

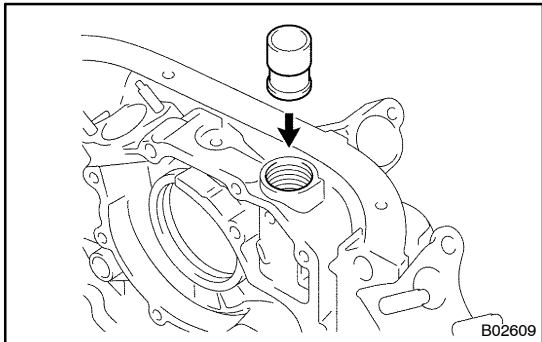
OVERHAUL

1. REMOVE OIL PUMP RELIEF VALVE

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

2. REMOVE OIL PUMP GEAR SET

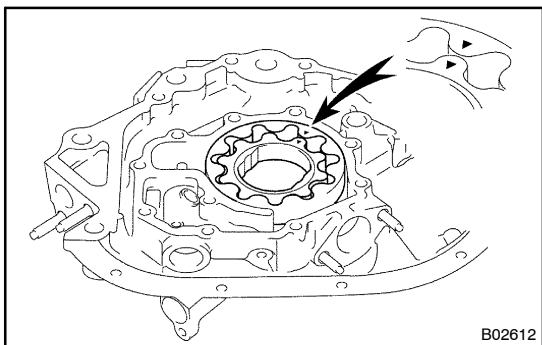
- (a) Remove the 10 screws, pump body cover and the drive and driven rotors.



3. INSPECT OIL PUMP RELIEF VALVE

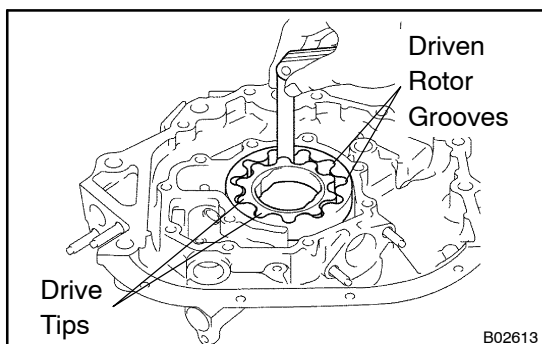
- (a) Coat the relief valve with engine oil and drop it into the relief valve hole.
 (b) Check that the relief valve falls in smoothly by its own weight.

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



4. INSPECT OIL PUMP GEAR SET

- (a) Install the rotors to the oil pump body and align the rotor's matchmarks.



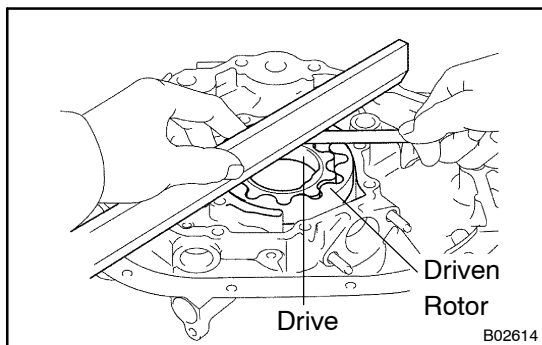
- (b) Check the tip clearance.

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

Clearance:

Standard	0.060 to 0.180 mm (0.0024 to 0.0071 in.)
Maximum	0.18 mm (0.0071 in.)

If the tip clearance is greater than the maximum, replace with a new drive and driven rotor set.

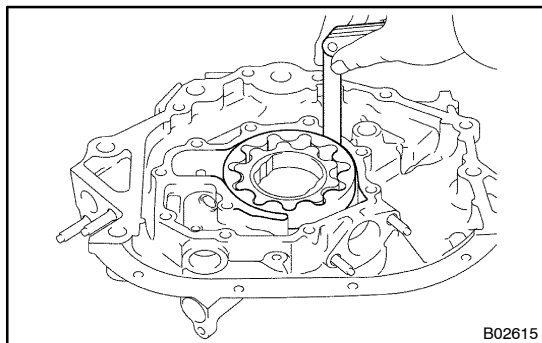


- (c) Check the side clearance.
- (1) Using a feeler gauge and precision straight edge, measure the clearance between the rotors and precision straight edge.

Clearance:

Standard	0.030 to 0.090 mm (0.0012 to 0.0035 in.)
Maximum	0.09 mm (0.0035 in.)

If the side clearance is greater than the maximum, replace with a new drive and driven rotor set.



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

Clearance:

Standard	0.250 to 0.325 mm (0.0098 to 0.0128 in.)
Maximum	0.325 mm (0.0128 in.)

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

5. INSTALL OIL PUMP GEAR SET

- (a) Install the 10 screws, pump body cover and the drive and driven rotors.

6. INSTALL OIL PUMP RELIEF VALVE

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