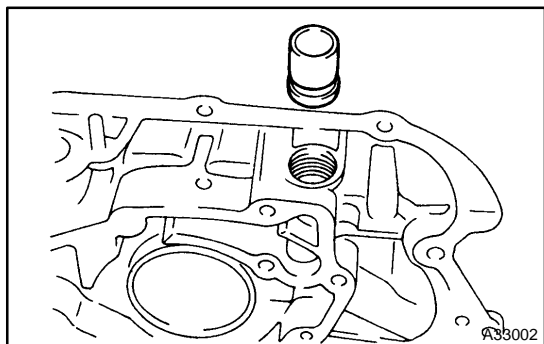


OVERHAUL

1. REMOVE OIL PUMP RELIEF VALVE

- (a) Remove the plug, spring and relief valve.



2. INSPECT OIL PUMP RELIEF VALVE

- (a) Apply a light coat of engine oil.
 (b) Check that the valve falls smoothly into the valve hole by its own weight.

If it does not, replace the relief valve. If necessary, replace the oil pump assy.

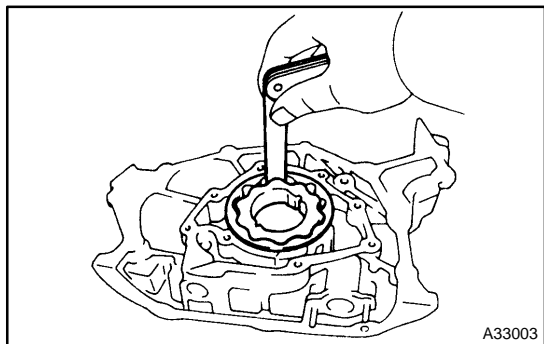
3. INSPECT OIL PUMP COVER

- (a) Remove the 10 screws and the oil pump cover.

4. INSPECT OIL PUMP ROTOR

- (a) Apply a light coat of engine oil to the oil pump rotor set and place them into the oil pump body. Check that the rotors revolve smoothly.

If the result is not as specified, replace the oil pump assy.

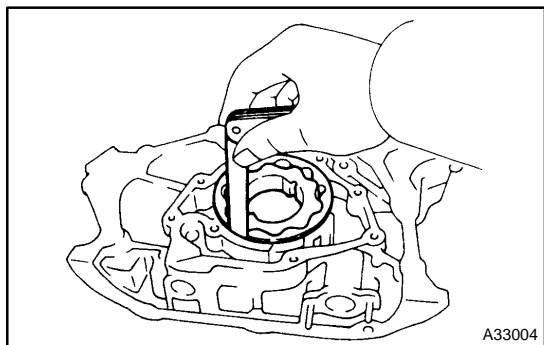


- (b) Check the clearance between the drive tips and driven rotor grooves.
 (1) Insert a feeler gauge between each drive tip and driven rotor groove. Measure the clearances.

Specified tip clearance:

0.060 to 0.300 mm (0.0024 to 0.0118 in.)

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

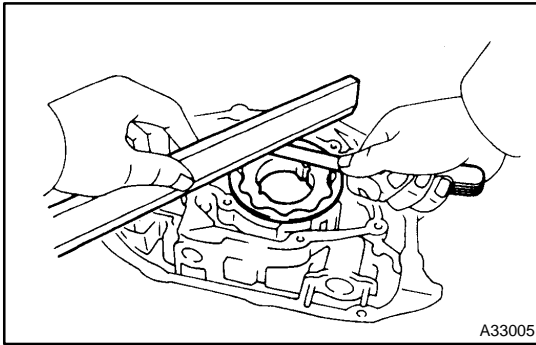


- (c) Check the clearance between the driven rotor and body.
 (1) Insert a feeler gauge between the driven rotor and body. Measure the clearance.

Specified body clearance:

0.250 to 0.500 mm (0.0098 to 0.0128 in.)

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



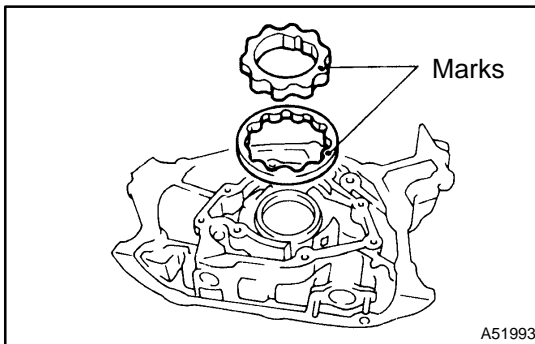
- (d) Check the clearance between the drive and driven rotor.
- (1) Place a precision straight edge on the top surface of the drive. Insert a feeler gauge between the bottom edge of the precision straight edge and the top surface of the driven rotor. Measure the clearance.

Specified side clearance:

0.030 to 0.150 mm (0.0012 to 0.0059 in.)

If the side clearance is greater than the maximum, replace the oil pump assy.

5. REMOVE OIL PUMP ROTOR



6. INSTALL OIL PUMP ROTOR

- (a) Apply a light coat of engine oil to the oil pump gear set and place it into the pump body with the marks facing the pump body cover side.

7. INSTALL OIL PUMP COVER

- (a) Install the oil pump cover with the 10 screws.

Torque: 10 N·m (102 kgf·cm, 7 ft·lbf)

8. INSTALL OIL PUMP RELIEF VALVE

- (a) Apply a light coat of engine oil to the relief valve, and insert the relief valve and spring into the pump body hole.

- (b) Install the plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)