



93143P56

Fig. 71 Slide the fan as an assembly up and away from the radiator. Be careful not to dislodge the mounting stud on the left side

cedures. Tighten the fan shroud retaining bolt to 23–33 inch lbs. (3–4 Nm). Tighten the fan shroud retaining nut to 71–106 inch lbs. (8–12 Nm).

4.6L Engine

▶ See Figure 73

1. Loosen the fan clutch-mounting shaft from the water pump hub.
2. Loosen the fan shroud from its radiator mounting and remove the lower hose from the shroud.
3. Lift the fan and clutch assembly and the fan shroud from the vehicle.
4. If necessary, remove the fan-to-fan clutch retaining bolts and separate the fan from the fan clutch.

*** CAUTION

Closely examine the fan for cracks or separation, to avoid the possibility of personal injury or vehicle damage.

To install:

5. Assemble the fan and fan clutch. Tighten the retaining bolts to 15–20 ft. lbs. (20–27 Nm).
6. Install the fan and clutch assembly and the fan shroud. Mount the fan clutch shaft to the water pump hub and tighten to 37–46 ft. lbs. (50–62 Nm).
7. Slip the shroud into the lower mounting clips and install the shroud retaining screws.

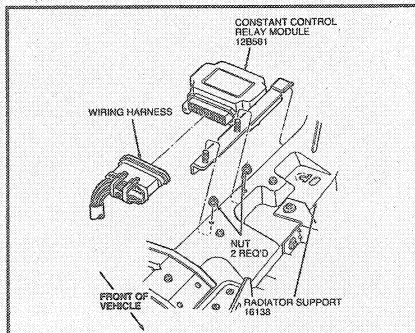


Fig. 72 Constant control relay module location—3.8L engines

5.0L Engines

1. Loosen the fan clutch-to-water pump hub retaining bolts.
2. If necessary, remove the drive belt from the water pump pulley.
3. Remove the fan shroud upper retaining screws. Lift the shroud to disengage it from the lower retaining clips.
4. Remove the fan clutch-to-water pump hub bolts and remove the fan and clutch assembly and the fan shroud.
5. If necessary, remove the fan-to-fan clutch retaining bolts and separate the fan from the fan clutch.

*** CAUTION

Closely examine the fan for cracks or separation, to avoid the possibility of personal injury or vehicle damage.

To install:

6. Assemble the fan and fan clutch. Tighten the retaining bolts evenly and alternately to 12–18 ft. lbs. (16–24 Nm).
7. Install the fan and clutch assembly and the fan shroud.
8. Install the fan clutch-to-water pump hub bolts.
9. Slip the shroud into the lower mounting clips and install the shroud retaining screws.
10. If removed, install the water pump drive pulley and adjust the belt tension; refer to Section 1.
11. Tighten the fan clutch-to-water pump hub

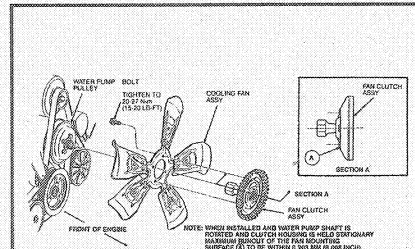


Fig. 73 Fan and fan clutch assembly—4.6L engine

bolts evenly and alternately to 15–22 ft. lbs. (20–27 Nm). Recheck the belt tension.

Water Pump

REMOVAL & INSTALLATION

3.8L Engine

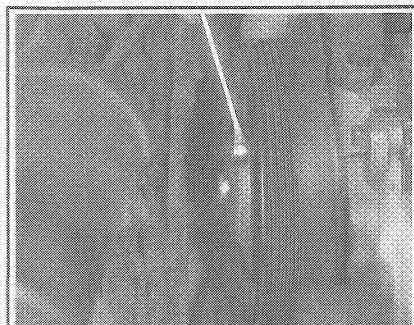
▶ See Figures 74 thru 90

1. Disconnect the negative battery cable.
2. Drain and recycle the engine coolant.

*** CAUTION

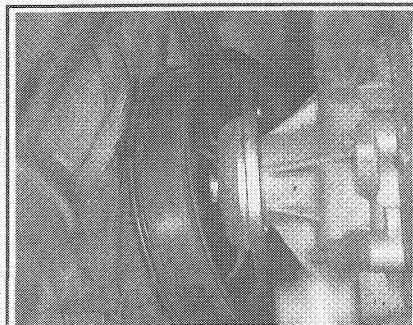
Never open, service, or drain the radiator or cooling system when hot; serious burns can occur from the steam and hot coolant. In addition, when draining engine coolant, keep in mind that cats and dogs are attracted to ethylene glycol antifreeze and could drink any that is left in an uncovered container or in puddles on the ground. This will prove fatal in sufficient quantities. Always drain coolant into a sealable container. Coolant should be reused unless it is contaminated or is several years old.

3. Remove the drive belt.
4. Remove the two nuts and bolt retaining the drive belt tensioner to the engine.
5. Disconnect the heater hose at the water pump. Remove the lower hose.



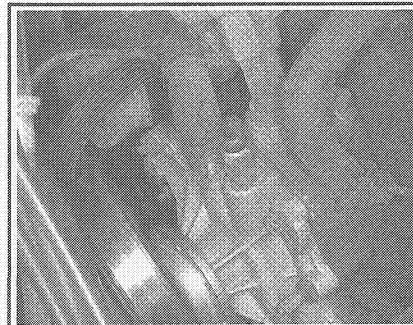
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Fig. 74 It is best to leave the belt in place while breaking loose the mounting bolts on the radiator pulley



93143P15

Fig. 75 The water pump pulley does not clear the space between the water pump and the frame



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Fig. 76 Moving the pulley around to gain clearance to the water pump bolts does not always work