

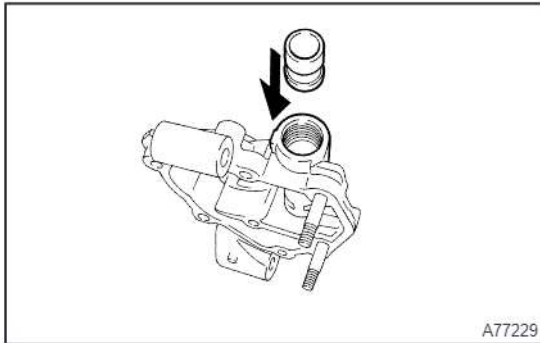
OVERHAUL

1. REMOVE OIL PUMP RELIEF VALVE PLUG

- (a) Using a 27 mm socket wrench, remove the oil pump relief plug.
SST 09011-12271

2. REMOVE OIL PUMP RELIEF VALVE SPRING

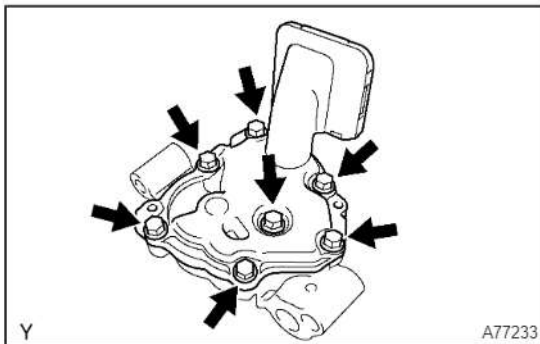
3. REMOVE OIL PUMP RELIEF VALVE



4. INSPECT OIL PUMP RELIEF VALVE

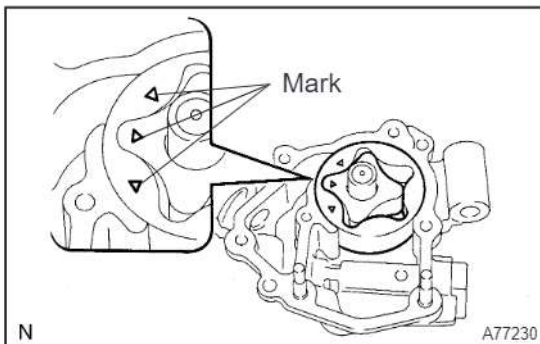
- (a) Coat the oil pump relief valve with engine oil.
(b) Check that it falls smoothly into the oil pump relief valve hole by its own weight.

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



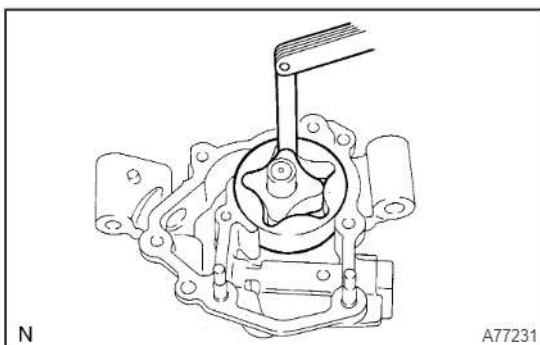
5. REMOVE OIL PUMP COVER

- (a) Remove 7 bolts and the oil pump cover.



6. INSPECT OIL PUMP ROTOR SET

- (a) Place the drive and driven rotors into the oil pump body with the marks facing the oil pump cover.



7. INSPECT ROTOR TIP CLEARANCE

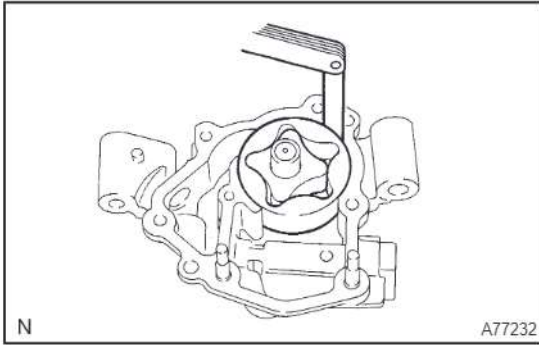
- (a) Using a feeler gauge, measure the clearance between the drive and driven rotor tip.

Standard tip clearance:

0.080 to 0.160 mm (0.0031 to 0.0063 in.)

Maximum tip clearance: 0.35 mm (0.0138 in.)

If the tip clearance is greater than maximum, replace the rotors as a set.



8. INSPECT ROTOR BODY CLEARANCE

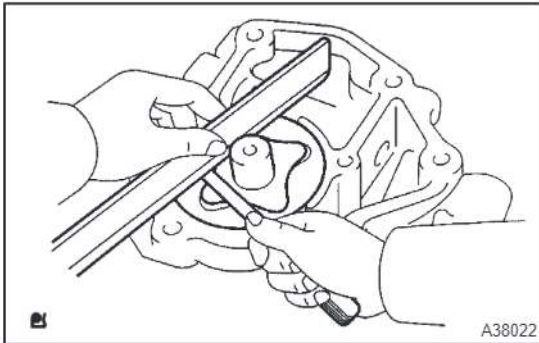
- (a) Using a feeler gauge, measure the clearance between the driven rotor and body.

Standard body clearance:

0.100 to 0.170 mm (0.0039 to 0.067 in.)

Maximum body clearance: 0.325 mm (0.0128 in.)

If the body clearance is greater than maximum, replace the rotors as a set. If necessary, replace the oil pump assembly.



9. INSPECT ROTOR SIDE CLEARANCE

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

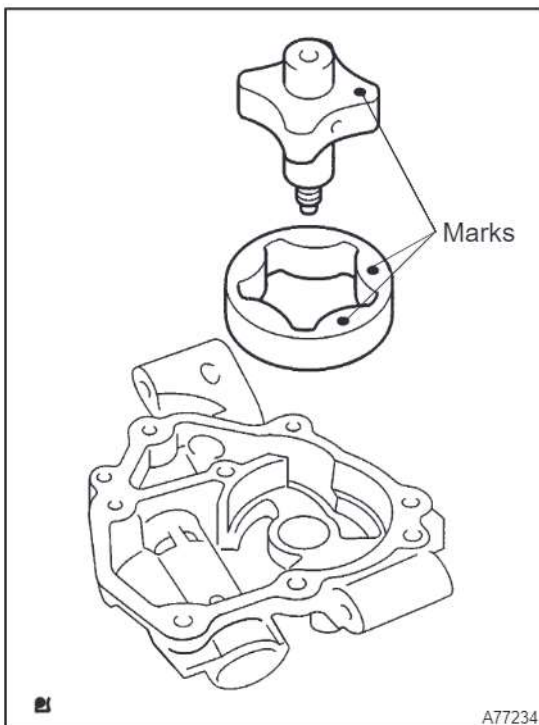
Standard side clearance:

0.030 to 0.085 mm (0.0012 to 0.0033 in.)

Maximum side clearance: 0.16 mm (0.0063 in.)

If the side clearance is greater than maximum, replace the rotors as a set. If necessary, replace the oil pump assembly.

10. REMOVE OIL PUMP ROTOR SET



11. INSTALL OIL PUMP ROTOR SET

- (a) Coat the drive rotor and driven rotor with engine oil.
- (b) Place the drive rotor and driven rotor into the pump body with marks facing the pump body cover.

12. INSTALL OIL PUMP COVER

Torque: 8.8 N·m (90 kgf·cm, 80 in.·lbf)

13. INSTALL OIL PUMP RELIEF VALVE

- (a) Coat the oil pump relief valve with engine oil, and insert the oil pump relief valve into oil pump body hole.

14. INSTALL OIL PUMP RELIEF VALVE SPRING**15. INSTALL OIL PUMP RELIEF VALVE PLUG**

- (a) Using a 27 mm socket wrench, install the oil pump relief valve plug.

Torque: 49 N·m (500 kgf·cm, 35 ft·lbf)

SST 09011-12271