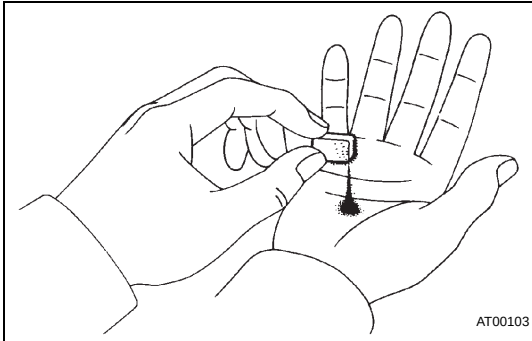


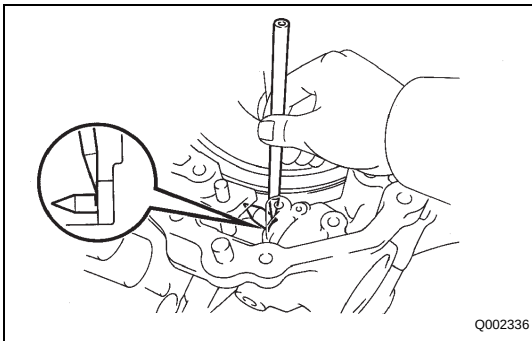
Mark	Front Race Diameter Inside / Outside mm (in.)	Thrust Bearing Diameter Inside / Outside mm (in.)	Rear Race Diameter Inside / Outside mm (in.)
C	-	41.0 (1.614) / 58.0 (2.283)	-
D	-	30.7 (1.209) / 46.0 (1.811) or 30.7 (1.209) / 46.3 (1.823) or 30.7 (1.209) / 47.1 (1.854)	-
E	-	25.8 (1.016) / 42.0 (1.654)	26.0 (1.024) / 39.5 (1.555)
F	-	22.0 (0.866) / 38.0 (1.496)	19.0 (0.748) / 35.0 (1.378)
G	-	28.1 (1.106) / 45.0 (1.772)	-
H	24.1 (0.949) / 37.6 (1.480)	22.1 (0.870) / 37.6 (1.480)	-



INSPECTION

1. INSPECT AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY

- (a) Remove the 2 oil cleaner magnets and use them to collect any steel chips. Carefully examine the chips and particles in the pan and on the magnet to determine what type of wear has occurred in the transaxle:
Steel (magnetic)..... bearing, gear and plate wear
Brass (non-magnetic)..... bushing wear



2. INSPECT PISTON STROKE OF 2ND COAST BRAKE

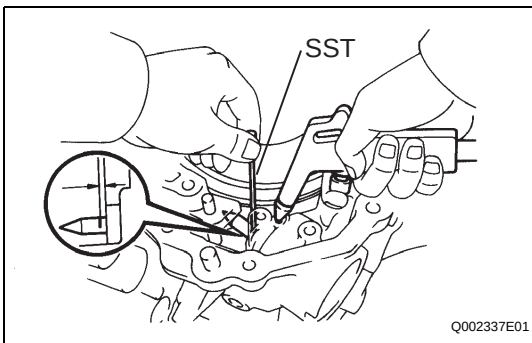
- (a) Apply a small amount of paint to the piston rod at the point where it meets the case.
- (b) Using SST, measure the piston stroke while applying and releasing compressed air (392 to 785 kPa, 4 to 8 kgf/cm², 57 to 114 psi).

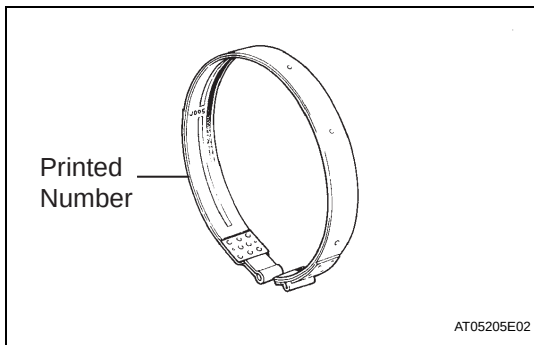
SST 09240-00020

Piston stroke:

1.5 to 3.0 mm (0.059 to 0.118 in.)

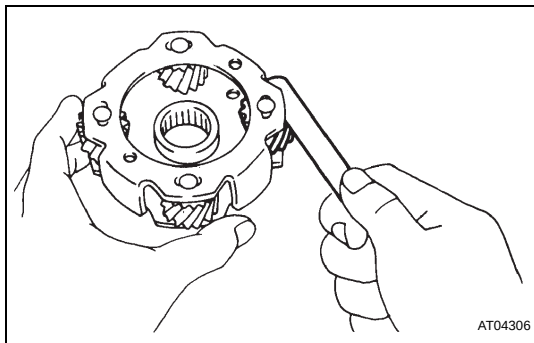
If the piston stroke exceeds the limit, inspect the brake band.





3. INSPECT 2ND COAST BRAKE BAND ASSEMBLY

- (a) If the lining of the 2nd coast brake band assembly is peeling off or discolored, or even if a part of the printed numbers are defaced, replace the 2nd coast brake band assembly.



4. INSPECT FRONT PLANETARY GEAR ASSEMBLY

- (a) Using a feeler gauge, measure the planetary pinion gear thrust clearance.

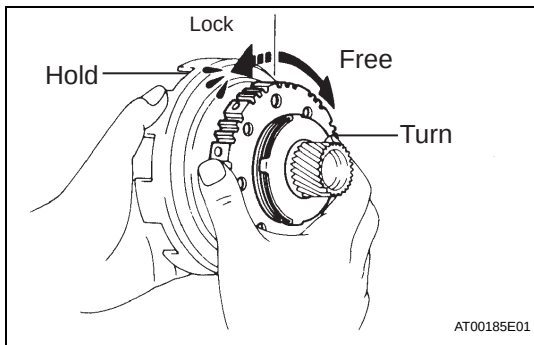
Standard clearance:

0.2 to 0.5 mm (0.008 to 0.020 in.)

Maximum clearance:

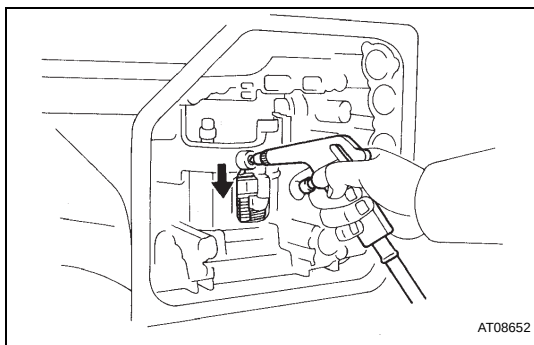
0.55 mm (0.022 in.)

If the clearance is greater than the maximum, replace the front planetary gear assembly.



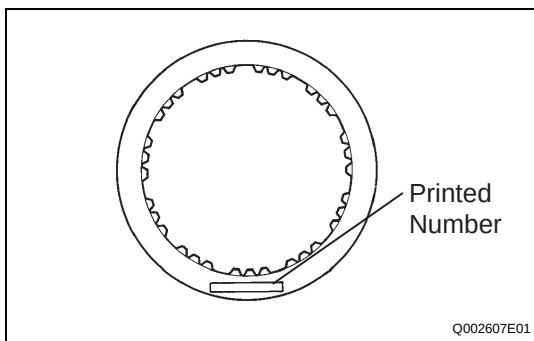
5. INSPECT 1 WAY CLUTCH ASSEMBLY

- (a) Hold the sun gear and turn the hub. The hub should turn freely clockwise and should lock if turned counterclockwise.



6. INSPECT 2ND BRAKE PISTON

- (a) Using compressed air, check that the 2nd brake piston moves smoothly.

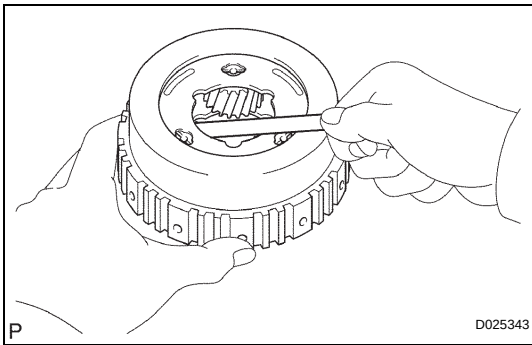


7. INSPECT 2ND BRAKE CLUTCH DISC

- (a) Check if the sliding surfaces of the discs, plates and flanges are worn or burnt. If necessary, replace them.

HINT:

- If the lining of the disc is peeling off or discolored, even if a part of the printed numbers are defaced, replace all discs.
- Before assembling new discs, soak them in ATF for at least 15 minutes.



8. INSPECT REAR PLANETARY GEAR ASSEMBLY

- (a) Using a feeler gauge, measure the planetary pinion gear thrust clearance.

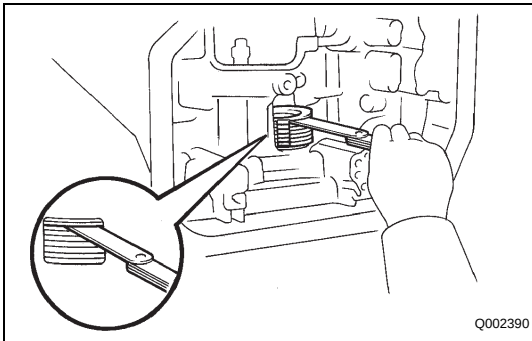
Standard clearance:

0.2 to 0.5 mm (0.008 to 0.020 in.)

Maximum clearance:

0.55 mm (0.022 in.)

If the clearance is greater than maximum, replace the rear planetary gear assembly.



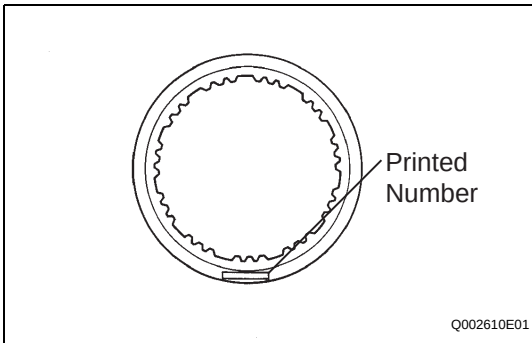
9. INSPECT PACK CLEARANCE OF FIRST AND REVERSE BRAKE

- (a) Using a feeler gauge, measure the first & reverse brake pack clearance.

Pack clearance:

1.19 to 2.25 mm (0.0469 to 0.0886 in.)

If the pack clearance is non-standard, check the disc.

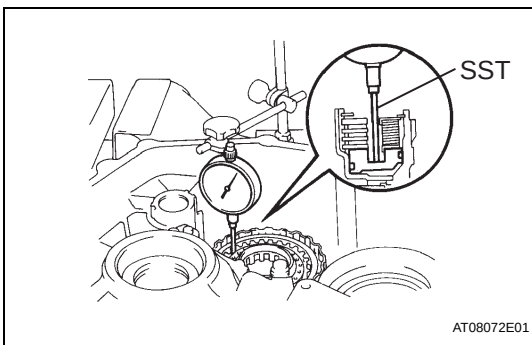


10. INSPECT 1ST AND REVERSE BRAKE CLUTCH DISC

- (a) Check if the sliding surfaces of the discs, plates and flanges are worn or burnt. If necessary, replace them.

HINT:

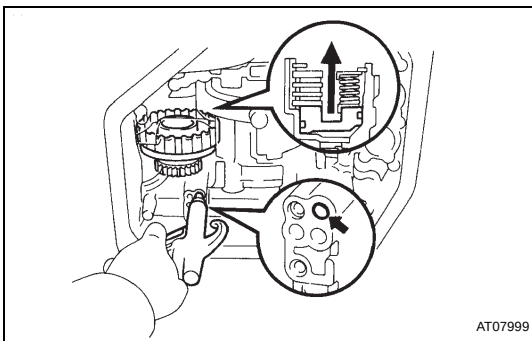
- If the lining of the disc is peeling off or discolored, even if a part of the printed numbers are defaced, replace all discs.
- Before assembling new discs, soak them in ATF for at least 15 minutes.



11. INSPECT PISTON STROKE OF UNDERDRIVE CLUTCH

- (a) Set a dial indicator (long type pick or SST).

SST 09350-32014 (09351-32190)



- (b) While applying and releasing compressed air (392 to 785 kPa, 4 to 8 kgf/cm², 57 to 114 psi), measure the underdrive clutch piston stroke.

Piston stroke:

1.5 to 1.9 mm (0.059 to 0.075 in.)

- (c) If the piston stroke is non-standard, select another flange.

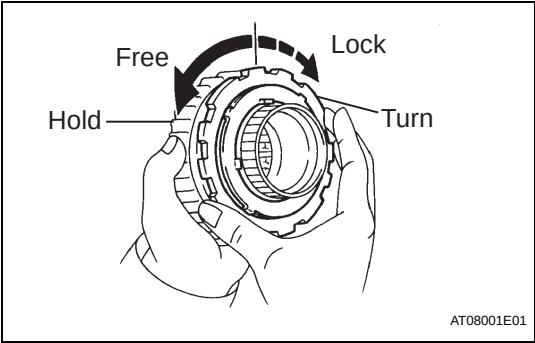
HINT:

There are 4 different flange thickness.

Flange thickness:

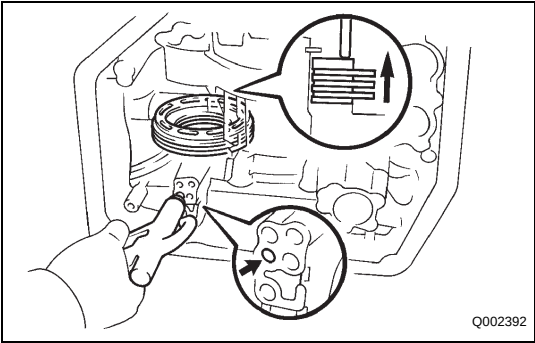
mm (in.)

Thickness	Thickness
2.04 (0.0803)	2.40 (0.0945)
2.20 (0.0866)	2.50 (0.0984)



12. INSPECT UNDERDRIVE 1 WAY CLUTCH ASSEMBLY

- (a) Hold the 1 way clutch drum and turn the 1 way clutch. Check that the 1 way clutch must be able to turn free counterclockwise and will lock if turned clockwise.



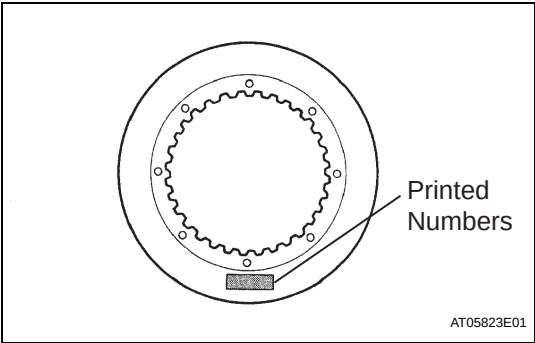
13. INSPECT PACK CLEARANCE OF UNDERDRIVE BRAKE

- (a) Using a dial indicator, measure the underdrive brake pack clearance.

Pack clearance:

1.15 to 1.97 mm (0.0453 to 0.0786 in.)

If clearance is non-standard, check the disc.

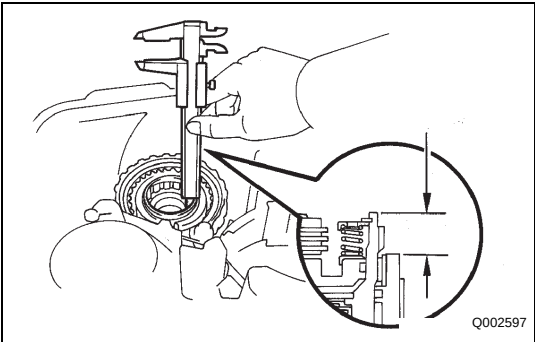


14. INSPECT UNDERDRIVE CLUTCH DISC NO.2

- (a) Check if the sliding surfaces of the discs, plates and flanges are worn or burnt. If necessary, replace them.

HINT:

- If the lining of the disc is peeling off or discolored, even if a part of the printed numbers are defaced, replace all discs.
- Before assembling new discs, soak them in ATF for at least 15 minutes.

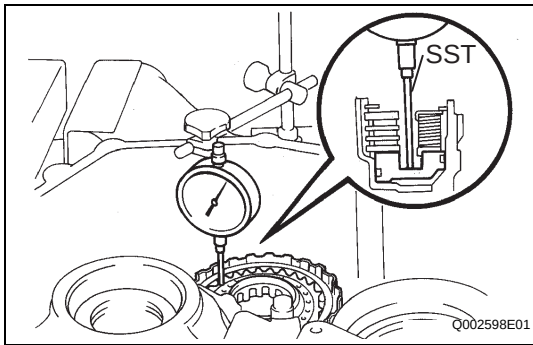


15. INSPECT HEIGHT OF CLUTCH ASSEMBLY

- (a) Using vernier calipers, check the height from the sleeve to the inner race.

Height:

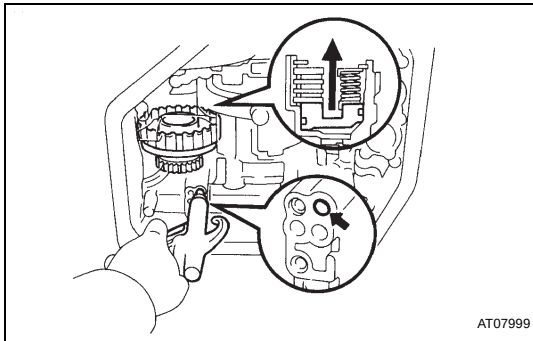
17.3 to 18.2 mm (0.681 to 0.717 in.)



16. INSPECT PISTON STROKE OF UNDERDRIVE CLUTCH

- (a) Set a dial indicator and measuring terminal (SST) together.

SST 09350-32014 (09351-32190)



- (b) While applying and releasing compressed air (392 to 785 Cps, 4 to 8 kgf/cm², 57 to 114 psi), measure the underdrive clutch piston stroke.

Piston stroke:

1.5 to 1.9 mm (0.059 to 0.075 in.)

If the piston stroke is less than the limit, parts may have been misassembled. Check them.

If the piston stroke is non-standard, select another flange.

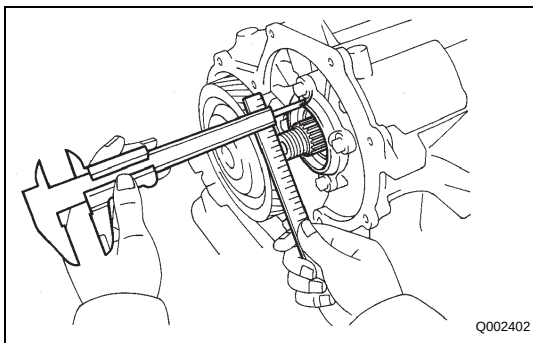
HINT:

There are 4 different thickness for the flange.

Flange thickness:

mm (in.)

Thickness	Thickness
2.04 (0.0803)	2.40 (0.0945)
2.20 (0.0866)	2.50 (0.0984)

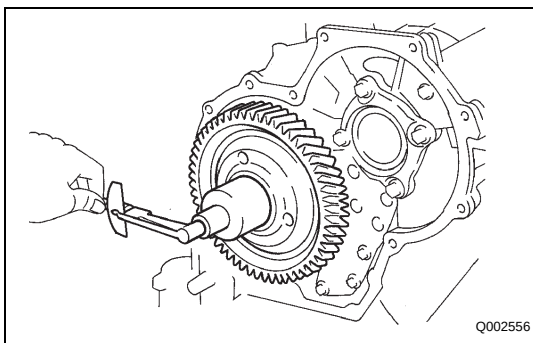


17. INSPECT HEIGHT OF COUNTER SHAFT

- (a) Using vernier calipers, measure the distance between the tip of the counter shaft and bolt seat of the clutch support.

Height:

30.3 to 32.5 mm (1.193 to 1.280 in.)



18. INSPECT DRIVE GEAR PRELOAD

- (a) Using a torque wrench, measure the starting torque of the counter drive gear.

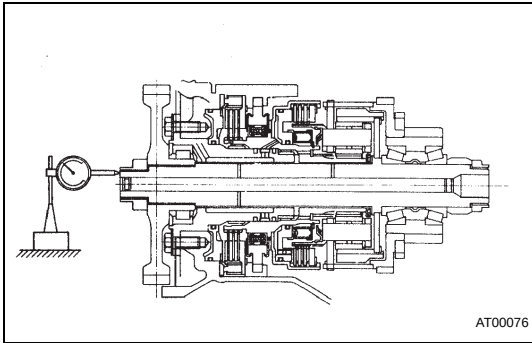
Torque: Starting torque

0.11 to 0.70 N*m (1.1 to 7.1 kgf*cm, 0.9 to 6.1 in.*lbf)

Rotating torque

0.04 to 0.30 N*m (0.4 to 3.0 kgf*cm, 0.3 to 2.6 in.*lbf)

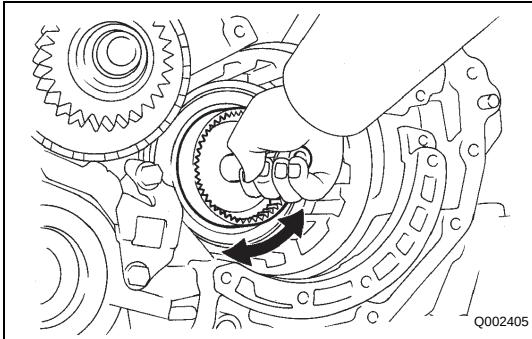
If the torque exceeds the limit, replace the spacer.

**19. INSPECT END PLAY OF COUNTER SHAFT**

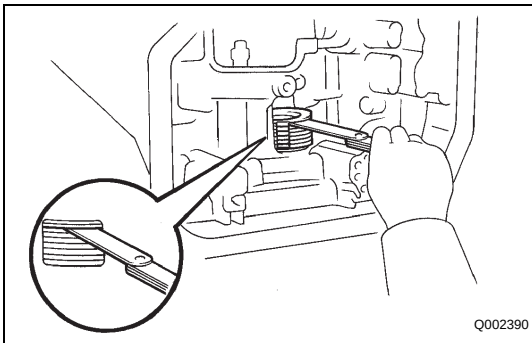
- (a) Using a dial indicator, measure the end play of the counter shaft.

End play:

0.2 to 0.9 mm (0.008 to 0.035 in.)

**20. INSPECT INTERMEDIATE SHAFT SUB-ASSEMBLY**

- (a) Make sure that the intermediate shaft sub-assembly turns smoothly.

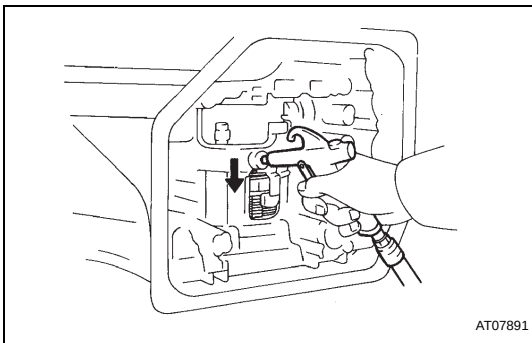
**21. INSPECT PACK CLEARANCE OF FIRST AND REVERSE BRAKE**

- (a) Using a feeler gauge, measure the first & reverse brake pack clearance.

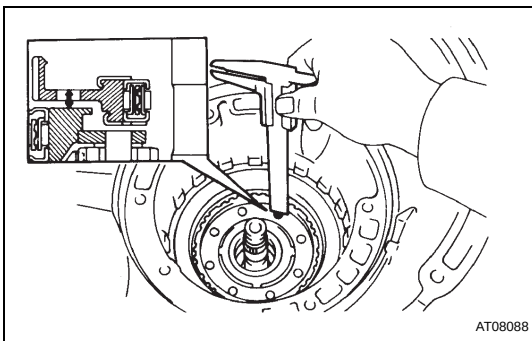
Pack clearance:

1.19 to 2.25 mm (0.0469 to 0.0886 in.)

If the pack clearance is non-standard, parts have been misassembled. Check them.

**22. INSPECT 2ND BRAKE PISTON**

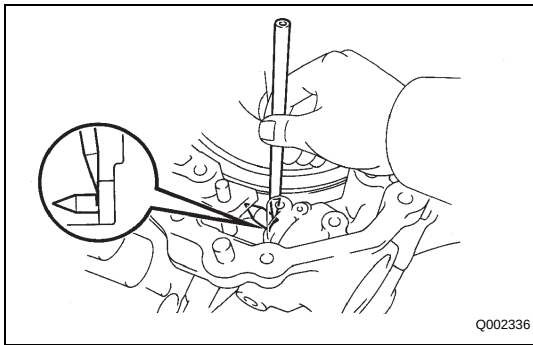
- (a) Using compressed air, check that the 2nd brake piston moves smoothly.

**23. INSPECT 2ND BRAKE HUB INSTALLATION DISTANCE**

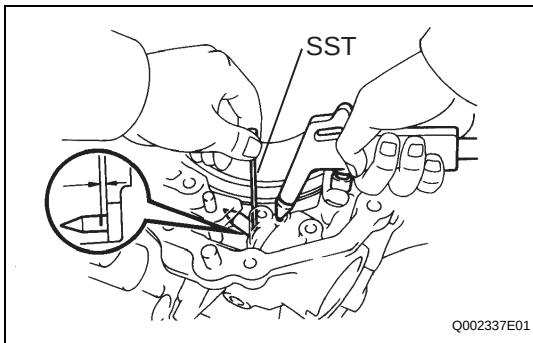
- (a) Check the distance between the surface of the 2nd brake hub and rear planetary gear.

Distance:

Approx. 5 mm (0.20 in.)

**24. INSPECT PISTON STROKE OF 2ND COAST BRAKE**

- (a) Apply a small amount of paint to the piston rod at the point where it meets the case.



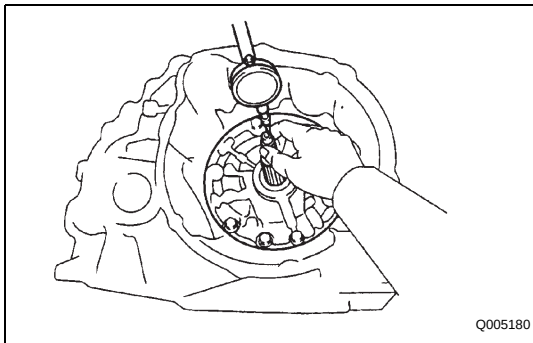
- (b) Using SST, measure the piston stroke while applying and releasing compressed air (392 to 785 kPa, 4 to 8 kgf/cm², 57 to 114 psi).

SST 09240-00020

Piston stroke:

1.5 to 3.0 mm (0.059 to 0.118 in.)

If the piston stroke exceeds the limit, select a new piston rod.

**25. INSPECT INPUT SHAFT ASSEMBLY**

- (a) Measure the thrust play in the axial direction.

Thrust play:

0.3 to 0.9 mm (0.012 to 0.035 in.)

If the play is not as specified, select and replace the race for the end of the input shaft assembly.

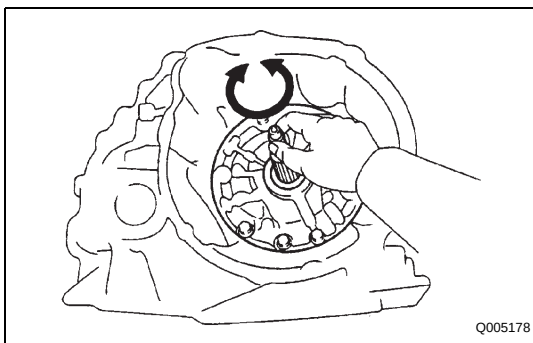
HINT:

There are 3 different thickness for races, if necessary, select one of them.

Race thickness:

mm (in.)

Thickness	Thickness
0.8 (0.031)	1.0 (0.039)
1.4 (0.055)	-

**26. INSPECT INPUT SHAFT ENDPLAY**

- (a) Make sure that the input shaft rotates smoothly.