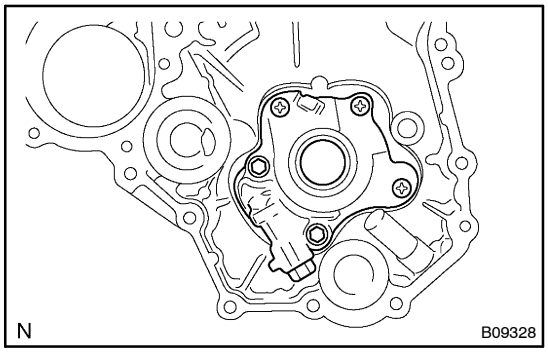
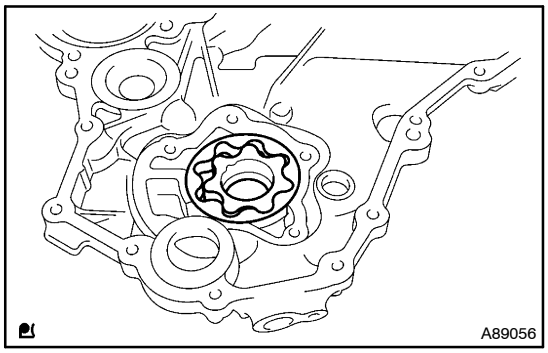
170J7–01

OVERHAUL



1. REMOVE OIL PUMP ROTOR SET

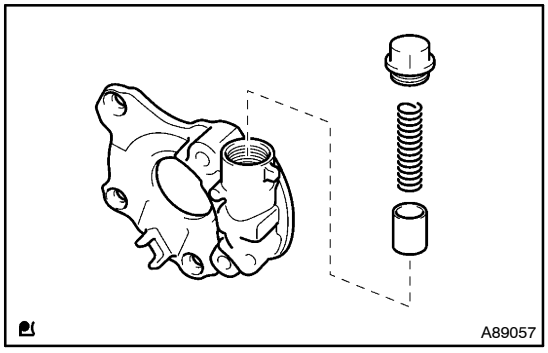
(a) Remove the 2 bolts and 3 screws, then remove the oil pump cover.



(b) Remove the oil pump rotor set from the oil pump body.

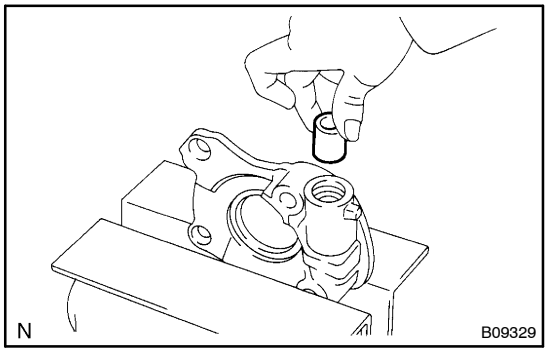
NOTICE:

Keep the 2 removed rotors without changing the arrangement or turning them over.



2. REMOVE OIL PUMP RELIEF VALVE

(a) Remove the oil pump relief valve plug, then remove the oil pump relief valve spring and oil pump relief valve.



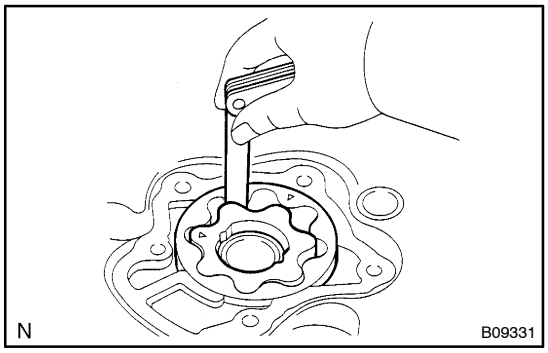
3. INSPECT OIL PUMP RELIEF VALVE

(a) Apply engine oil to the oil pump relief valve. Check that the valve falls smoothly into the valve hole of the oil pump body by its own weight.

4. INSPECT OIL PUMP ASSY

(a) Check the operation.

(1) Apply engine oil to the drive and driven rotors. Install the rotors to the oil pump body, then check that the rotors revolve smoothly.

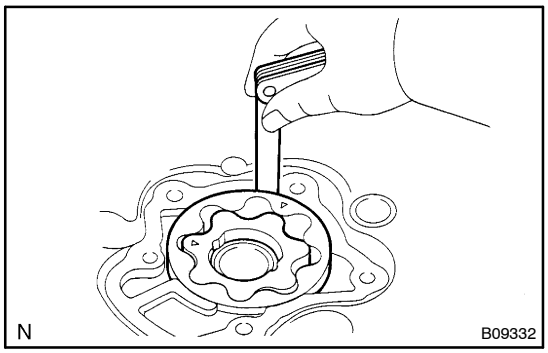


(b) Inspect the tip clearance.

(1) Using a feeler gauge, measure the clearance between the drive and driven rotor tips.

Standard tip clearance:
0.060 to 0.180 mm (0.0024 to 0.0071 in.)
Maximum tip clearance: 0.28 mm (0.0110 in.)

If the tip clearance is greater than maximum, replace the oil pump assembly.

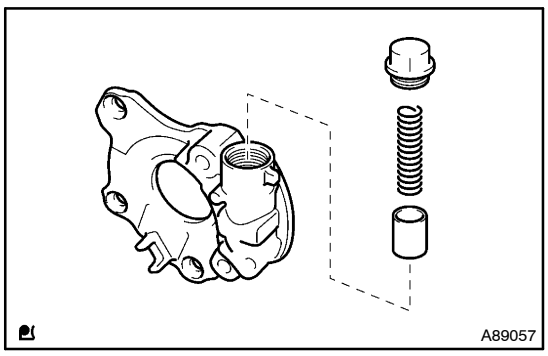


(c) Inspect the body clearance.

(1) Using a feeler gauge, measure the clearance between the driven rotor and oil pump body.

Standard body clearance:
0.250 to 0.325 mm (0.0098 to 0.0128 in.)
Maximum body clearance: 0.425 mm (0.0167 in.)

If the body clearance is greater than maximum, replace the oil pump assembly.



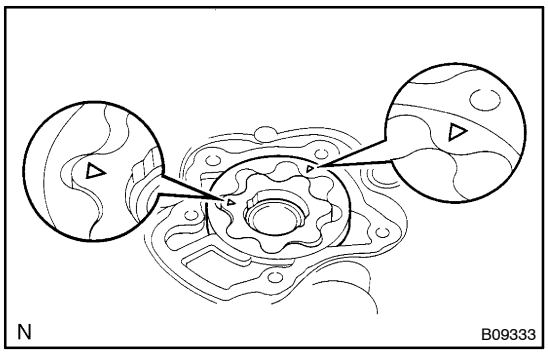
5. INSTALL OIL PUMP RELIEF VALVE

(a) Apply engine oil to the oil pump relief valve.

(b) Install the oil pump relief valve and oil pump relief valve spring to the oil pump cover.

(c) Install the oil pump relief valve plug.

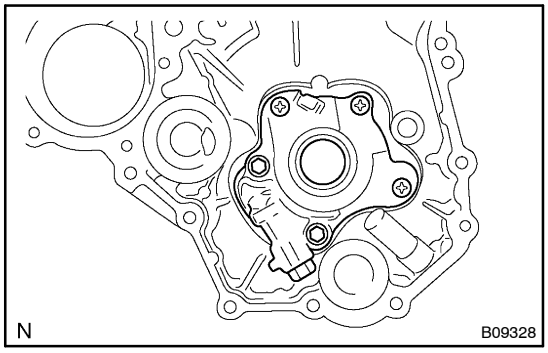
Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)



6. INSTALL OIL PUMP ROTOR SET

(a) Apply engine oil to the drive and driven rotors.

(b) Install the rotors to the the oil pump body with the marks facing upward.



(c) Install the oil pump cover with the 2 bolts and 3 screws.
Torque:
8.8 N·m (90 kgf·cm, 78 in.·lbf) for bolt
10 N·m (102 kgf·cm, 7.4 ft·lbf) for screw