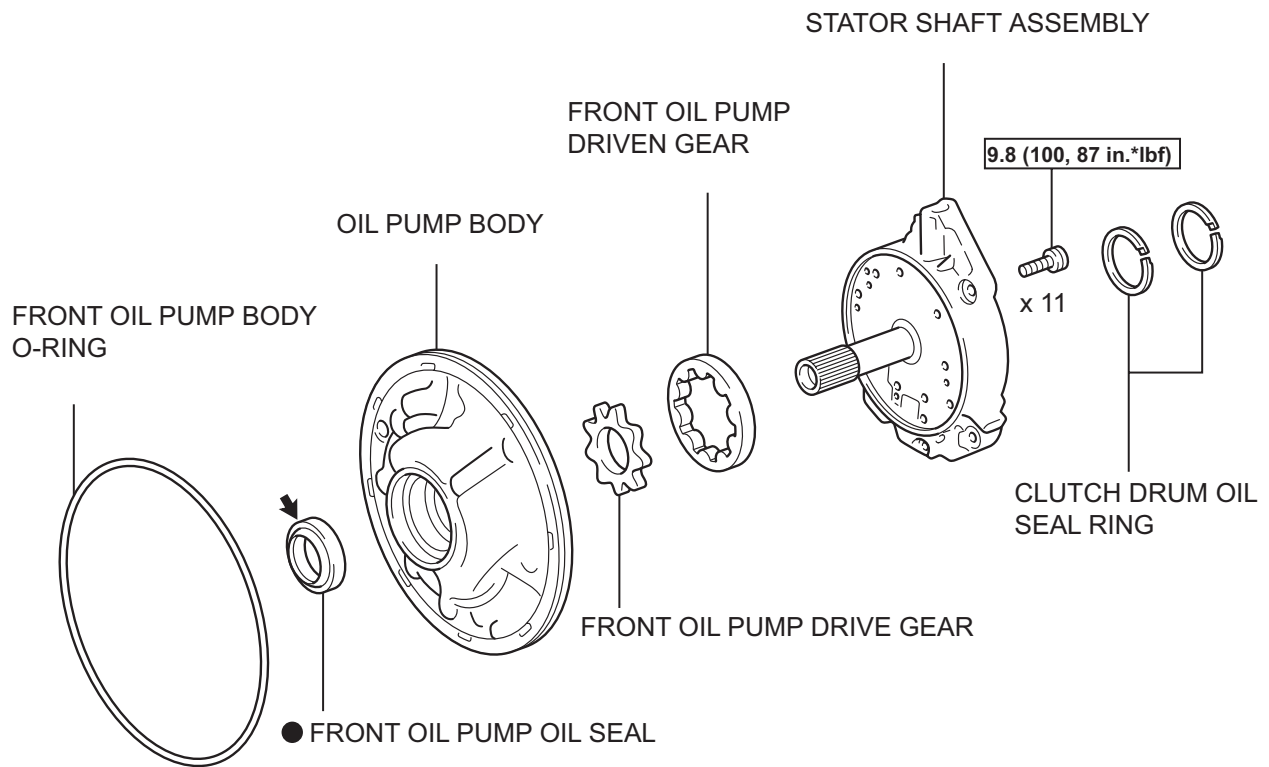


# OIL PUMP COMPONENTS



$\boxed{\text{N*m (kgf*cm, ft.*lbf)}}$ : Specified torque

- Non-reusable part
- ← Apply petroleum jelly

## DISASSEMBLY

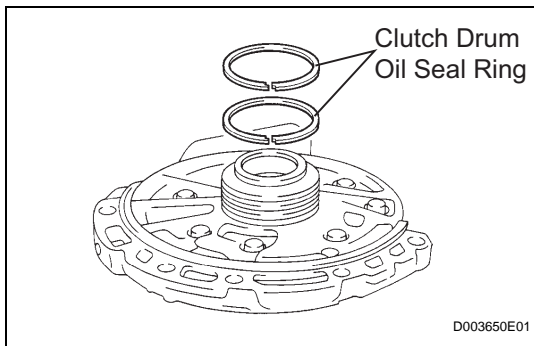
**1. INSPECT OIL PUMP ASSEMBLY**

HINT:

(See page [AX-253](#))

**2. REMOVE CLUTCH DRUM OIL SEAL RING**

(a) Remove the 2 clutch drum oil seal rings.



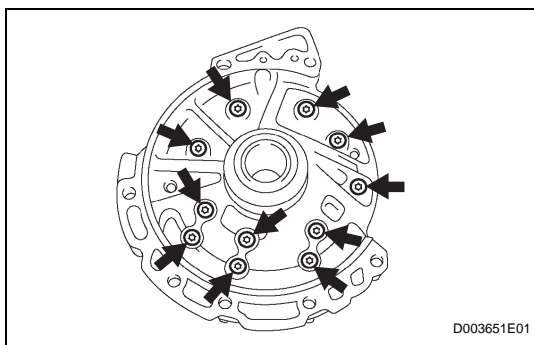
**3. REMOVE STATOR SHAFT ASSEMBLY**

(a) Using a "torx" socket (T30), remove the 11 bolts and stator shaft.

**4. INSPECT CLEARANCE OF OIL PUMP ASSEMBLY**

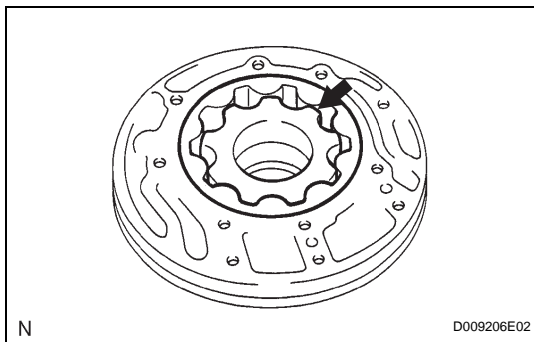
HINT:

(See page [AX-253](#))



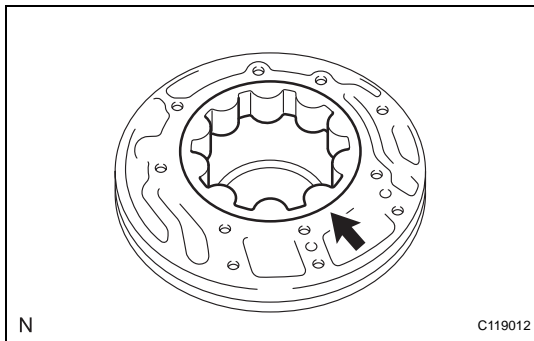
**5. REMOVE FRONT OIL PUMP DRIVE GEAR**

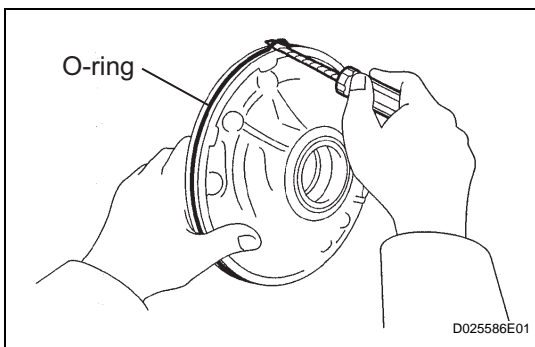
(a) Remove the front oil pump drive gear.



**6. REMOVE FRONT OIL PUMP DRIVEN GEAR**

(a) Remove the front oil pump driven gear.



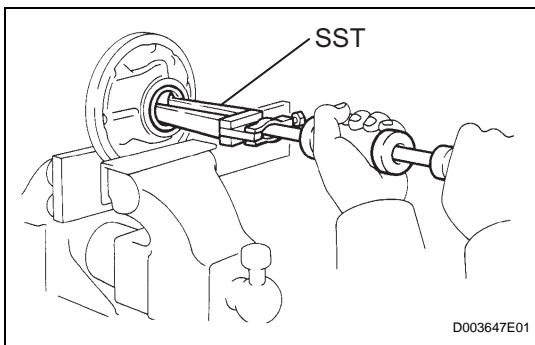


**7. REMOVE FRONT OIL PUMP BODY O-RING**

- (a) Using a screwdriver, remove the O-ring.

**HINT:**

Tape the screwdriver before use.

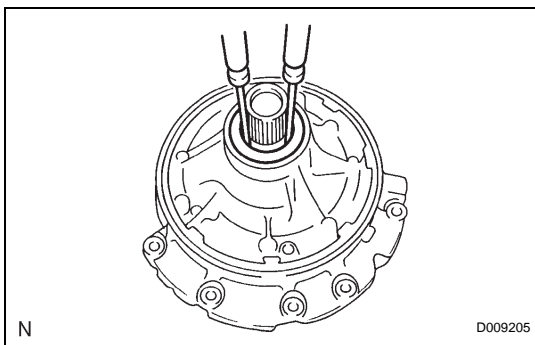


**8. REMOVE FRONT OIL PUMP OIL SEAL**

- (a) Mount the oil pump in a soft jaw vise.

- (b) Using SST, remove the oil seal from the oil pump body.

**SST 09308-00010**



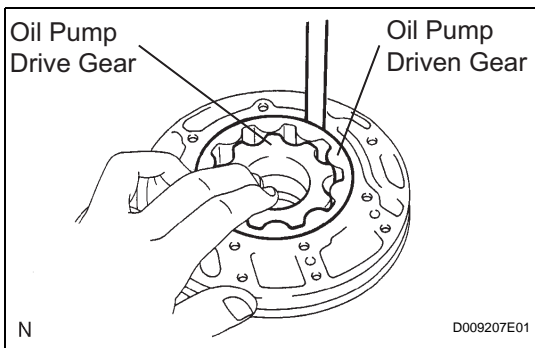
**INSPECTION**

**1. INSPECT OIL PUMP ASSEMBLY**

- (a) Turn the drive gear with the 2 screwdrivers and make sure that it rotates smoothly.

**NOTICE:**

**Be careful not to damage the oil seal lip.**



**2. INSPECT CLEARANCE OF OIL PUMP ASSEMBLY**

- (a) Push the driven gear to one side of the body.
- (b) Using a feeler gauge, measure the clearance.

**Standard body clearance:**

**0.10 to 0.17 mm (0.0039 to 0.0067 in.)**

**Side clearance:**

**0.02 to 0.05 mm (0.001 to 0.002 in.)**

**Maximum body clearance:**

**0.17 mm (0.0067 in.)**

If the body clearance is greater than the maximum, replace the oil pump body sub-assembly.

- (c) Using a feeler gauge, measure the tip clearance between the driven gear teeth and drive gear teeth.

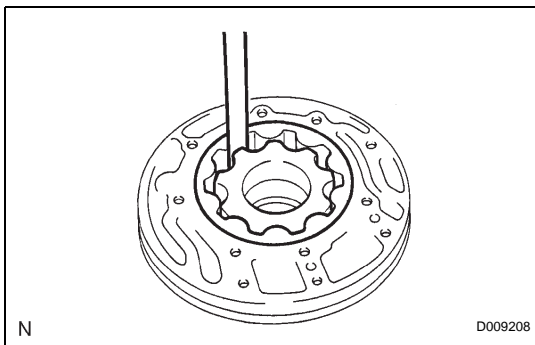
**Standard tip clearance:**

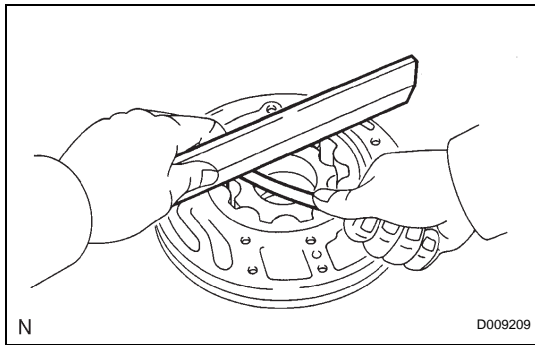
**0.07 to 0.15 mm (0.0028 to 0.0059 in.)**

**Maximum tip clearance:**

**0.15 mm (0.0059 in.)**

If the tip clearance is greater than the maximum, replace the oil pump body sub-assembly.





- (d) Using a straightedge and feeler gauge, measure the side clearance of both gears.

**Standard side clearance:**

**0.02 to 0.05 mm (0.0008 to 0.0020 in.)**

**Maximum side clearance:**

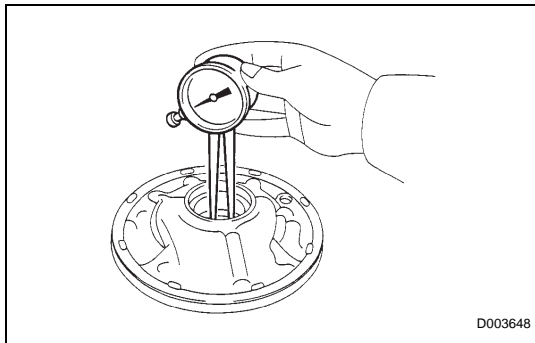
**0.05 mm (0.0020 in.)**

**Drive gear thickness: mm (in.)**

| Mark | Thickness                           |
|------|-------------------------------------|
| A    | 11.690 to 11.699 (0.4602 to 0.4606) |
| B    | 11.700 to 11.709 (0.4606 to 0.4610) |
| C    | 11.710 to 11.720 (0.4610 to 0.4614) |
| D    | 11.721 to 11.730 (0.4615 to 0.4618) |
| E    | 11.731 to 11.740 (0.4619 to 0.4622) |

**Driven gear thickness: mm (in.)**

| Mark | Thickness                           |
|------|-------------------------------------|
| A    | 11.690 to 11.699 (0.4602 to 0.4606) |
| B    | 11.700 to 11.709 (0.4606 to 0.4610) |
| C    | 11.710 to 11.720 (0.4610 to 0.4614) |
| D    | 11.721 to 11.730 (0.4615 to 0.4618) |
| E    | 11.731 to 11.740 (0.4619 to 0.4622) |



**3. INSPECT FRONT OIL PUMP AND GEAR BODY SUB-ASSEMBLY**

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

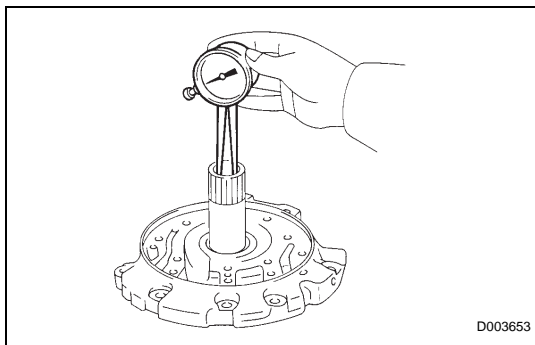
**Standard inside diameter:**

**38.113 to 38.138 mm (1.50051 to 1.50149 in.)**

**Maximum inside diameter:**

**38.188 mm (1.50346 in.)**

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



**4. INSPECT STATOR SHAFT ASSEMBLY**

- (a) Using a dial indicator, measure the inside diameter of the stator shaft.

**Standard inside diameter:**

**21.500 to 21.526 mm (0.84646 to 0.84748 in.)**

**Maximum inside diameter:**

**21.57 mm (0.8492 in.)**

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

**REASSEMBLY**

**1. INSTALL FRONT OIL PUMP OIL SEAL**

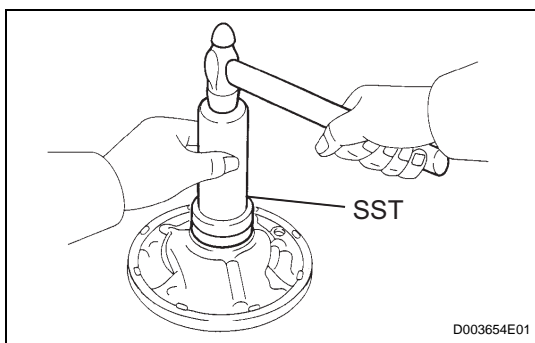
- (a) Using SST and a hammer, install a new oil seal to the oil pump body.

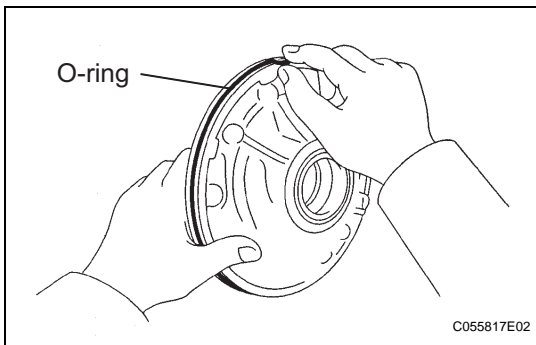
**SST 09350-32014 (09351-32140)**

**HINT:**

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

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



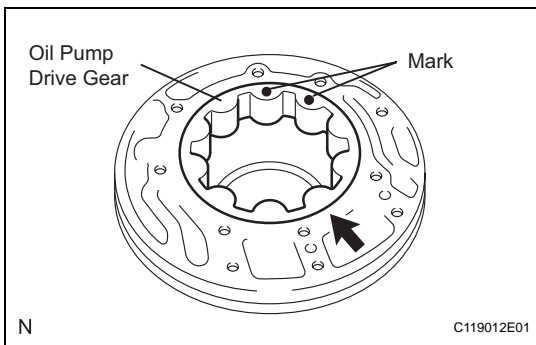


**2. INSTALL FRONT OIL PUMP BODY O-RING**

- (a) Coat new O-ring with ATF, and install it to the oil pump body.

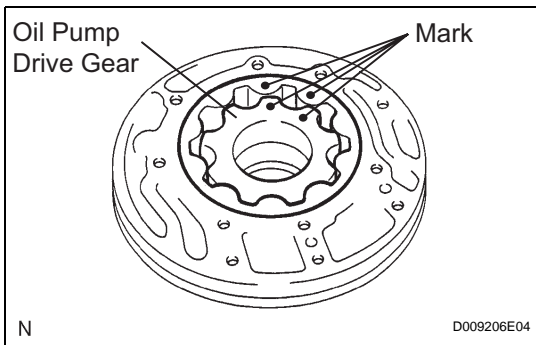
**NOTICE:**

**Make sure that the O-ring is not twisted or pinched. Moreover, apply enough ATF to the O-ring before installation.**



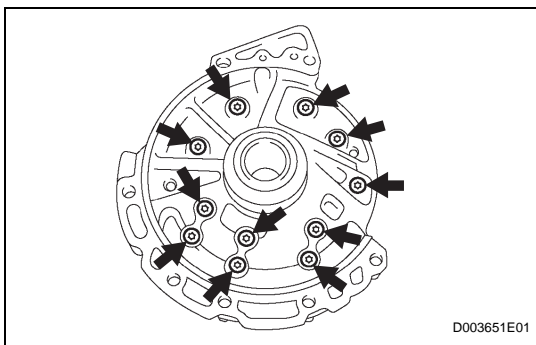
**3. INSTALL FRONT OIL PUMP DRIVEN GEAR**

- (a) Coat the front oil pump driven gear with ATF, and install it to the oil pump body with the marked side facing upward.



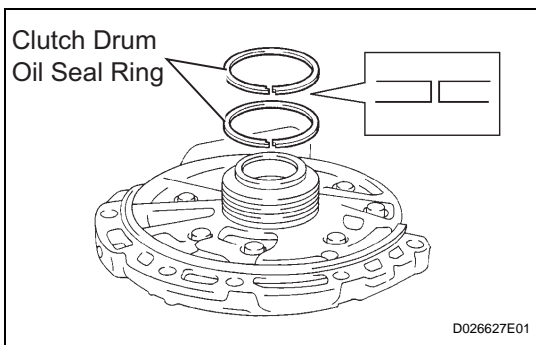
**4. INSTALL FRONT OIL PUMP DRIVE GEAR**

- (a) Coat the front oil pump drive gear with ATF, and install it to the oil pump body with the marked side facing upward.



**5. INSTALL STATOR SHAFT ASSEMBLY**

- (a) Set the stator shaft and align it with each bolt hole.
- (b) Using a "torx" socket (T30), install the 11 bolts.  
**Torque: 9.8 N\*m (100 kgf\*cm, 87 in.\*lbf)**



**6. INSTALL CLUTCH DRUM OIL SEAL RING**

- (a) Coat 2 new clutch drum oil seal rings with ATF.
- (b) Install 2 new clutch drum oil seal rings.

**NOTICE:**

**Do not expand the ring ends excessively.**

**7. INSPECT OIL PUMP ASSEMBLY**

**HINT:**

(See page [AX-253](#))

