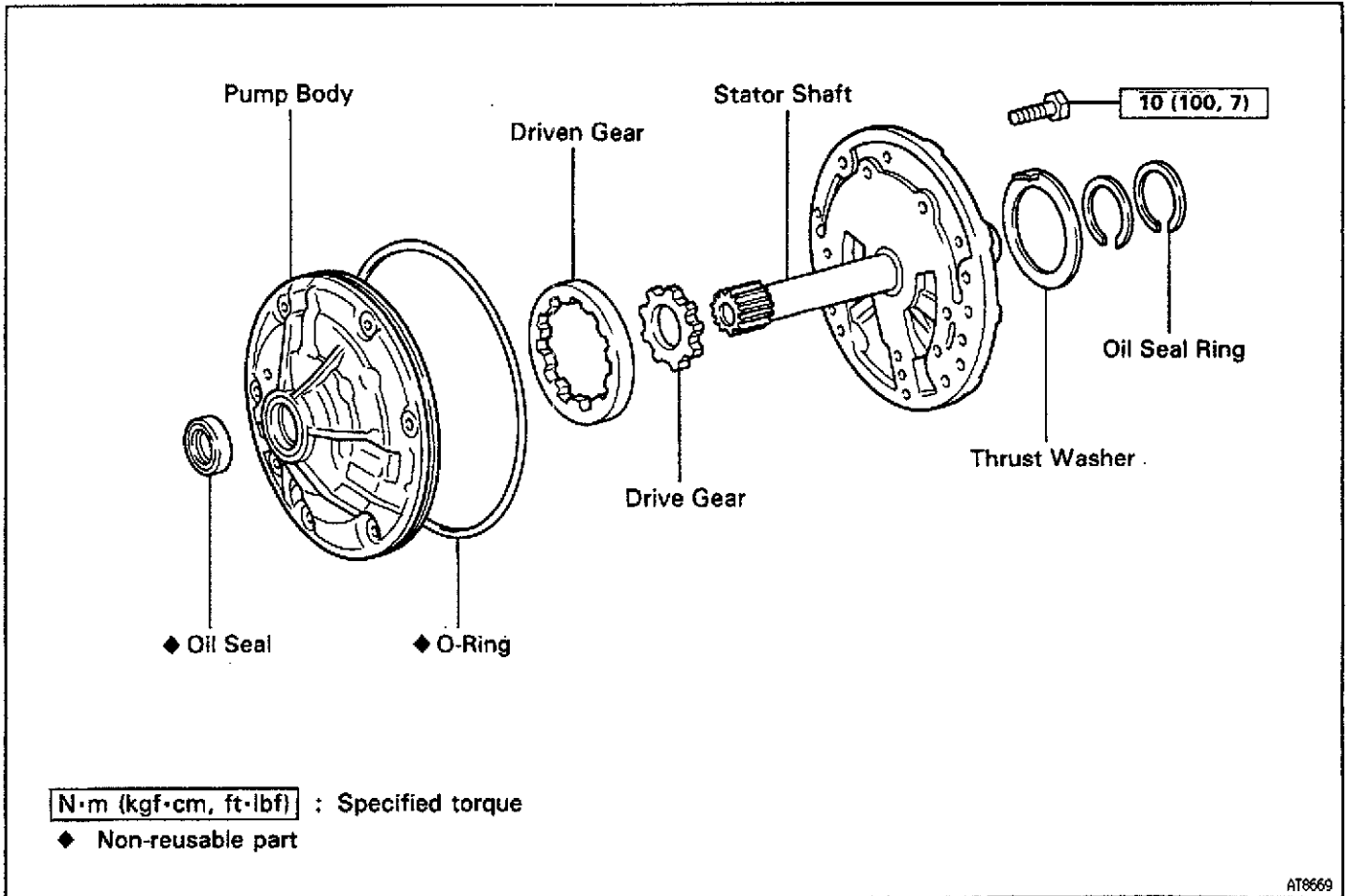
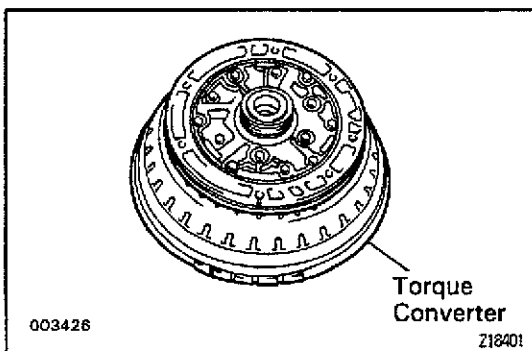


# OIL PUMP COMPONENTS

AXIAL-00



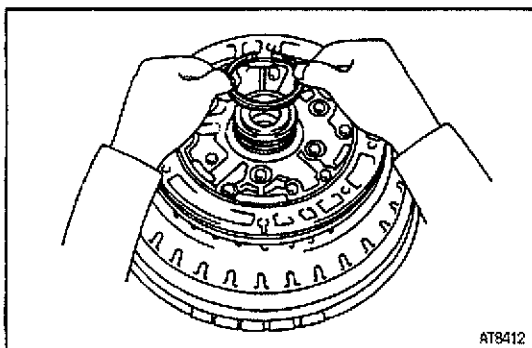
AT



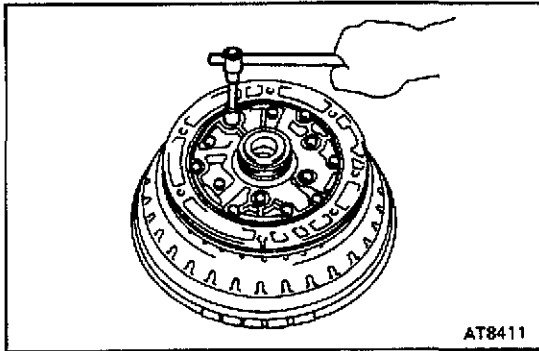
## OIL PUMP DISASSEMBLY

AT148-03

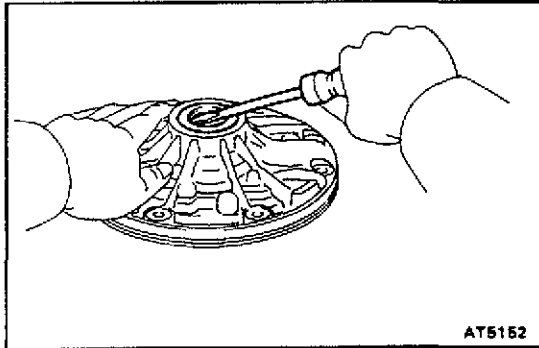
- 1. USE TORQUE CONVERTER AS WORK STAND**  
Place the oil pump body on the torque converter.
- 2. REMOVE OIL SEAL RING**  
Remove the 2 oil seal rings from the stator shaft back side.
- 3. REMOVE THRUST WASHER FROM STATOR SHAFT BACK SIDE**



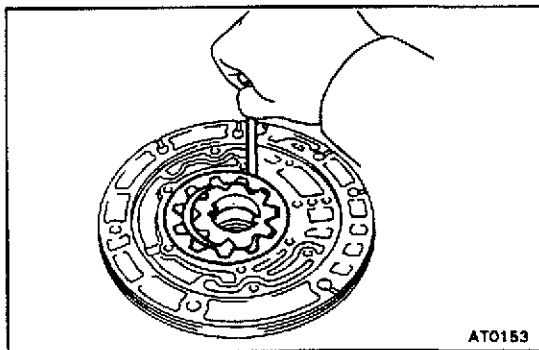
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**4. REMOVE STATOR SHAFT**

- (a) Remove the 13 bolts, and then remove the stator shaft from the oil pump body.
- (b) Remove the oil pump body from the torque converter.

**5. REMOVE OIL PUMP DRIVE GEAR AND DRIVEN GEAR****6. REMOVE OIL SEAL**

Pry off the oil seal with a screwdriver.

**OIL PUMP INSPECTION**

AKOAR-OF

**1. 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:** 0.30 mm (0.0120 in.)

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

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

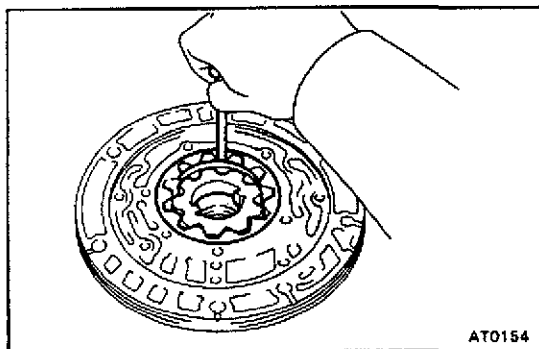
Using a feeler gauge, measure between the driven gear teeth and the crescent-shaped part of the pump body.

**Standard tip clearance:**

0.11 — 0.14 mm (0.0043 — 0.0055 in.)

**Maximum tip clearance:** 0.30 mm (0.0120 in.)

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

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

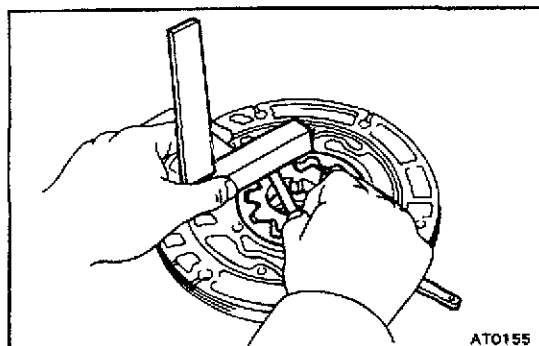
Using a steel straight edge and a feeler gauge, measure the side clearance of both gears.

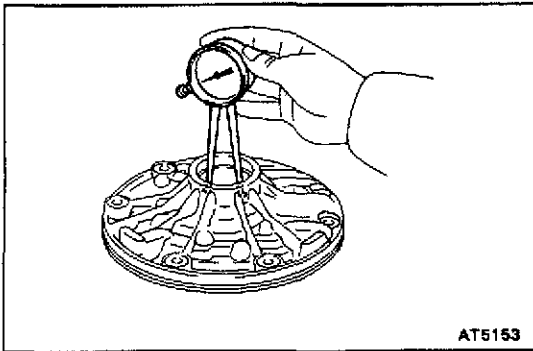
**Standard side clearance:**

0.02 — 0.05 mm (0.0008 — 0.0020 in.)

**Maximum side clearance:** 0.10 mm (0.0040 in.)

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



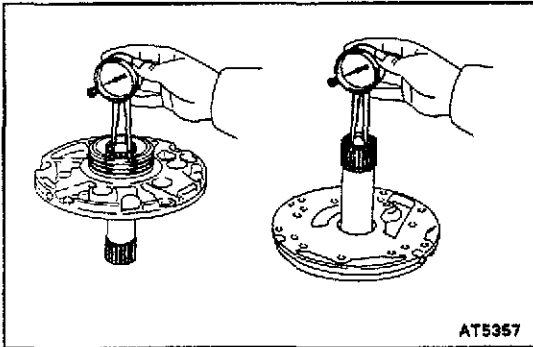


#### 4. CHECK OIL PUMP BODY BUSHING

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.



#### 5. CHECK STATOR SHAFT BUSHINGS

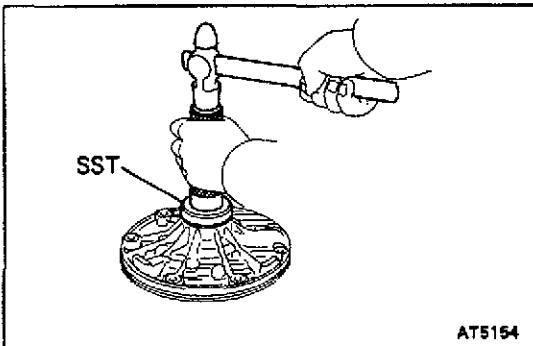
Using a dial indicator, measure the inside diameter of the stator shaft bushing.

**Maximum inside diameter:**

**Front side 21.58 mm (0.8496 in.)**

**Rear side 27.08 mm (1.0661 in.)**

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



### OIL PUMP ASSEMBLY

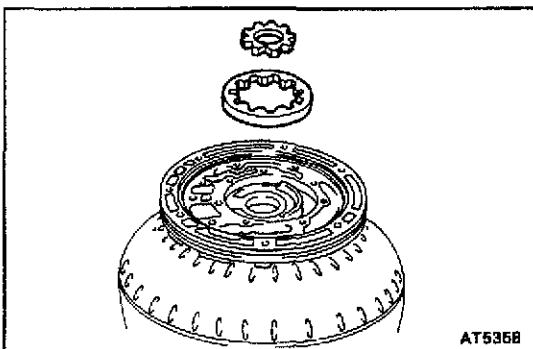
AXOAP-02

#### 1. INSTALL FRONT OIL SEAL

- (a) Using SST and a hammer, install a new oil seal. The seal end should be flush with the outer edge of the pump body.

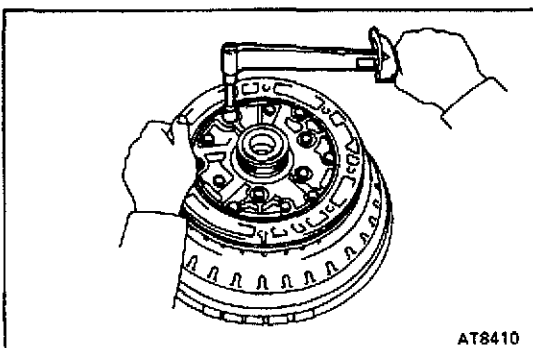
SST 09350-30020 (09351-32140)

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



#### 2. INSTALL DRIVEN GEAR AND DRIVE GEAR TO OIL PUMP BODY

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

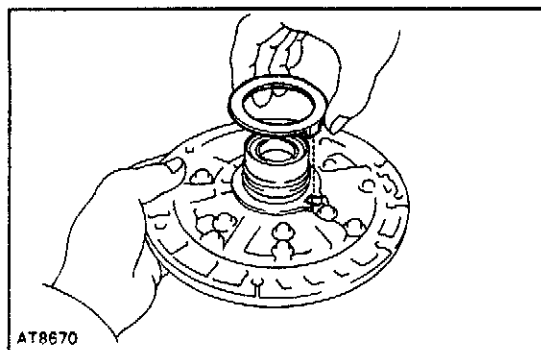


#### 3. INSTALL STATOR SHAFT TO PUMP BODY

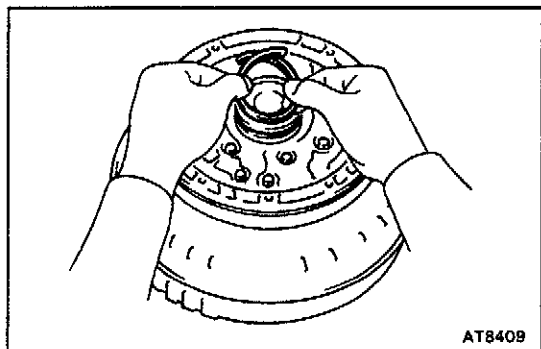
- (a) Align the stator shaft with each bolt hole.

- (b) Tighten the 13 bolts.

**Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)**

**4. INSTALL THRUST WASHER**

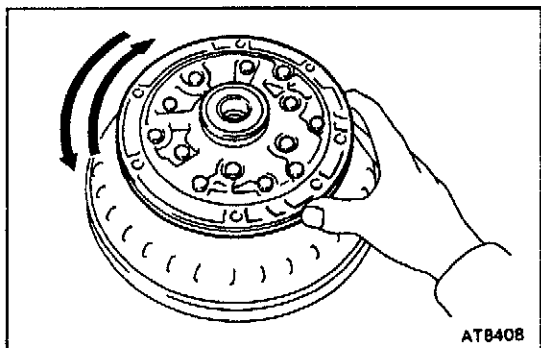
- (a) Coat the thrust washer with petroleum jelly.
- (b) Align the tab of the washer with the hollow of the pump body.

**5. INSTALL OIL SEAL RINGS**

- (a) Coat the 2 oil seal rings with ATF.
- (b) Install the 2 oil seal rings to the stator shaft groove, 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.

**6. CHECK OIL PUMP DRIVE GEAR ROTATION**

Make sure the drive gear rotates smoothly.