

3-32 ENGINE AND ENGINE OVERHAUL

7. Position the tube on the oil pump and hand-start the 2 bolts. Install the bolt retaining the pickup tube to the main bearing stud spacer hand tight.

8. Tighten the pickup tube-to-oil pump bolts to 6.0–8.8 ft. lbs. (8–12 Nm). Tighten the pickup tube to main bearing stud spacer bolt to 15–22 ft. lbs. (20–30 Nm).

9. Rotate the inner rotor of the oil pump to align with the flats on the crankshaft and install the oil pump flush with the cylinder block. Install the 4 retaining bolts and tighten to 6.0–8.8 ft. lbs. (8–12 Nm).

10. Install a new oil filter. Install the timing chains.

11. Install the oil pan, front cover and camshaft covers.

12. Fill the crankcase with the proper type and quantity of engine oil. Connect the negative battery cable, start the engine, and check for leaks.

5.0L Engines

▶ See Figure 125

1. Disconnect the negative battery cable. Remove the oil pan; see the procedure in this Section.

2. Remove the oil pump inlet tube and screen assembly.

3. Remove the oil pump attaching bolts and gasket. Remove the oil pump intermediate shaft.

To install:

4. Prime the oil pump by filling either the inlet or outlet ports with engine oil and rotating the pump shaft to distribute the oil within the pump body.

5. Position the intermediate driveshaft into the distributor socket. With the shaft firmly seated in the distributor socket, the stop on the shaft should touch the roof of the crankcase. Remove the shaft and position the stop, as necessary.

6. Position a new gasket on the pump body, insert the intermediate shaft into the oil pump, and install the pump and shaft as an assembly.

▶ Do not attempt to force the pump into position if it will not seat readily. The driveshaft hex may be misaligned with the distributor shaft. To align, rotate the intermediate shaft into a new position.

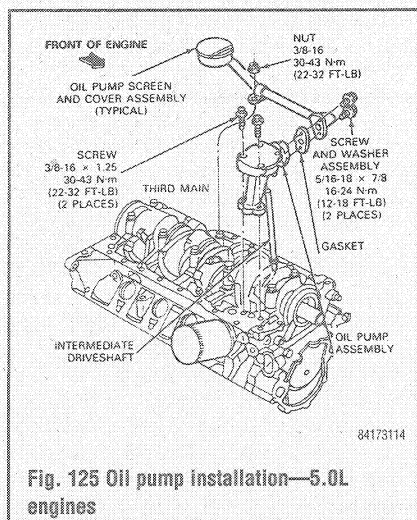


Fig. 125 Oil pump installation—5.0L engines

7. Tighten the oil pump attaching bolts to 22–32 ft. lbs. (30–43 Nm).

8. Clean and install the oil pump inlet tube and screen assembly.

9. Install the oil pan and the remaining components in the reverse order of removal. Start the engine and check for leaks.

Crankshaft Damper

REMOVAL & INSTALLATION

3.8L Engine

▶ See Figure 126

1. Disconnect the negative battery cable. Properly drain the cooling system and the engine oil.

2. Remove the air cleaner assembly and air intake duct.

3. If necessary, remove the fan shroud attaching screws and bolts, then remove the fan/clutch assembly and shroud.

4. Loosen the accessory drive belt idler. Remove the drive belt and water pump pulley.

5. Remove the power steering pump-mounting bracket attaching bolts. Leaving the hoses con-

nected, place the pump/bracket assembly in a position that will prevent the loss of power steering fluid.

6. If equipped with air conditioning, remove the compressor front support bracket. Leave the compressor in place.

7. Disconnect coolant bypass and heater hoses at the water pump. Disconnect the radiator upper hose at the thermostat housing.

8. Disconnect the coil wire from the distributor cap, then remove the cap with the secondary wires still attached. Remove the distributor-retaining clamp and lift distributor out of the front cover.

9. Raise and safely support the vehicle.

10. Remove the crankshaft damper and pulley.

▶ If the crankshaft pulley and vibration damper have to be separated, mark the damper and pulley so they may be reassembled in the same relative position. This is important as the damper and pulley are initially balanced as a unit. If the crankshaft damper is being replaced, check if the original damper has balance pins installed. If so, new balance pins must be installed on the new damper in the same position as the original damper. The crankshaft pulley must also be installed in the original installation position.

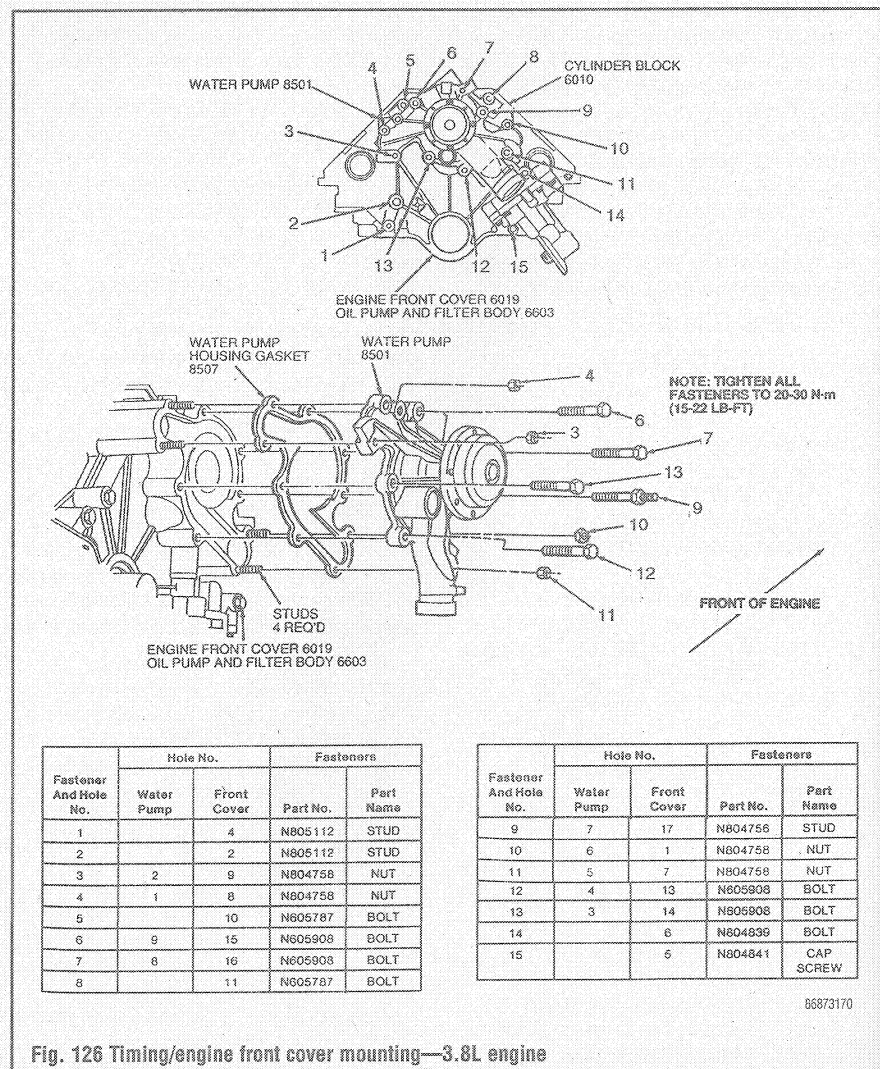


Fig. 126 Timing/engine front cover mounting—3.8L engine