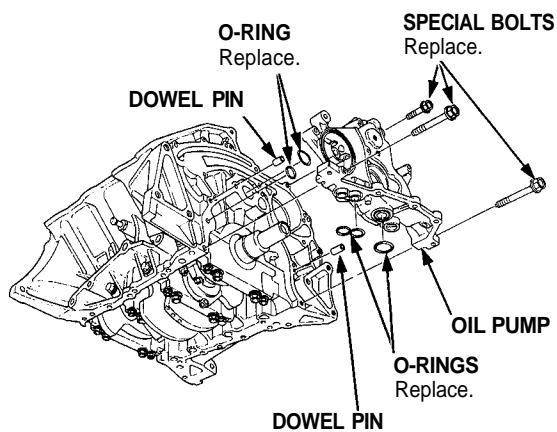




Removal/Inspection/Installation

1. Drain the engine oil and the differential oil.
2. Turn the crankshaft to TDC (see page 6-34).
3. Remove the timing belt (see page 6-31).
4. Remove the oil pan (see page 8-6).
5. Remove the special bolts, then remove the oil pump assembly.

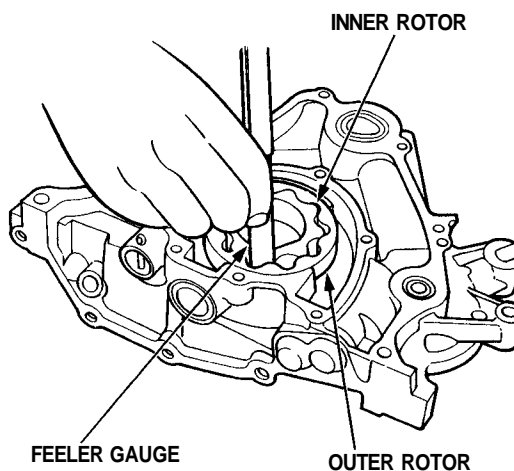


6. Remove the seven screws from the pump housing, then separate the housing and cover.
7. Check the inner-to-outer rotor clearance on the pump rotor.

Inner-to-Outer Rotor Clearance

Standard (New): 0.04 — 0.16 mm
(0.002 — 0.006 in)

Service Limit: 0.20 mm (0.008 in)

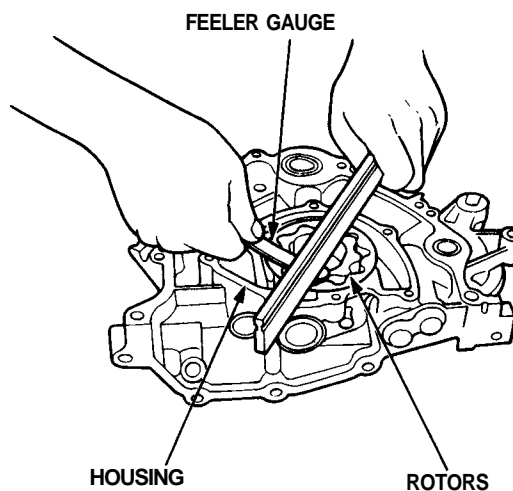


8. Check the housing-to-rotor axial clearance on the outer pump rotor.

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)



(cont'd)

Oil Pump

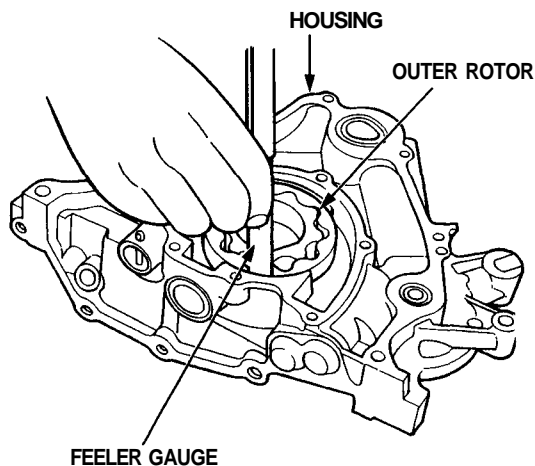
Removal/Inspection/Installation (cont'd)

9. Check the housing-to-outer rotor clearance.

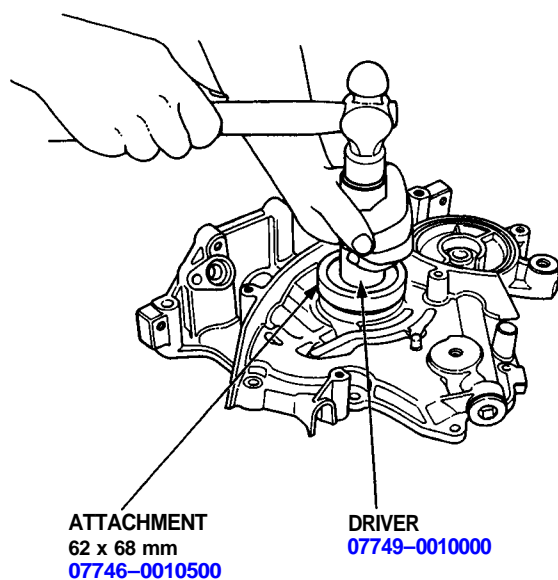
Housing-to-Outer Rotor Clearance

Standard (New): 0.10 — 0.18 mm
(0.004 — 0.007 in)

Service Limit: 0.20 mm (0.008 in)



10. Inspect both rotors and pump housing for scoring or other damage. Replace parts if necessary.
11. Remove the old oil seal from the oil pump.
12. Using the special tools, gently tap in the new oil seal until the tool bottoms on the pump.



13. Reassemble the oil pump, applying liquid gasket to the pump housing screws.

14. Check that the oil pump turns freely.

15. Apply a light coat of oil to the seal lip.

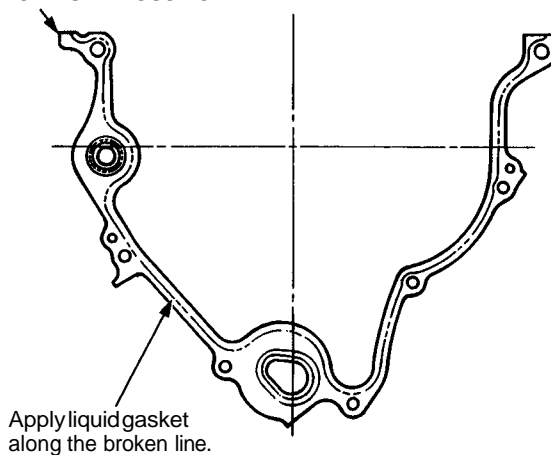
16. Install the two dowel pins on the cylinder block.

17. Apply liquid gasket to the cylinder block mating surface of the oil pump.

NOTE:

- Use liquid gasket. Part No. 08718- 0001.
- Check that the mating surfaces are clean and dry before applying liquid gasket.
- Apply liquid gasket evenly, in a narrow bead centered on the mating surface.
- Do not apply liquid gasket to the O-ring grooves.
- To prevent leakage of oil, apply liquid gasket to the inner threads of the bolt holes.

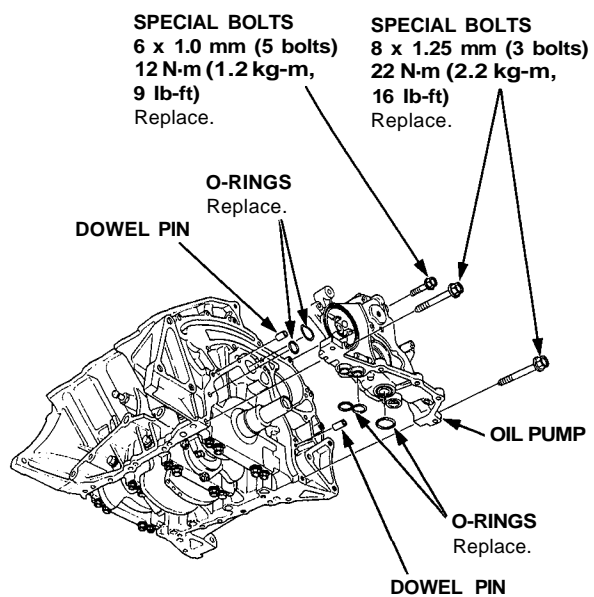
OIL PUMP HOUSING



- Do not install the parts if 20 minutes or more have elapsed since applying liquid gasket. Instead, reapply liquid gasket after removing old residue.
- After assembly, wait at least 30 minutes before filling the engine with oil.



18. Install new O-rings on the oil pump.
19. Install the oil pump to the cylinder block.



20. Install the oil pan (see page [8-8](#)).
21. Install the timing belt (see page [6-34](#)).