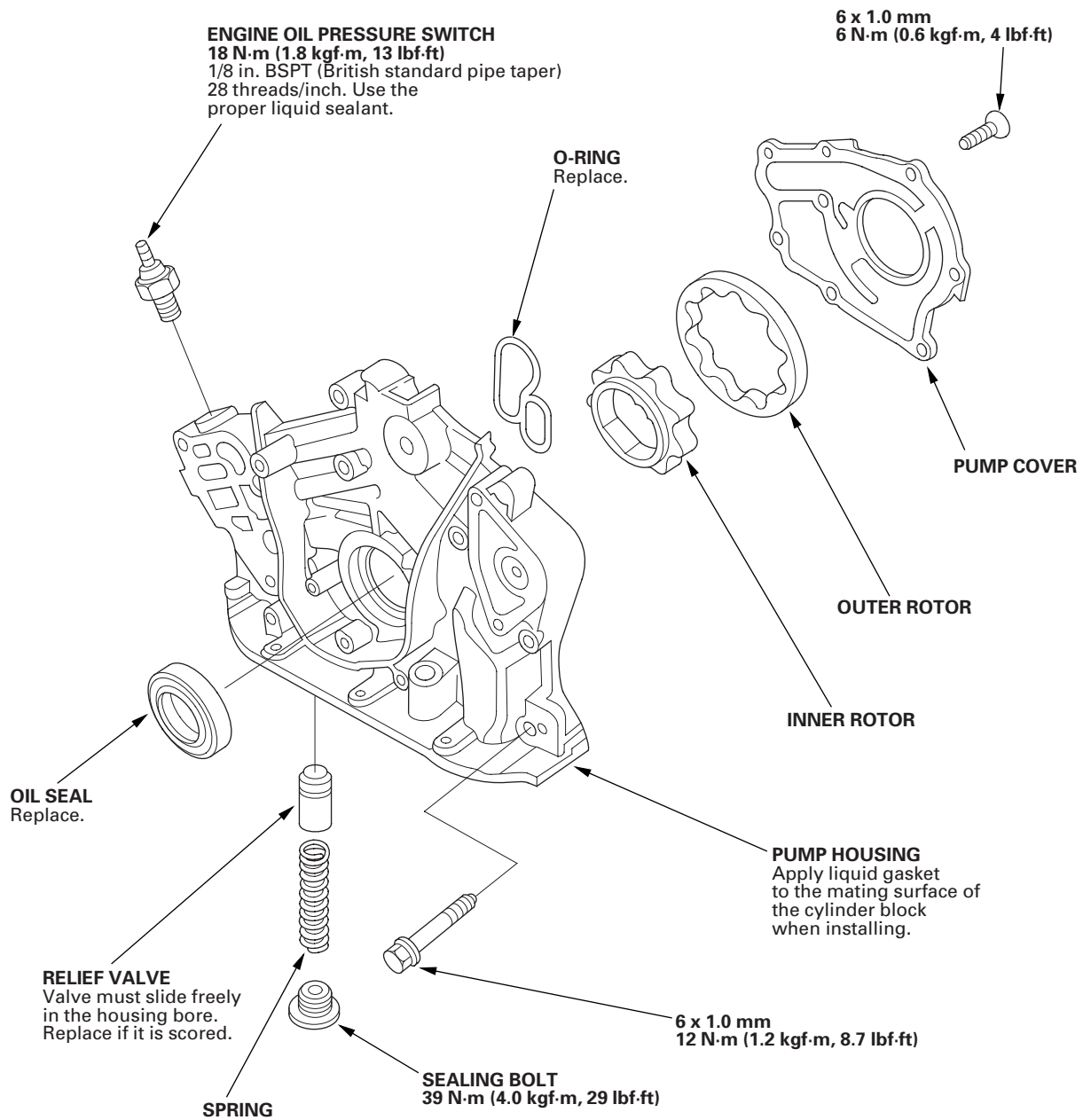


Oil Pump Overhaul

Exploded View



(cont'd)

Engine Lubrication

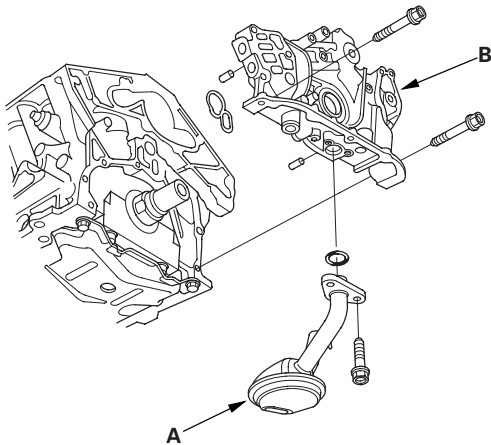
Oil Pump Overhaul (cont'd)

Special Tools Required

Oil Seal Driver 07GAD-PH70201

Removal

1. Drain the engine oil.
2. Turn the crankshaft so that the No. 1 piston is at TDC (see page 6-22).
3. Remove the timing belt (see page 6-19).
4. Remove the idler pulley.
5. Remove the CKP sensor, then remove the timing belt drive pulley (see page 6-56).
6. Remove the VTEC solenoid valve and oil filter assembly (see page 6-9).
7. Remove the oil pan and the oil screen (A).



8. Remove the mounting bolts and the oil pump assembly (B).
9. Remove the screws from the pump housing, then separate the housing and cover.

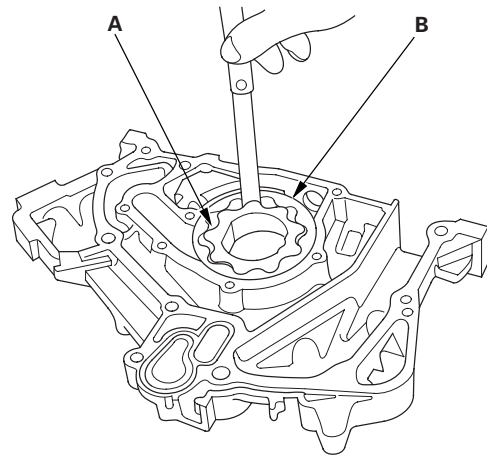
Inspection

10. Check the inner-to-outer rotor radial clearance between the inner rotor (A) and outer rotor (B). If the inner-to-outer rotor clearance exceeds the service limit, replace the oil pump assembly.

Inner Rotor-to-Outer Rotor Radial Clearance

Standard (New): 0.04–0.16 mm
(0.002–0.006 in.)

Service Limit: 0.20 mm (0.008 in.)

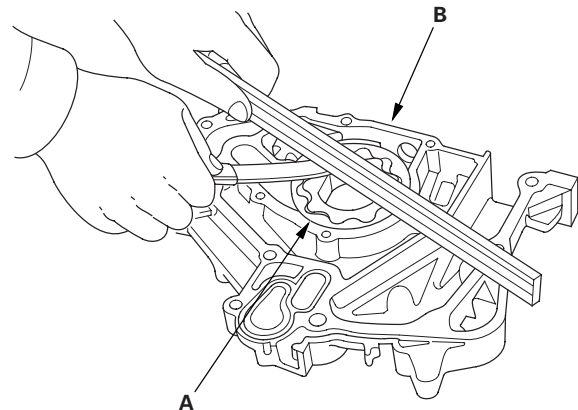


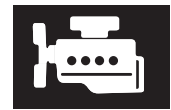
11. Check the housing-to-rotor axial clearance between the rotors (A) and pump housing (B). If the housing-to-rotor axial clearance exceeds the service limit, replace the oil pump assembly.

Housing-to-Rotor Axial Clearance

Standard (New): 0.02–0.07 mm
(0.001–0.003 in.)

Service Limit: 0.12 mm (0.005 in.)



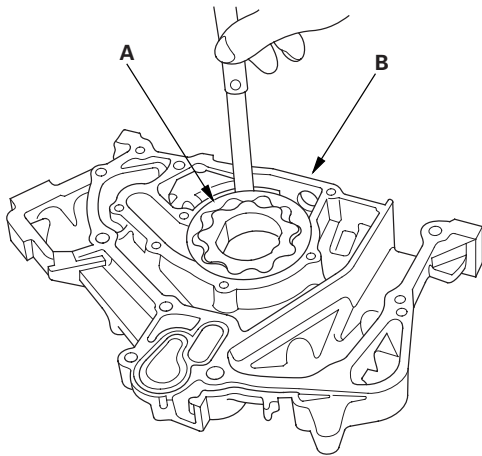


12. Check the housing-to-outer rotor radial clearance between the outer rotor (A) and pump housing (B). If the housing-to-outer rotor radial clearance exceeds the service limit, replace the oil pump assembly.

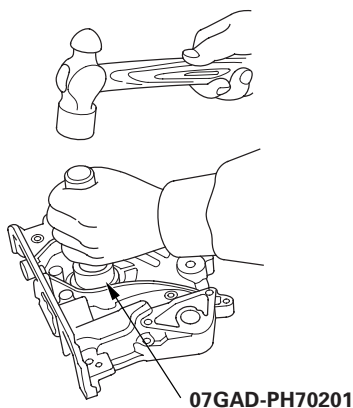
Housing-to-Outer Rotor Radial Clearance
Standard (New): 0.14 – 0.19 mm

(0.006 – 0.007 in.)

Service Limit: 0.20 mm (0.008 in.)



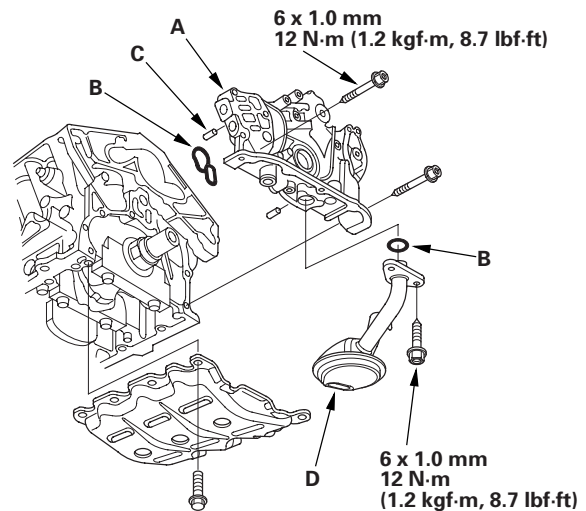
13. Inspect both rotors and the pump housing for scoring or other damage. Replace parts if necessary.
14. Remove the old oil seal from the oil pump.
15. Gently tap in the new oil seal until the special tool bottoms on the pump.



16. Apply liquid thread lock to the pump housing screws.

Installation

17. Reassemble the oil pump.
18. Check that the oil pump turns freely.
19. Clean and dry the oil pump mating surfaces.
20. Install the oil pump (A).
 - 1 Apply liquid gasket part No. 08718-0001 or 08718-0003 evenly to the block mating surface of the oil pump and to the inner threads of the bolt holes.
 - 2 Grease the lip of the oil seal and apply oil to the new O-rings (B).
 - 3 Install the dowel pins (C), then align the inner rotor with the crankshaft and install the oil pump.
 - 4 Clean the excess grease off the crankshaft, and check the seal for distortion.



21. Install the oil screen (D).

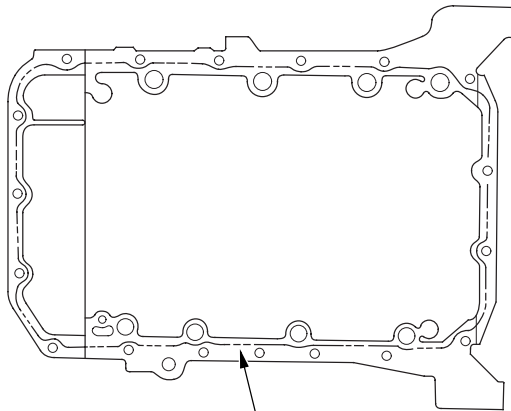
(cont'd)

Engine Lubrication

Oil Pump Overhaul (cont'd)

22. Clean and dry the oil pan mating surfaces.
23. Apply liquid gasket, part No. 08718-0001 or 08718-0003, evenly to the oil pan mating surface of the block and to the inner threads of the bolt holes, then install the oil pan.

NOTE: Do not install the parts if 5 minutes or more have elapsed since applying liquid gasket. Instead, reapply liquid gasket after removing the old residue.



Apply liquid gasket
along the broken line.

24. Tighten the bolts in two or three steps. In the final step, tighten all bolts, in sequence, to 12 N·m (1.2 kgf·m, 8.7 lbf·ft).

