

7. Remove the nut from the sector shaft.
8. Remove the pitman arm from the sector shaft with pitman arm removal tool T64P-3590-F or equivalent. Remove the tool from the pitman arm.

## \*\*\* WARNING

**Do not damage the seals and/or gear housing. Do not use a non-approved tool such as a pickle fork.**

9. Support the steering gear and remove the steering gear retaining bolts.
  10. Work the gear free of the flex coupling and remove the gear.
  11. If the flex coupling did not come off with the gear, lift it off the shaft.
- To install:**
12. Turn the steering wheel to the straight-ahead position.

13. Center the steering gear input shaft with the indexing flat facing downward on 1989-91 vehicles. On 1992-98 vehicles, center the steering gear input shaft with the centerline of the 2 indexing flats at 4 o'clock.

14. Slide the steering gear input shaft into the flex coupling and into place on the frame side rail. Install the retaining bolts and tighten to 50-65 ft. lbs. (68-88 Nm).

15. Make sure the wheels are in the straight-ahead position. Install the pitman arm on the sector shaft and install the lockwasher and nut. Tighten the nut to 233-250 ft. lbs. (316-338 Nm).

16. Move the flex coupling into place on the steering gear input shaft. Install the retaining bolt and tighten to 20-30 ft. lbs. (27-41 Nm).

17. Connect the pressure and return lines to the steering gear and tighten the lines. Fill the reservoir and turn the steering wheel from stop-to-stop to distribute the fluid. Check the fluid level and add fluid, if necessary.

18. Start the engine and turn the steering wheel from left to right.

19. Check for leaks.
20. Install the stone shield.

## Power Steering Pump

### REMOVAL & INSTALLATION

#### See Figures 127 and 128

1. Disconnect the negative battery cable.
2. Disconnect the fluid return hose at the pump and drain the fluid into a container.
3. Remove the pressure hose from the pump and, if necessary, drain the fluid into a container. Do not remove the fitting from the pump.
4. Disconnect the belt from the pulley. On 5.0L engines, use pulley removal tool T69L-10300-B or equivalent, to remove the pulley.
5. Remove the mounting bolts and remove the pump.

#### To install:

6. On 5.0L engines, place the pump on the mounting bracket and install the bolts at the front of the pump. Tighten to 30-45 ft. lbs. (40-62 Nm).
7. On 4.6L engines, place the pump on the mounting bosses of the engine block and install the bolts at the side of the pump. Tighten to 15-22 ft. lbs. (20-30 Nm).

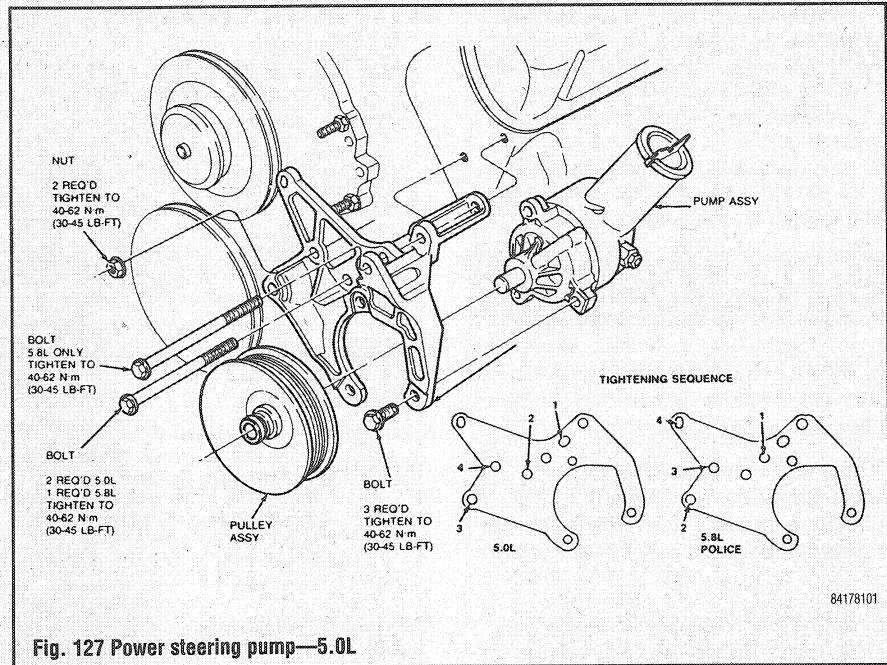


Fig. 127 Power steering pump—5.0L

8. On 5.0L engines, install the pump pulley using pulley replacer tool T65P-3A733-C or equivalent.

9. Place the belt on the pump pulley and adjust the tension, if necessary.

10. Install the pressure hose to the pump fitting. Tighten the tube nut with a tube nut wrench rather than with an open-end wrench. Tighten to 20-25 ft. lbs. (27-34 Nm) on 1989-91 vehicles or 35-45 ft. lbs. (47-60 Nm) on 1992-98 vehicles.

**Do not overtighten this fitting. Swivel and/or end play of the fitting is normal and does not indicate a loose fitting. Overtightening the tube nut can collapse the tube nut wall, resulting in a leak and requiring replacement of the entire pressure hose assembly. Use of an open-end wrench to tighten the nut can deform the tube nut hex, which may result in improper torque and may make further servicing of the system difficult.**

11. Connect the return hose to the pump and tighten the clamp.
12. Fill the reservoir with the proper type and quantity of fluid.
13. Bleed the air from the system.

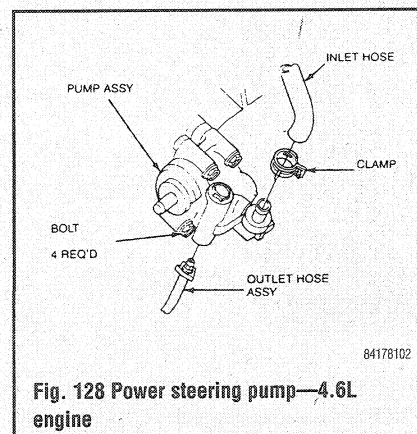


Fig. 128 Power steering pump—4.6L engine

### BLEEDING

1. Disconnect the ignition coil.
2. Raise and safely support the vehicle so the front wheels are off the floor.
3. Fill the power steering fluid reservoir.
4. Crank the engine with the starter and add fluid until the level remains constant.
5. While cranking the engine, rotate the steering wheel from lock-to-lock.

**The front wheels must be off the floor during lock-to-lock rotation of the steering wheel.**

6. Check the fluid level and add fluid, if necessary.
7. Connect the ignition coil wire. Start the engine and allow it to run for several minutes.
8. Rotate the steering wheel from lock-to-lock.
9. Shut off the engine and check the fluid level. Add fluid, if necessary.

10. If air is still present in the system, purge the system of air using power steering pump air evacuator tool 021-00014 or equivalent, as follows:

- a. Make sure the power steering pump reservoir is full to the COLD FULL mark on the dipstick or to just above the minimum indication on the reservoir.
- b. Tightly insert the rubber stopper of the air evacuator assembly into the pump reservoir fill neck.
- c. Apply 15 in. Hg maximum vacuum on the pump reservoir for a minimum of 3 minutes with the engine idling. As air purges from the system, vacuum will fall off. Maintain adequate vacuum with the vacuum source.
- d. Release the vacuum and remove the vacuum source. Fill the reservoir to the COLD FULL mark or to just above the minimum indication on the reservoir.
- e. With the engine idling, apply 15 in. Hg vacuum to the pump reservoir. Slowly cycle the steering wheel from lock-to-lock every 30 seconds for approximately 5 minutes. Do not hold the steering wheel on the stops while cycling.