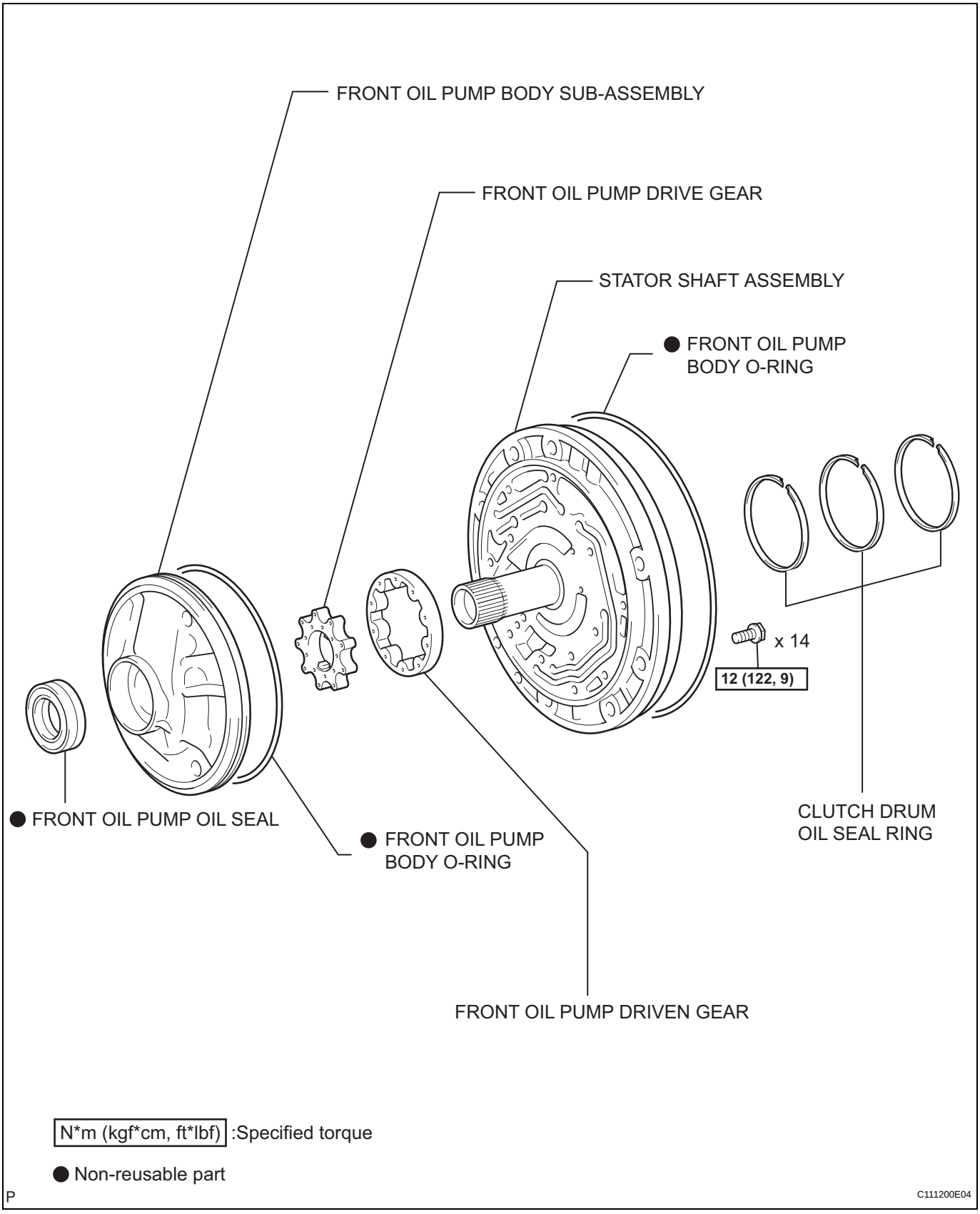
OIL PUMP

COMPONENTS



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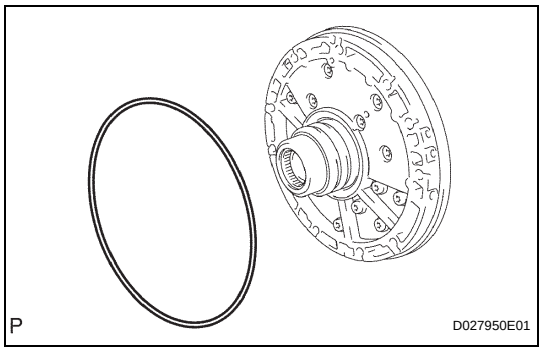
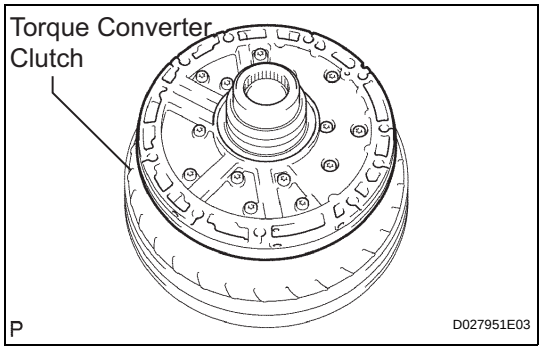


DISASSEMBLY

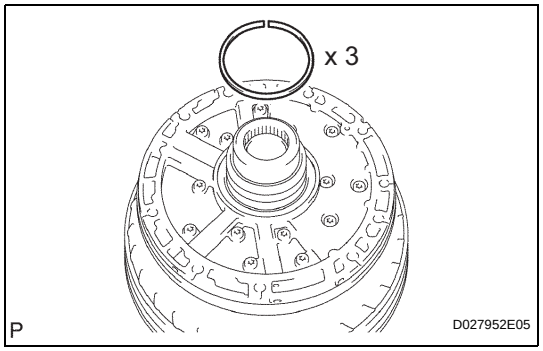
1. REMOVE FRONT OIL PUMP BODY O-RING

(a) Remove the O-ring from the oil pump assembly.



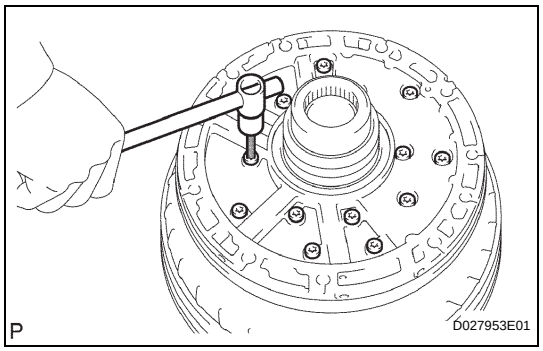
2. FIX OIL PUMP ASSEMBLY

(a) Place the oil pump body on the torque converter clutch.



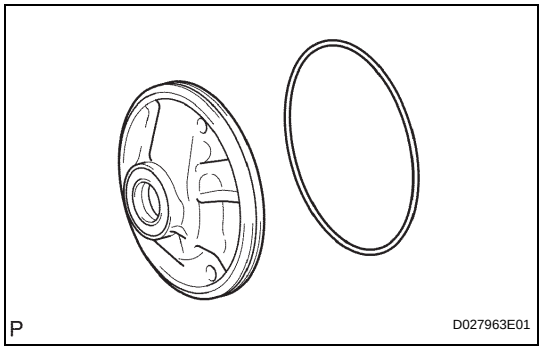
3. REMOVE CLUTCH DRUM OIL SEAL RING

(a) Remove the 3 oil seal rings.



4. REMOVE STATOR SHAFT ASSEMBLY

(a) Remove the 14 bolts, and then remove the stator shaft from the oil pump body.



5. REMOVE FRONT OIL PUMP BODY O-RING

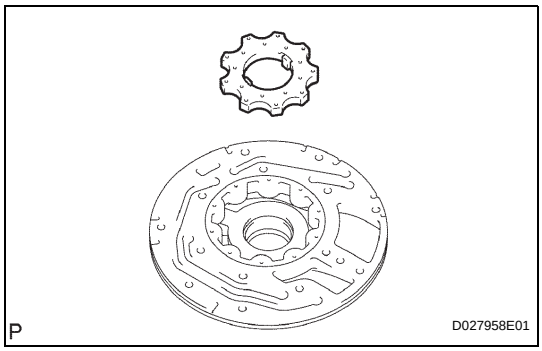
(a) Remove the O-ring from the oil pump body.

(b) Remove the oil pump body from the torque converter clutch.

6. INSPECT FRONT OIL PUMP BODY SUB-ASSEMBLY (See page AT-240)

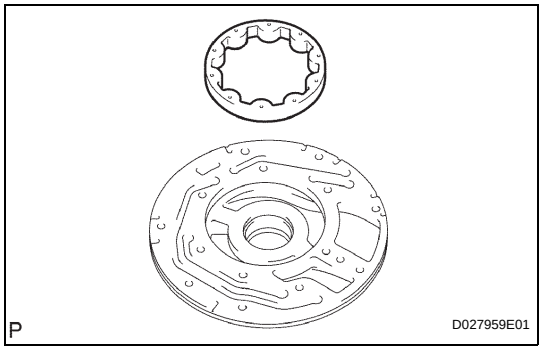
7. INSPECT STATOR SHAFT ASSEMBLY (See page AT-240)

8. INSPECT CLEARANCE OF OIL PUMP ASSEMBLY



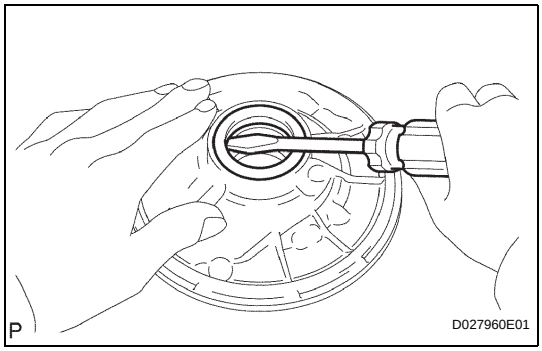
9. REMOVE FRONT OIL PUMP DRIVE GEAR

(a) Remove the front oil pump drive gear from the front oil pump body.



10. REMOVE FRONT OIL PUMP DRIVEN GEAR

(a) Remove the front oil pump driven gear from the front oil pump body.



11. REMOVE FRONT OIL PUMP OIL SEAL

(a) Using a screwdriver, remove the oil seal.

NOTICE:

Be careful not to damage the bushing and oil pump body.

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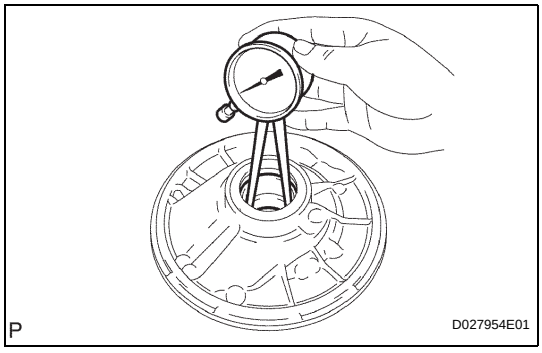
INSPECTION



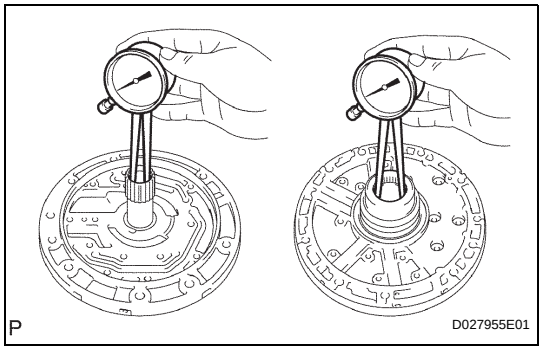
1. INSPECT FRONT OIL PUMP BODY SUB-ASSEMBLY

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

Maximum inside diameter:

38.188 mm (1.504 in.)

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



2. INSPECT STATOR SHAFT ASSEMBLY

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

Maximum inside diameter:

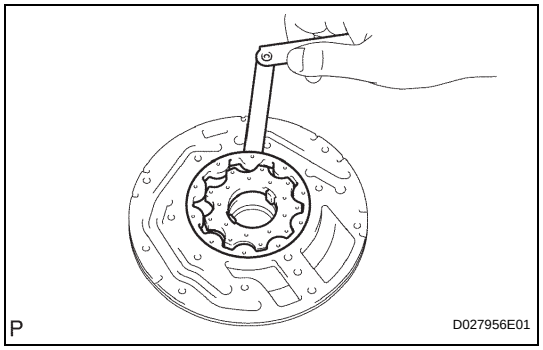
Front side:

21.577 mm (0.850 in.)

Rear side:

32.08 mm (1.263 in.)

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



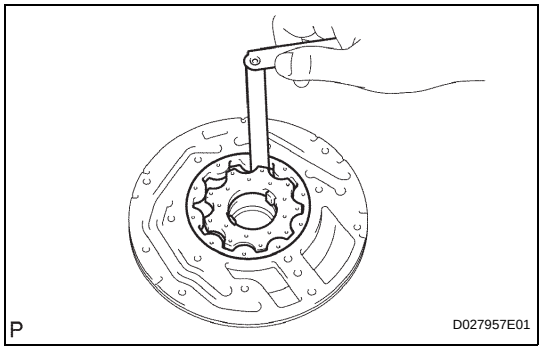
3. INSPECT CLEARANCE OF OIL PUMP ASSEMBLY

(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.)
Maximum body clearance:
0.17 mm (0.0067 in.)

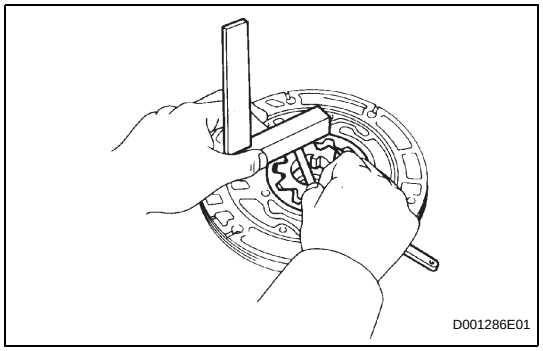
If the body clearance is greater than the maximum, replace drive gear, the driven gear or pump body.



(c) Using a feeler gauge, measure the 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 drive gear, the driven gear or pump body.



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

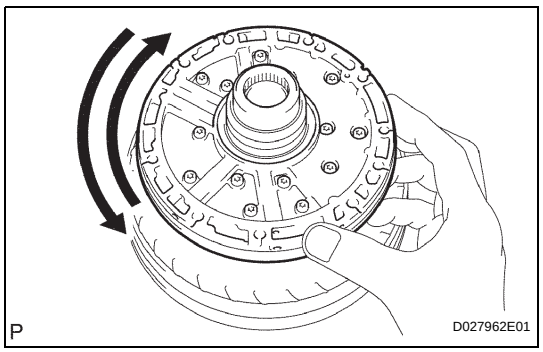
Standard side clearance:
0.02 to 0.05 mm (0.0008 to 0.0020 in.)
Maximum side clearance:
0.05 mm (0.0020 in.)

(e) There are 5 different thicknesses for the drive and driven gears.

Drive and drive gears thickness

Mark	Thickness
0	10.740 to 10.749 mm (0.4228 to 0.4232 in.)
1	10.750 to 10.759 mm (0.4232 to 0.4236 in.)
2	10.760 to 10.769 mm (0.4236 to 0.4240 in.)
3	10.770 to 10.779 mm (0.4240 to 0.4244 in.)
4	10.780 to 10.789 mm (0.4244 to 0.4248 in.)

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



4. INSPECT FRONT OIL PUMP DRIVE GEAR ROTATION

(a) Make sure the drive gear rotates smoothly.

(b) Remove the oil pump assembly from the torque converter.

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