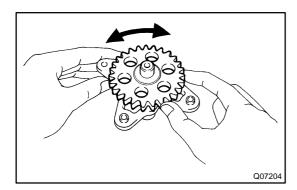
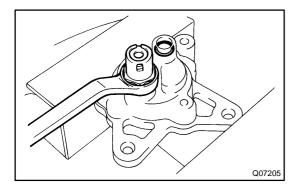
TR01M-03



INSPECTION

1. CHECK OIL PUMP OPERATION

Install the oil pump drive gear to the drive rotor, check that the drive rotor turns smoothly.



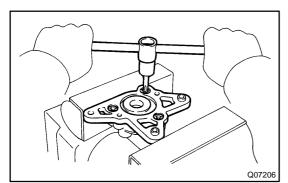
2. INSPECT ROTOR CLEARANCE

- (a) Remove the relief valve and O-ring.
 - (1) Mount the oil pump plate in a vise.
 - (2) Remove the relief valve and O-ring from the oil pump body.

Torque: 29 N·m (300 kgf·cm, 21 ft·lbf)

HINT:

At the time of reassembly, coat a new O-ring with gear oil and install it to the oil pump body.



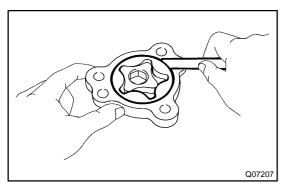
- (b) Remove the oil pump plate.
 - (1) Using a torx socket wrench, unscrew the 3 torx screws. (Torx socket wrench T30 09042-00010)

Torque: 7.4 N-m (75 kgf-cm, 65 in.-lbf)

- Remove the oil pump plate.
- (c) Remove the drive rotor and driven rotor.

HINT:

At the time of reassembly, apply gear oil to the both rotors.



- (d) Inspect the driven rotor body clearance.
 - (1) Push the driven rotor to one side of the body.
 - (2) Using a feeler gauge, measure the clearance.

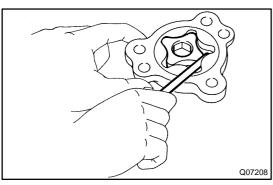
Standard clearance:

0.09 - 0.16 mm (0.0035 - 0.0063 in.)

Maximum clearance:

0.16 mm (0.0063 in.)

If the clearance exceeds the maximum, replace the drive rotor, driven rotor or oil pump body.



(e) Inspect the both rotor tips clearance.

Using a feeler gauge, measure the clearance between both rotor tips.

Standard clearance:

0.05 - 0.15 mm (0.0020 - 0.0059 in.)

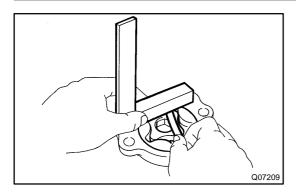
Maximum clearance:

0.15 mm (0.0059 in.)

If the clearance exceeds the maximum, replace the drive rotor, driven rotor or oil pump body.

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Author: Date: 1128



(f) Inspect the both rotors side clearance.

Using a steel square and feeler gauge, measure the clearance between the rotors and straight edge.

Standard clearance:

0.03 - 0.10 mm (0.0012 - 0.0039 in.)

Maximum clearance:

0.10 mm (0.0039 in.)

If the clearance exceeds the maximum, replace the drive rotor, driven rotor or oil pump body.

3. ASSEMBLE REMOVAL PARTS

HINT:

Reassembly is in the reverse order of disassembly.

2002 4RUNNER (RM887U)

Author: Date: 1129