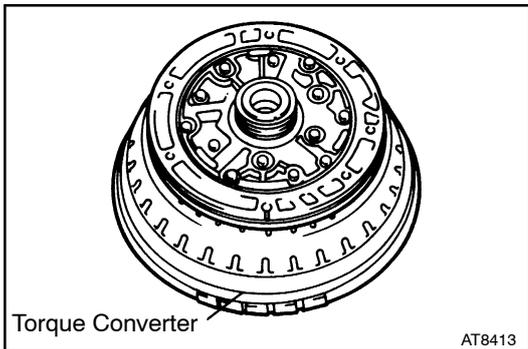
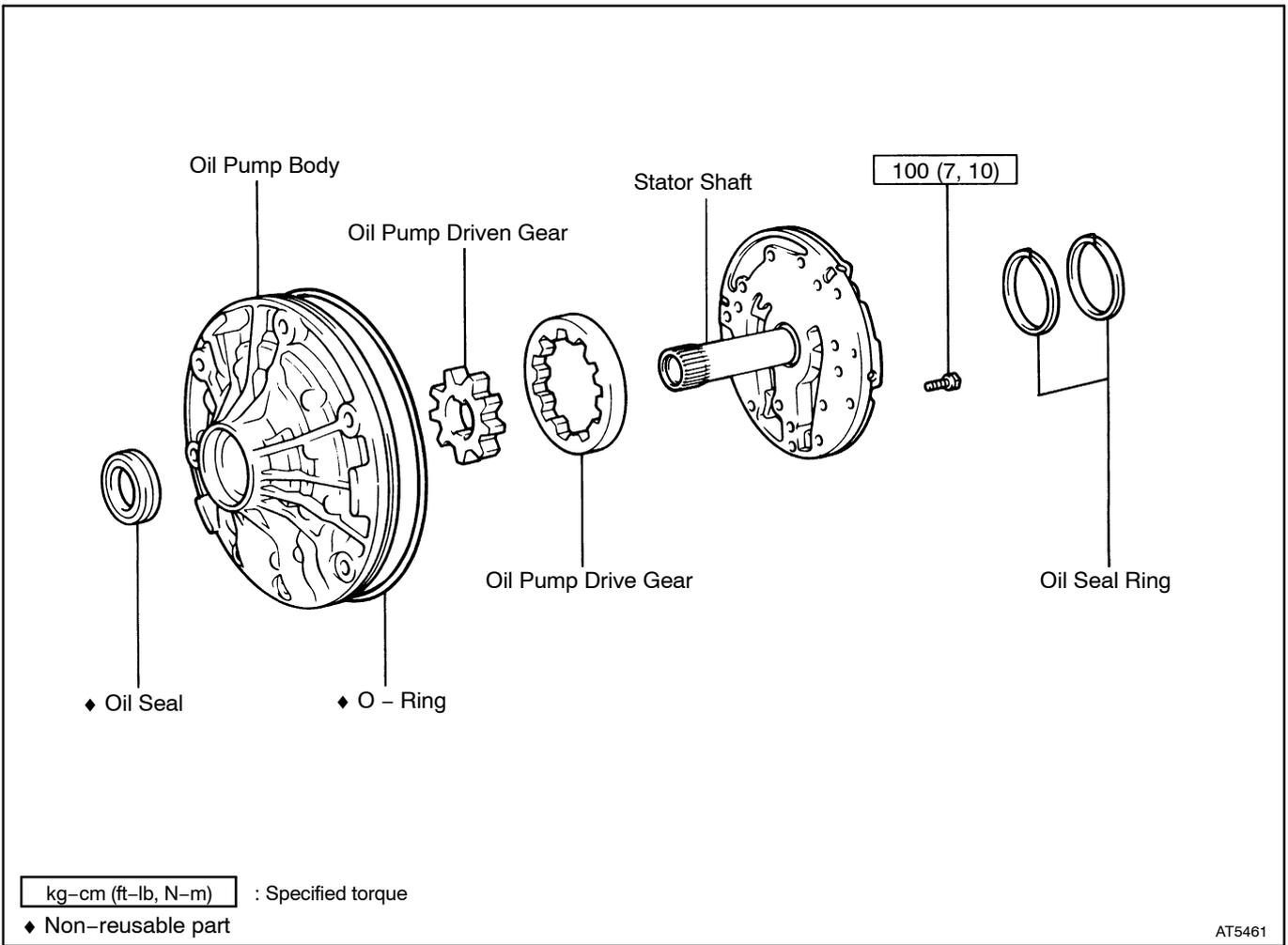
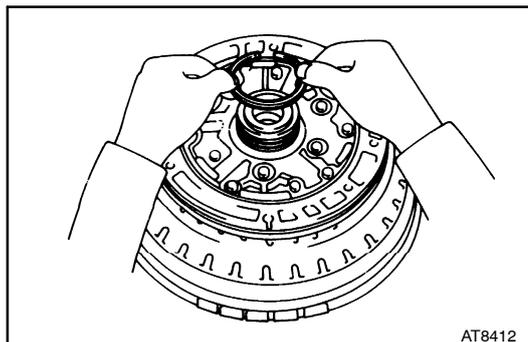


Oil Pump COMPONENTS

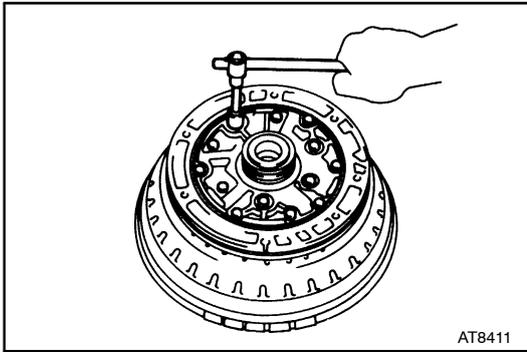


DISASSEMBLY OF OIL PUMP

- 1. USE TORQUE CONVERTER AS WORK STAND**
Place the oil pump body on the torque converter.

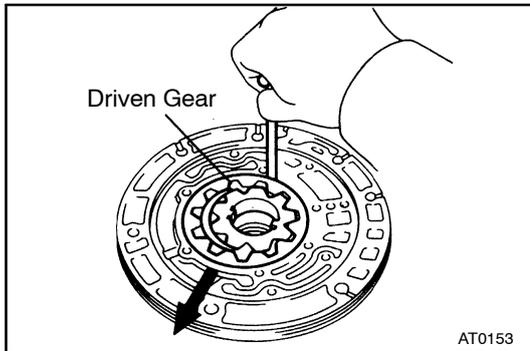


- 2. REMOVE OIL SEAL RINGS**
Remove the two oil seal rings.



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.



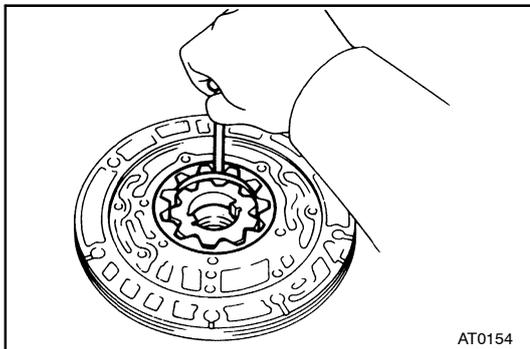
4. CHECK BODY CLEARANCE OF DRIVEN GEAR

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.



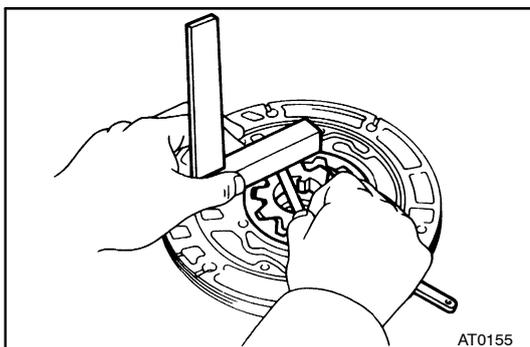
5. CHECK TIP CLEARANCE OF DRIVEN GEAR

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.



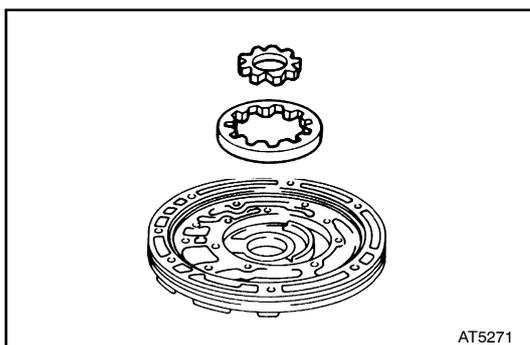
6. CHECK SIDE CLEARANCE OF BOTH GEARS

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

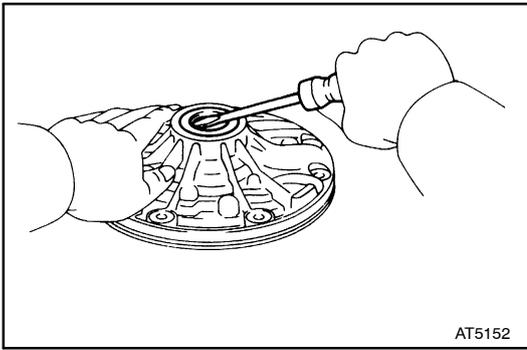
Standard side clearance: 0.02 – 0.05 mm
(0.0008 – 0.0020 in.)

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.

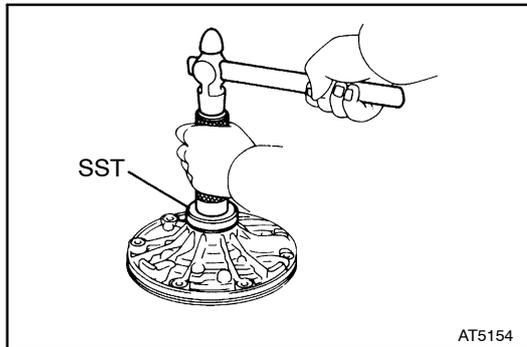


7. REMOVE OIL PUMP DRIVE GEAR AND DRIVEN GEAR



8. REMOVE OIL SEAL

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

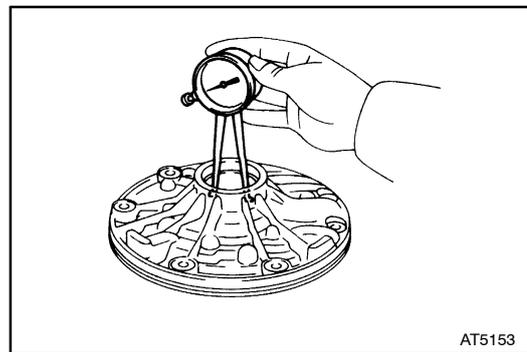


- (b) Using SST, install a new oil seal.

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.



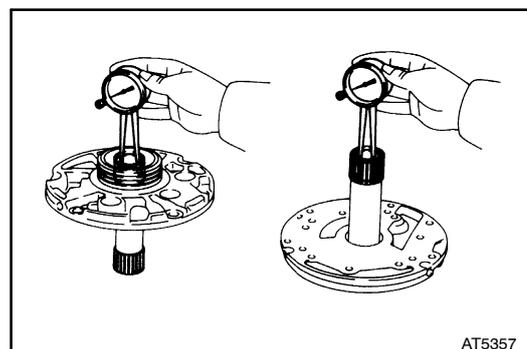
CHECK OIL PUMP BUSHING

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

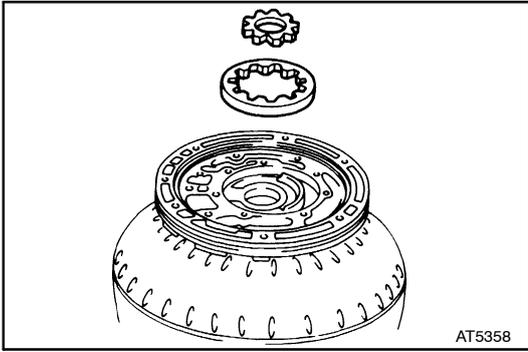
Using a dial indicator, measure the inside diameter of the stator shaft bushing.

Maximum inside diameter:

Front side: 21.58 mm (0.8496 in.)

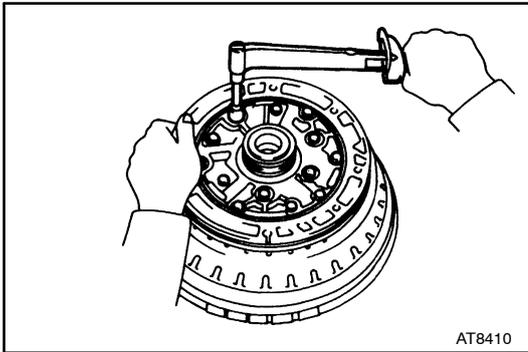
Rear side: 27.08 mm (1.0661 in.)

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



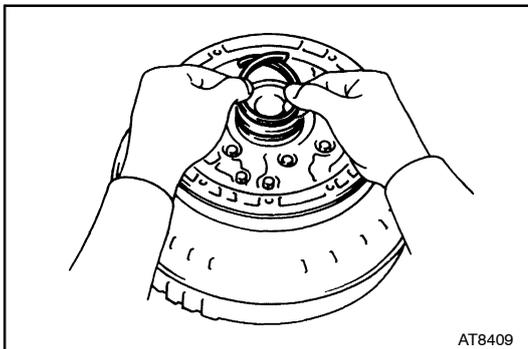
ASSEMBLY OF OIL PUMP

1. **INSTALL DRIVEN GEAR AND DRIVE GEAR TO OIL PUMP BODY**
 - (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.



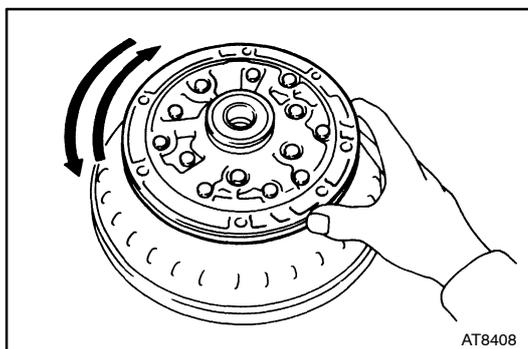
2. **INSTALL STATOR SHAFT TO OIL PUMP BODY**
 - (a) Align the stator shaft with each bolt hole.
 - (b) Tighten the thirteen bolts.

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



3. **INSTALL OIL SEAL RINGS**
 - (a) Coat the two oil seal rings with ATF.
 - (b) 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.