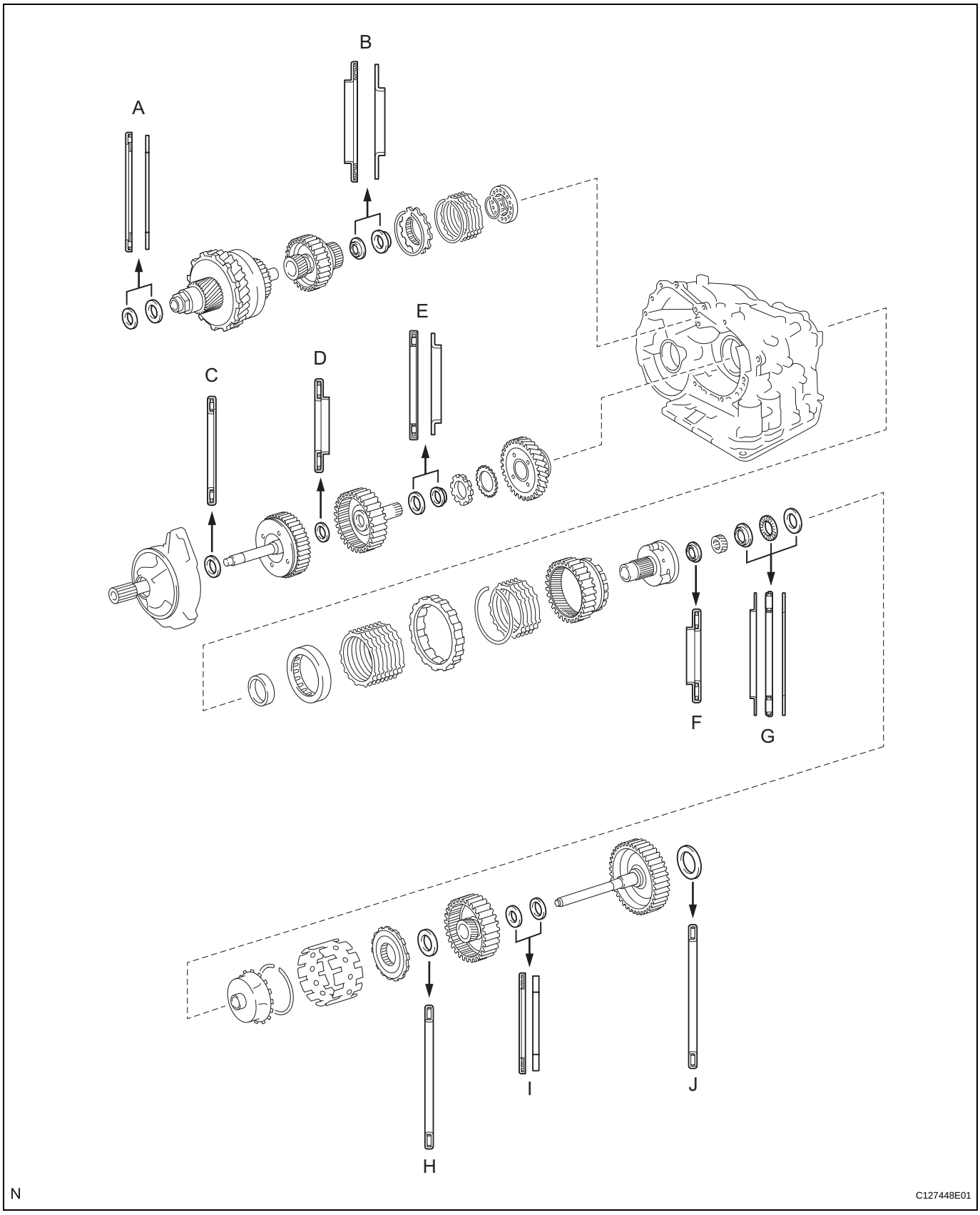
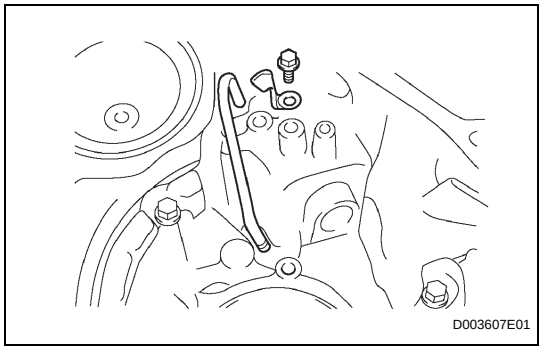
REASSEMBLY

1. BEARING POSITION



Standard bearing position

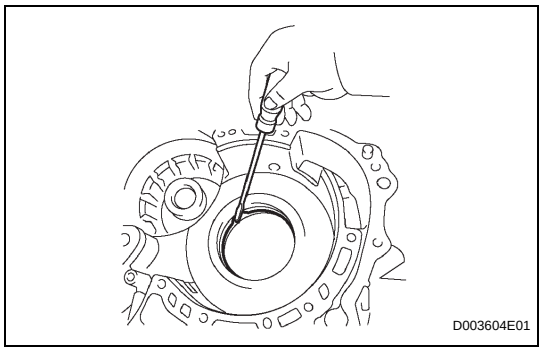
Mark	Front Race Diameter Inside / Outside	Thrust Bearing Diameter Inside / Outside	Rear Race Diameter Inside / Outside
A	-	53.0 mm (2.087 in.) / 78.2 mm (3.079 in.)	52.1 mm (2.051 in.) / 75.5 mm (2.972 in.)
B	-	37.73 mm (1.4854 in.) / 58.0 mm (2.283 in.)	29.9 mm (1.177 in.) / 55.5 mm (2.185 in.)
C	-	33.85 mm (1.3327 in.) / 52.2 mm (2.055 in.)	-
D	-	23.5 mm (0.925 in.) / 44.0 mm (1.732 in.)	-
E	-	36.3 mm (1.492 in.) / 52.2 mm (2.055 in.)	34.5 mm (1.358 in.) / 48.5 mm (1.909 in.)
F	-	34.6 mm (1.362 in.) / 52.2 mm (2.055 in.)	-
G	40.3 mm (1.587 in.) / 58.0 mm (2.283 in.)	38.6 mm (1.520 in.) / 60.0 mm (2.362 in.)	38.6 mm (1.520 in.) / 58.0 mm (2.283 in.)
H	-	53.6 mm (2.110 in.) / 69.6 mm (2.740 in.)	-
I	-	33.7 mm (1.327 in.) / 48.2 mm (1.898 in.)	30.3 mm (1.193 in.) / 46.0 mm (1.811 in.)
J	-	53.6 mm (2.110 in.) / 70.18 mm (2.763 in.) or 69.6 mm (2.740 in.)	-



2. INSTALL DIFFERENTIAL GEAR LUBE APPLY TUBE

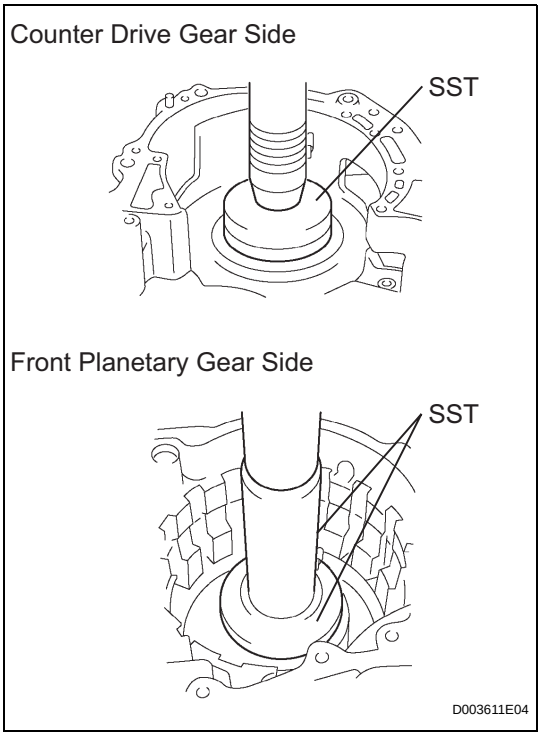
(a) Install the apply tube and apply tube clamp to the transaxle housing with the bolt.
Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)
NOTICE:
Make sure to insert the tube to the stopper.

3. INSTALL NO. 2 BREATHER PLUG



4. INSTALL COUNTER DRIVE GEAR HOLE SNAP RING

(a) Using a screwdriver, install the hole snap ring to the transaxle.



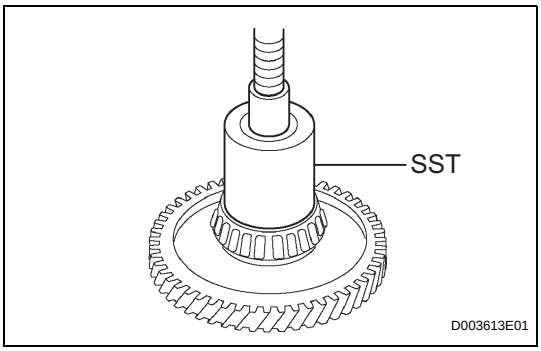
5. INSTALL COUNTER DRIVE GEAR

(a) Using SST and a press, press in the 2 counter drive gear bearings outer races to the transaxle.

NOTICE:

- **Press-fit the bearing race until it contacts the snap ring.**
- **Do not apply excessive pressure.**

SST 09950-60020 (09951-00890, 09951-07150)

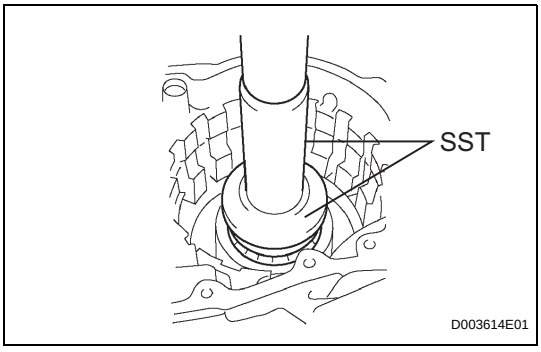


(b) Using SST and a press, press in the tapered roller bearing to the counter drive gear.

SST 09649-17010

NOTICE:

- **Press-fit the bearing inner race until it contacts the counter drive gear.**
- **Do not apply excessive pressure.**

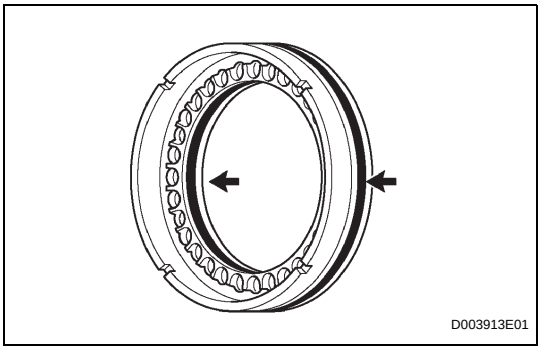


(c) Using SST and a press, press in the counter drive gear and bearing to the transaxle.

SST 09950-60020 (09951-00890), 09950-70010 (09951-07150)

NOTICE:

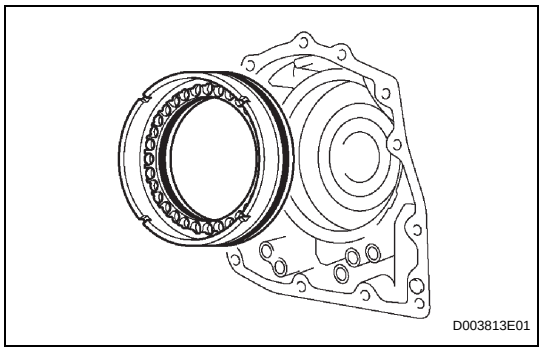
Do not apply excessive pressure.



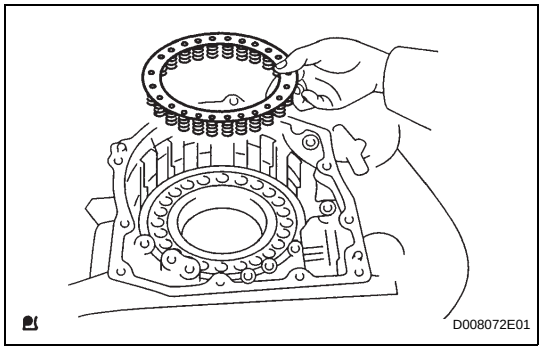
6. INSTALL 1ST AND REVERSE BRAKE PISTON

(a) Coat 2 new O-rings with ATF.

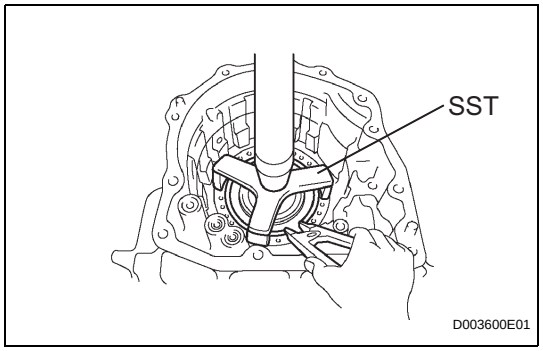
(b) Install the 2 O-ring to the 1st and reverse brake piston.



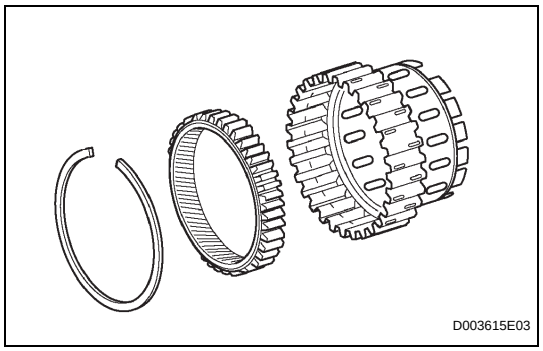
(c) Coat the 1st and reverse brake piston with ATF, and install it to the transaxle.



(d) Install the 1st and reverse brake return spring to the 1st and reverse brake piston.

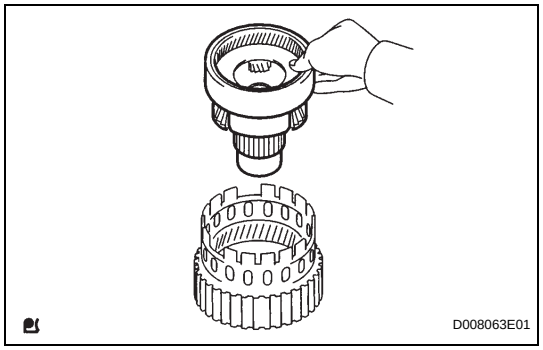


(e) Using SST, a press and snap ring expander, press the piston return spring and snap ring to the transaxle.
NOTICE:
- **Stop the press when the spring sheet is lowered to the place 1 to 2 mm (0.039 to 0.078 in.) from the snap ring groove, preventing the spring sheet from being deform.**
- **Do not expand the snap ring excessively.**



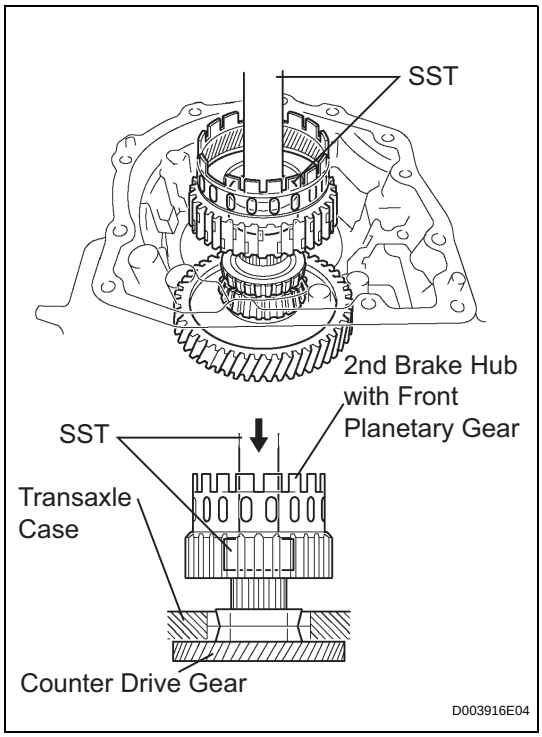
7. INSTALL FRONT PLANETARY RING GEAR

(a) Using a screwdriver, install the front planetary ring gear and brake hub snap ring to the brake hub.

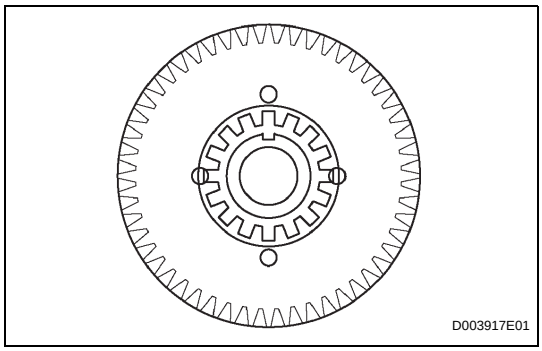


8. INSTALL FRONT PLANETARY GEAR ASSEMBLY

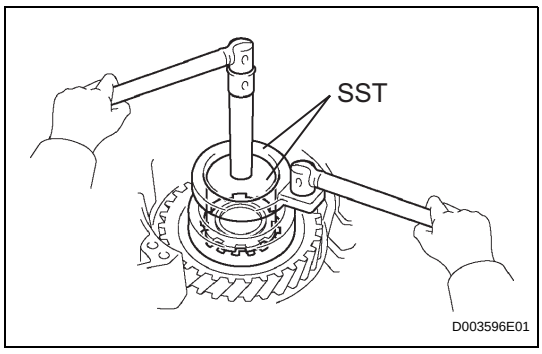
(a) Install the front planetary gear to the brake hub.



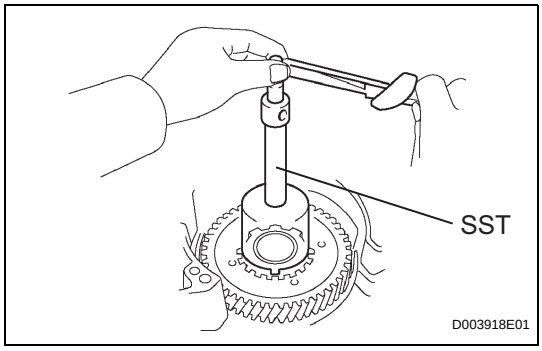
(b) Using SST and a press, press-fit the front planetary gear.
NOTICE:
Do not apply excessive pressure to it.



(c) Install the front planetary gear washer, as shown in the illustration.



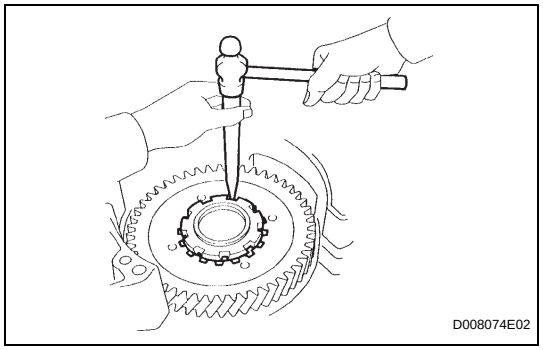
(d) Using SST, install the nut.
SST 09387-00030, 09387-00080
Torque: 280 N*m (2,855 kgf*cm, 206 ft.*lbf)

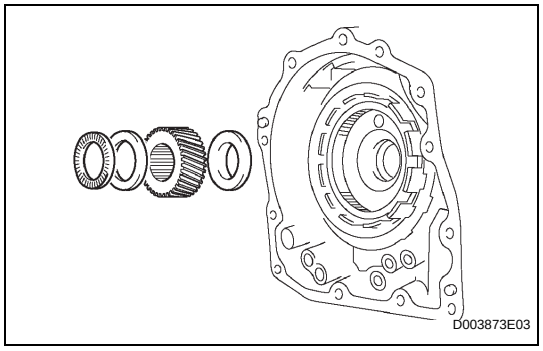


(e) Using SST and a torque wrench, measure the turning torque of the bearing while rotating SST at 60 rpm. When the measured value is not within the specified value, gradually tighten the nut until it reaches the specified value.
SST 09950-60010 (09951-00400), 09950-70010 (09951-07100), 09387-00030, 09387-00080

Torque: Turning torque at 60 rpm
0.5 to 1.0 N*m (5.1 to 10.0 kgf*cm, 4.4 to 8.7 in.*lbf) for new
0.3 to 0.5 N*m (3.1 to 5.1 kgf*cm, 2.7 to 4.4 in.*lbf) for used

(f) Using a chisel and hammer, stake the front planetary gear washer.

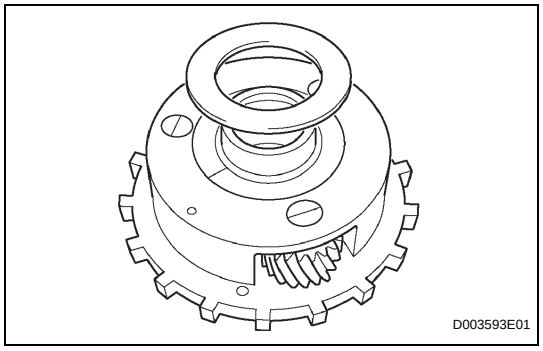

D008074E02


D003873E03

9. INSTALL INPUT SUN GEAR

(a) Install the 2 thrust bearings, bearing race and front planetary sun gear to the planetary gear.
Standard bearing race diameter

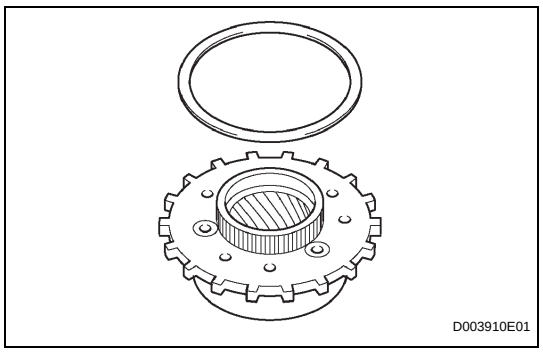
Item	Inside	Outside
Bearing	34.6 mm (1.362 in.)	52.2 mm (2.055 in.)
Race	40.3 mm (1.587 in.)	58.0 mm (2.283 in.)
Bearing	38.6 mm (1.520 in.)	60.0 mm (2.362 in.)


D003593E01

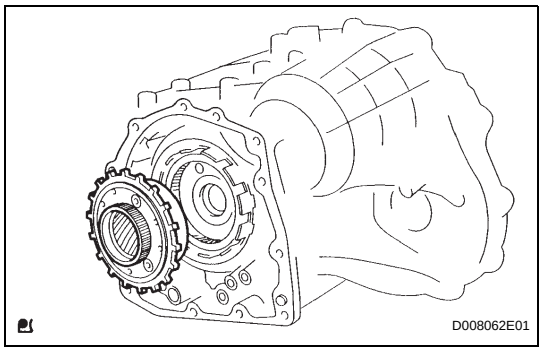
10. INSTALL REAR PLANETARY GEAR ASSEMBLY

(a) Coat the bearing race with ATF, and install it to the rear planetary gear.
Standard bearing race diameter

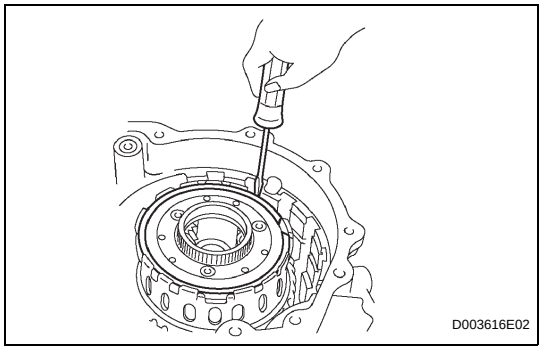
Item	Inside	Outside
Race	38.6 mm (1.520 in.)	58.0 mm (2.283 in.)


D003910E01

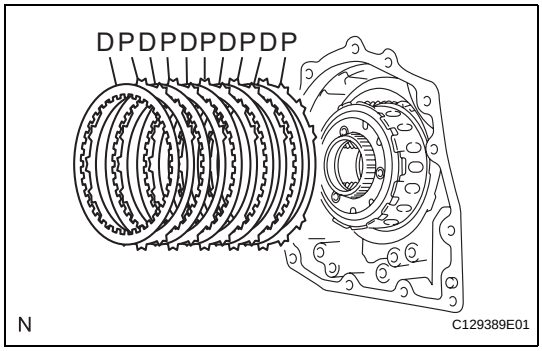
(b) Install the planetary carrier thrust washer to the planetary gear.



(c) Install the rear planetary gear to the rear planetary ring gear.

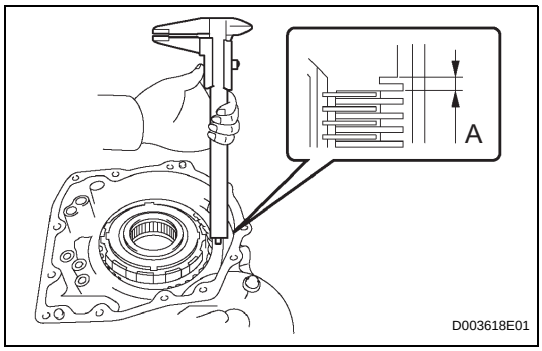


(d) Using a screwdriver, install the snap ring to the brake hub.



11. INSTALL 1ST AND REVERSE BRAKE CLUTCH DISC

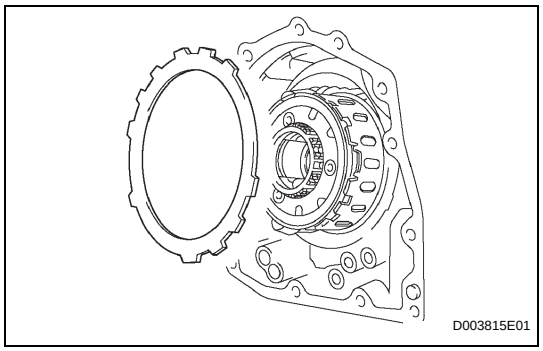
(a) Install the 5 plates and 5 discs.
Install in order:
P - D - P - D - P - D - P - D - P - D
HINT:
P = Plate
D = Disc



(b) Using a vernier caliper, measure the distance between the disc surface and the contact surface of the 2nd brake cylinder and transaxle (Dimension A).

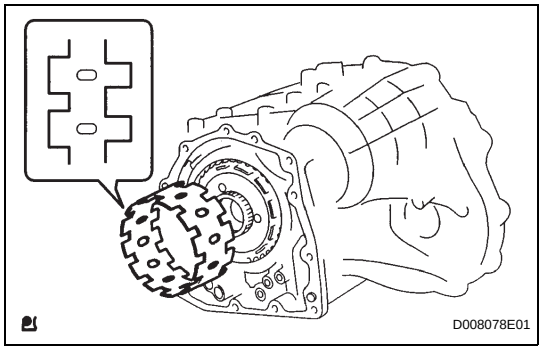
(c) Select an appropriate flange so that the piston stroke will meet the specified value.
Pack clearance:
1.02 to 1.21 mm (0.0402 to 0.0476 in.)
HINT:
Piston stroke = Dimension A - Flange thickness
Standard flange thickness

Mark	Thickness	Mark	Thickness
1	1.8 mm (0.071 in.)	5	2.2 mm (0.087 in.)
2	1.9 mm (0.075 in.)	6	2.3 mm (0.091 in.)
3	2.0 mm (0.079 in.)	7	2.4 mm (0.094 in.)
4	2.1 mm (0.083 in.)	8	2.5 mm (0.098 in.)



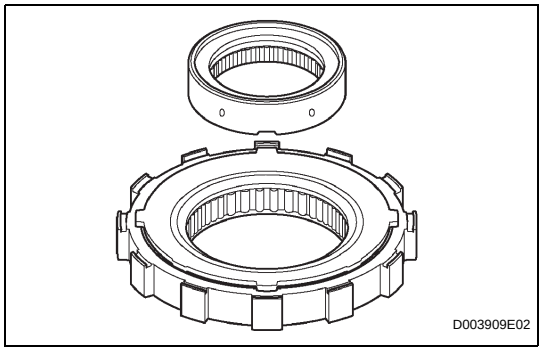
(d) Install the flange.

12. INSPECT PACK CLEARANCE OF 1ST AND REVERSE BRAKE



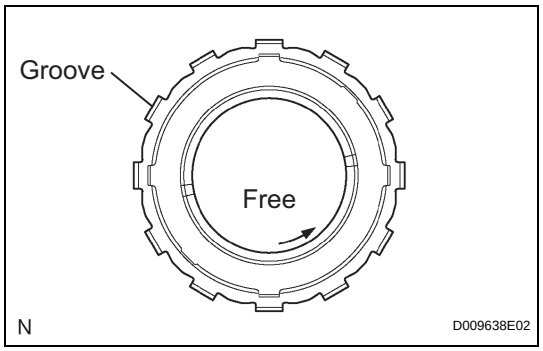
13. INSTALL 1-WAY CLUTCH SLEEVE OUTER

(a) Install the 1-way clutch outer sleeve to the 2nd brake cylinder.
NOTICE:
Check the positioning direction of the outer sleeve.

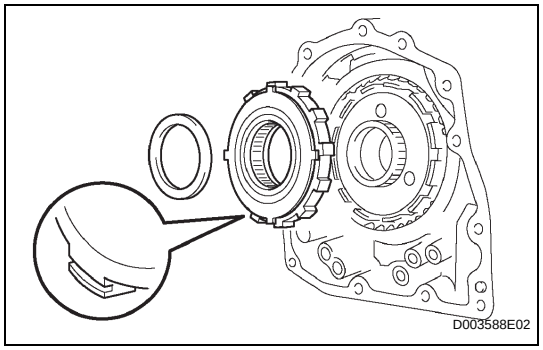


14. INSTALL 1-WAY CLUTCH ASSEMBLY

(a) Install the inner race to the 1-way clutch.
NOTICE:
Check the direction of the inner race.



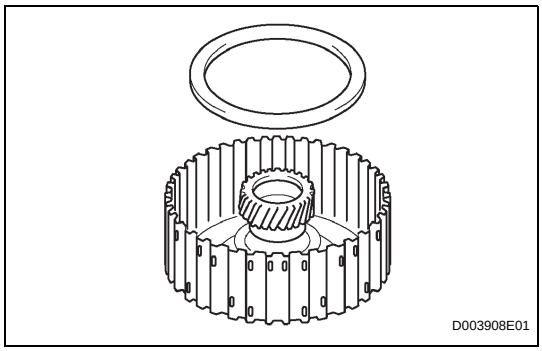
(b) Check the rotating direction of the 1-way clutch for the lock or free operation, as shown in illustration.



(c) Install the 1-way clutch and bearing to the 1-way clutch outer race sleeve.
Standard bearing diameter

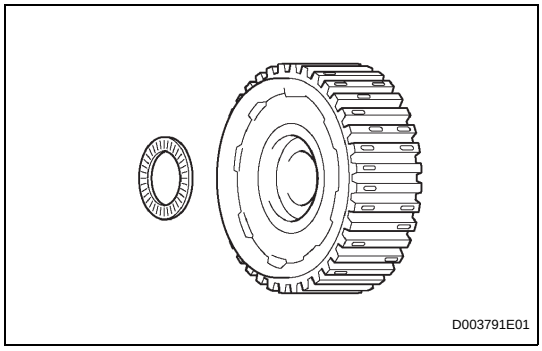
Item	Inside	Outside
Bearing	53.6 mm (2.110 in.)	69.6 mm (2.740 in.)

NOTICE:
Install the thrust bearing properly so that no colored race will be visible.



15. INSTALL REAR PLANETARY SUN GEAR ASSEMBLY

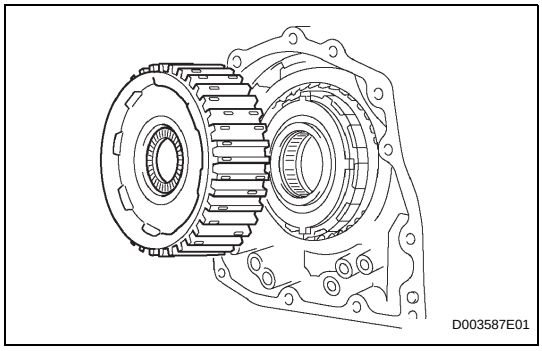
(a) Coat the No. 1 planetary carrier thrust washer with petroleum jelly, and install it onto the rear planetary sun gear.



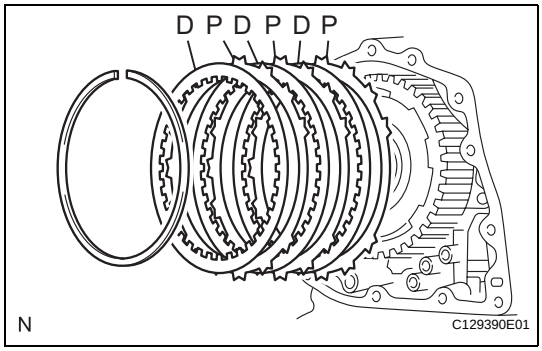
(b) Coat the bearing with petroleum jelly, and install it onto the rear planetary sun gear.

Standard bearing diameter

Item	Inside	Outside
Bearing	33.8 mm (1.331 in.)	48.2 mm (1.898 in.)



(c) Install the rear planetary sun gear to the rear planetary gear.



16. INSTALL 2ND BRAKE CLUTCH DISC

(a) Install the 3 discs and 3 plates to the transaxle.

Install in order:

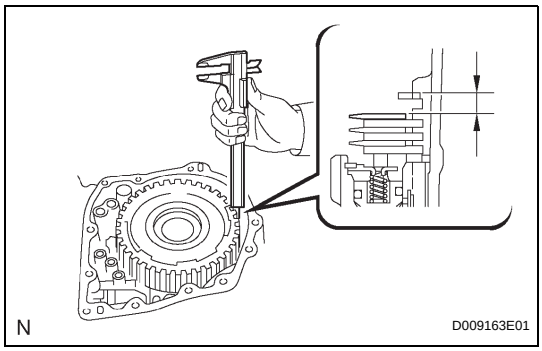
P - D - P - D - P - D

HINT:

P = Plate

D = Disc

(b) Temporarily install the snap ring.



(c) Using a vernier caliper, measure the distance between the disc surface and snap ring surface.

(d) Select an appropriate flange so that the piston stroke will meet the specified value.

Standard pack clearance:

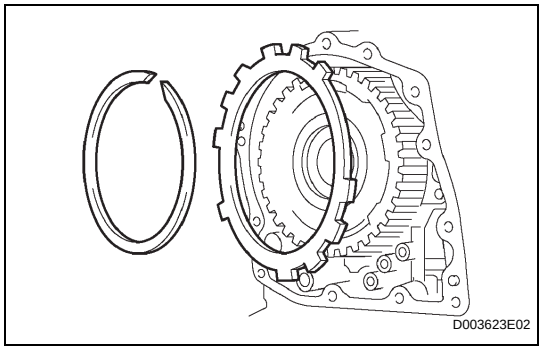
0.62 to 0.91 mm (0.0244 to 0.0358 in.)

HINT:

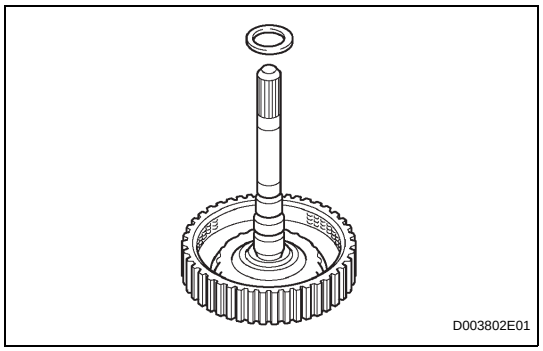
Piston stroke = Clearance - Flange thickness -Snap ring thickness 1.6 mm (0.063 in.)

Standard flange thickness

Mark	Thickness	Mark	Thickness
1	3.0 mm (0.118 in.)	5	3.4 mm (0.134 in.)
2	3.1 mm (0.122 in.)	6	3.5 mm (0.138 in.)
3	3.2 mm (0.126 in.)	7	3.6 mm (0.142 in.)
4	3.3 mm (0.130 in.)	8	-



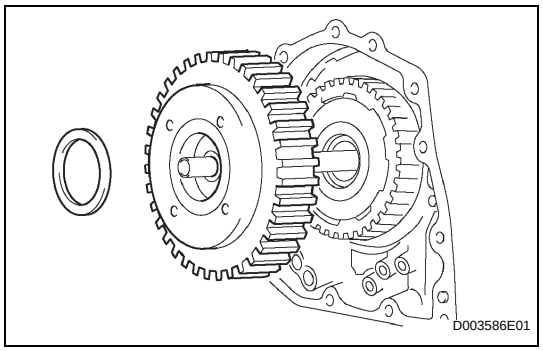
(e) Temporarily remove the snap ring, attach the selected flange and restore the snap ring.
NOTICE:
Secure the snap ring so that its gap is visible through the groove of the transaxle case.



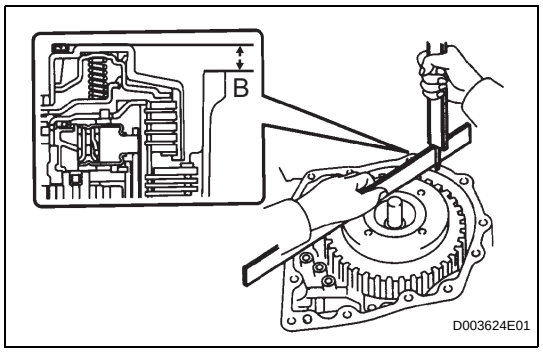
17. INSTALL DIRECT CLUTCH

(a) Install the bearing race to the direct clutch.
Standard bearing diameter

Item	Inside	Outside
Bearing race	30.3 mm (1.193 in.)	46.0 mm (1.811 in.)

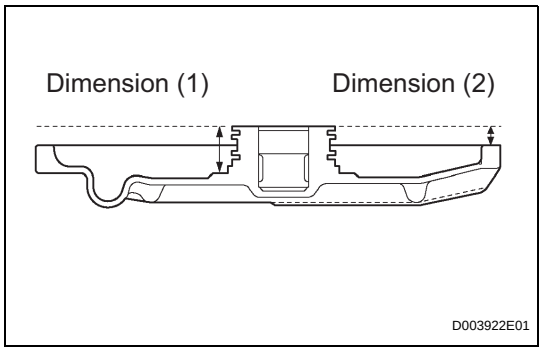


(b) Install the direct clutch and thrust needle roller bearing to the rear planetary sun gear.
NOTICE:
The disc in the direct clutch should completely align with the hub attached outside the rear planetary sun gear. Otherwise, the rear cover cannot be installed.



(c) Clean the connector part of the transaxle case and rear cover.

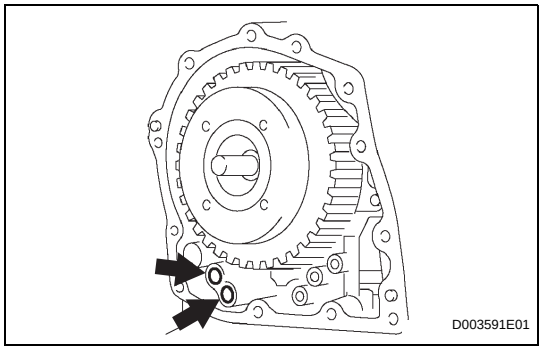
(d) As shown in the illustration, place a straightedge on the direct clutch drum and measure the distance between the transaxle case and the straightedge using a vernier caliper (Dimension B).



(e) Measure the 2 places of the rear cover as shown in the illustration and calculate a dimension C using the following formula.
HINT:
Dimension C = Dimension (1) - Dimension (2)

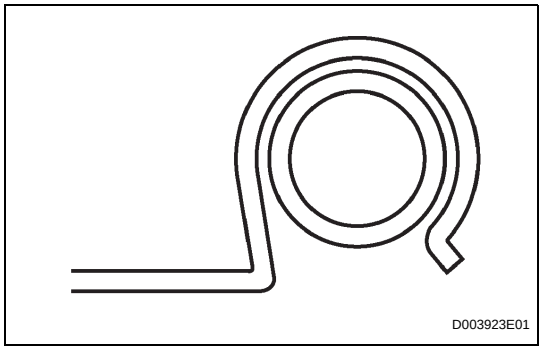
(f) Calculate the end play value using the following formula. Select a thrust bearing which satisfies the end play value and install it.
End play:
0.198 to 0.936 mm (0.00800 to 0.03685 in.)
NOTICE:
Make sure that the colored race side is facing the direct clutch assembly.
HINT:
End play = Dimension C - Dimension B
Standard bearing thickness and diameter

Thickness	Inside	Outside
3.58 mm (0.1409 in.)	53.6 mm (2.110 in.)	69.6 mm (2.740 in.)
3.88 mm (0.1528 in.)	53.6 mm (2.110 in.)	70.18 mm (2.763 in.)



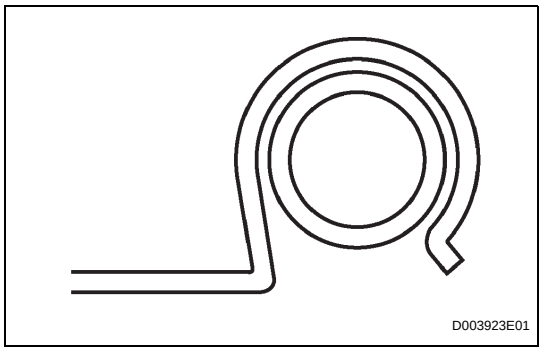
18. INSTALL NO. 1 GOVERNOR APPLY GASKET

(a) Install 2 new apply gaskets to the transaxle.



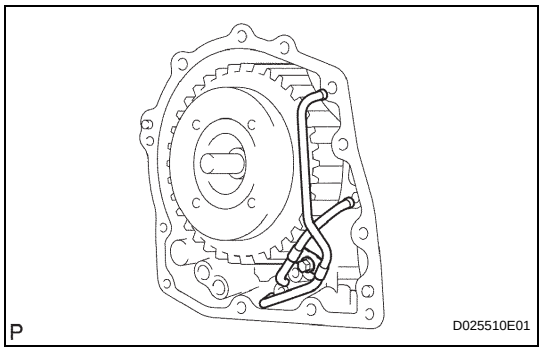
19. INSTALL FRONT CLUTCH APPLY TUBE

(a) Install the clamp to the front clutch apply tube.
NOTICE:
Make sure to install the clamp to the apply pipe before installing the apply pipe to the transaxle case. This prevents the apply pipe from being deformed or damaged.

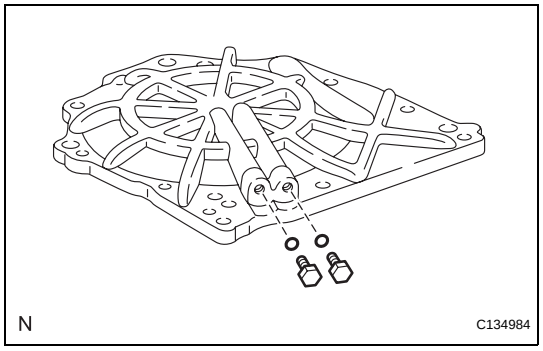


20. INSTALL BRAKE APPLY TUBE

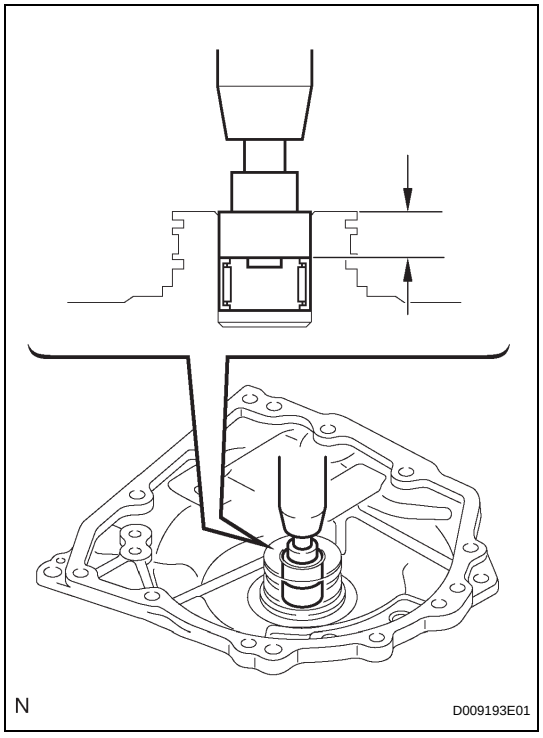
(a) Install the clamp to the brake apply tube.
NOTICE:
Make sure to install the clamp to the apply pipe before installing the apply pipe to the transaxle case. This prevents the apply pipe from being deformed or damaged.



(b) Install the 2 apply tubes to the transaxle with the bolt.
Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)
NOTICE:
Each pipe should be securely inserted until it reaches the stopper.

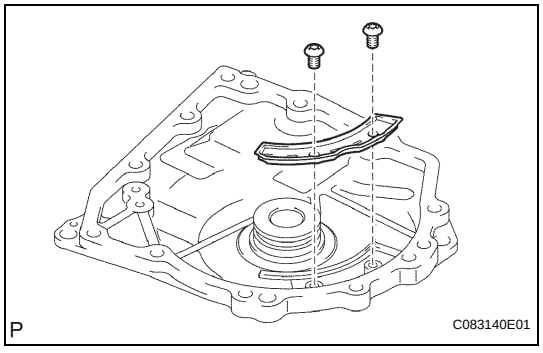


21. INSTALL NO. 1 TRANSAXLE CASE PLUG
(a) Install 2 new O-rings to the 2 plugs.
(b) Install the 2 plugs to the transaxle rear cover.
Torque: 7.4 N*m (75 kgf*cm, 65 in.*lbf)

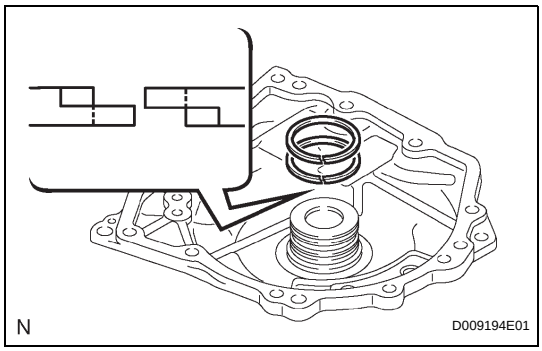


22. INSTALL TRANSAXLE REAR COVER SUB-ASSEMBLY
(a) Using SST and a press, press in the bearing.
SST 09950-60010 (09951-00230, 09951-00350)
Standard depth:
12.05 to 12.75 mm (0.4744 to 0.5020 in.)
NOTICE:
- **Face the inscribed mark side of the bearing race up.**
- **Repeat the press-fit until the specified value is obtained.**

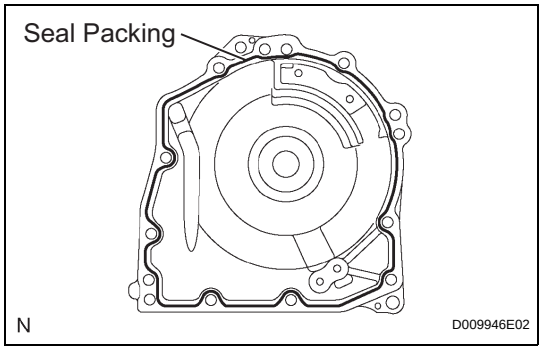
(b) Apply adhesive to the 2 screws.
Adhesive:
Toyota Genuine Adhesive 1344,
Three Bond 1344 or Equivalent



(c) Using a T30 "torx" socket, install the transaxle rear cover plate with the 2 screws.
Torque: 7.5 N*m (76 kgf*cm, 66 in.*lbf)



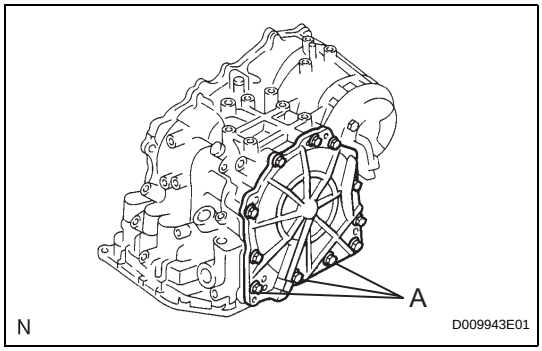
(d) Coat 2 new oil seal rings with ATF, and install them to the transaxle rear cover.



(e) Remove any packing material and be careful not to get oil on the contacting surfaces of the transaxle rear cover or the transaxle.

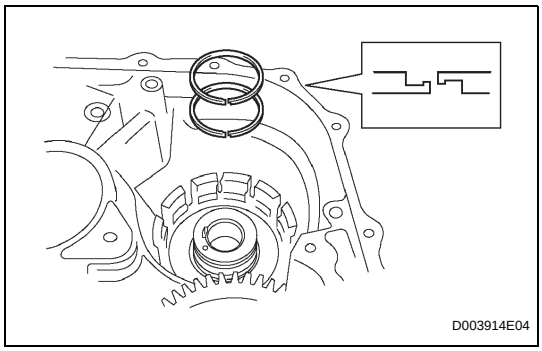
(f) Apply seal packing to the cover.
Seal packing:
Toyota Genuine Seal Packing 1281,
Three Bond 1281 or Equivalent

(g) Coat the needle roller bearing with ATF.



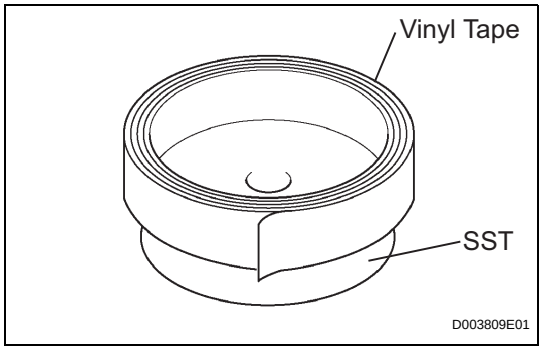
(h) Apply adhesive to the threads of the bolts labeled A.
Adhesive:
Toyota Genuine Adhesive 1344,
Three Bond 1344 or Equivalent

(i) Install the 11 bolts.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf) for bolt A
25 N*m (255 kgf*cm, 18 ft.*lbf) for other bolt



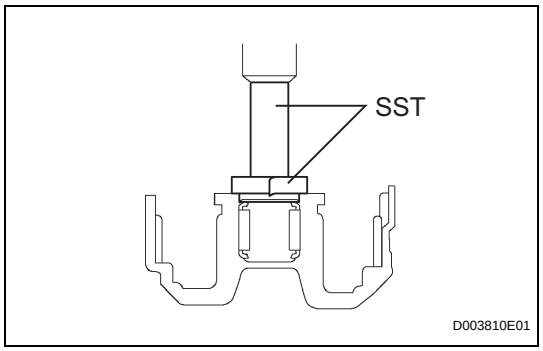
23. INSTALL UNDERDRIVE CLUTCH DRUM OIL SEAL RING

(a) Install 2 new oil seals to the transaxle.

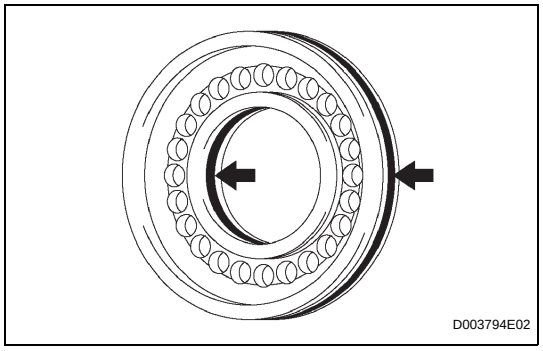


24. INSTALL UNDERDRIVE BRAKE PISTON

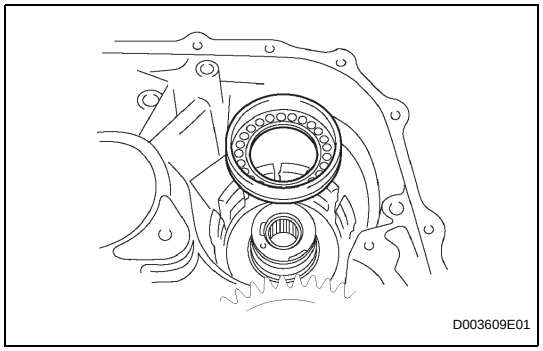
(a) Wind a vinyl tape around SST at the 4.0 mm (0.157 in.) above from the bottom end until the thickness of the wound tape is about 5.0 mm (0.197 in.).
SST 09550-60010 (09951-00320)
NOTICE:
Clean SST to remove deposited oil before winding a vinyl tape.



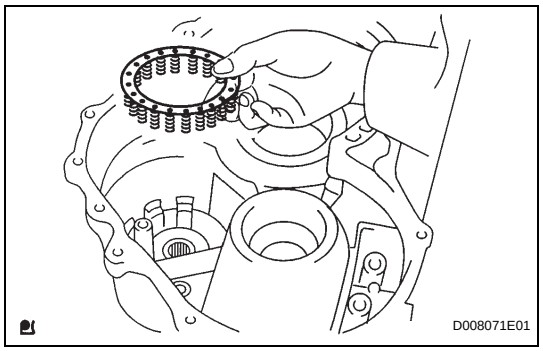
(b) Using SST and a press, press in the needle-roller bearing to the transaxle until the wound vinyl tape contacts the transaxle case.
SST 09550-60010 (09951-00320), 09950-70010 (09951-07100), 09387-00020



(c) Coat 2 new O-rings with ATF, and install them to the underdrive brake piston.

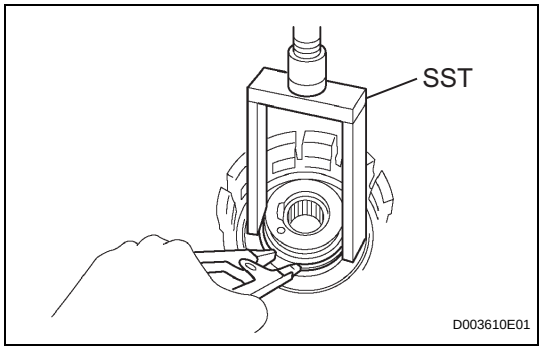


(d) Install the underdrive brake piston to the transaxle.

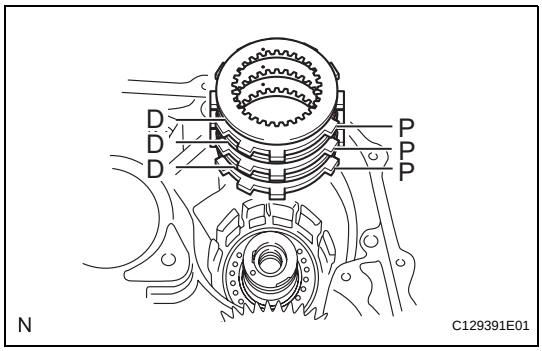


25. INSTALL UNDERDRIVE BRAKE RETURN SPRING SUB-ASSEMBLY

(a) Install the underdrive brake return spring to the underdrive brake piston.



(b) Using SST, a snap ring expander and press, press the return spring and install the snap ring to the transaxle.
SST 09387-00020
NOTICE:
Do not apply excessive pressure.



26. INSTALL NO. 2 UNDERDRIVE CLUTCH DISC

(a) Install the 3 discs and 3 plates to the transaxle.

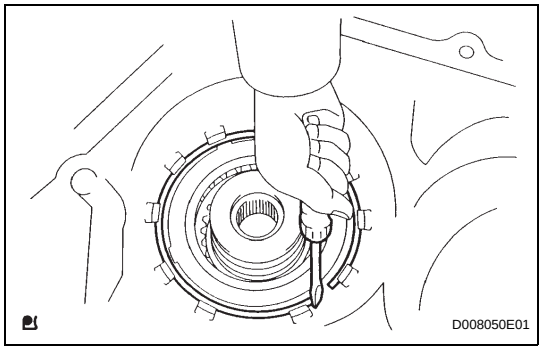
Install in order:

P - D - P - D - P - D

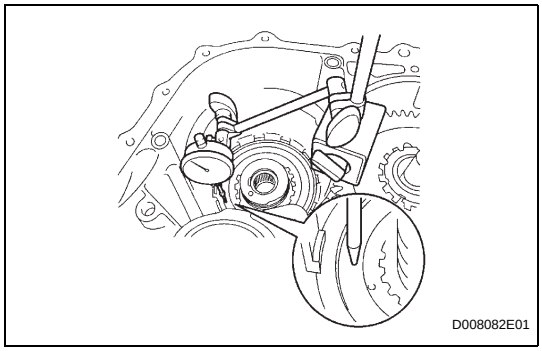
HINT:

D = Disc

P = Plate



(b) Using a screwdriver, install the snap ring.



(c) Using a dial indicator, measure the underdrive brake piston stroke while applying and releasing compressed air (392 kPa, 4.0 kgf/cm^2, 57 psi).

Standard piston stroke:

1.81 to 2.20 mm (0.0713 to 0.0866 in.)

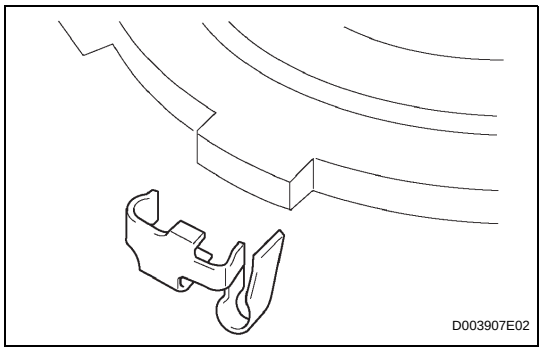
HINT:

Select an appropriate flange from the table below so that it will meet the specified value.

Standard flange thickness

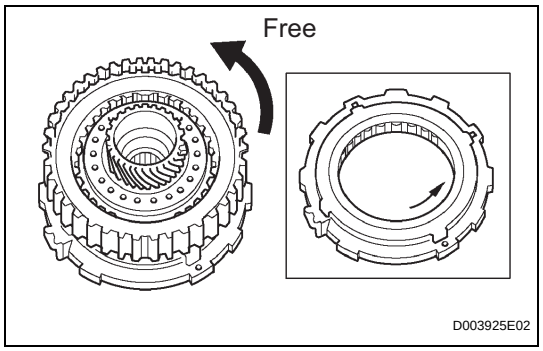
Mark	Thickness	Mark	Thickness
1	3.0 mm (0.118 in.)	3	3.4 mm (0.134 in.)
2	3.2 mm (0.126 in.)	-	-

(d) Temporarily remove the snap ring and attach the flange. Restore the snap ring.

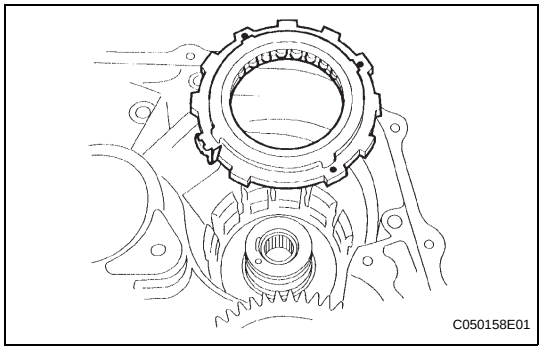


27. INSTALL UNDERDRIVE 1-WAY CLUTCH ASSEMBLY

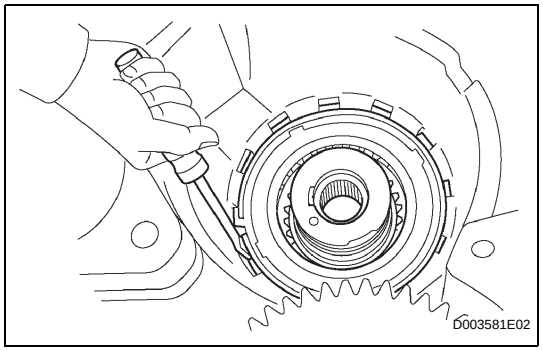
(a) Install the outer race retainer to the 1-way clutch.



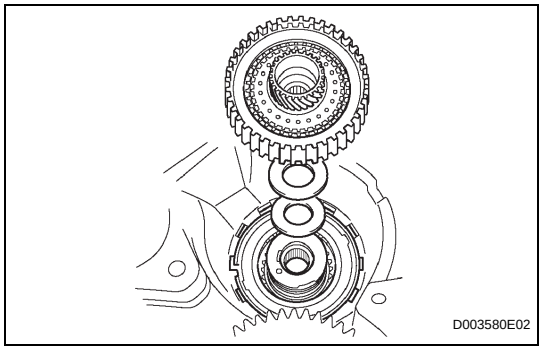
(b) Install the underdrive clutch assembly to the 1-way clutch. Rotate the underdrive clutch to check the rotating direction for the lock or free operation.



(c) Install the 1-way clutch to the transaxle.
NOTICE:
Make sure that the mark on the 1-way clutch outer race is visible.



(d) Using a screwdriver, install the snap ring to the transaxle.

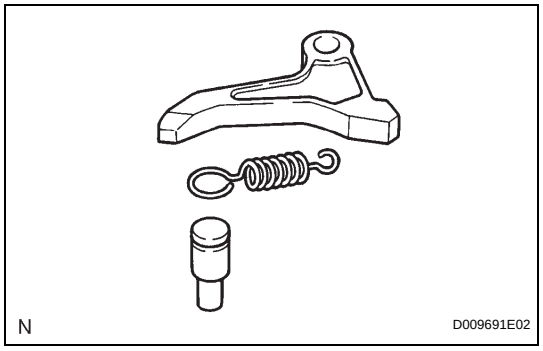


28. INSTALL UNDERDRIVE CLUTCH

(a) Coat the bearing and bearing race with petroleum jelly, and install them onto the underdrive clutch.
Standard race diameter

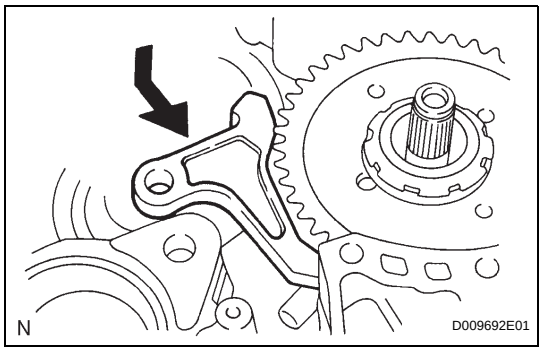
Item	Inside	Outside
Bearing	37.73 mm (1.4854 in.)	58.0 mm (2.283 in.)
Race	29.9 mm (1.177 in.)	55.5 mm (2.185 in.)

(b) Install the underdrive clutch assembly to the transaxle.

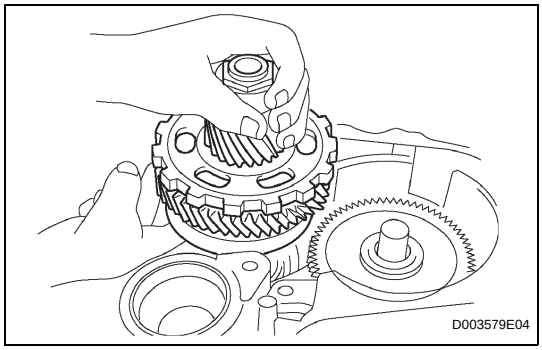


29. INSTALL UNDERDRIVE PLANETARY GEAR ASSEMBLY

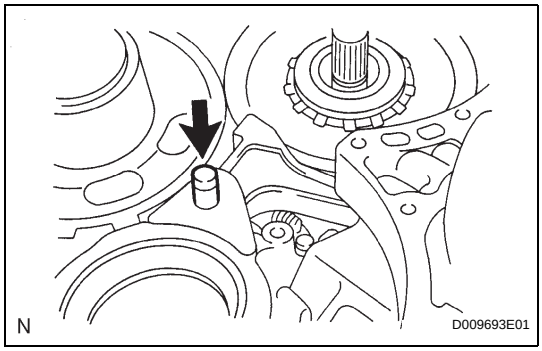
(a) Install the parking lock pawl pin and torsion spring to the parking lock pawl.



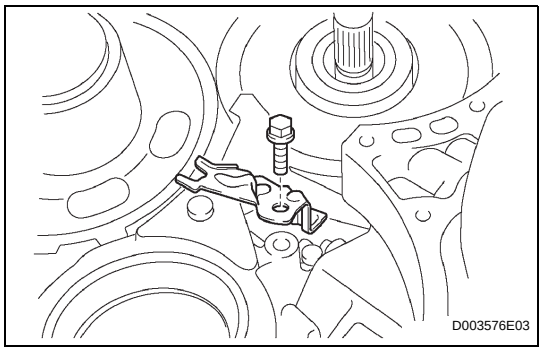
(b) Temporarily install the parking lock pawl, shaft and spring to the transaxle case as shown in the illustration.



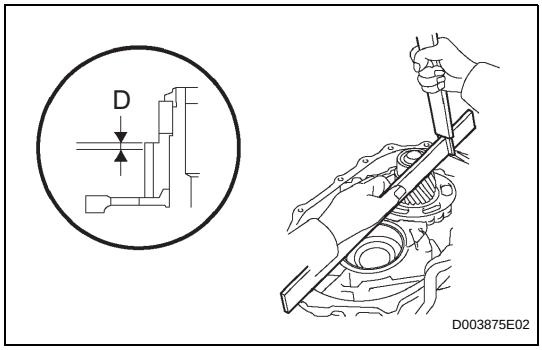
(c) Install the underdrive planetary gear assembly to the transaxle.
NOTICE:
Engage all the discs of the underdrive clutch and hub splines of the underdrive planetary gear assembly firmly and assemble them securely.



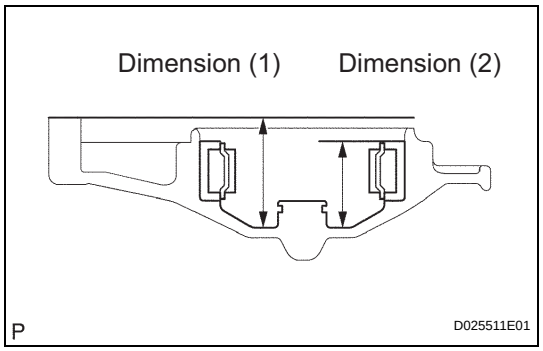
(d) Install the parking lock pawl shaft.



(e) Install the pawl shaft clamp with the bolt.
Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)



(f) Using a straightedge and vernier caliper as shown in the illustration, measure the gap between the top of the differential drive pinion in the underdrive planetary gear and contact surface of the transaxle and housing (Dimension D).
NOTICE:
Note down the dimension D as it is necessary for the following process.



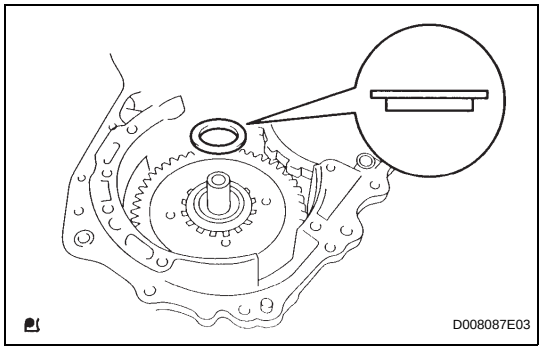
(g) As shown in the illustration, measure the 2 places of the transaxle housing. Calculate the dimension E using the formula.
NOTICE:
Note down the dimension E as it is necessary for the following process.
HINT:
Dimension E = Dimension (1) - Dimension (2)

30. INSPECT MULTIPLE DISC CLUTCH CLUTCH HUB (See page AX-187)

31. INSTALL MULTIPLE DISC CLUTCH CLUTCH HUB

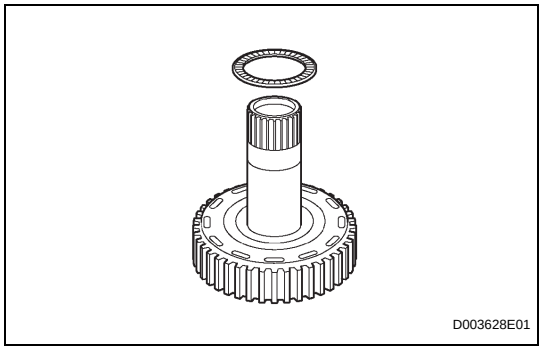
(a) Install the bearing race to the transaxle while checking its direction.
Standard bearing diameter

Item	Inside	Outside
Bearing race	34.5 mm (1.358 in.)	48.5 mm (1.909 in.)



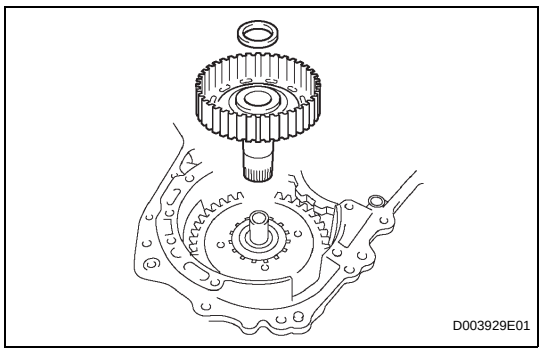
(b) Coat the thrust needle roller bearing and race with petroleum jelly, and install them onto the multiple disc clutch hub.
Standard thrust bearing and race diameter

Item	Inside	Outside
Bearing	36.3 mm (1.429 in.)	52.25 mm (2.055 in.)



(c) Install the input shaft thrust bearing to the multiple clutch hub.
Standard bearing diameter

Item	Inside	Outside
Bearing	23.5 mm (0.925 in.)	44.0 mm (1.732 in.)

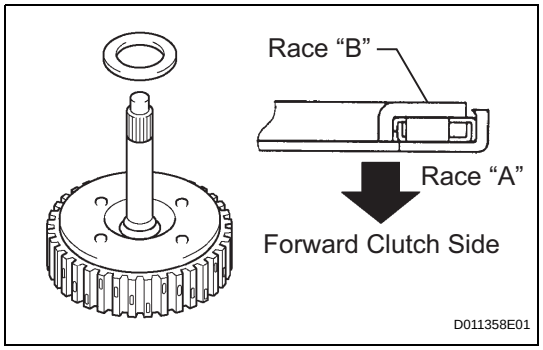


(d) Install the forward clutch hub to the transaxle.

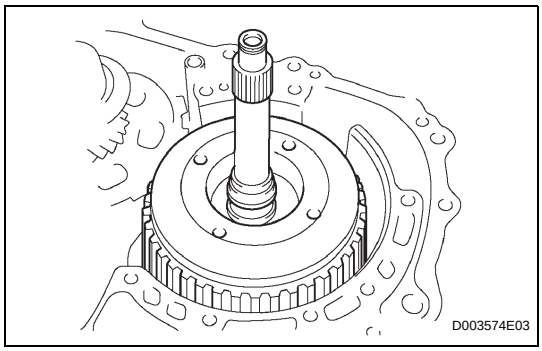
32. INSTALL FORWARD CLUTCH ASSEMBLY

(a) Install the input shaft thrust bearing to the forward clutch.
Standard bearing diameter

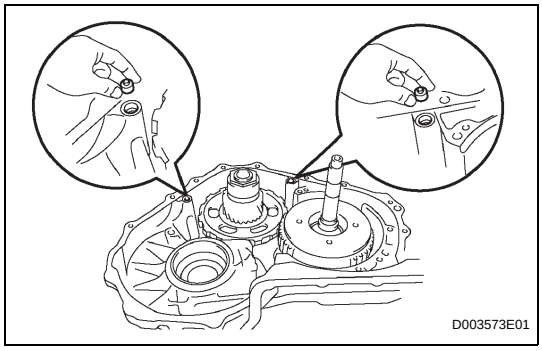
Item	Inside	Outside
Bearing	33.85 mm (1.3327 in.)	52.2 mm (2.055 in.)



NOTICE:
Install the thrust bearing properly so that the race "B" will be visible.

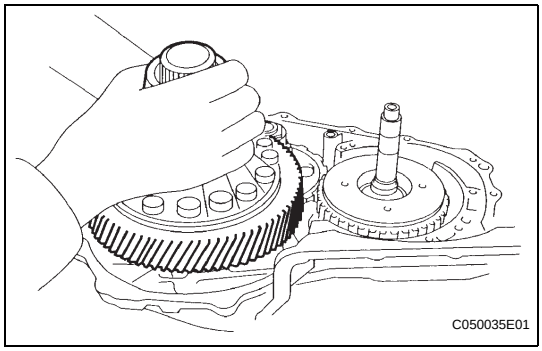


(b) Install the forward clutch to the multiple clutch hub.
NOTICE:
Align the splines of all discs in the forward clutch with those of multiple clutch hub to assemble them securely.



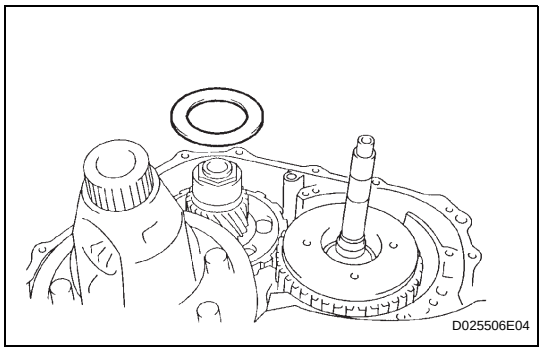
33. INSTALL OVERDRIVE BRAKE GASKET

(a) Install 2 new overdrive brake gaskets to the transaxle.



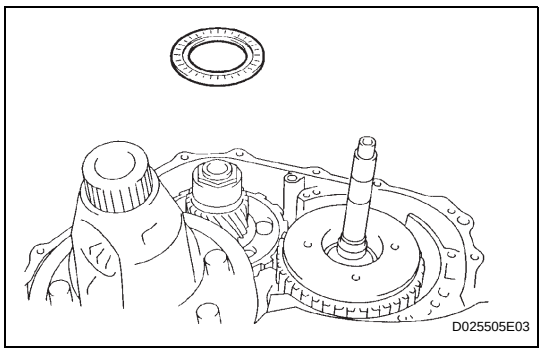
34. INSTALL FRONT DIFFERENTIAL ASSEMBLY

(a) Install the differential assembly to the transaxle.



35. INSTALL NO. 2 THRUST BEARING UNDERDRIVE RACE

(a) Install the thrust bearing race to the underdrive planetary gear.



36. INSTALL THRUST NEEDLE ROLLER BEARING

(a) Calculate the end play value using the following formula and value of Dimensions D and E that were measured when installing the cylindrical roller bearing and underdrive planetary gear. Select an appropriate underdrive planetary gear thrust bearing race No. 2 which satisfies the specified end play value, and install it.
Standard end play:
0.498 to 0.993 mm (0.0194 to 0.0390 in.)

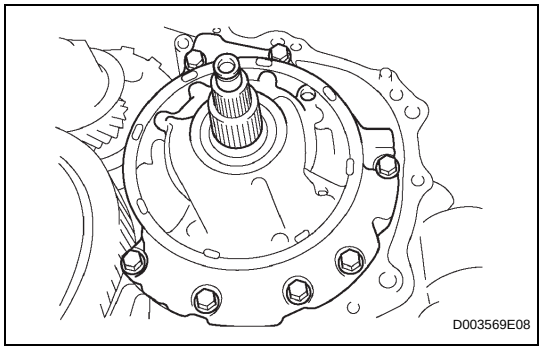
HINT:
End play = Dimension E - Dimension D - thrust bearing thickness 3.28 mm (0.1291 in.) - underdrive thrust bearing race thickness.

Standard race thickness

E - D	Thickness
Less then 7.34 mm (0.2890 in.)	3.5 mm (0.138 in.)
7.34 mm (0.2890 in.)	3.8 mm (0.150 in.)

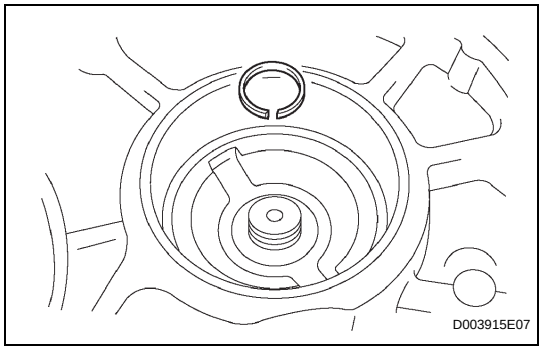
Standard bearing and bearing race diameter

Item	Inside	Outside
Bearing	53.0 mm (2.087 in.)	78.2 mm (3.079 in.)
Bearing race	52.1 mm (2.051 in.)	75.5 mm (2.972 in.)



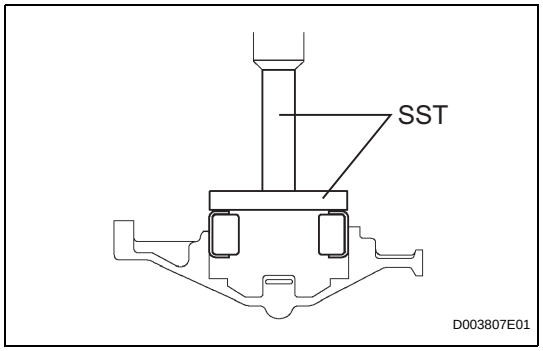
37. INSTALL OIL PUMP ASSEMBLY

(a) Install the oil pump to the transaxle with the 7 bolts.
Torque: 22 N*m (226 kgf*cm, 16 ft.*lbf)



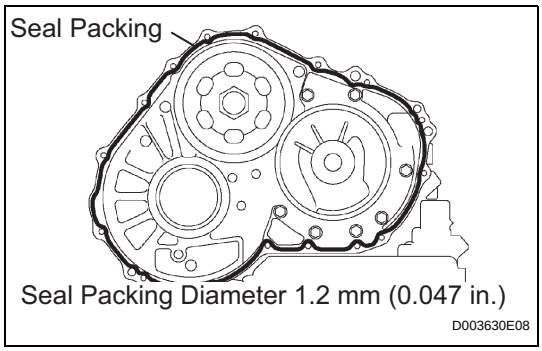
38. INSTALL UNDERDRIVE OUTPUT SHAFT OIL SEAL RING

(a) Install a new oil seal ring to the transaxle housing.



39. INSTALL UNDERDRIVE CYLINDRICAL ROLLER BEARING

(a) Using SST and a press, press in the underdrive cylindrical roller bearing.
SST 09950-60020, 09950-70010 (09951-07100, 09951-07100)
NOTICE:
Do not apply excessive pressure to it.



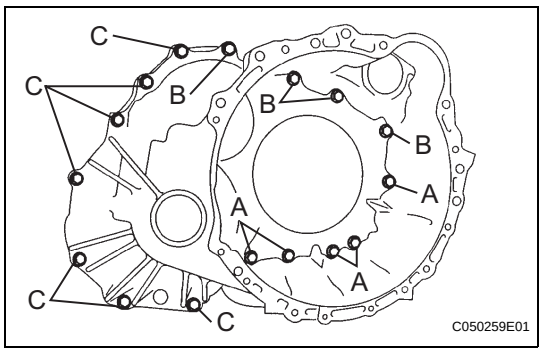
40. INSTALL TRANSAXLE HOUSING

(a) Remove any packing material and be careful not to get oil on the contacting surfaces of the transaxle case or transaxle housing.

(b) Apply seal packing to the transaxle case.

Seal packing:

Toyota Genuine Seal Packing 1281, Three Bond 1281 or Equivalent



(c) Install the transaxle housing and to the transaxle with the 16 bolts.

Torque: 22 N*m (224 kgf*cm, 16 ft.*lbf) for bolt A
29 N*m (296 kgf*cm, 21 ft.*lbf) for bolt B and C

HINT:

Each bolt length is indicated below.

Bolt length:

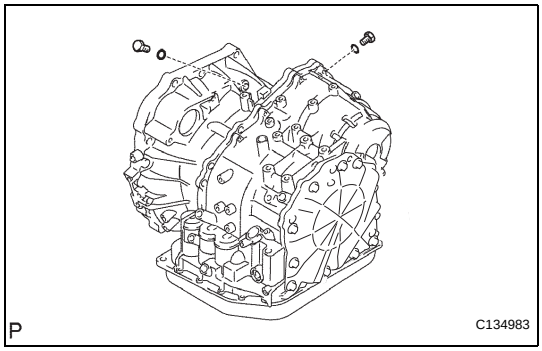
50 mm (1.969 in.) for bolt A
50 mm (1.969 in.) for bolt B
42 mm (1.654 in.) for bolt C

NOTICE:

Because the bolt A is a seal bolt, apply the seal packing to new bolts and tighten them within 10 minutes after application.

Seal packing:

Toyota Genuine Seal Packing 1281, Three Bond 1281 or Equivalent



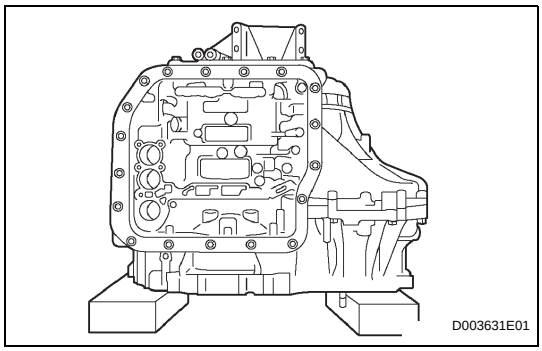
41. INSTALL NO. 1 TRANSAXLE CASE PLUG

(a) Install 2 new O-rings to the 2 plugs.

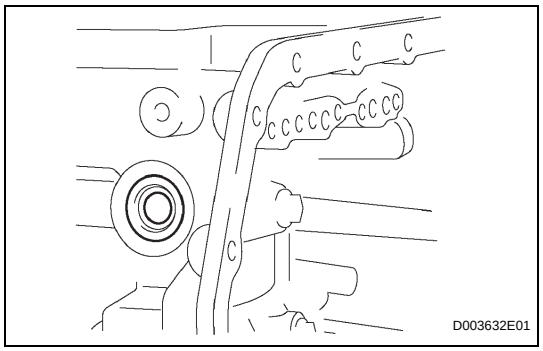
(b) Install the 2 plugs to the transaxle housing.

Torque: 7.4 N*m (75 kgf*cm, 65 in.*lbf)

42. INSPECT INPUT SHAFT END PLAY (See page AX-185)



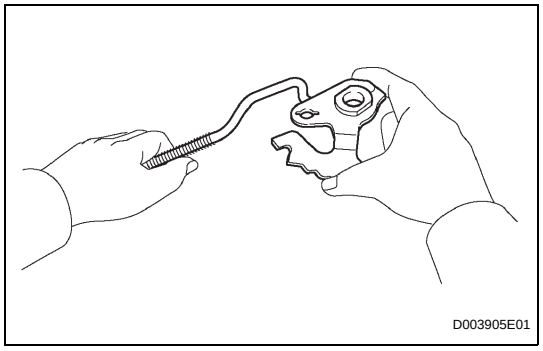
43. FIX AUTOMATIC TRANSAXLE ASSEMBLY



44. INSTALL MANUAL VALVE LEVER SHAFT OIL SEAL

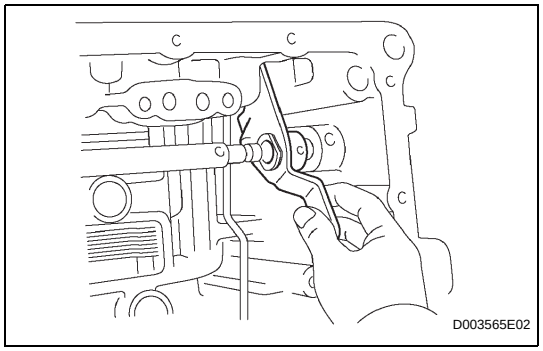
(a) Coat a new oil seal with ATF, and install it to the transaxle.

(b) Install the oil seal to the transaxle.



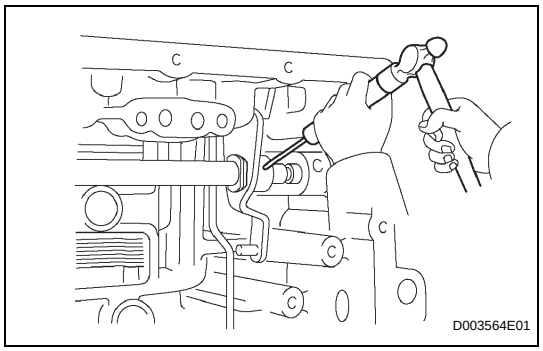
45. INSTALL PARKING LOCK ROD SUB-ASSEMBLY

(a) Install the parking lock rod to the manual valve lever.

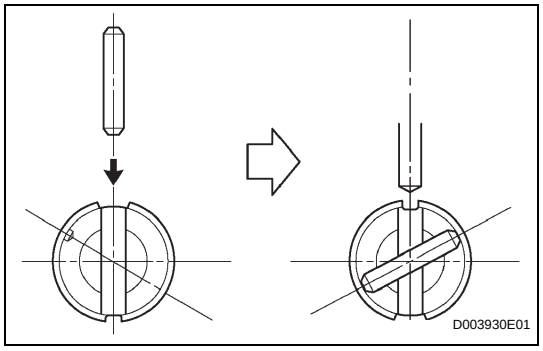


46. INSTALL MANUAL VALVE LEVER SUB-ASSEMBLY

(a) Install a new spacer and manual valve lever shaft to the transaxle.



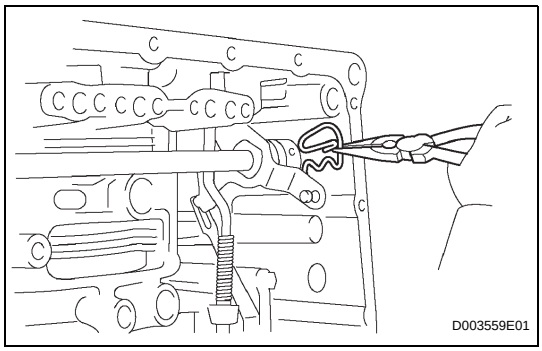
(b) Using a pin punch and hammer, tap in a new pin.



(c) Turn the spacer and lever shaft to align the small hole for locating the staking position in the spacer with the staking position mark on the lever shaft.

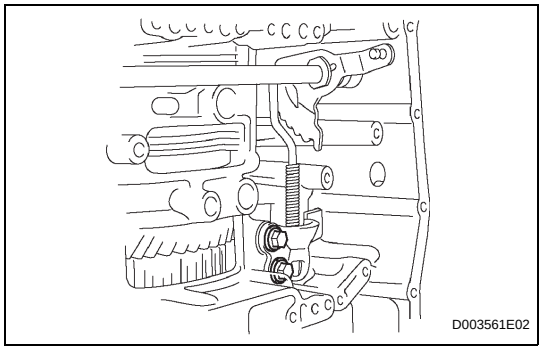
(d) Using a pin punch, stake the spacer through the small hole.

(e) Check that the spacer does not turn.



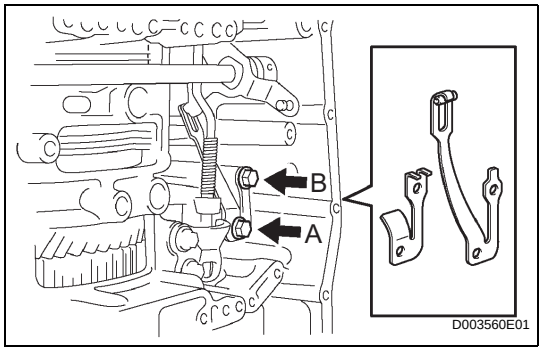
47. INSTALL MANUAL VALVE LEVER SHAFT RETAINER SPRING

(a) Using needle-nose pliers, install the retainer spring.



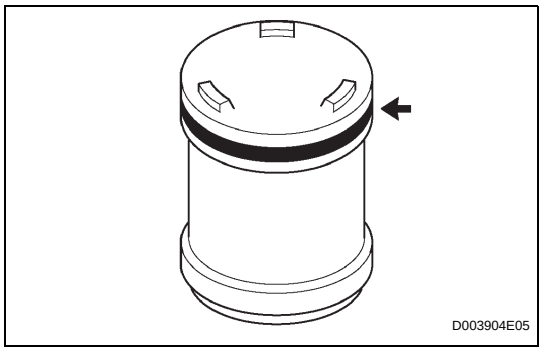
48. INSTALL PARKING LOCK PAWL BRACKET

(a) Install the parking lock pawl bracket with the 2 bolts.
Torque: 20 N*m (204 kgf*cm, 15 ft.*lbf)
Bolt length:
25 mm (0.984 in.)



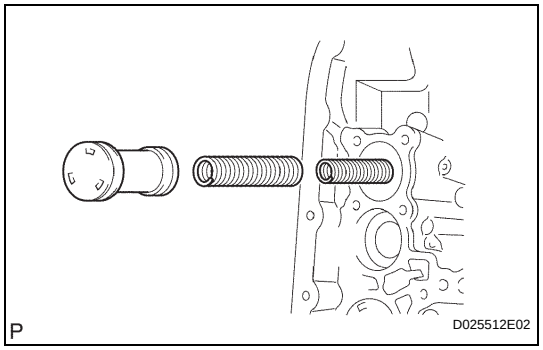
49. INSTALL MANUAL DETENT SPRING SUB-ASSEMBLY

(a) Install the manual detent spring with the 2 bolts.
NOTICE:
Make sure to install the manual detent spring and cover in this order.
Torque: 20 N*m (204 kgf*cm, 15 ft.*lbf) for bolt A
12 N*m (122 kgf*cm, 9 ft.*lbf) for bolt B
HINT:
Each bolt length is indicated below.
Bolt length:
27 mm (1.063 in.) for bolt A
16 mm (0.630 in.) for bolt B



50. INSTALL B-3 ACCUMULATOR PISTON

(a) Coat a new O-ring with ATF, and install it to the B-3 accumulator piston.

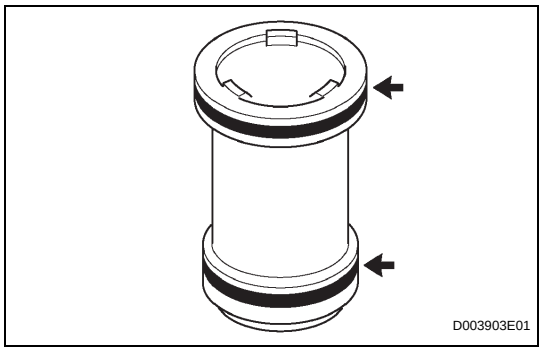


(b) Coat the accumulator B-3 piston and spring with ATF, and install them to the transaxle.

Standard accumulator spring

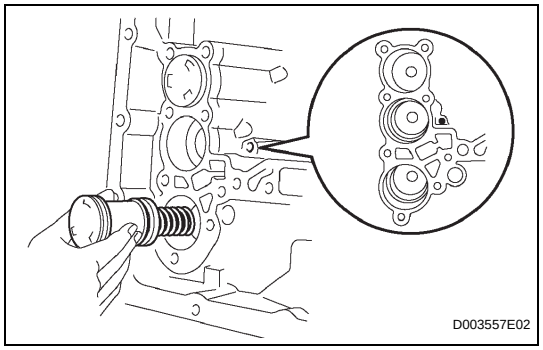
Spring	Free length Outer diameter	Color
B-3 Inner	60.24 mm (2.3716 in.) 15.9 mm (0.626)	Yellowish green
B-3 Outer	74.61 mm (2.9374 in.) 21.7 mm (0.854 in.)	Blue

AX



51. INSTALL C-1 ACCUMULATOR PISTON

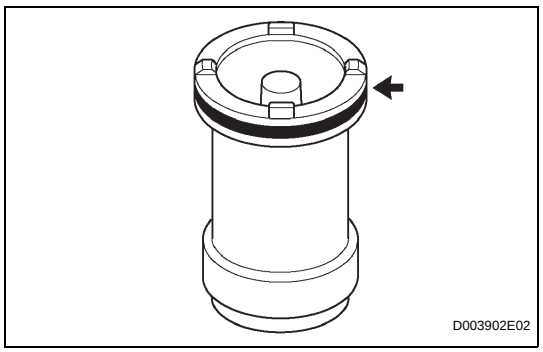
(a) Coat 2 new O-rings with ATF, and install them to the C-1 accumulator piston.



(b) Coat the accumulator C-1 piston with ATF, and install it to the transaxle.

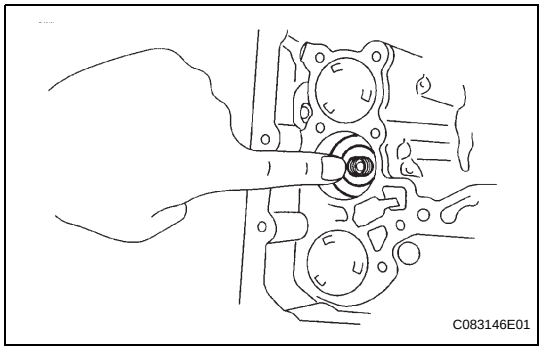
Standard accumulator spring

Spring	Free length Outer diameter	Color
C-1	81.53 mm (3.2098 in.) 18.5 mm (0.728 in.)	Pink

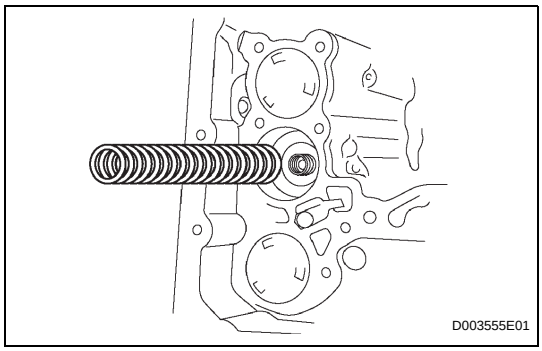


52. INSTALL C-3 ACCUMULATOR PISTON

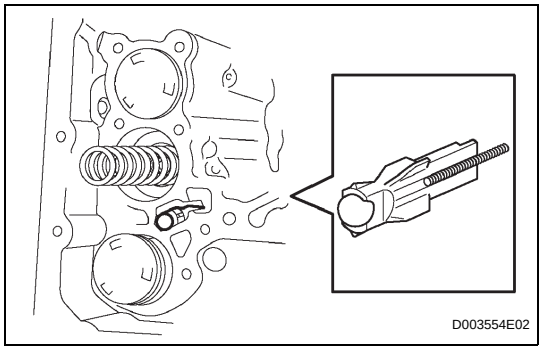
(a) Coat a new O-ring with ATF, and install it to the C-3 accumulator piston.



(b) Coat the C-3 accumulator piston with ATF, and install it to the transaxle.

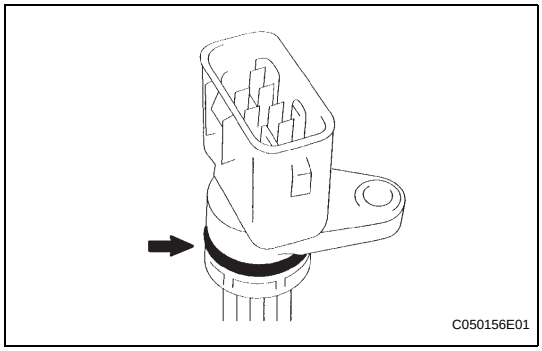


(c) Install the compression spring from the C-3 accumulator piston.



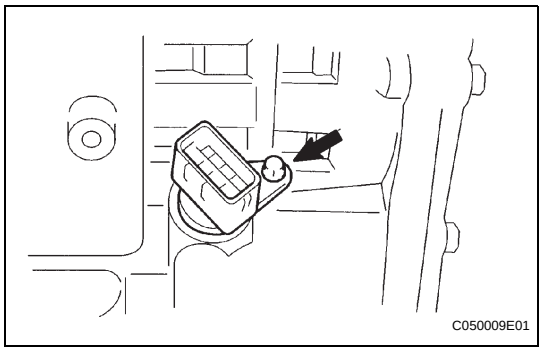
53. INSTALL CHECK BALL BODY

(a) Install the check ball body and spring.

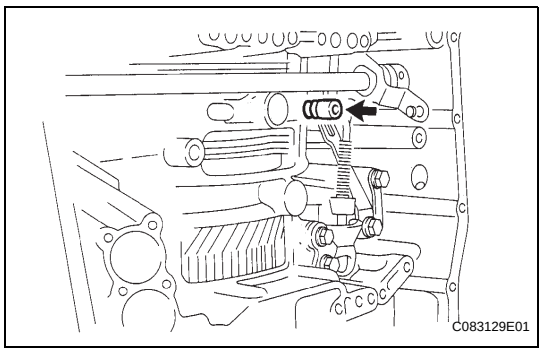


54. INSTALL TRANSMISSION WIRE

(a) Coat a new O-ring with ATF, and install it to the transaxle solenoid wire.

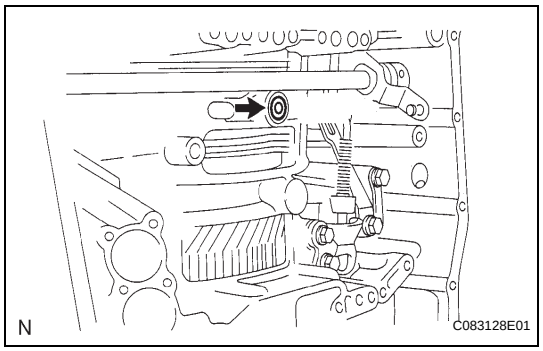


(b) Install the solenoid wire retaining bolt.
Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)



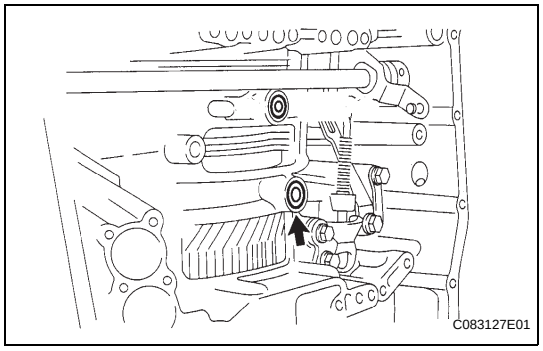
55. INSTALL BRAKE DRUM GASKET

(a) Coat a new brake drum gasket with ATF, and install it to the transaxle.



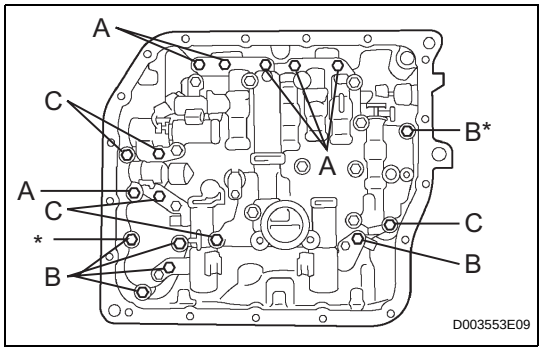
56. INSTALL TRANSAXLE CASE 2ND BRAKE GASKET

(a) Coat a new transaxle case 2nd brake gasket with ATF, and install it to the transaxle.



57. INSTALL NO. 1 GOVERNOR APPLY GASKET

(a) Coat a new governor apply gasket No. 1 with ATF, and install it to the transaxle.



58. INSTALL TRANSMISSION VALVE BODY ASSEMBLY

(a) Make sure that the manual valve lever position, install the valve body with the 17 bolts to the transaxle.

Torque: 11 N*m (112 kgf*cm, 8 ft.*lbf)

HINT:

Each bolt length is indicated below.

Bolt length:

25 mm (0.984 in.) for bolt A
41 mm (1.614 in.) for bolt B
45 mm (1.771 in.) for bolt C

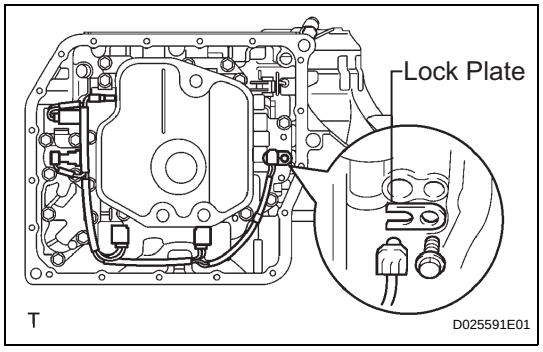
NOTICE:

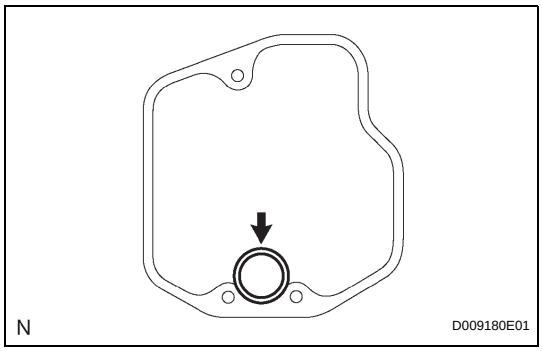
- **Push the valve body against the accumulator piston spring and the check ball body to install it.**
- **When installing the valve body to the transaxle case, do not hold the solenoids.**
- **Tighten the bolts marked by * in the illustration first temporarily because they are positioning bolts.**

(b) Connect the 5 solenoid connectors.

(c) Install the ATF temperature sensor, clamp and bolt.

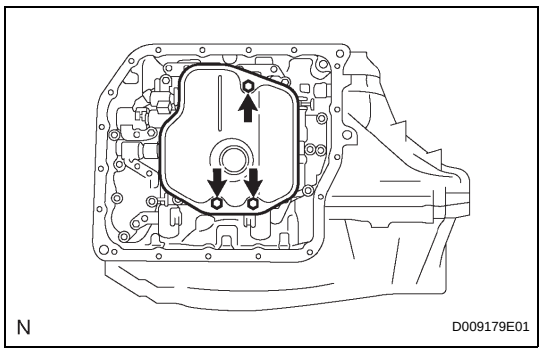
Torque: 6.6 N*m (67 kgf*cm, 58 in.*lbf)



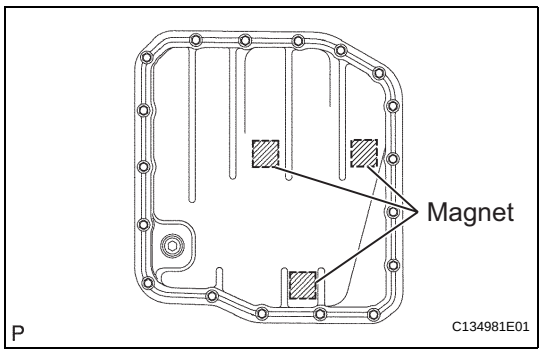


59. INSTALL VALVE BODY OIL STRAINER ASSEMBLY

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



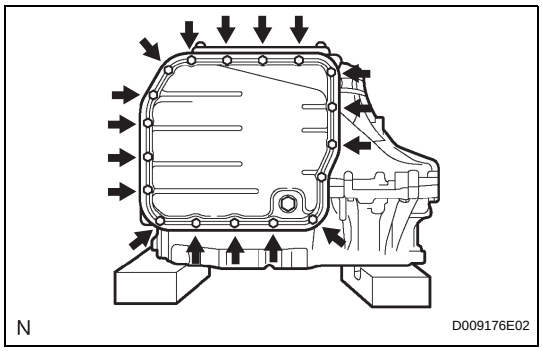
(b) Install the oil strainer and 3 bolts to the valve body.
Torque: 11 N*m (112 kgf*cm, 8 ft.*lbf)



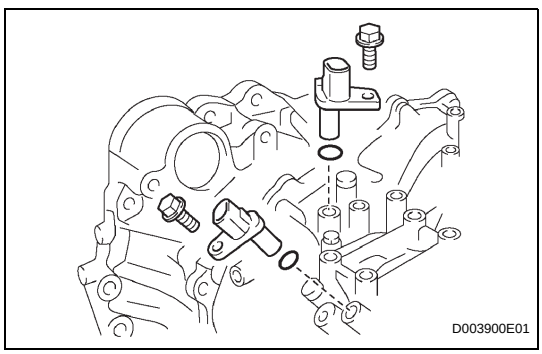
60. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY

(a) Install the 3 magnets in the oil pan.

(b) Install a new oil pan gasket to the oil pan.



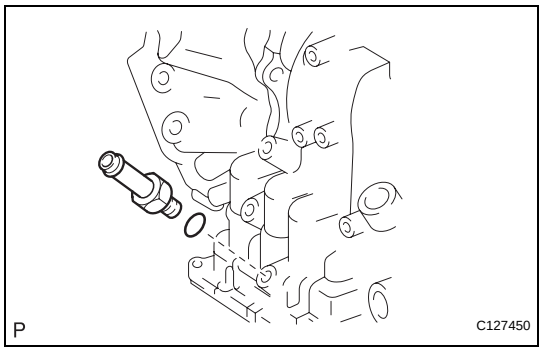
(c) Install the oil pan to the transaxle with the 18 bolts.
Torque: 7.6 N*m (77 kgf*cm, 67 in.*lbf)
NOTICE:
Because the bolts are seal bolts, apply seal packing to new bolts and tighten them within 10 minutes after application.



61. INSTALL SPEED SENSOR

(a) Coat 2 new O-rings with ATF, and install them to the 2 sensors.

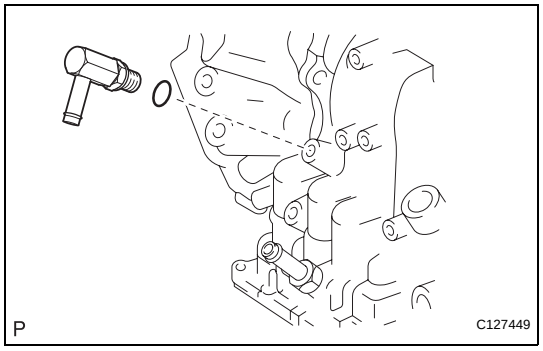
(b) Install the 2 sensors with the 2 bolts to the transaxle.
Torque: 11 N*m (112 kgf*cm, 8 ft.*lbf)



62. INSTALL OIL COOLER INLET TUBE UNION

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

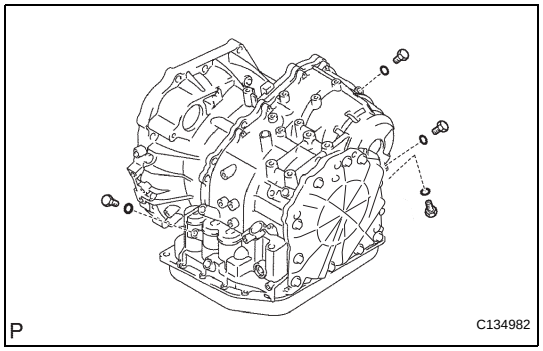
(b) Install the union to the transaxle.
Torque: 27 N*m (276 kgf*cm, 20 ft.*lbf)



63. INSTALL OIL COOLER OUTLET TUBE UNION

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

(b) Install the union to the transaxle case.
Torque: 25 N*m (255 kgf*cm, 18 ft.*lbf)



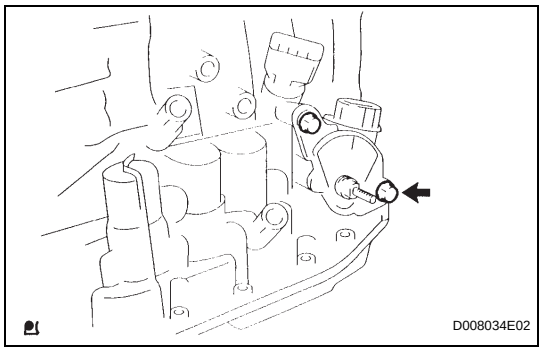
64. INSTALL NO. 1 TRANSAXLE CASE PLUG

(a) Coat 4 new O-rings with ATF, and install them to the 4 plugs.

(b) Install the 4 plugs to the transaxle.
Torque: 7.4 N*m (75 kgf*cm, 65 in.*lbf)

65. INSTALL BREATHER PLUG HOSE

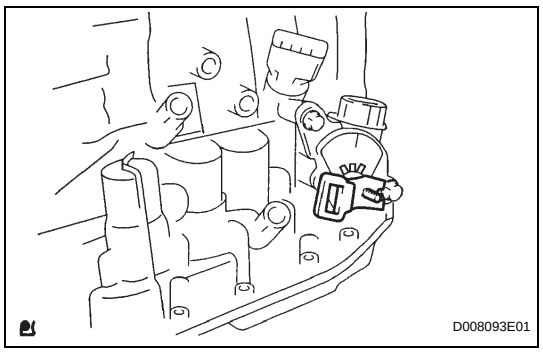
(a) Install the breather plug hose to the breather plug.



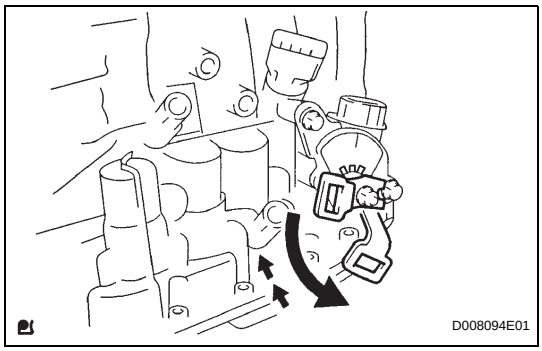
66. INSTALL PARK/NEUTRAL POSITION SWITCH ASSEMBLY

(a) Install the park/neutral position switch onto the manual valve lever shaft and temporarily install the 2 adjusting bolts.

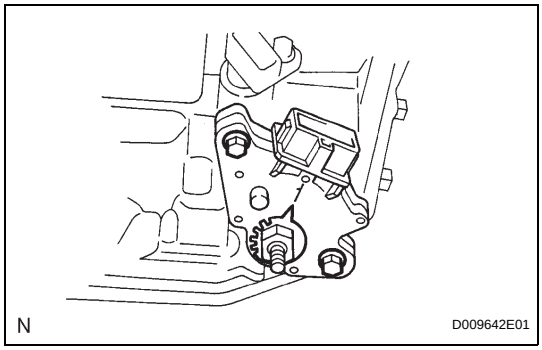
(b) Install a new lock plate and the nut.
Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)



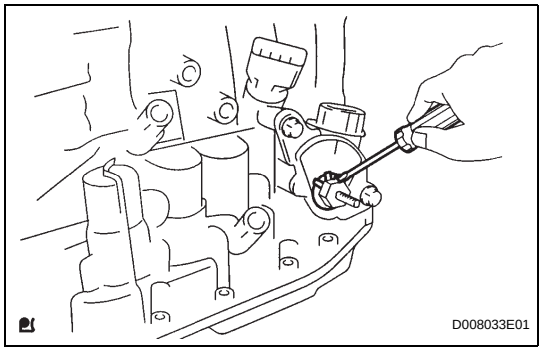
(c) Temporarily install the control shaft lever.



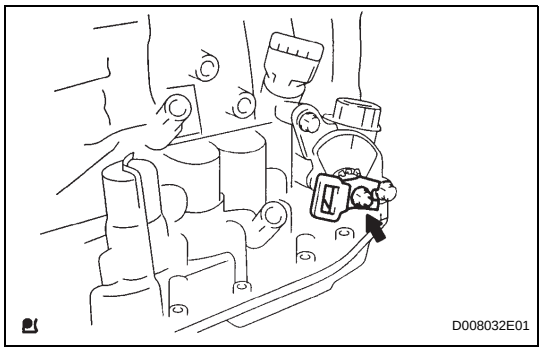
(d) Turn the lever counterclockwise until it stops, and then turn it clockwise 2 notches.
(e) Remove the control shaft lever.



(f) Align the groove with neutral basic line.
(g) Tighten the 2 bolts.
Torque: 6.9 N*m (70 kgf*cm, 61 in.*lbf)



(h) Using a screwdriver, stake the nut with the lock plate.



(i) Install the control shaft lever, washer and nut.
Torque: 13 N*m (133 kgf*cm, 10 ft.*lbf)

67. INSTALL SPEEDOMETER DRIVEN HOLE COVER SUB-ASSEMBLY

(a) Coat a new O-ring with ATF and install it to the hole cover.
(b) Install the hole cover to the transaxle with the bolt.