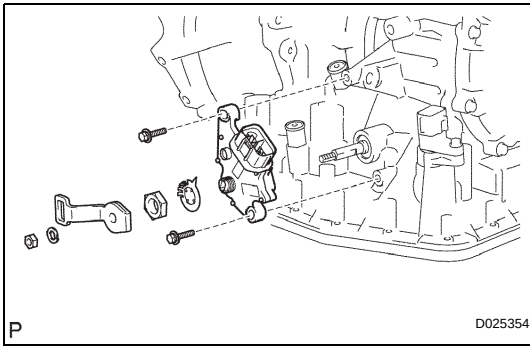
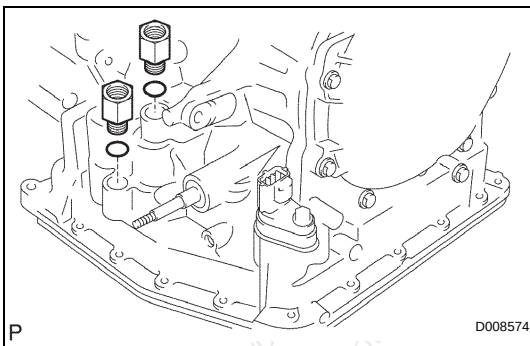


DISASSEMBLY

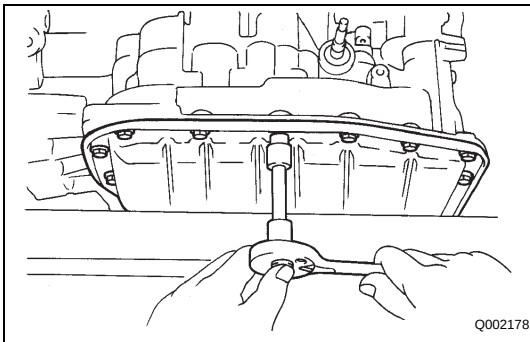
1. **REMOVE BREATHER PLUG HOSE**
2. **REMOVE BREATHER PLUG NO.1 (ATM)**
 - (a) Remove the breather plug No. 1 and O-ring from the transaxle case.
3. **REMOVE TRANSAXLE CASE NO.1 PLUG**
 - (a) Remove the transaxle case No. 1 plug and O-ring from the transaxle case.
4. **REMOVE TRANSMISSION CONTROL SHAFT LEVER**
 - (a) Remove the nut, washer and transmission control shaft lever.



5. **REMOVE PARK/NEUTRAL POSITION SWITCH ASSEMBLY**
 - (a) Pry off the lock washer and remove the nut.
 - (b) Remove the 2 bolts and pull out the park / neutral position switch assembly.



6. **REMOVE OIL COOLER TUBE UNION**
 - (a) Remove the 2 oil cooler tube unions.
 - (b) Remove the 2 O-rings from the 2 oil cooler tube unions.

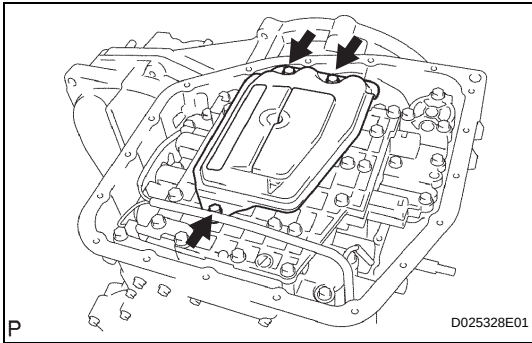


7. **REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY**
 - (a) Remove the 18 bolts.
 - (b) Remove the automatic transaxle oil pan sub-assembly by lifting the transaxle case.

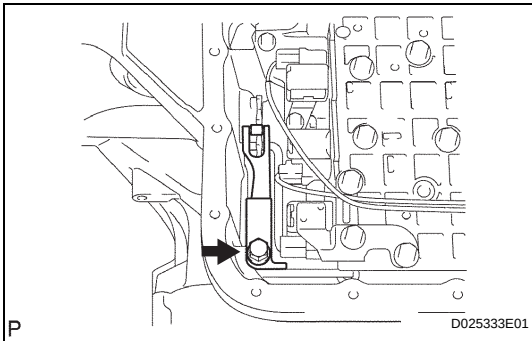
NOTICE:

Do not turn the transaxle over as it will contaminate the valve body with the foreign materials from the bottom of the pan.

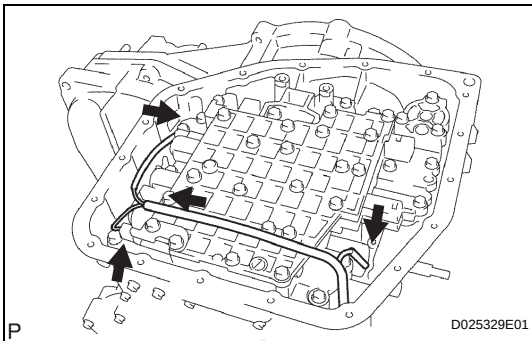
- (c) Remove the automatic transaxle oil pan gasket.
 - (d) Place the transaxle on wooden blocks to prevent damage to the pipes.
8. **INSPECT AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY**
9. **FIX AUTOMATIC TRANSAXLE ASSEMBLY**
 - (a) Place automatic transaxle assembly on wooden blocks.

**10. REMOVE VALVE BODY OIL STRAINER ASSEMBLY**

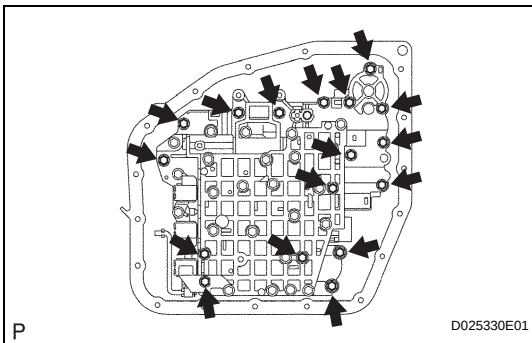
- (a) Remove the 3 bolts and valve body oil strainer assembly and oil strainer gasket.

**11. REMOVE MANUAL DETENT SPRING SUB-ASSEMBLY**

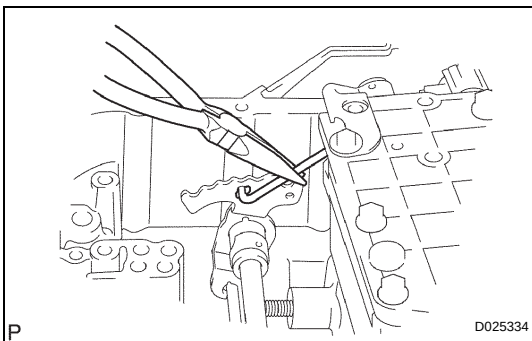
- (a) Remove the bolt, manual detent spring sub-assembly and manual detent spring cover.

**12. REMOVE TRANSMISSION VALVE BODY ASSEMBLY**

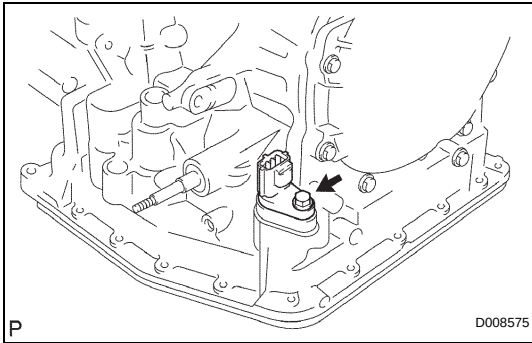
- (a) Disconnect the solenoid connectors.



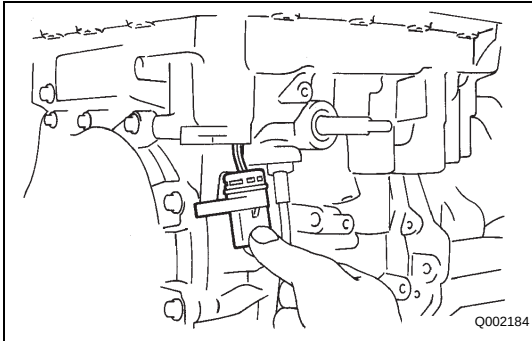
- (b) Remove the 17 bolts.



- (c) Disconnect the manual valve connecting rod from the manual valve lever sub-assembly, then remove the transmission valve body assembly.

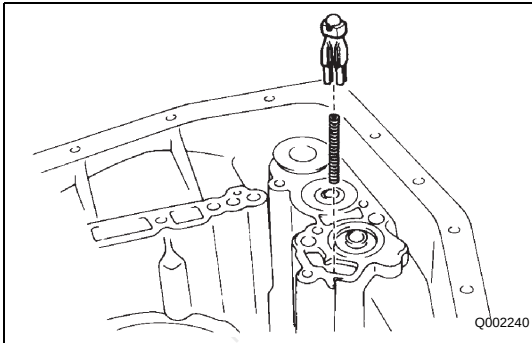
**13. REMOVE TRANSMISSION WIRE**

- (a) Remove the bolt.

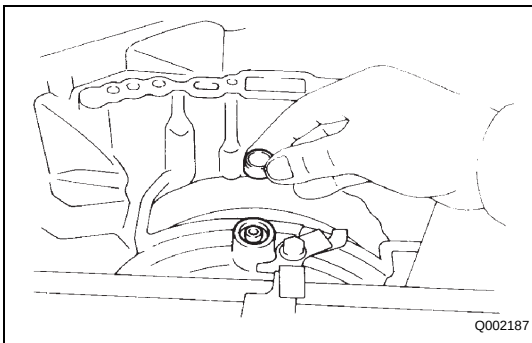


- (b) Remove the transmission wire from the transaxle case.

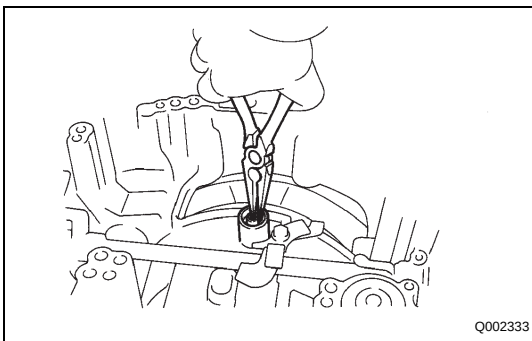
- (c) Remove the O-ring from the transmission wire.

**14. REMOVE CHECK BALL BODY**

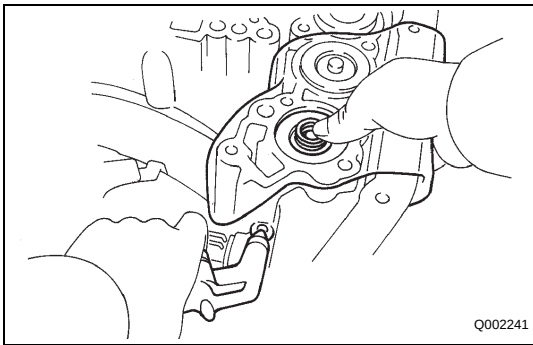
- (a) Remove the check ball body and compression spring from the transaxle case.

**15. REMOVE GOVERNOR APPLY GASKET NO.1**

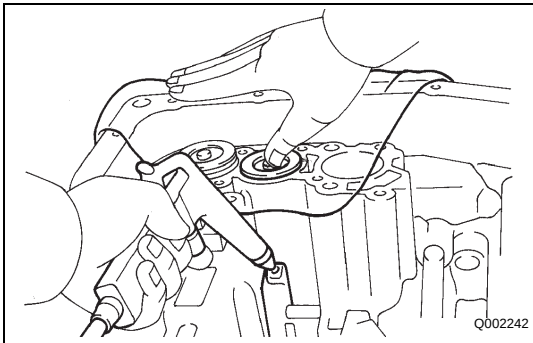
- (a) Remove the governor apply gasket No. 1 from the transaxle case.

**16. REMOVE BRAKE DRUM GASKET**

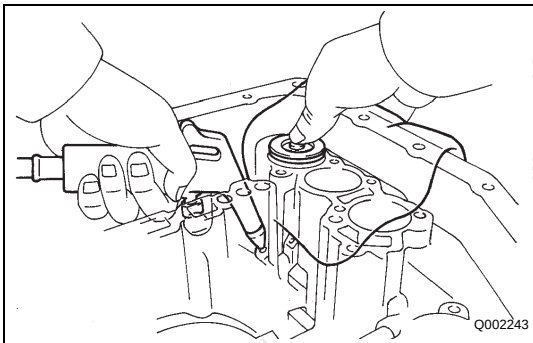
- (a) Using needle-nose pliers, pull out the brake drum gasket from the transaxle case.

**17. REMOVE B-2 ACCUMULATOR PISTON**

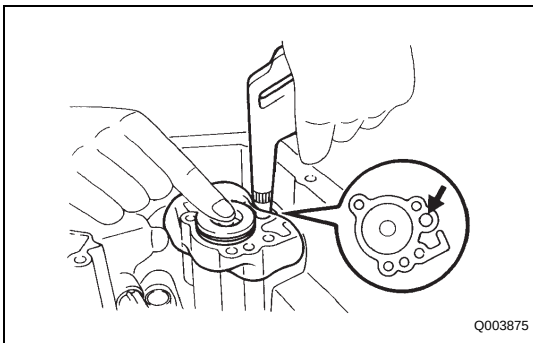
- (a) Using low-pressure compressed air (98 kPa, 1 kgf/cm², 14 psi), pop out the B-2 accumulator piston into a rag and remove the compression spring.
- (b) Remove the 2 O-rings from the B-2 accumulator piston.

**18. REMOVE C-2 ACCUMULATOR PISTON**

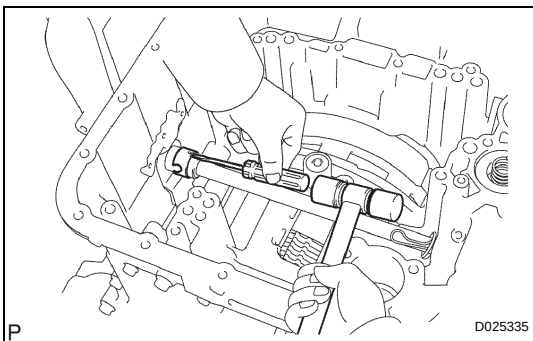
- (a) Using low-pressure compressed air (98 kPa, 1 kgf/cm², 14 psi), pop out the C-2 accumulator piston into a rag and remove the compression spring.
- (b) Remove the 2 O-rings from the C-2 accumulator piston.

**19. REMOVE C-1 ACCUMULATOR PISTON**

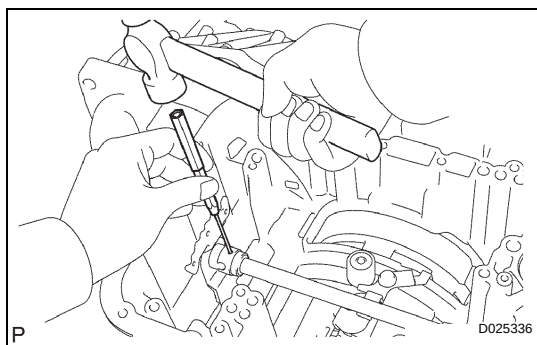
- (a) Using low-pressure compressed air (98 kPa, 1 kgf/cm², 14 psi), pop out the C-1 accumulator piston into a rag and remove the compression spring.
- (b) Remove the 2 O-rings from the C-1 accumulator piston.

**20. REMOVE C-3 ACCUMULATOR PISTON**

- (a) Using low-pressure compressed air (98 kPa, 1 kgf/cm², 14 psi), pop out the C-3 accumulator piston into a rag and remove the 2 compression springs.
- (b) Remove the 2 O-rings from the C-3 accumulator piston.

**21. REMOVE MANUAL VALVE LEVER SHAFT**

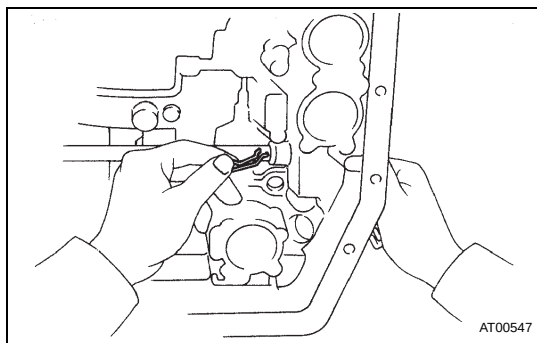
- (a) Using a screwdriver and hammer, unstick the spacer and remove it.



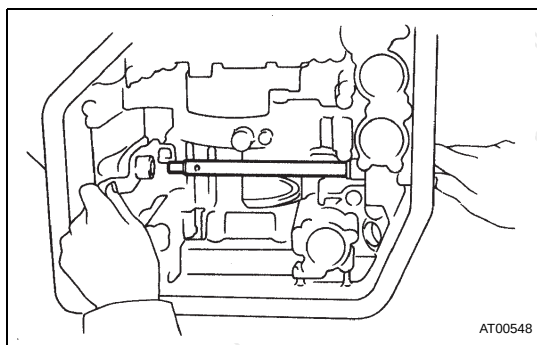
- (b) Using a pin punch and hammer, drive out the slotted spring pin.

HINT:

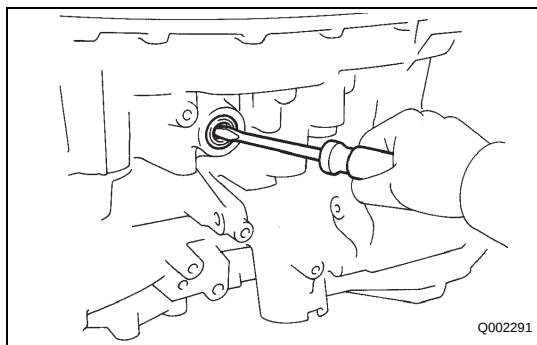
Drive out the spring pin slowly so that it will not fall into the transaxle case.



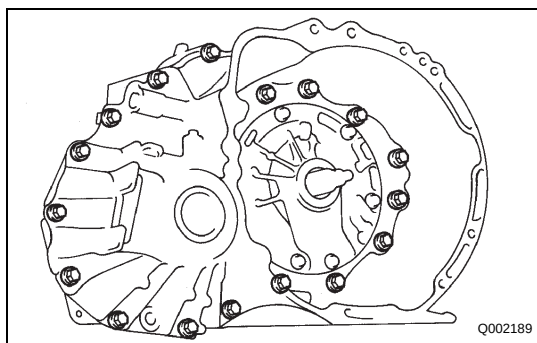
- (c) Remove the retainer spring.
(d) Remove the parking lock rod sub-assembly from the manual valve lever sub-assembly.



- (e) Slide out the manual valve lever shaft and remove the manual valve lever sub-assembly and washer plate.

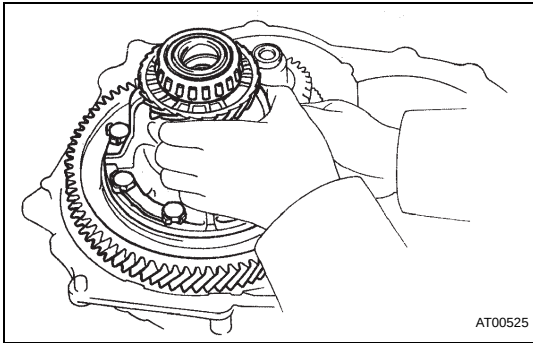


- (f) Using a screwdriver, remove the manual valve lever shaft oil seal.



22. REMOVE TRANSAXLE HOUSING

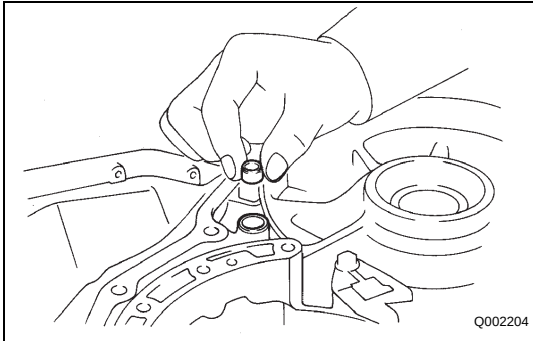
- (a) Remove the 17 bolts and transaxle housing.

**23. REMOVE FRONT DIFFERENTIAL ASSEMBLY**

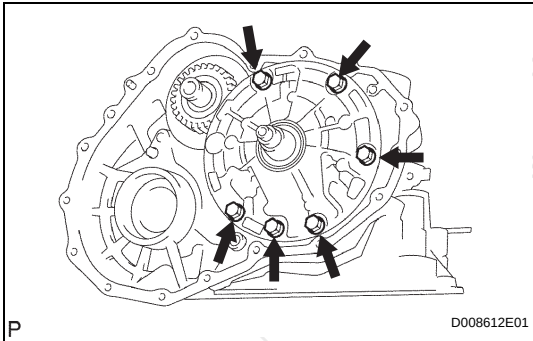
- (a) Remove the front differential assembly from the transaxle case.

24. REMOVE TRANSMISSION CASE PLATE NO.1

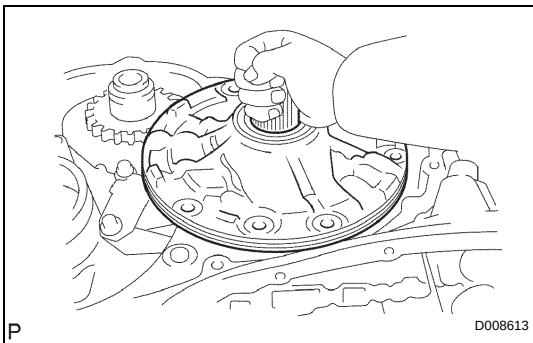
- (a) Remove the bolt and transmission case plate No. 1 from the transaxle case.

**25. REMOVE GOVERNOR APPLY GASKET NO.2**

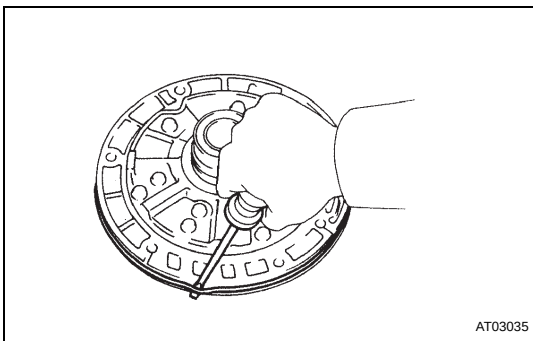
- (a) Remove the governor apply gasket No. 2 from the transaxle case.

**26. REMOVE OIL PUMP ASSEMBLY**

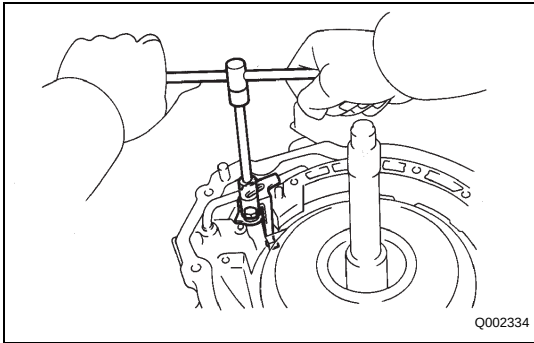
- (a) Remove the 6 bolts and holding the oil pump assembly from the transaxle case.



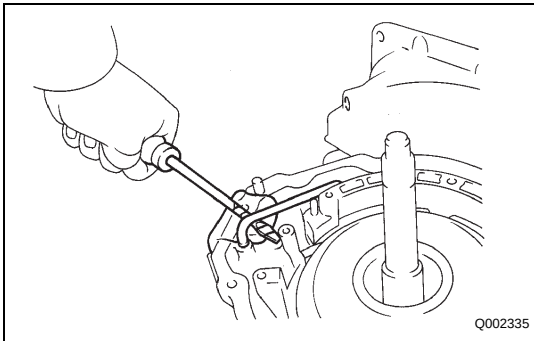
- (b) Pull out the oil pump assembly from the transaxle case.



- (c) Using a screwdriver, remove the O-ring from the oil pump assembly.

**27. REMOVE TRANSAXLE APPLY TUBE CLAMP NO.3**

- (a) Remove the bolt and transaxle apply tube clamp No. 3 from the transaxle case.

**28. REMOVE GOVERNOR PRESSURE TUBE**

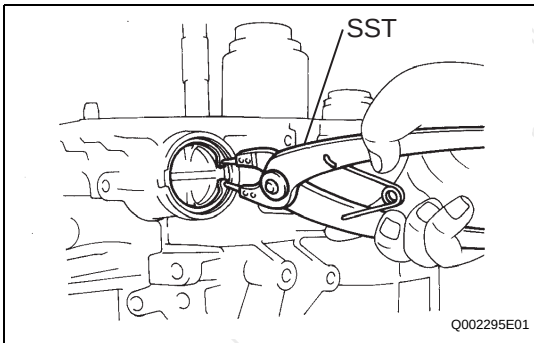
- (a) Using a screwdriver, remove the governor pressure tube from the transaxle case.

HINT:

Tape the screwdriver tip before use.

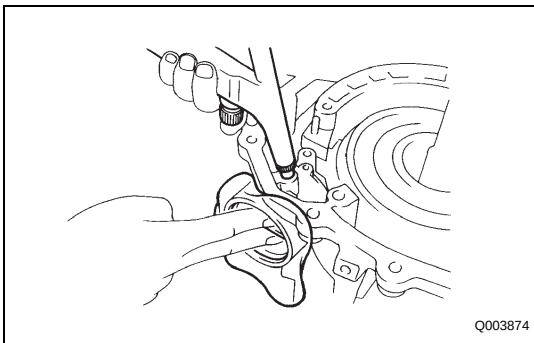
NOTICE:

Be careful not to bend or damage the tube.

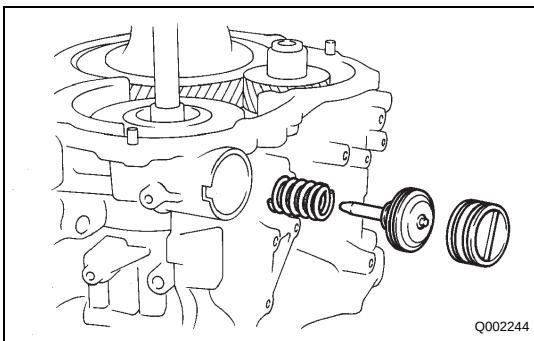
**29. INSPECT PISTON STROKE OF 2ND COAST BRAKE
(See page AX-167)****30. REMOVE 2ND COAST BRAKE PISTON**

- (a) Using SST, remove the snap ring.

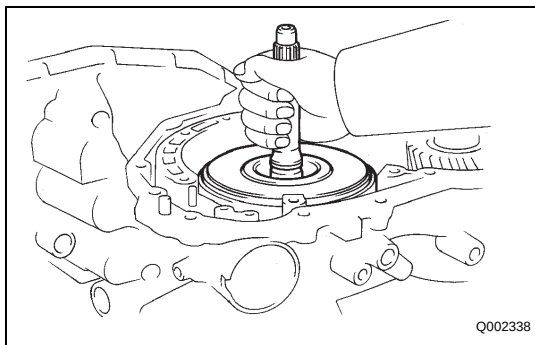
SST 09350-32014 (09351-32050)



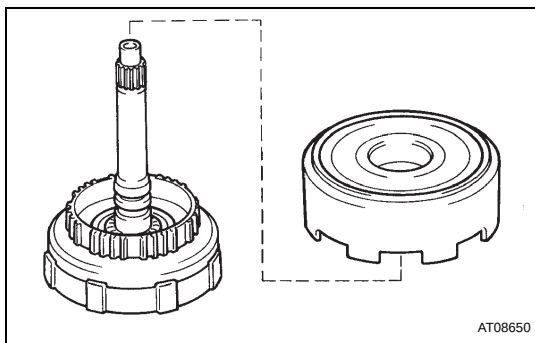
- (b) Using low-pressure compressed air (98 kPa, 1 kgf/cm², 14 psi), pop out the cover into a rag.



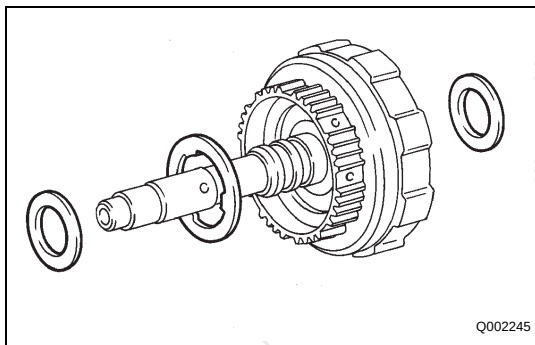
- (c) Remove the 2nd coast brake cover, 2nd coast brake piston and compression spring.
(d) Remove the 2 O-rings from the 2nd coast brake cover.

**31. REMOVE INPUT SHAFT ASSEMBLY**

- (a) Remove the direct clutch with the forward clutch from the case.

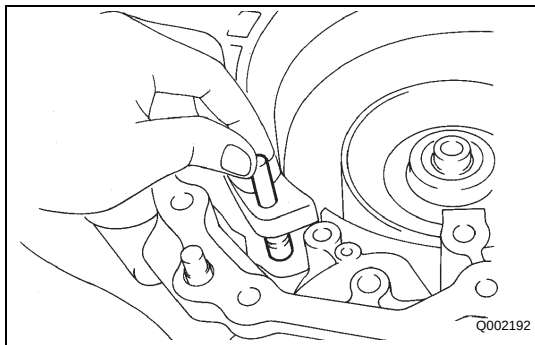


- (b) Remove the direct clutch from the forward clutch.

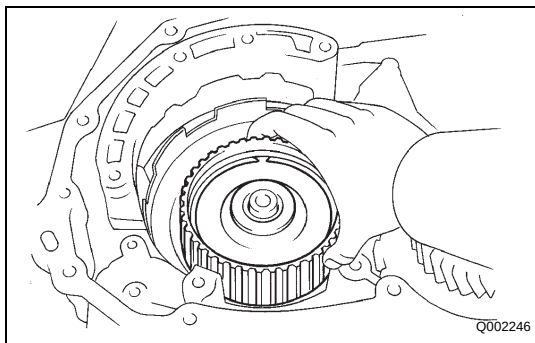


- (c) Remove the clutch drum thrust washer and 2 thrust needle roller bearing from the forward clutch.

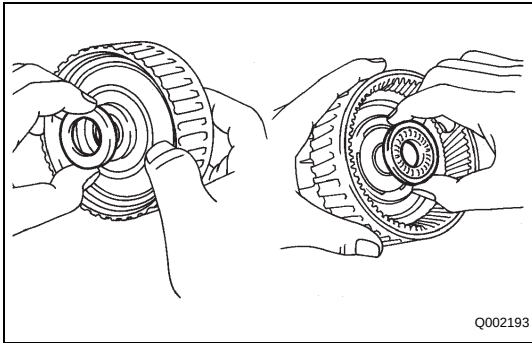
AX

**32. REMOVE 2ND COAST BRAKE BAND ASSEMBLY**

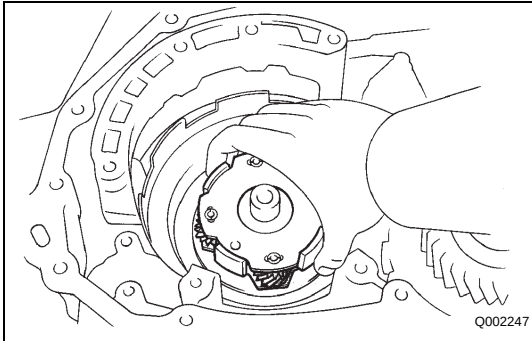
- (a) Pull out the pin.
(b) Remove the 2nd coast brake band assembly from the transaxle case.

**33. INSPECT 2ND COAST BRAKE BAND ASSEMBLY
(See page [AX-168](#))****34. REMOVE FRONT PLANETARY RING GEAR**

- (a) Remove the front planetary ring gear from the transaxle case.

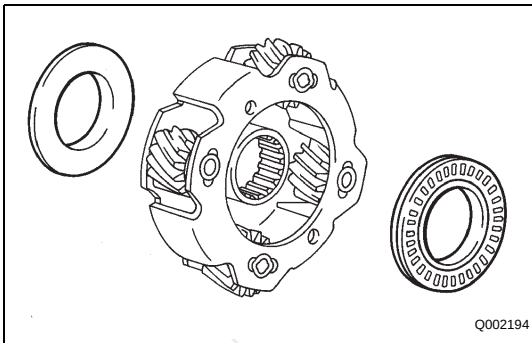


- (b) Remove the thrust needle roller bearing and thrust bearing race from the front planetary ring gear.



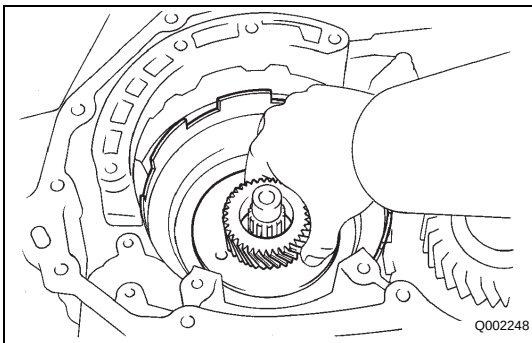
35. REMOVE FRONT PLANETARY GEAR ASSEMBLY

- (a) Remove the front planetary gear assembly with the thrust needle roller bearing and thrust bearing race from the transaxle case.



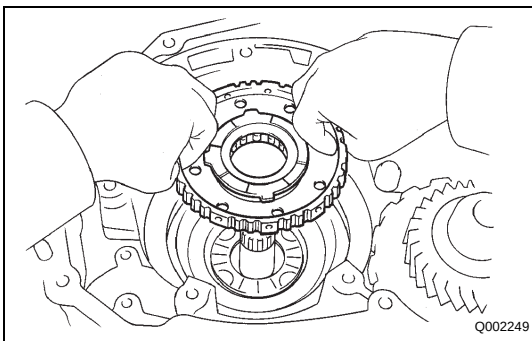
- (b) Remove the thrust needle roller bearing and thrust bearing race from the front planetary gear assembly.

36. INSPECT FRONT PLANETARY GEAR ASSEMBLY
(See page [AX-168](#))



37. REMOVE SUN GEAR INPUT DRUM ASSEMBLY

- (a) Remove the planetary sun gear sub-assembly with the sun gear input drum and planetary thrust washer No. 3 from the transaxle case.

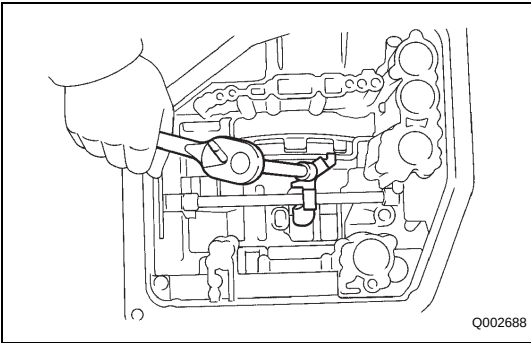


38. REMOVE 1 WAY CLUTCH ASSEMBLY

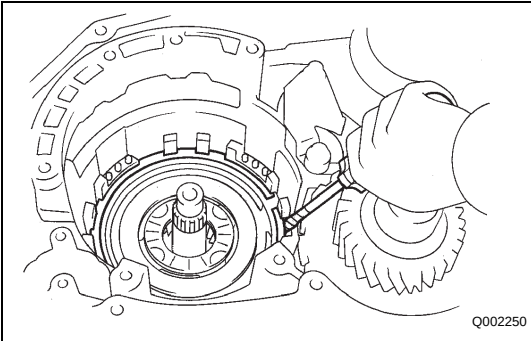
- (a) Remove the 1 way clutch assembly from the transaxle case.

39. INSPECT 1 WAY CLUTCH ASSEMBLY (See page [AX-168](#))

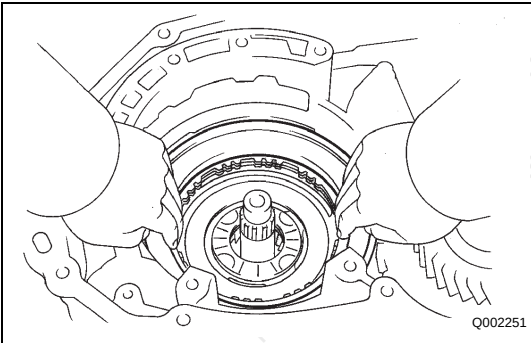
40. INSPECT 2ND BRAKE PISTON (See page [AX-168](#))



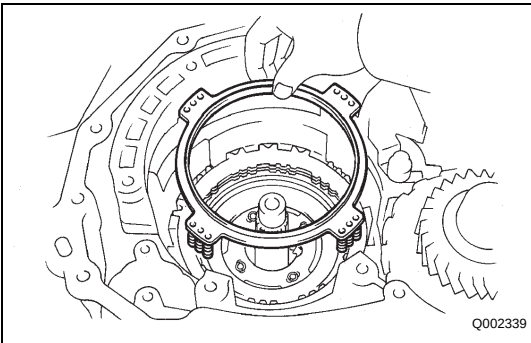
- 41. REMOVE 2ND COAST BRAKE BAND GUIDE PLATE**
- (a) Remove the bolt and brake band guide plate retainer and 2nd coast brake band guide plate from the transaxle case.



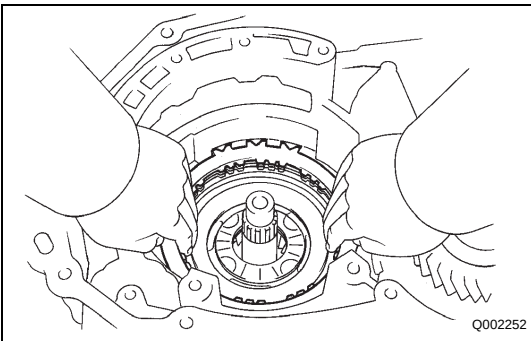
- 42. REMOVE SECOND BRAKE PISTON ASSEMBLY**
- (a) Using a screwdriver, remove the snap ring from the transaxle case.
- HINT:
Tape the screwdriver tip before use.



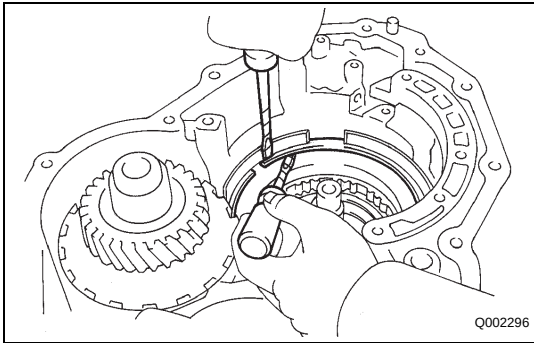
- (b) Remove the 2nd brake piston assembly from the transaxle case.
- HINT:
If the brake drum is difficult to remove, lightly tap it with a wooden block.



- 43. REMOVE 2ND BRAKE PISTON RETURN SPRING SUB-ASSEMBLY**
- (a) Remove the 2nd brake piston return spring sub-assembly from the transaxle case.



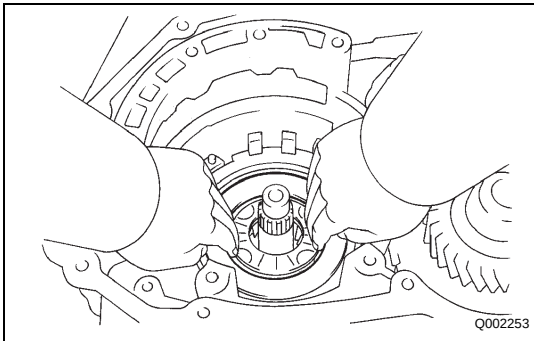
- 44. REMOVE 2ND BRAKE CLUTCH DISC**
- (a) Remove the 3 plates, 3 2nd brake clutch discs and flange from the transaxle case.
- 45. INSPECT 2ND BRAKE CLUTCH DISC (See page [AX-168](#))**

**46. REMOVE REAR PLANETARY GEAR ASSEMBLY**

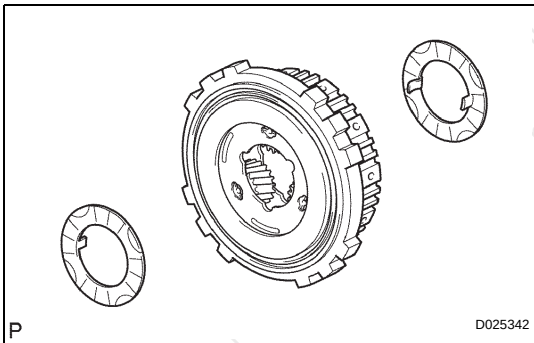
- (a) Using 2 screwdrivers, remove the snap ring from the transaxle case.

HINT:

Tape the screwdriver tip before use.

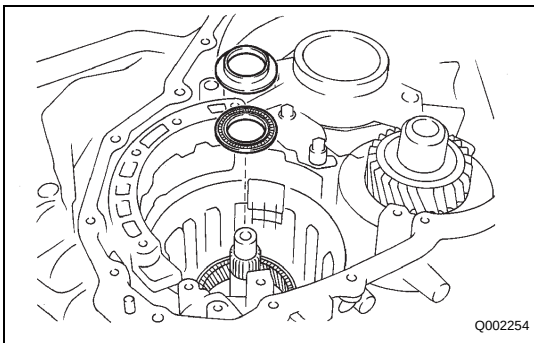


- (b) Remove the 1 way clutch No. 2 assembly and rear planetary gear assembly with the 2 planetary carrier thrust washer No. 2s from the transaxle case.

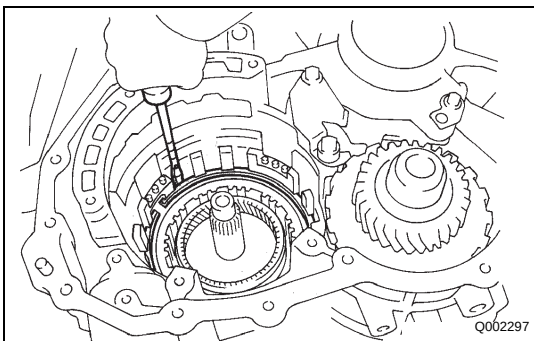


- (c) Remove the 2 planetary carrier thrust washer No. 2s from the rear planetary gear assembly.

- (d) Remove the 1 way clutch No. 2 assembly from the rear planetary gear assembly.



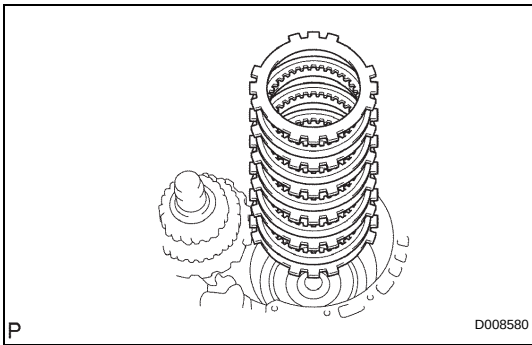
- (e) Remove the thrust needle roller bearing and thrust bearing race from the transaxle case.

47. INSPECT REAR PLANETARY GEAR ASSEMBLY (See page [AX-169](#))**48. INSPECT PACK CLEARANCE OF FIRST AND REVERSE BRAKE (See page [AX-169](#))****49. REMOVE 1ST AND REVERSE BRAKE CLUTCH DISC**

- (a) Using a screwdriver, remove the snap ring from the transaxle case.

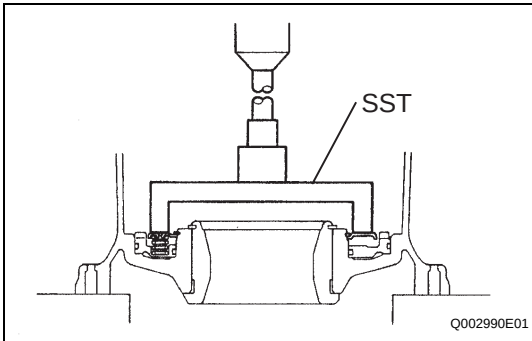
HINT:

Tape the screwdriver tip before use.



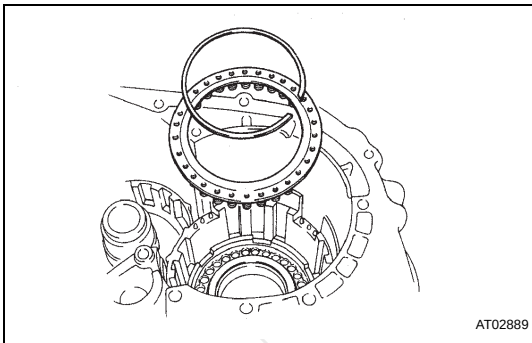
- (b) Remove the flange, 6 plates and 6 1st & reverse brake clutch discs from the transaxle case.

50. INSPECT 1ST AND REVERSE BRAKE CLUTCH DISC
(See page [AX-169](#))



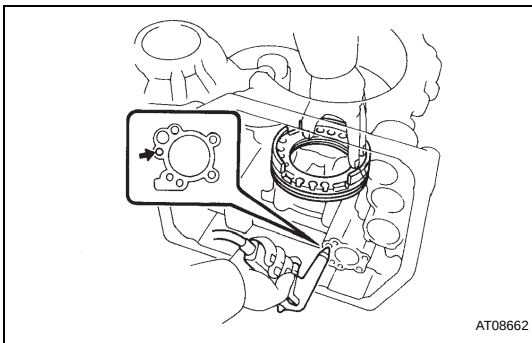
51. REMOVE 1ST AND REVERSE BRAKE RETURN SPRING SUB-ASSEMBLY

- (a) Using SST and a press, in the return spring until the snap ring is free from the return spring.
SST 09350-32014 (09351-32040)



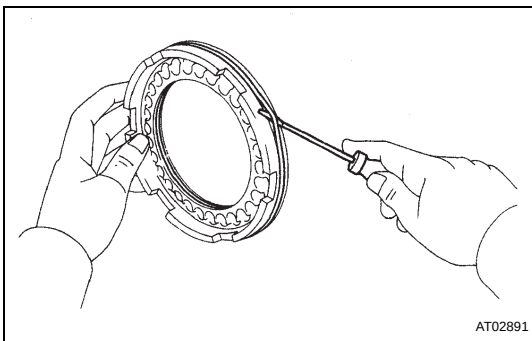
- (b) Using snap ring pliers, remove the snap ring.
(c) Remove the 1st & reverse brake return spring sub-assembly from the transaxle case.

AX

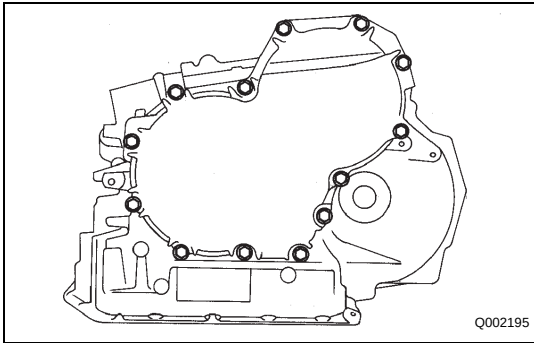


52. REMOVE 1ST AND REVERSE BRAKE PISTON

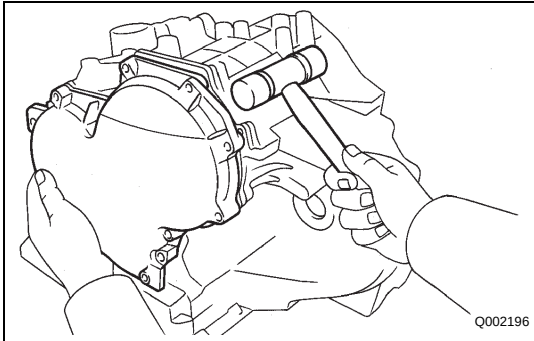
- (a) Apply compressed air into the oil passage of the case to remove the 1st & reverse brake piston.
HINT:
Hold the 1st and reverse piston so it is not slant and blow with the gun slightly away from the oil hole.
- (b) If the 1st & reverse piston does not pop out with compressed air, use needle-nose pliers to remove it.



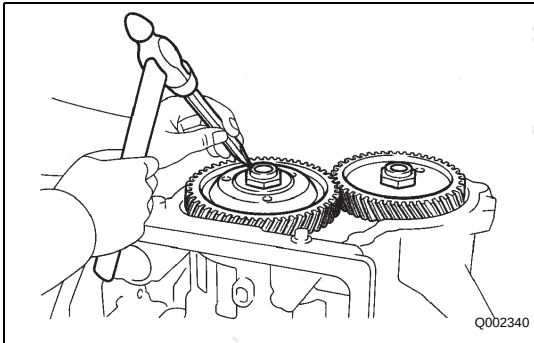
- (c) Using a screwdriver, remove the 2 O-rings from the 1st & reverse brake piston.

**53. REMOVE TRANSMISSION CASE COVER REAR**

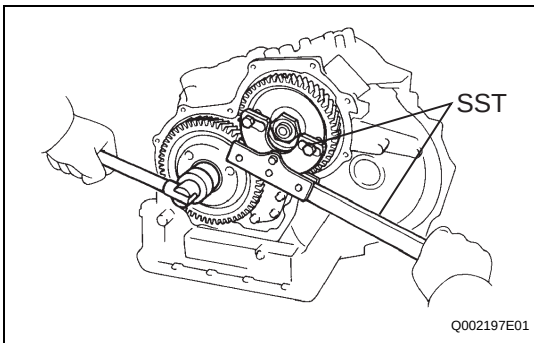
(a) Remove the 13 bolts from the transaxle case.



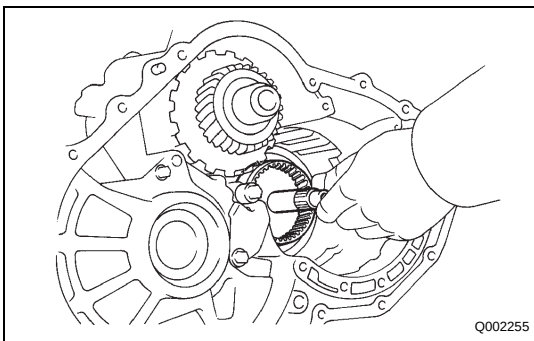
(b) Tap off the circumference of the transmission case cover rear with a plastic hammer to remove the rear case from the transaxle case, and remove the transmission case cover rear.

**54. REMOVE INTERMEDIATE SHAFT SUB-ASSEMBLY**

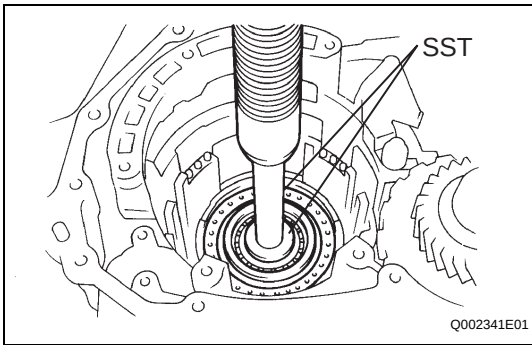
(a) Using a chisel and hammer, unstick the counter drive gear nut.



(b) Using SST, remove the counter drive gear nut.
SST 09330-00021, 09350-32014 (09351-32032)



(c) Remove the intermediate shaft sub-assembly from the transaxle case.

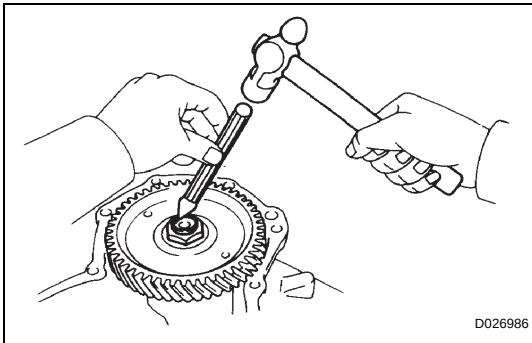
**55. REMOVE COUNTER DRIVE GEAR**

- (a) Using SST and a press, remove the counter drive gear from the transaxle case.

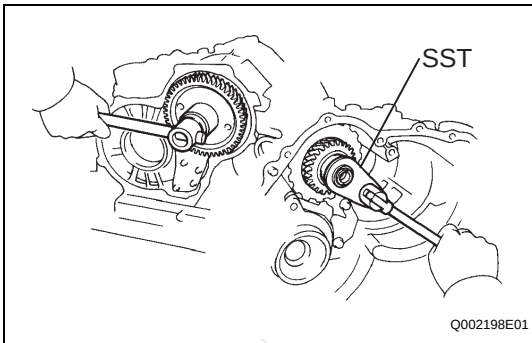
SST 09950-60010 (09951-00380), 09950-70010 (09951-07100)

56. REMOVE COUNTER DRIVE GEAR BEARING

- (a) Remove the snap ring from the counter drive gear bearing.
 (b) Remove the counter drive gear bearing from the counter drive gear.

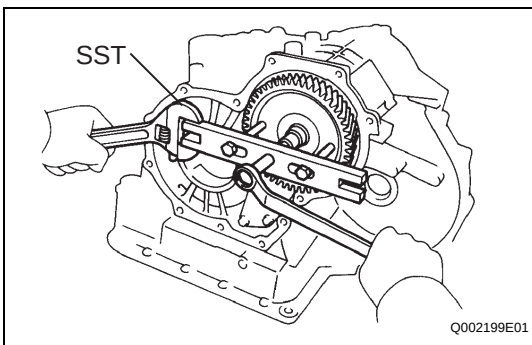
**57. REMOVE COUNTER DRIVEN GEAR**

- (a) Using a chisel and hammer, unstake the counter driven gear nut.



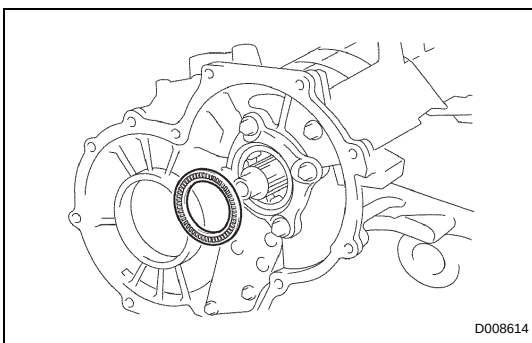
- (b) Using SST to hold the counter shaft assembly, remove the counter driven gear nut on the counter driven gear side.

SST 09350-32014 (09351-32170)

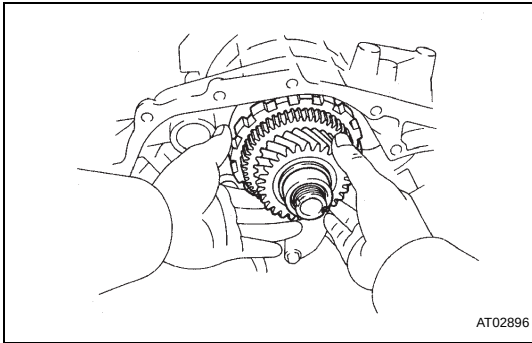


- (c) Using SST, remove the counter driven gear.

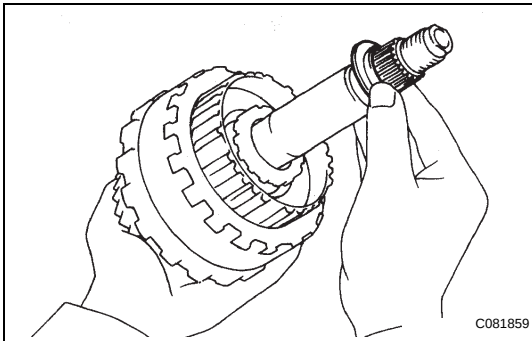
SST 09350-32014 (09351-32170), 09330-00021 (09351-32032)



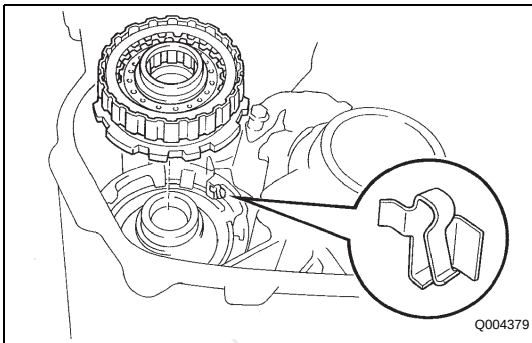
- (d) Remove the thrust needle roller bearing from the transaxle case.

**58. REMOVE COUNTER SHAFT ASSEMBLY**

- (a) Pull out the counter shaft assembly from the transaxle case.



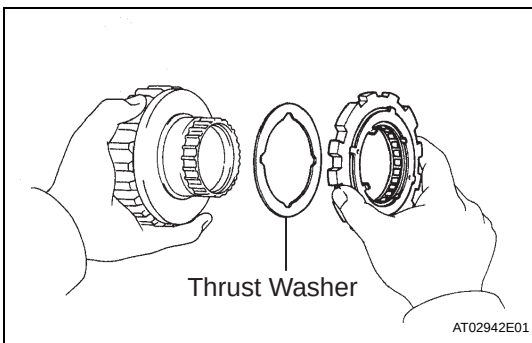
- (b) Remove the thrust needle roller bearing from the counter shaft assembly.

59. INSPECT PISTON STROKE OF UNDERDRIVE CLUTCH (See page AX-169)**60. REMOVE UNDERDRIVE CLUTCH ASSEMBLY**

- (a) Remove the underdrive clutch assembly from the transaxle case.

61. REMOVE UNDERDRIVE 1 WAY CLUTCH RETAINER

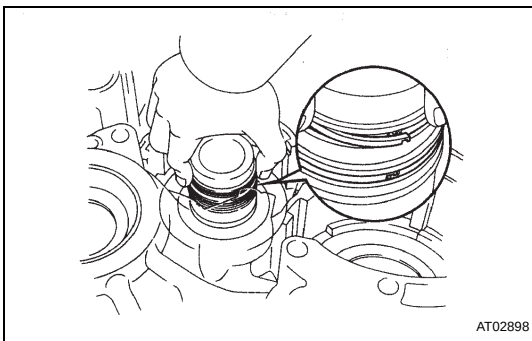
- (a) Remove the underdrive 1 way clutch retainer from the transaxle case.

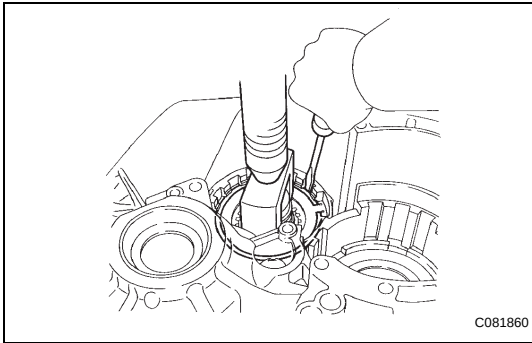
62. INSPECT UNDERDRIVE 1 WAY CLUTCH ASSEMBLY (See page AX-170)**63. REMOVE UNDERDRIVE 1 WAY CLUTCH ASSEMBLY**

- (a) Remove the underdrive 1 way clutch assembly and underdrive clutch drum thrust washer from the underdrive clutch drum sub-assembly.

64. REMOVE OVERDRIVE CLUTCH DRUM OIL SEAL RING

- (a) Remove the 2 overdrive clutch drum oil seal rings from the transaxle case.

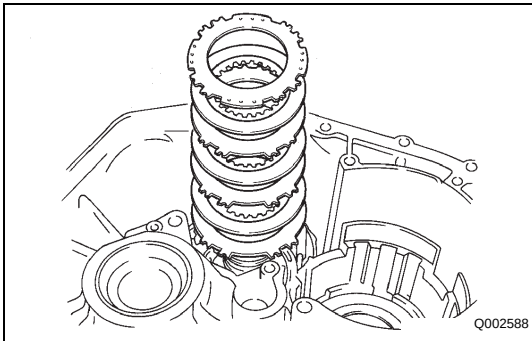
65. INSPECT PACK CLEARANCE OF UNDERDRIVE BRAKE (See page AX-170)

**66. REMOVE UNDERDRIVE CLUTCH DISC NO.2**

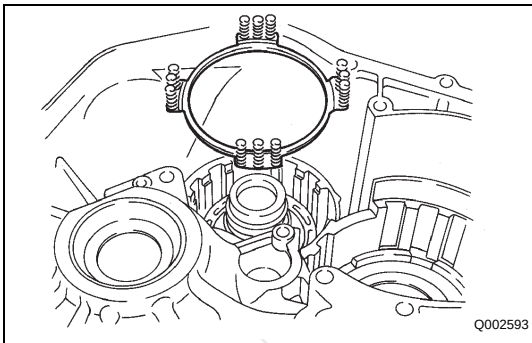
- (a) Using SST and a press, press in the flange until the snap ring is free from the flange.

SST 09350-32014 (09351-32070)

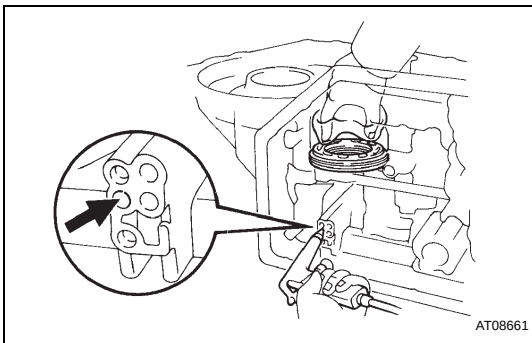
- (b) Using a screwdriver, remove the underdrive clutch flange No. 2 hole snap ring from the transaxle case.



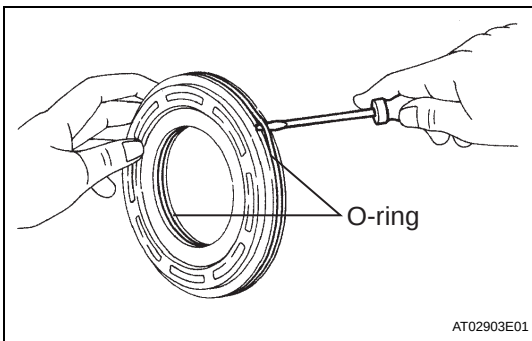
- (c) Remove the flange, 3 plates and 3 underdrive clutch discs No. 2.

67. INSPECT UNDERDRIVE CLUTCH DISC NO.2 (See page [AX-170](#))**68. REMOVE UNDERDRIVE BRAKE RETURN SPRING SUB-ASSEMBLY**

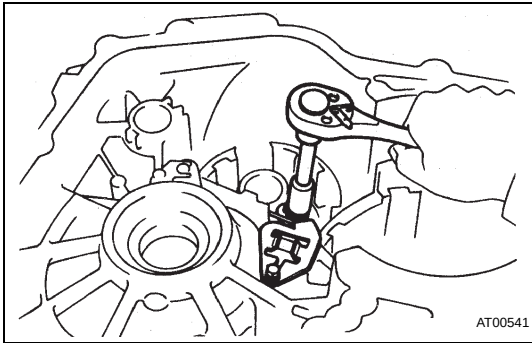
- (a) Remove the underdrive brake return spring sub-assembly from the transaxle case.

**69. REMOVE UNDERDRIVE BRAKE PISTON**

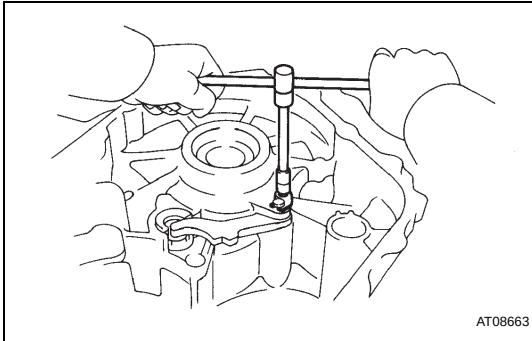
- (a) Using low-pressure compressed air (98 kPa, 1 kgf/cm², 14 psi), pop out the underdrive brake piston into a rag.



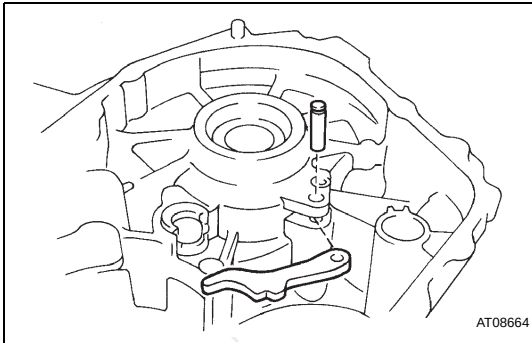
- (b) Using a screwdriver, remove the 2 O-rings from the underdrive brake piston.

**70. REMOVE PARKING LOCK PAWL**

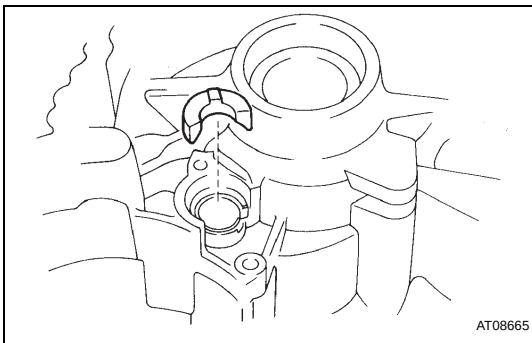
- (a) Remove the 2 bolts, pawl stopper plate, torsion spring and spring guide sleeve from the transaxle case.



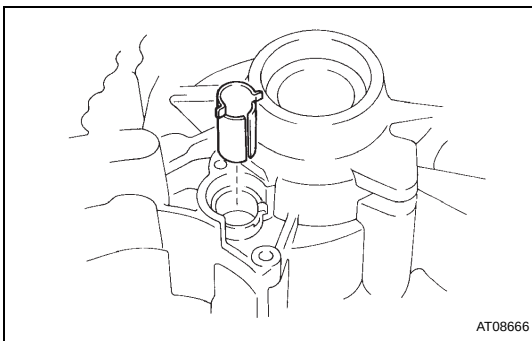
- (b) Remove the bolt and pawl shaft clamp from the transaxle case.



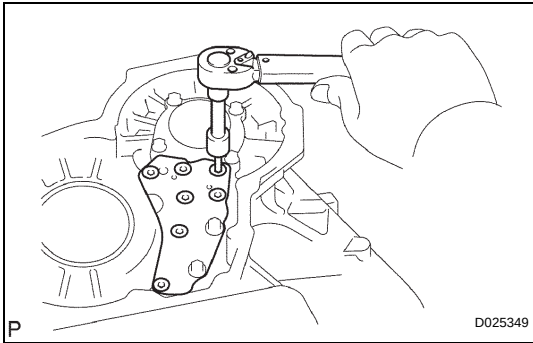
- (c) Remove the parking lock pawl shaft and parking lock pawl from the transaxle case.

**71. REMOVE PARKING LOCK SLEEVE**

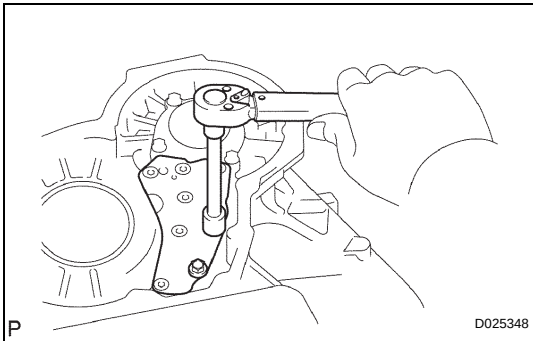
- (a) Remove the spring guide sleeve from the transaxle case.

**72. REMOVE CAM GUIDE SLEEVE**

- (a) Remove the cam guide sleeve from the transaxle case.

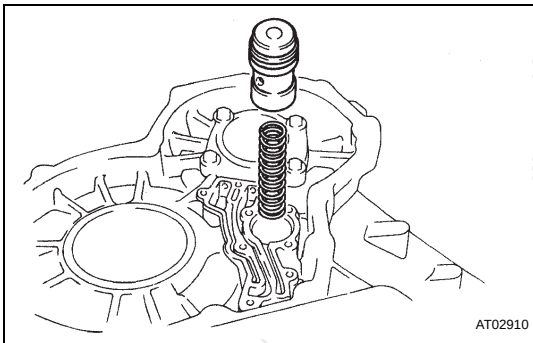
**73. REMOVE B-4 ACCUMULATOR PISTON**

- (a) Using a "TORX" wrench, remove the 7 screws.



- (b) Remove the 2 bolts.

- (c) Remove the transmission case plate No. 2 and transmission case plate No. 2 gasket from the transaxle case.

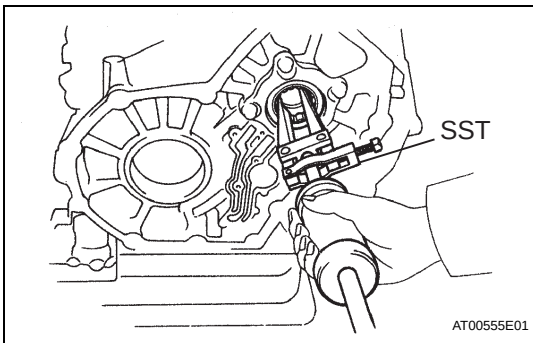


- (d) Remove the B-4 accumulator piston and compression spring from the transaxle case.

- (e) Remove the O-ring from the B-4 accumulator piston.

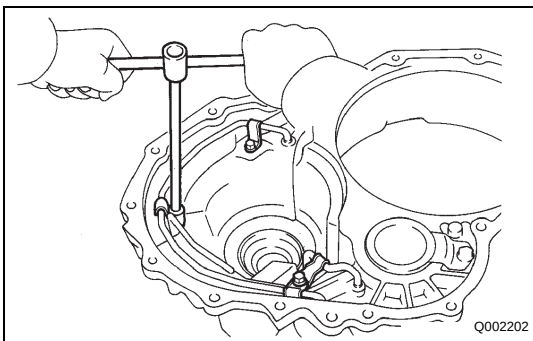
74. REMOVE TRANSMISSION CASE PLATE NO.3

- (a) Remove the bolt and transmission case plate No. 3 from the transaxle case.

**75. REMOVE COUNTER DRIVEN GEAR CYLINDRICAL ROLLER BEARING**

- (a) Using SST, remove the counter driven gear cylindrical roller bearing from the transaxle case.

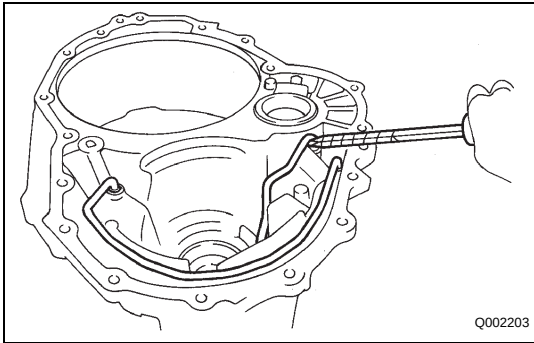
SST 09308-00010

**76. REMOVE TRANSAXLE APPLY TUBE CLAMP NO.1**

- (a) Remove the 2 bolts and 2 transaxle apply tube clamps No. 1 from the transaxle housing.

77. REMOVE TRANSAXLE APPLY TUBE CLAMP NO.2

- (a) Remove the bolt and transaxle apply tube clamp No.2 from the transaxle housing.

**78. REMOVE TRANSMISSION LUBE APPLY TUBE**

- (a) Using a screwdriver, remove the transmission lube apply tube from the transaxle housing.

HINT:

Tape the screwdriver tip before use.

NOTICE:

Be careful not to bend or damage the tube.

79. REMOVE DIFFERENTIAL GEAR LUBE APPLY TUBE

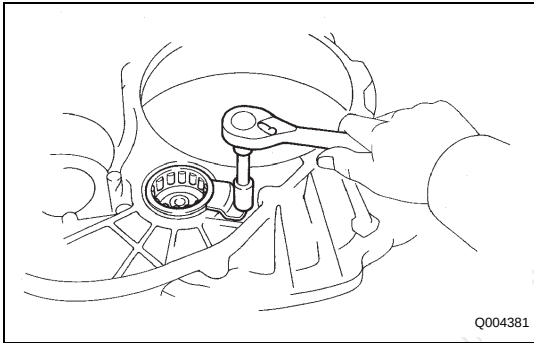
- (a) Using a screwdriver, remove the differential gear lube apply tube transaxle housing.

HINT:

Tape the screwdriver tip before use.

NOTICE:

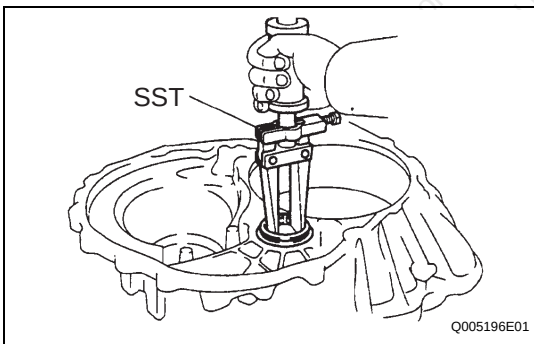
Be careful not to bend or damage the tube.

**80. REMOVE UNDERDRIVE CYLINDRICAL ROLLER BEARING**

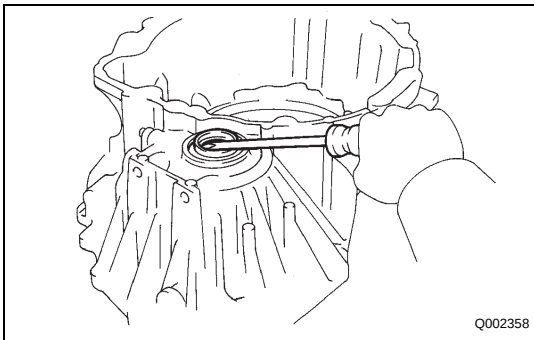
- (a) Remove the bolt, seal washer and roller bearing retainer from the transaxle housing.

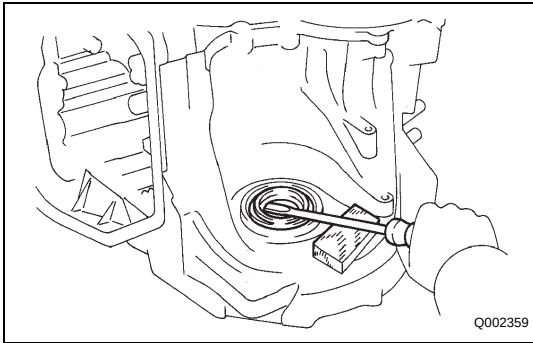
- (b) Using SST, remove the underdrive cylindrical roller bearing from the transaxle housing.

SST 09308-00010

**81. REMOVE TRANSAXLE HOUSING OIL SEAL**

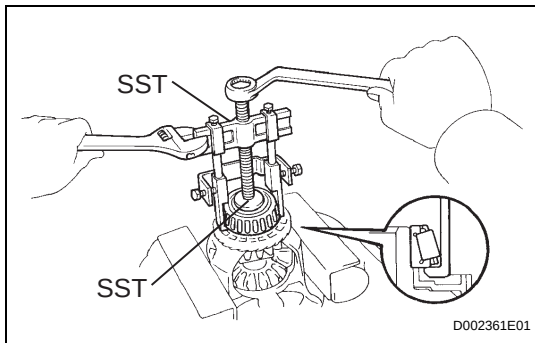
- (a) Using a screwdriver, remove the transaxle housing oil seal from the transaxle housing.





82. REMOVE TRANSAXLE CASE OIL SEAL

- (a) Using a screwdriver, remove the transaxle case oil seal from the transaxle case.



83. REMOVE FRONT DRIVE PINION FRONT TAPERED ROLLER BEARING

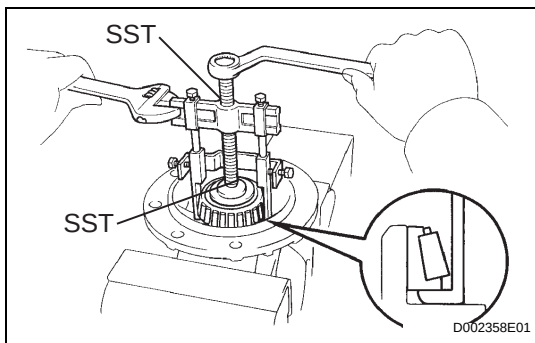
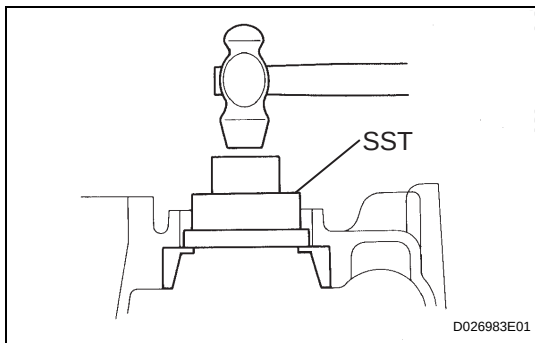
- (a) Setting SST to the cut-out portion on the speedometer drive gear, remove the front drive pinion front tapered roller bearing from the differential case.

SST 09950-40011 (09951-04010, 09952-04010, 09953-04030, 09954-04010, 09955-04061, 09957-04010, 09958-04011), 09950-60010 (09951-00340)

- (b) Remove the speedometer drive gear from the differential case.

- (c) Using SST and a hammer, drive out the front drive pinion front tapered roller bearing outer race.

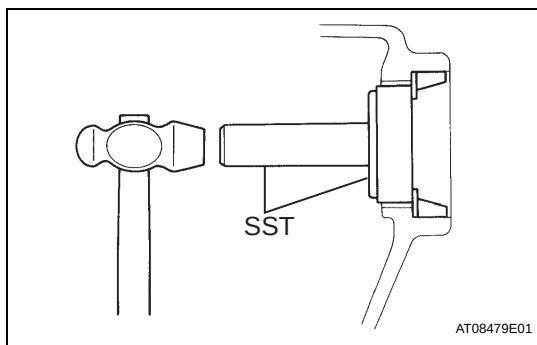
SST 09350-32014 (09351-32090)



84. REMOVE FRONT DRIVE PINION REAR TAPERED ROLLER BEARING

- (a) Setting SST to the cut-out portion on the differential case, remove the front drive pinion rear tapered roller bearing from the differential case.

SST 09950-40011 (09951-04010, 09952-04010, 09953-04030, 09954-04010, 09955-04061, 09957-04010, 09958-04011), 09950-60010 (09951-00410)

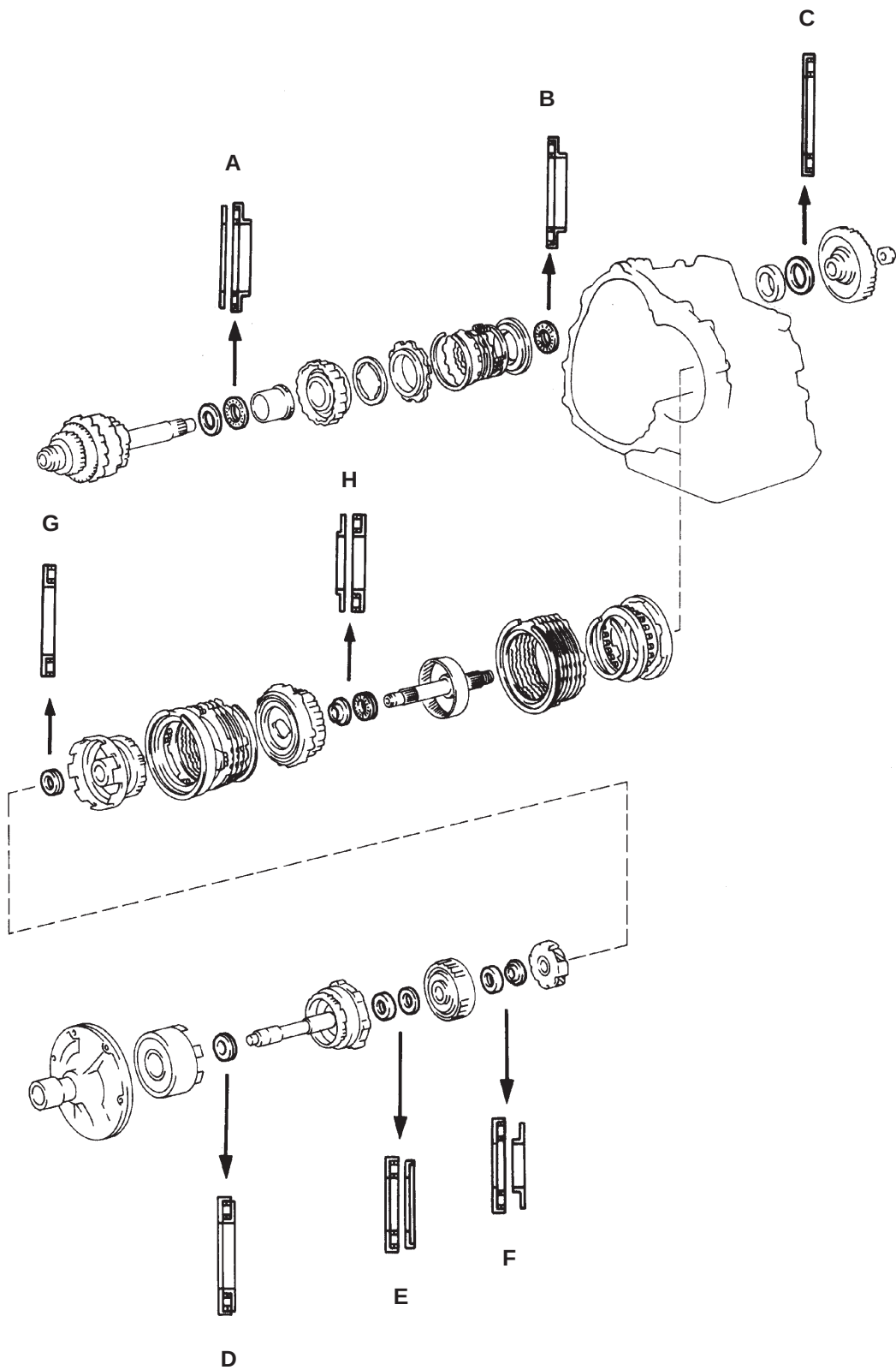


- (b) Using SST and a hammer, drive out the front drive pinion rear tapered roller bearing outer race and plate washer.

SST 09350-32014 (09351-32130, 09351-32150)

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85. BEARING POSITION



Q002419E01

Mark	Front Race Diameter Inside / Outside mm (in.)	Thrust Bearing Diameter Inside / Outside mm (in.)	Rear Race Diameter Inside / Outside mm (in.)
A	30.0 (1.181) / 41.8 (1.646)	31.0 (1.220) / 43.9 (1.728)	-
B	-	31.0 (1.220) / 43.9 (1.728)	-

AX

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