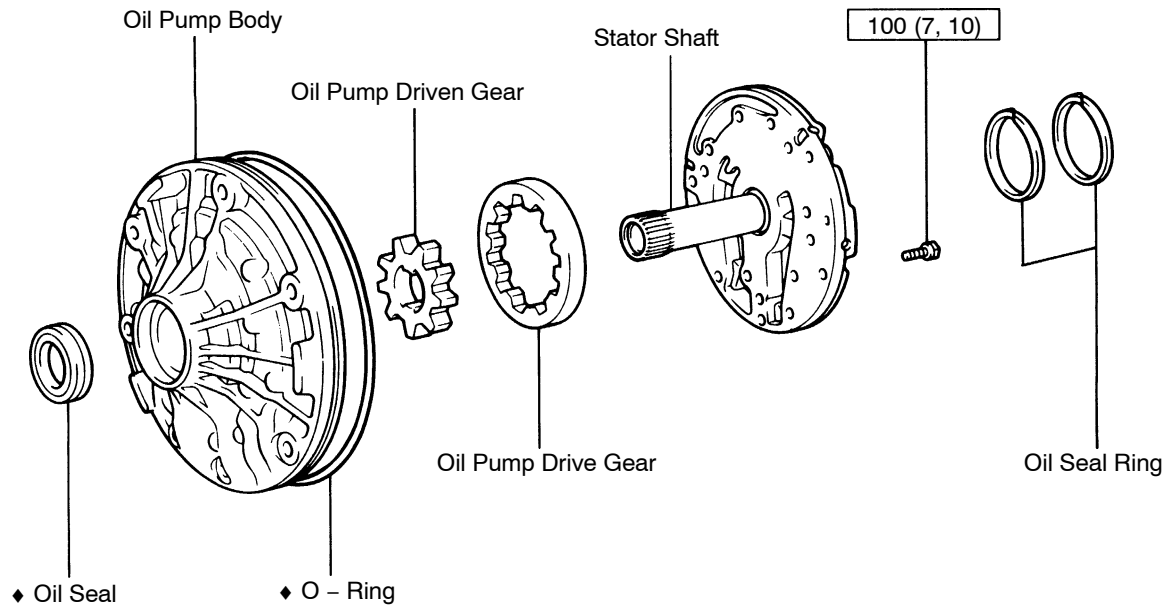


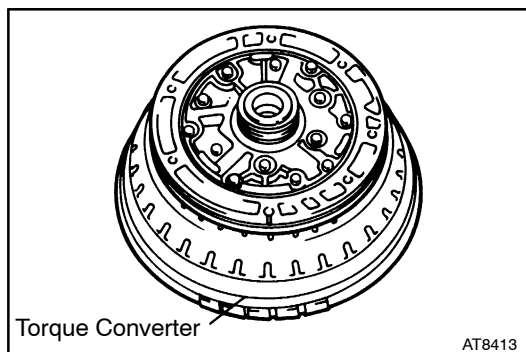
## Oil Pump COMPONENTS



kg-cm (ft-lb, N-m) : Specified torque

◆ Non-reusable part

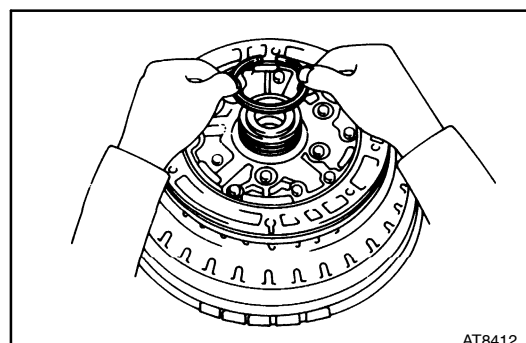
AT5461



### DISASSEMBLY OF OIL PUMP

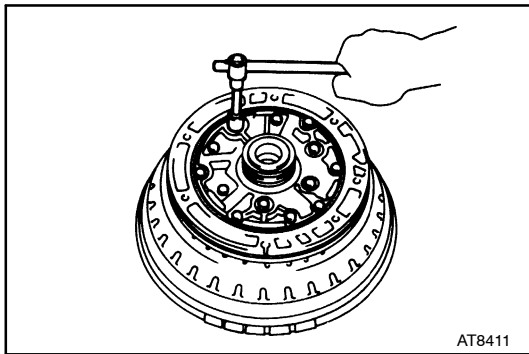
#### 1. USE TORQUE CONVERTER AS WORK STAND

Place the oil pump body on the torque converter.



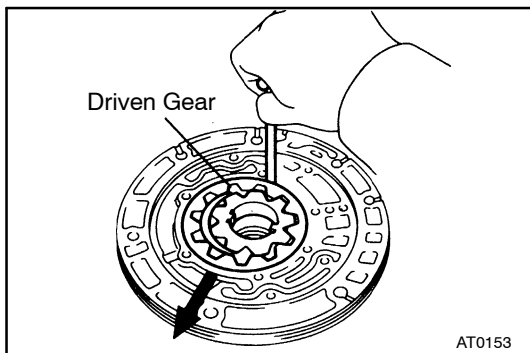
#### 2. REMOVE OIL SEAL RINGS

Remove the two oil seal rings.



### 3. REMOVE STATOR SHAFT

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



### 4. CHECK BODY CLEARANCE OF DRIVEN GEAR

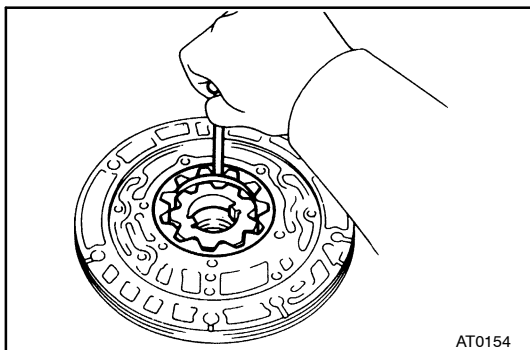
Push the driven gear to one side of the body.

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.



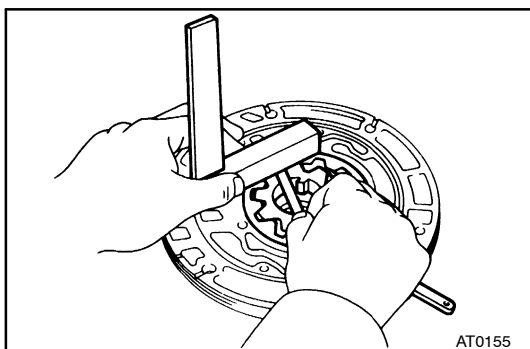
### 5. CHECK TIP CLEARANCE OF DRIVEN GEAR

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.



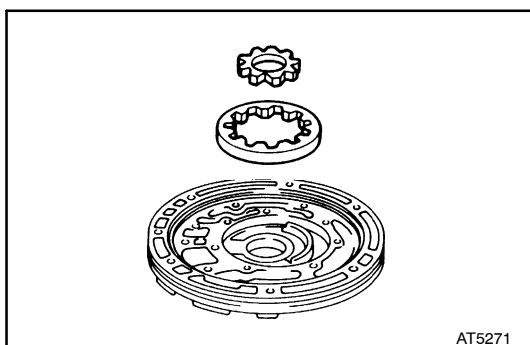
### 6. CHECK SIDE CLEARANCE OF BOTH GEARS

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

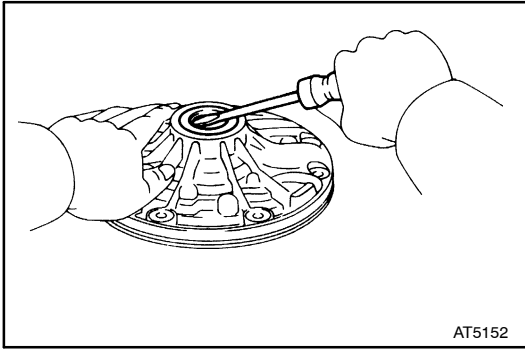
**Standard side clearance:** 0.02 – 0.05 mm  
(0.0008 – 0.0020 in.)

**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.

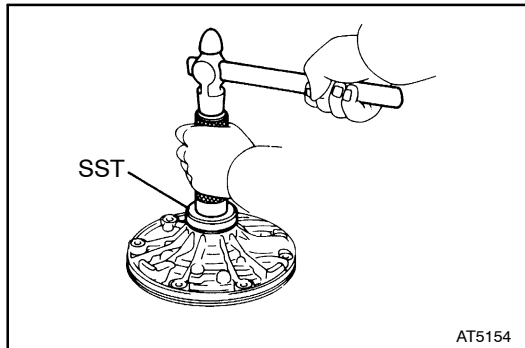


### 7. REMOVE OIL PUMP DRIVE GEAR AND DRIVEN GEAR



## 8. REMOVE OIL SEAL

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

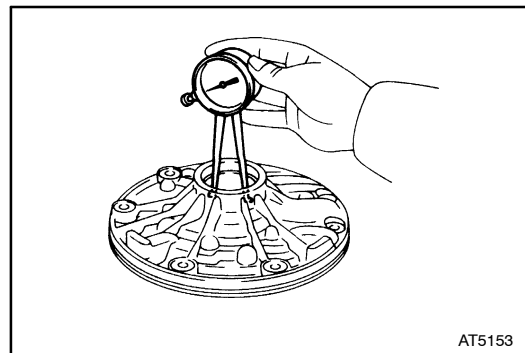


- (b) Using SST, install a new oil seal.

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

SST 09350-30020 (09351-32140)

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



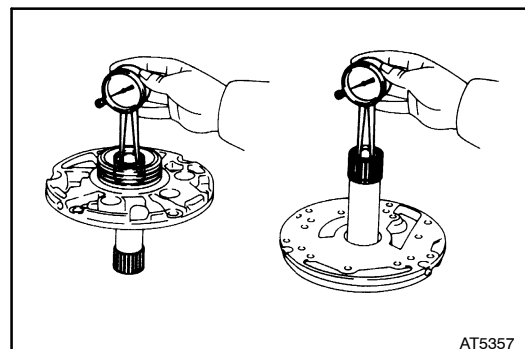
## CHECK OIL PUMP BUSHING

### 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

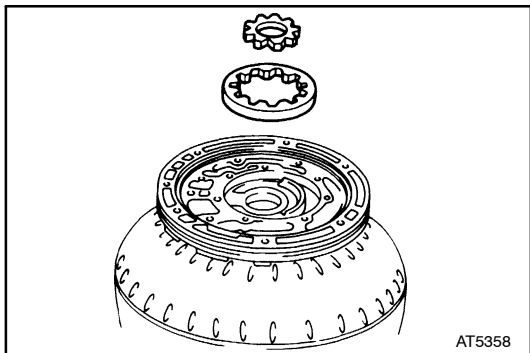
Using a dial indicator, measure the inside diameter of the stator shaft bushing.

**Maximum inside diameter:**

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

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

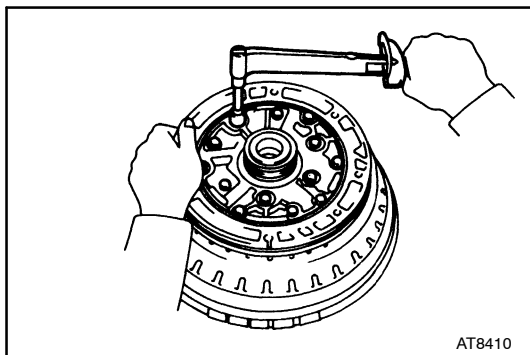
If the inside diameter is greater than the maximum, replace the stator shaft.



## ASSEMBLY OF OIL PUMP

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

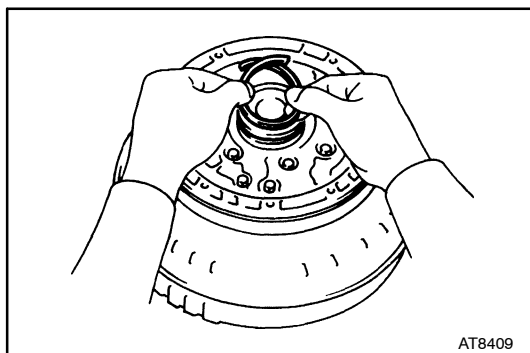
- Place the oil pump body on the torque converter.
- Coat the driven gear and drive gear with ATF.
- Install the driven gear and drive gear.



### 2. INSTALL STATOR SHAFT TO OIL PUMP BODY

- Align the stator shaft with each bolt hole.
- Tighten the thirteen bolts.

**Torque: 100 kg-cm (7 ft-lb, 10 N-m)**

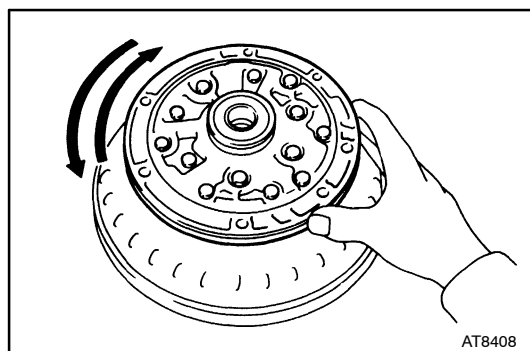


### 3. INSTALL OIL SEAL RINGS

- Coat the two oil seal rings with ATF.
- Contract the oil seal rings as shown, and install them onto the stator shaft.

**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.