

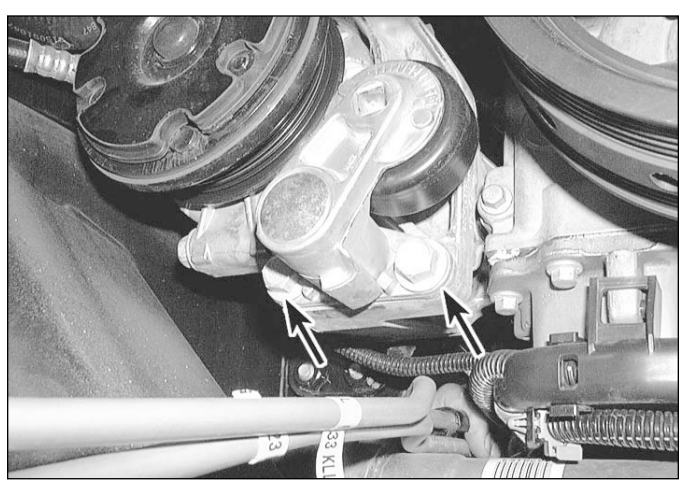
4 Often the only effective way to check a hose is to remove it completely from the vehicle. If more than one hose is removed, be sure to label the hoses and fittings to ensure correct installation.

5 When checking vacuum hoses, be sure to include any plastic T-fittings in the check. Inspect the fittings for cracks and the hose where it fits over the fitting for distortion, which could cause leakage.

6 A small piece of vacuum hose (1/4-inch inside diameter) can be used as a stethoscope to detect vacuum leaks. Hold one end of the hose to your ear and probe around vacuum hoses and fittings, listening for the hissing sound characteristic of a vacuum leak. **Warning:** *When probing with the vacuum hose stethoscope, be very careful not to come into contact with moving engine components such as the drivebelt, cooling fan, etc.*



12.8a Main belt tensioner mounting bolts (V8 engine shown)



12.8b Mounting bolts for V8 engine air conditioning belt tensioner