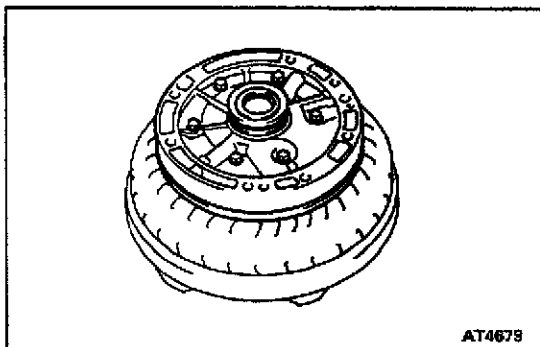
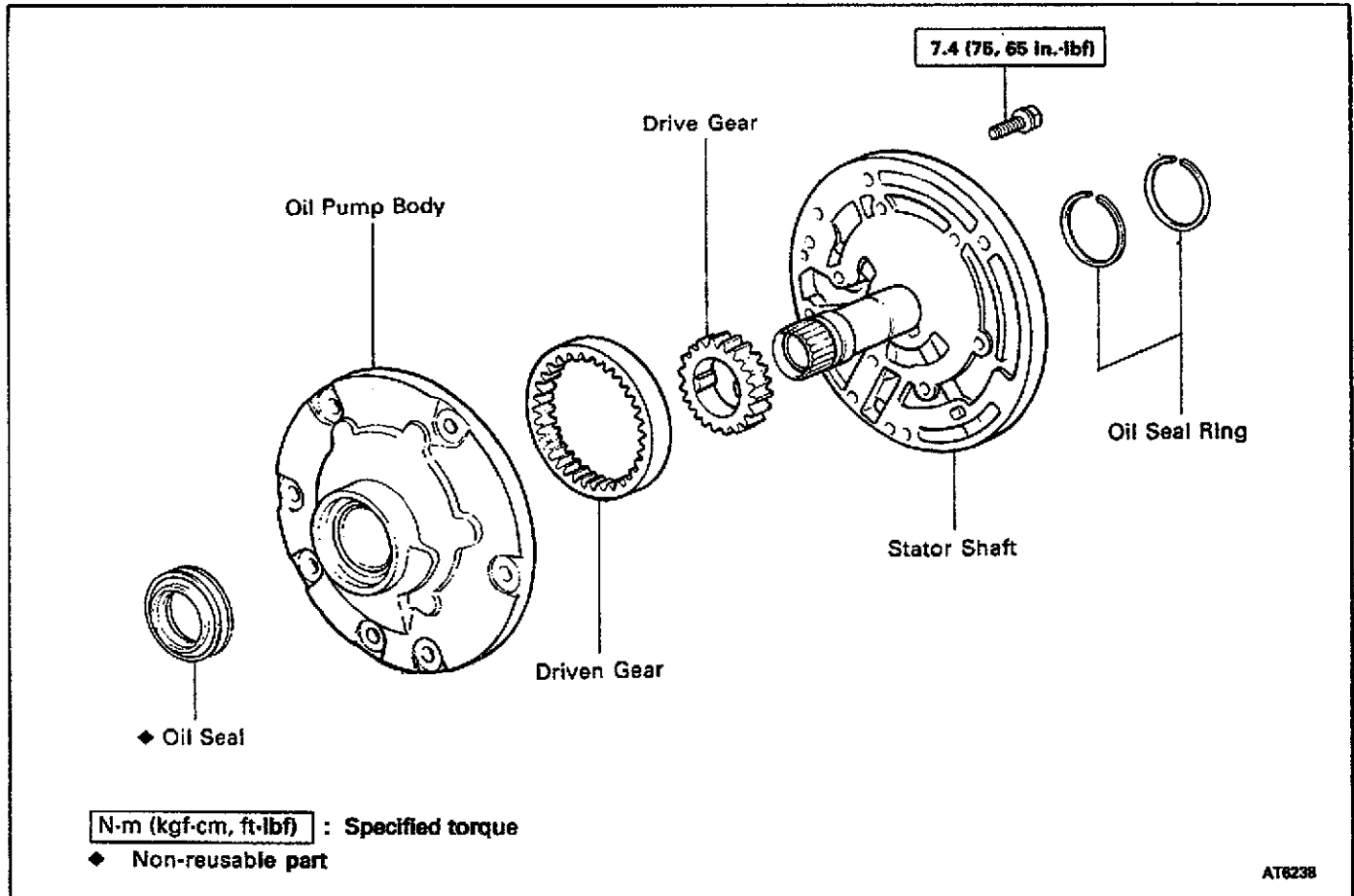


OIL PUMP COMPONENTS

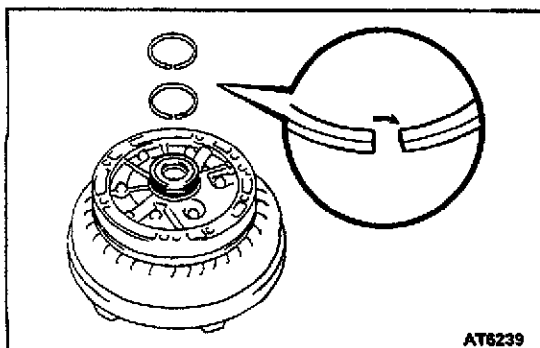
AT0AE-04



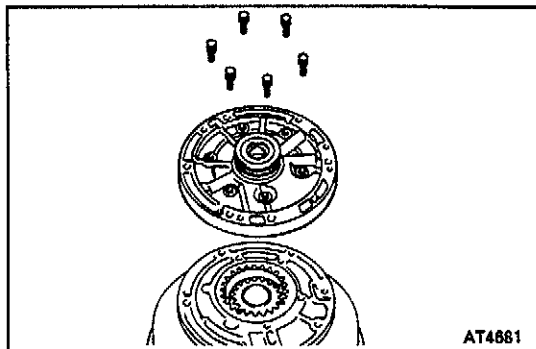
OIL PUMP DISASSEMBLY

AT0AF-04

1. USE TORQUE CONVERTER CLUTCH AS WORK STAND

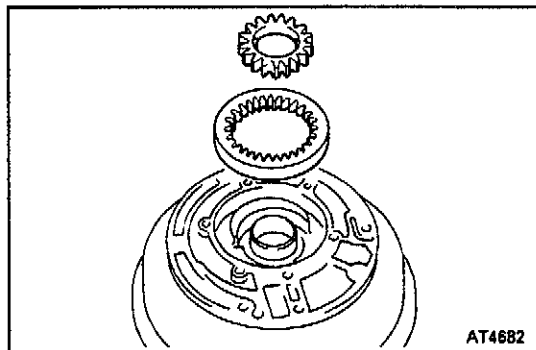


2. REMOVE 2 OIL SEAL RINGS

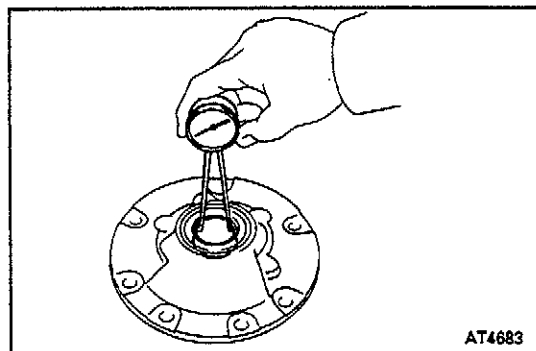


3. REMOVE STATOR SHAFT

Remove the 6 bolts, and then remove the stator shaft from the oil pump body.



4. REMOVE OIL PUMP DRIVE GEAR AND DRIVEN GEAR



OIL PUMP INSPECTION

ATOAG-04

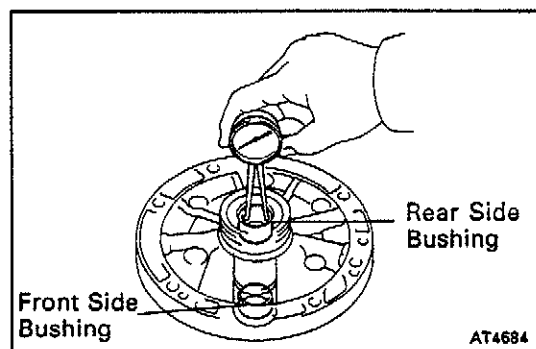
1. CHECK OIL PUMP BODY BUSHING

Using a dial indicator, measure the inside diameter of the oil pump body bushing.

Maximum inside diameter:

38.19 mm (1.5035 in.)

If the inside diameter is greater than the maximum, replace the oil pump body.



2. CHECK STATOR SHAFT BUSHING

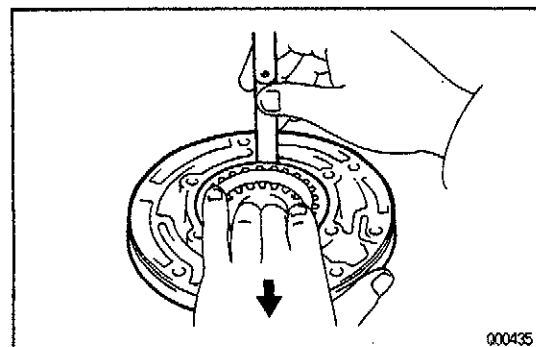
Using a dial indicator, measure the inside diameter of the stator shaft bushings.

Maximum inside diameter:

Front side 21.58 mm (0.8496 in.)

Rear side 23.10 mm (0.9094 in.)

If the inside diameter is greater than the maximum, replace the stator shaft.



3. CHECK BODY CLEARANCE OF DRIVEN GEAR

Push the driven gear to one side of the body.

Using a feeler gauge, measure the clearance.

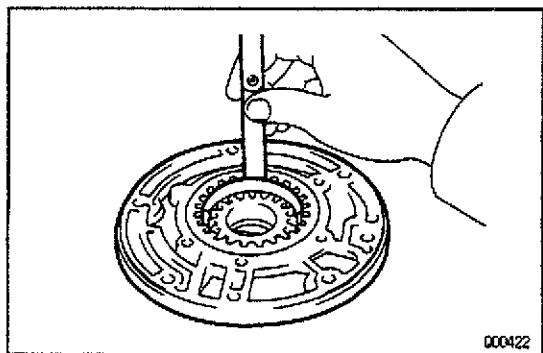
Standard body clearance:

0.07—0.15 mm (0.0028—0.0059 in.)

Maximum body clearance:

0.3 mm (0.012 in.)

If the body clearance is greater than the maximum, replace the drive gear, driven gear or pump body.

**4. CHECK TIP CLEARANCE OF DRIVEN GEAR**

Measure between the driven gear teeth and the crescent-shaped part of the pump body.

Standard tip clearance:

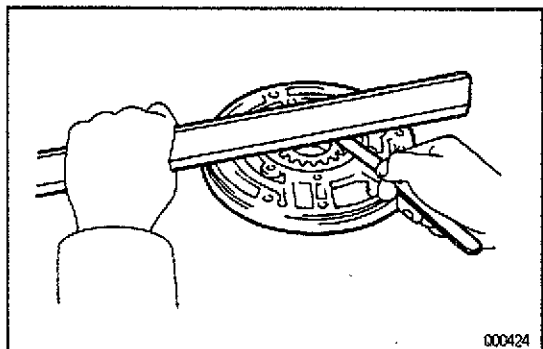
0.11–0.14 mm (0.0043–0.0055 in.)

Maximum tip clearance:

0.3 mm (0.012 in.)

If the tip clearance is greater than the maximum, replace the drive gear, driven gear or pump body.

AT

**5. CHECK SIDE CLEARANCE OF BOTH GEARS**

Using a steel straight edge and a feeler gauge, measure the side clearance of both gears.

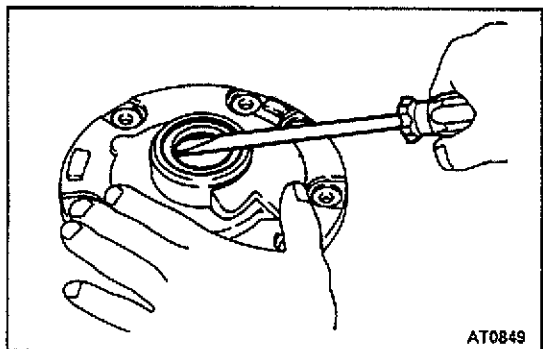
Standard side clearance:

0.02–0.05 mm (0.0008–0.0020 in.)

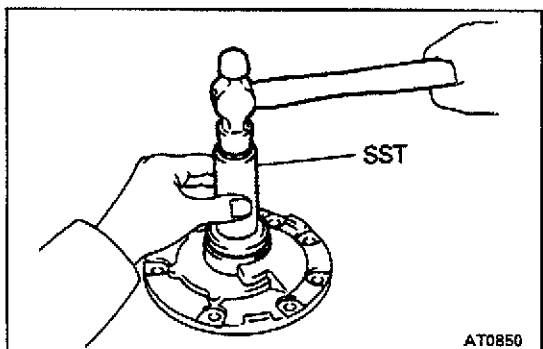
Maximum side clearance:

0.1 mm (0.004 in.)

If the side clearance is greater than the maximum, replace the drive gear, driven gear or pump body.

**6. IF NECESSARY, REPLACE OIL SEAL**

- (a) Pry off the oil seal with a screwdriver.

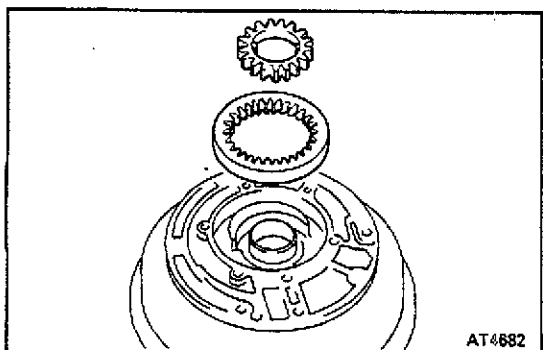


- (b) Using SST, install a new oil seal.

The oil seal end should be flushed with the outer edge of the pump body.

SST 09350–20015 (09388–20010)

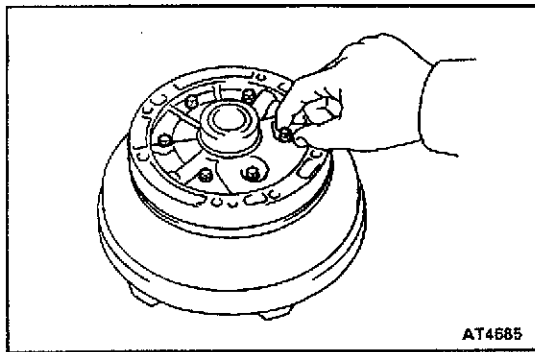
- (c) Coat the oil seal lip with MP grease.

**OIL PUMP ASSEMBLY**

ATOAH-04

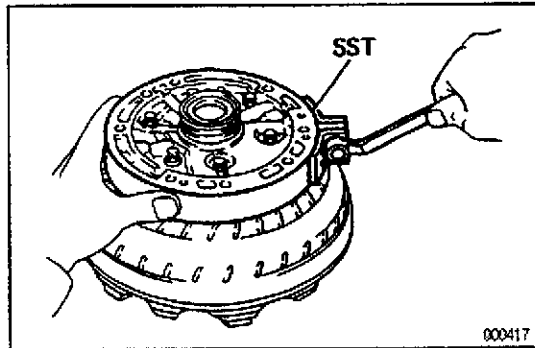
1. INSTALL DRIVEN GEAR AND DRIVE GEAR TO OIL PUMP BODY

- (a) Place the oil pump body on the torque converter clutch.
- (b) Coat the driven gear and drive gear with ATF.
- (c) Install the driven gear and drive gear.

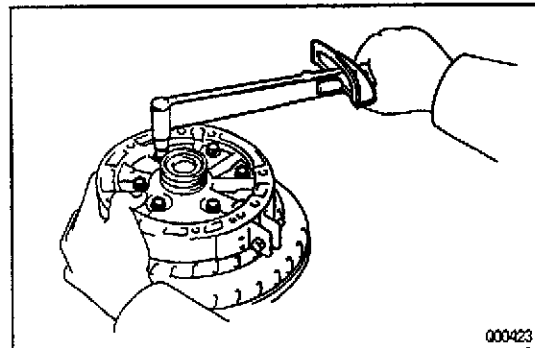


2. INSTALL STATOR SHAFT TO OIL PUMP BODY

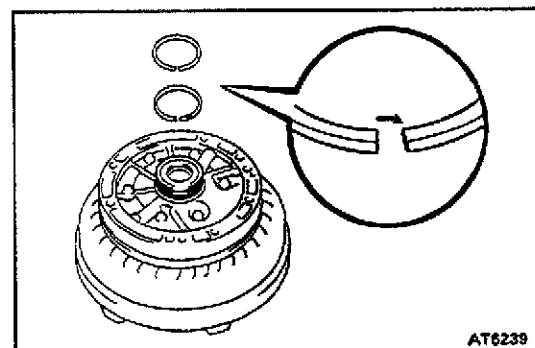
- (a) Align the stator shaft with each bolt hole.
- (b) Temporarily install the 6 bolts.



- (c) Install SST around the pump body and stator shaft.
SST 09350–20015 (09363–20010)
- (d) Tighten SST to align the pump body and stator shaft.

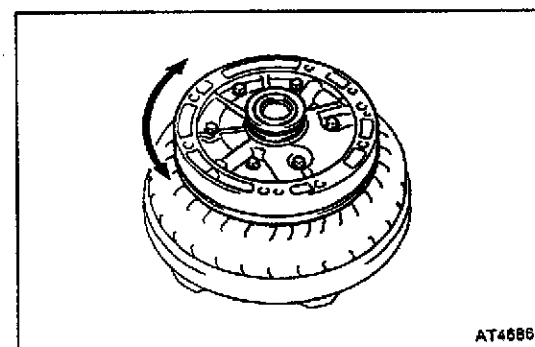


- (e) Tighten the 6 bolts.
Torque: 7.4 N·m (75 kgf·cm, 65 in.-lbf)
- (f) Remove SST.



3. INSTALL OIL SEAL RINGS

- (a) Coat the 2 oil seal rings with ATF.
- (b) Install the oil seal rings to the stator shaft, then snug them down by squeezing their ends together.
NOTICE: Do not spread the ring ends too much.
HINT: After installing the oil seal rings, check that they rotate smoothly.



4. CHECK OIL PUMP DRIVE GEAR ROTATION

Make sure the drive gear rotates smoothly.