COMPONENT PARTS INSTALLATION

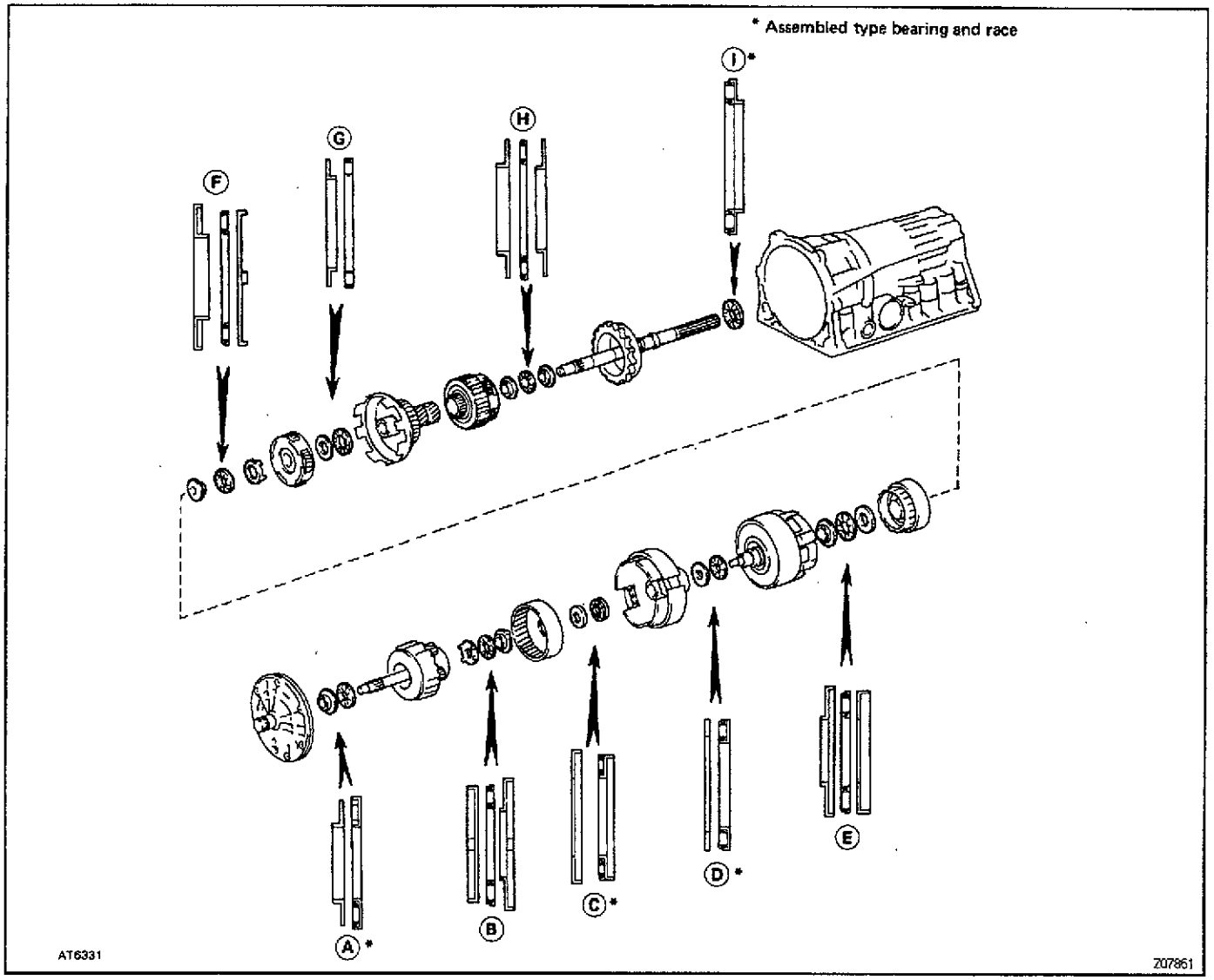
Disassembly, inspection and assembly of each component group have been indicated in the preceding chapter. Before assembly, make sure again that all component groups are assembled correctly. AT06L-07
If something wrong is found in a certain component group during assembly, inspect and repair this group immediately.
Recommended ATF:
DEXRON® II

GENERAL NOTES:

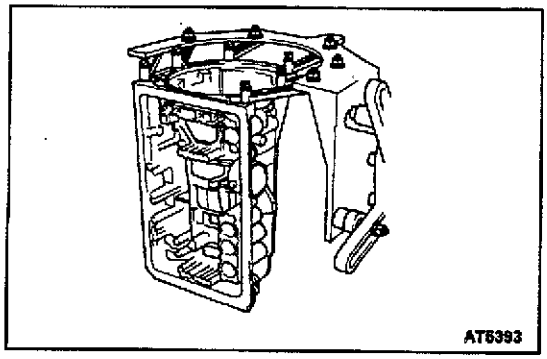
1. The automatic transmission is composed of highly precision–finished parts, necessitating careful inspection before assembly because even a small nick could cause fluid leakage or affect performance.
2. Before assembling new clutch discs, soak them in automatic transmission fluid for at least 15 minutes.
3. Apply automatic transmission fluid on sliding or rotating surfaces of parts before assembly.
4. Use petroleum jelly to keep small parts in their place.
5. Do not use adhesive cements on gaskets and similar parts.
6. When assembling the transmission, be sure to use new gaskets and O–rings.
7. Dry all parts with compressed air – never use shop rags.
8. When working with FIPG material, you must observe the following.
   - Using a razor blade and gasket scraper, remove all the old packing (FIPG) material from the gasket surfaces.
   - Thoroughly clean all components to remove all the loose material.
   - Clean both sealing surfaces with a non–residue solvent.
   - Parts must be assembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.

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BEARINGS AND RACES INSTALLATION POSITION AND DIRECTION



Mark	Front Race Diameter Inside / Outside mm (in.)	Thrust Bearing Diameter Inside / Outside mm (in.)	Rear Race Diameter Inside / Outside mm (in.)
Ⓐ	28.1 (1.106) / 47.3 (1.862)	28.9 (1.138) / 50.2 (1.976)	–
Ⓑ	27.3 (1.075) / 41.8 (1.646)	26.0 (1.024) / 46.8 (1.843)	24.2 (0.953) / 47.8 (1.882)
Ⓒ	37.2 (1.465) / 58.8 (2.315)	33.7 (1.327) / 51.1 (1.972)	–
Ⓓ	36.8 (1.449) / 50.9 (2.004)	33.7 (1.327) / 47.6 (1.874)	–
Ⓔ	26.0 (1.024) / 48.9 (1.925)	26.0 (1.024) / 46.7 (1.839)	26.8 (1.055) / 47.0 (1.850)
Ⓕ	30.6 (1.205) / 53.6 (2.110)	32.6 (1.283) / 47.7 (1.878)	34.3 (1.350) / 47.8 (1.882)
Ⓖ	33.7 (1.327) / 47.6 (1.874)	35.5 (1.398) / 47.7 (1.878)	–
Ⓗ	28.8 (1.134) / 44.8 (1.764)	30.1 (1.185) / 44.7 (1.760)	28.7 (1.094) / 44.8 (1.764)
Ⓘ	–	39.2 (1.543) / 57.7 (2.272)	–

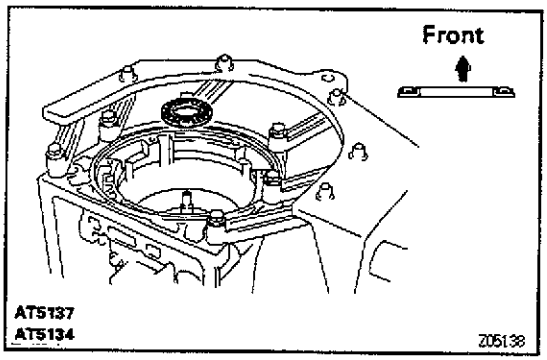


TRANSMISSION INSTALLATION

AT08L-01

1. INSTALL TRANSMISSION CASE

Install the transmission case in the overhaul attachment.



2. INSTALL BEARING AND RACE

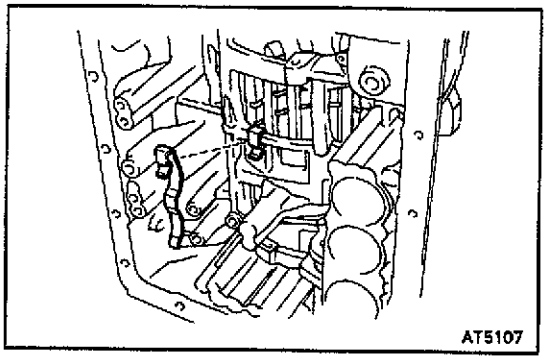
(a) Coat the assembled bearing and race with petroleum jelly.

(b) Install it onto the case.

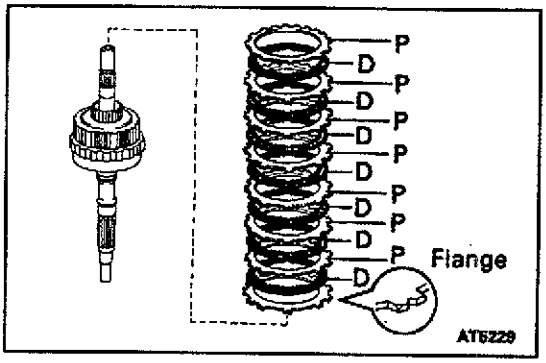
Assembled bearing and race diameter

mm (in.)

	Inside	outside
Bearing and race	39.2 (1.543)	57.7 (2.272)



3. INSTALL LEAF SPRING



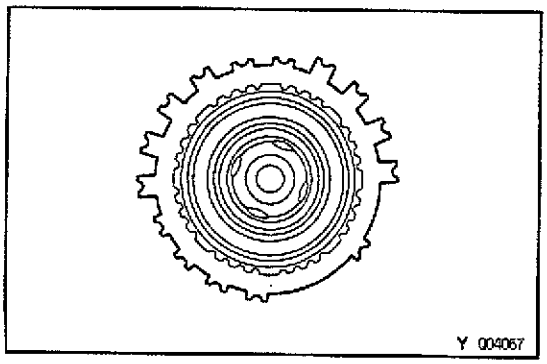
4. INSTALL REAR PLANETARY GEAR WITH FIRST AND REVERSE BRAKE PACK AND OUTPUT SHAFT

(a) Install the flange, the rounded edge facing upward.

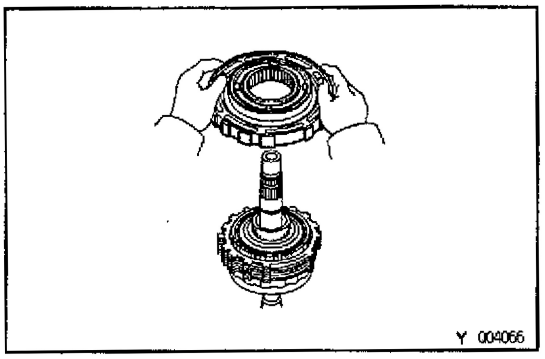
(b) Install the 6 plates and 6 discs.

Install in order: P = Plate D = Disc

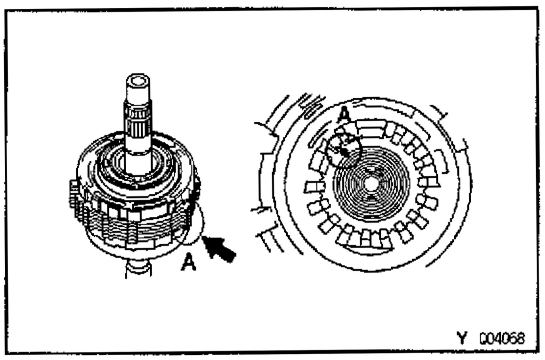
D–P–D–P–D–P–D–P–D–P–D–P



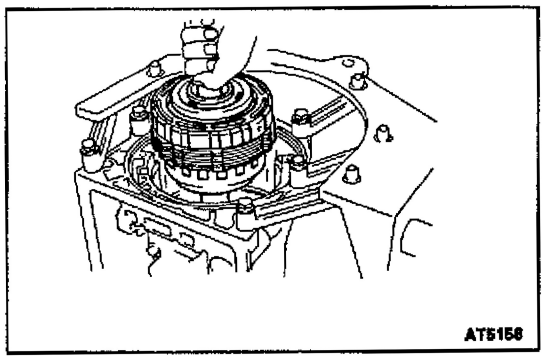
(c) Align the teeth on the flange, discs and plates.



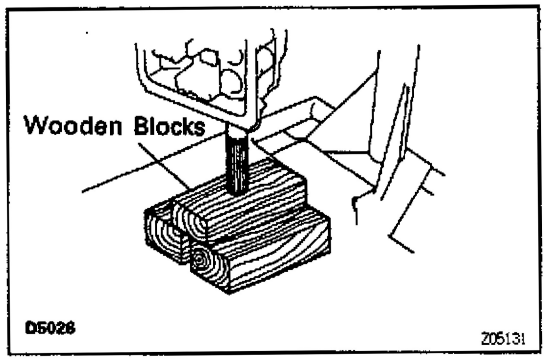
(d) face the snap ring upward (front side) and install the second brake drum to the planetary gear.
NOTICE: Face the oil hole in the drum towards the lower side of the transmission case (the side the valve body is installed).



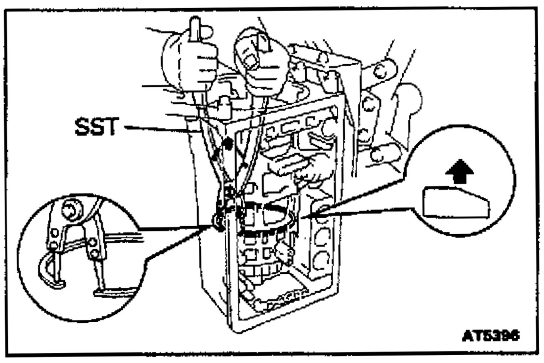
(e) Align the splines of the transmission case and the assembled rear planetary gear, first and reverse brake and output shaft, indicated by A.



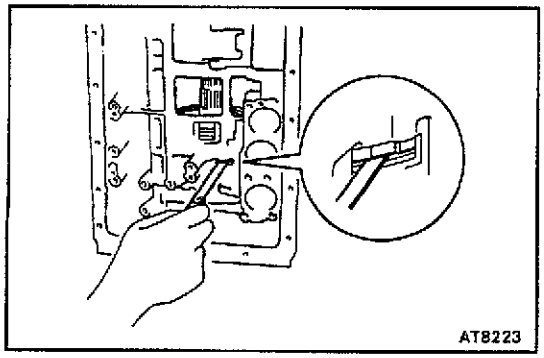
(f) Install the assembled output shaft.



(g) Rest the output shaft on wooden blocks.



(h) Using SST, install the snap ring.
SST 09350–30020 (09350–07060)



5. CHECK PACK CLEARANCE OF FIRST AND REVERSE BRAKE

Using a feeler gauge, measure the clearance between the plate and second brake drum.

Clearance:

0.60 — 1.12 mm (0.0236 — 0.0441 in.)

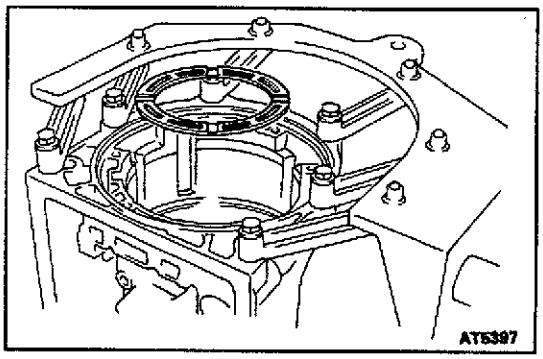
If the values are non—standard, select another flange.

HINT: There are 6 different thicknesses for the flange.

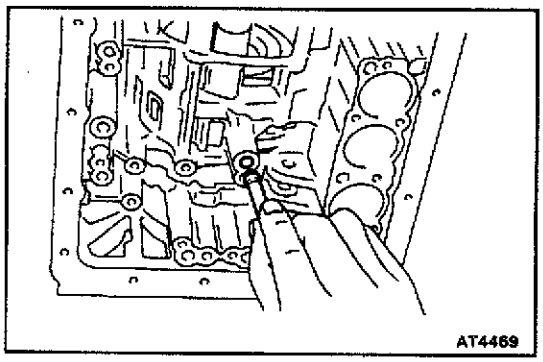
Flange thickness

mm (in.)

No.	Thickness	No.	Thickness
50	5.0 (0.197)	53	4.4 (0.173)
51	4.8 (0.189)	54	4.2 (0.165)
52	4.6 (0.181)	55	4.0 (0.157)



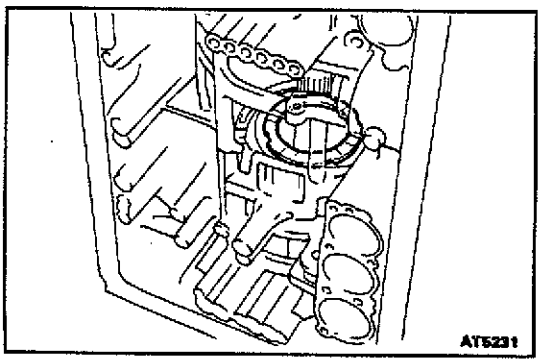
6. INSTALL SECOND BRAKE PISTON SLEEVE



7. INSTALL NEW BRAKE DRUM GASKET

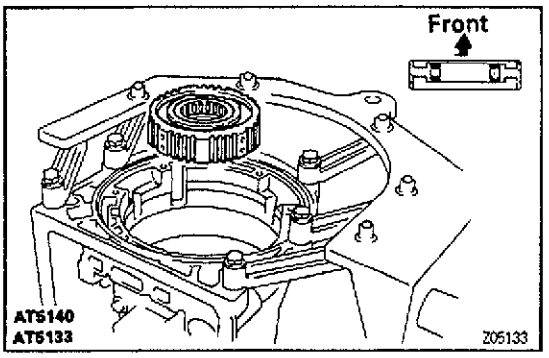
(a) Coat the gasket with ATF.

(b) Install a new brake drum gasket.



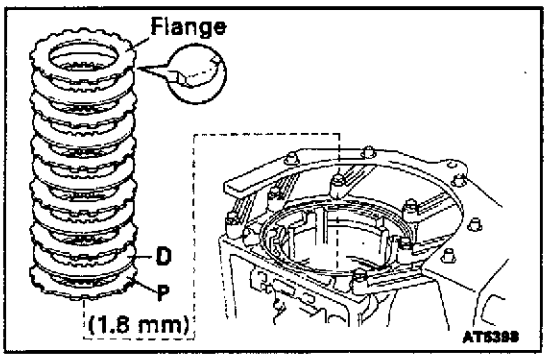
8. INSTALL NO.1 ONE—WAY CLUTCH

(a) Install the No.1 thrust washer onto the second brake.



(b) Install the No.1 one–way clutch.

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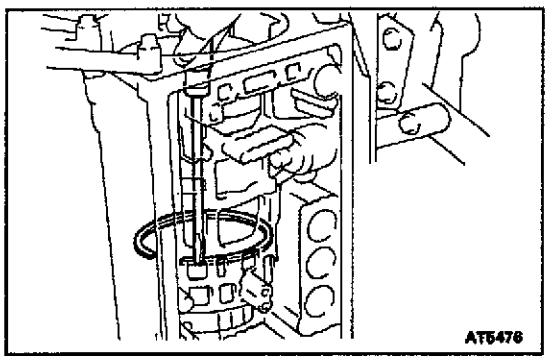


9. INSTALL FLANGE, PLATES AND DISCS OF SECOND BRAKE

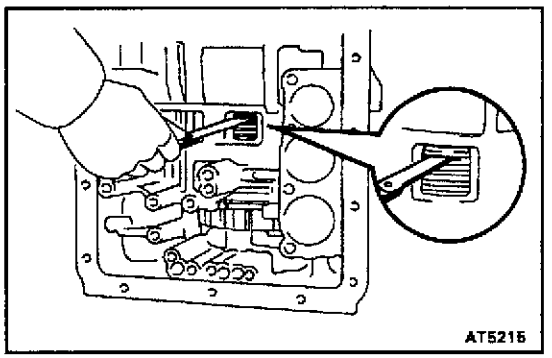
(a) Install the 1.8 mm (0.071 in.) thick plate with the rounded edge side of the plate facing the disc.

(b) Install the 5 plates and 5 discs.
Install in order: P = Plate D = Disc
D–P–D–P–D–P–D–P–D–P

(c) Install the flange with the rounded edge of the flange facing the disc.



(d) Using a screwdriver, install snap ring.



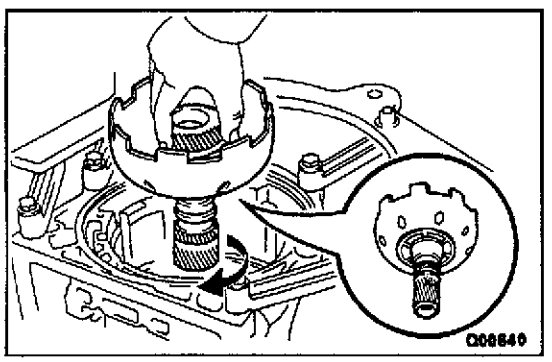
10. CHECK PACK CLEARANCE OF SECOND BRAKE

Using a feeler gauge, measure the clearance between the snap ring and flange.

Clearance:

0.62 – 1.98 mm (0.0244 – 0.0780 in.)

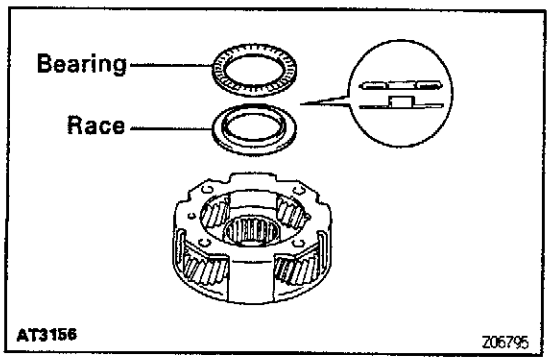
If the values are non–standard, check for an improper installation.



11. INSTALL PLANETARY SUN GEAR

While turning the planetary sun gear clockwise, install it into the No.1 one–way clutch.

HINT: Confirm the thrust washer is installed correctly.



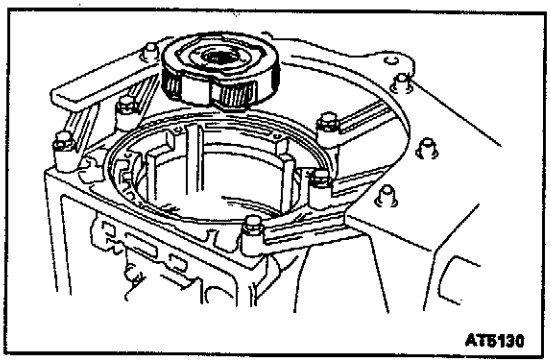
12. INSTALL FRONT PLANETARY GEAR

(a) Coat the bearing and race with petroleum jelly and install them onto the front planetary gear.

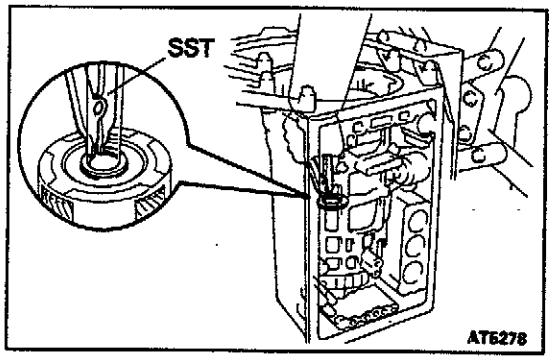
Bearing and race diameter

mm (in.)

	Inside	Outside
Bearing	35.5 (1.398)	47.7 (1.878)
Race	33.7 (1.327)	47.6 (1.874)

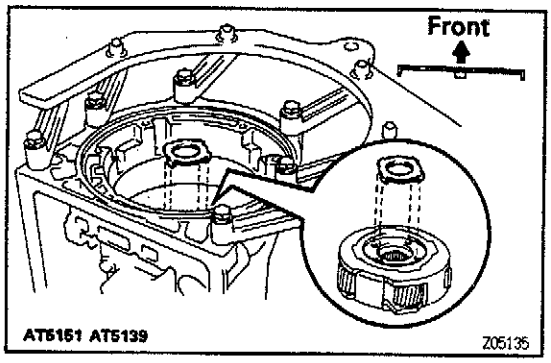


(b) Install the front planetary gear to the sun gear input drum.



(c) Using SST, install the snap ring.
SST 09350–30020 (09350–07070)

(d) Remove the wooden blocks under the output shaft.

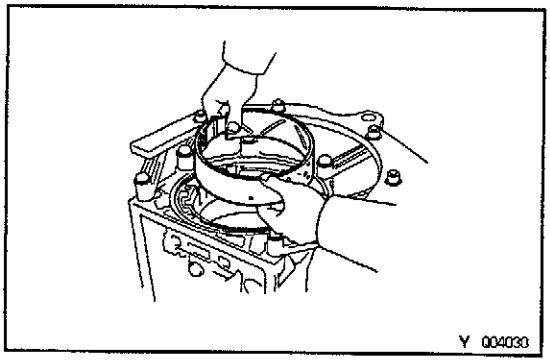


(e) Coat the bearing race with petroleum jelly and install it onto the front planetary gear.

Race diameter

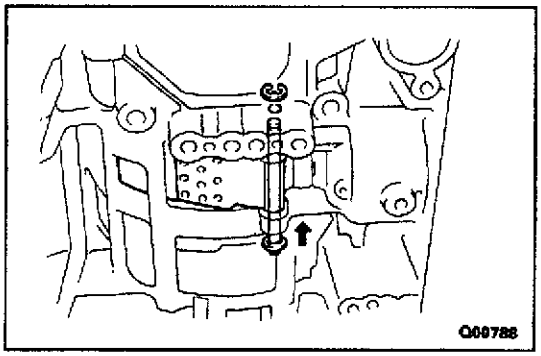
mm (in.)

	Inside	Outside
Race	34.3 (1.350)	47.8 (1.882)

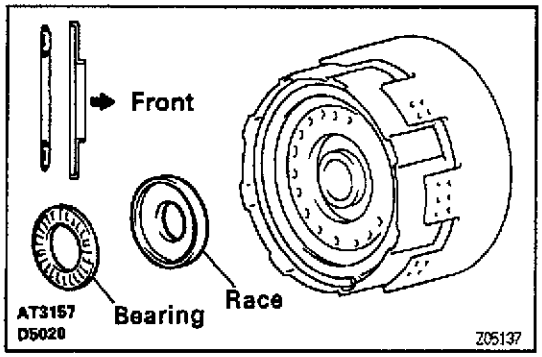


13. INSTALL SECOND COAST BRAKE BAND

(a) Install the second coast brake band to the case.



(b) Install the E—ring to the pin.
(c) Install the pin through the brake band.



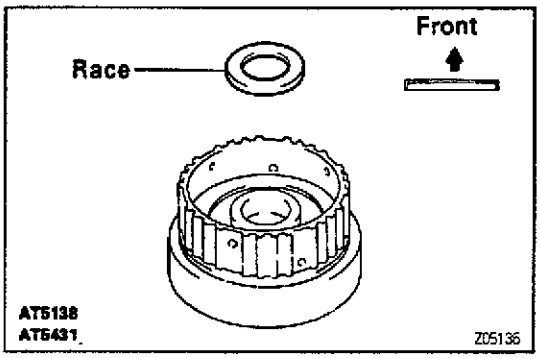
14. INSTALL FRONT PLANETARY RING GEAR TO FORWARD AND DIRECT CLUTCH

(a) Coat the bearing and race with petroleum jelly and install them onto the forward clutch.

Bearing and race diameter

mm (in.)

	Inside	Outside
Bearing	26.0 (1.024)	46.7 (1.839)
Race	26.0 (1.024)	48.9 (1.925)

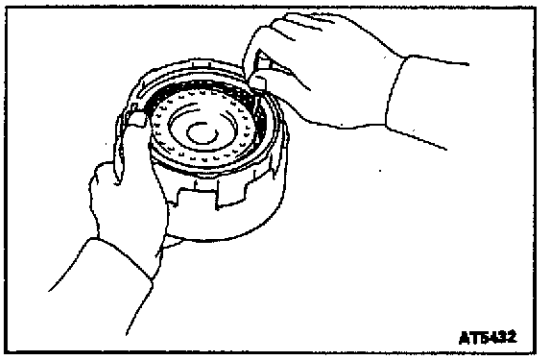


(b) Coat the race with petroleum jelly and install it onto the front planetary ring gear.

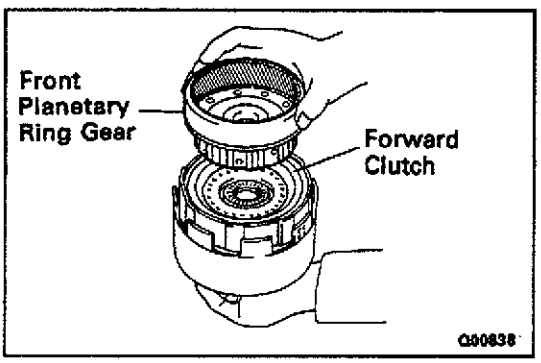
Race diameter

mm (in.)

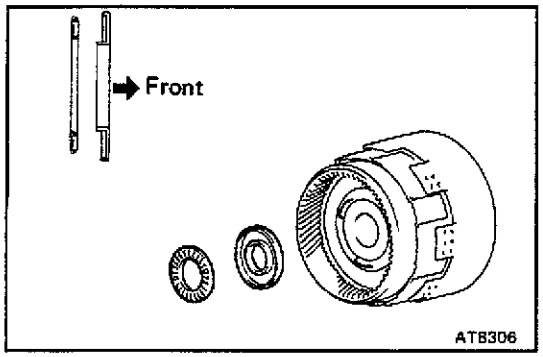
	Inside	Outside
Race	26.8 (1.055)	47.0 (1.850)



(c) Align the flukes of the discs in the forward clutch.



(d) Align the splines of the front planetary ring gear with the flukes of the discs and install the front planetary ring gear to the forward clutch.



15. INSTALL ASSEMBLED DIRECT CLUTCH, FORWARD CLUTCH AND FRONT PLANETARY RING GEAR INTO CASE

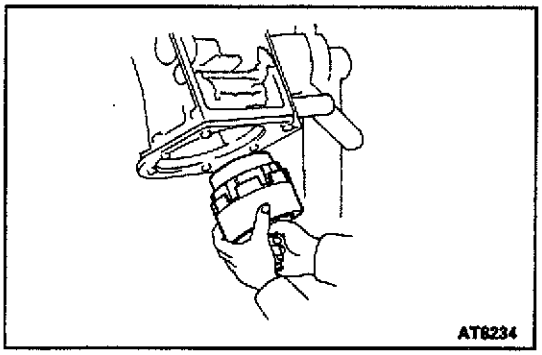
(a) Coat the bearing and race with petroleum jelly and install them onto the ring gear.

Bearing and race diameter

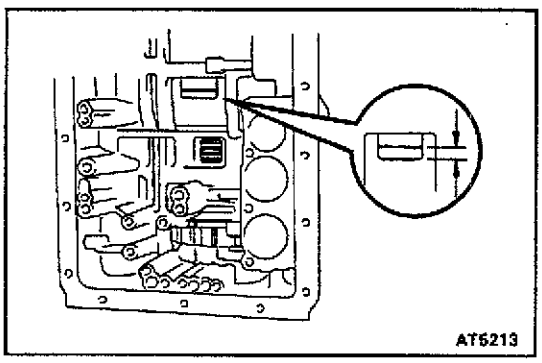
mm (in.)

	Inside	Outside
Bearing	32.6 (1.283)	47.7 (1.878)
Race	30.6 (1.205)	53.6 (2.110)

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(b) Install the assembled direct clutch, forward clutch and front planetary ring gear into the transmission case.

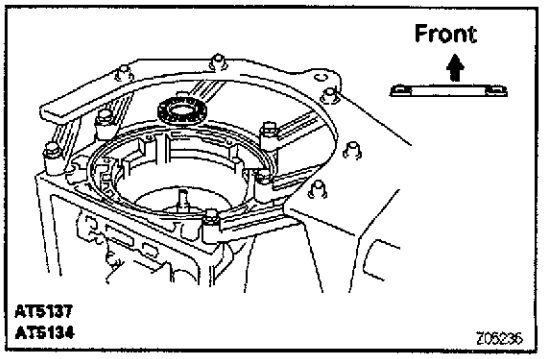


(c) Using vernier calipers, measure the distance between the sun gear input drum and direct clutch drum, as shown in the illustration.

Height:

5.3 — 7.3 mm (0.209 — 0.287 in.)

If the values are non—standard, check for an improper installation.

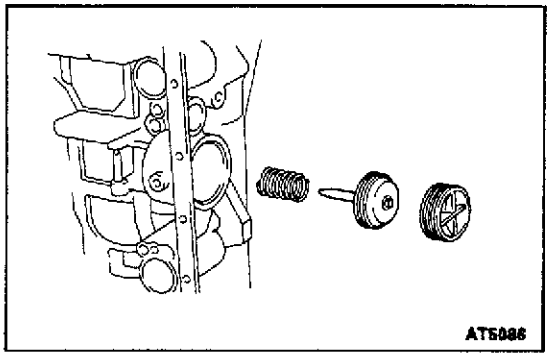


(d) Coat the assembled bearing and race with petroleum jelly and install it onto the forward clutch.

Assembled bearing and race diameter

mm (in.)

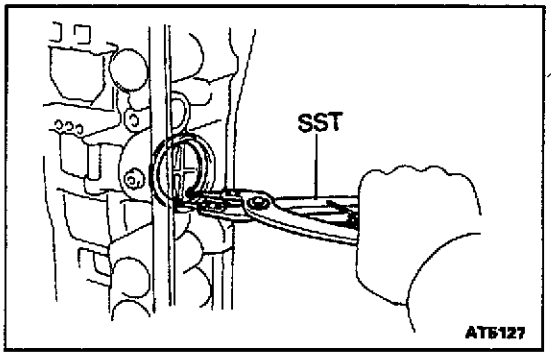
	Inside	Outside
Bearing and race	33.7 (1.327)	47.6 (1.874)



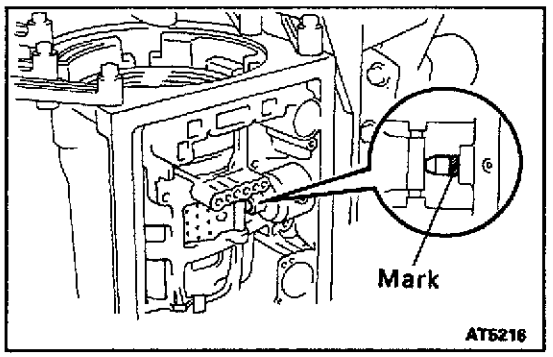
16. INSTALL SECOND COAST BRAKE COVER, PISTON ASSEMBLY AND SPRING

(a) Coat the 2 new O—rings with ATF and install them to the cover.

(b) Install the spring, piston assembly and cover to the case.

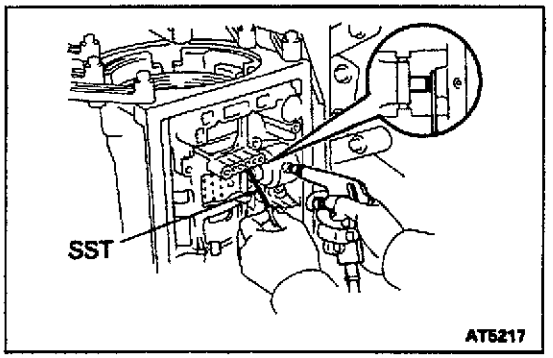


(c) Using SST, install the snap ring.
SST 09350—30020 (09350—07060)



17. CHECK PISTON ROD STROKE OF SECOND COAST BRAKE

(a) Place a mark on the second coast brake piston rod.



(b) Using SST, measure the stroke while applying and releasing compressed air (392—785 kPa, 4—8 kgf/cm², 57—114 psi).
SST 09240—00020

Piston rod stroke:

1.5 — 3.0 mm (0.059 — 0.118 in.)

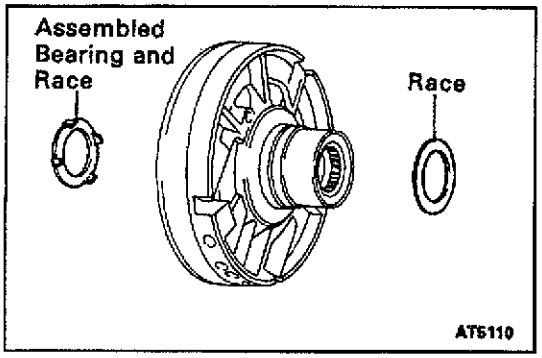
If the stroke is more than specified, replace the piston rod.

Piston rod length:

71.4 mm (2.811 in.)

72.9 mm (2.870 in.)

If it is still more than standard value, replace the brake band with a new one.



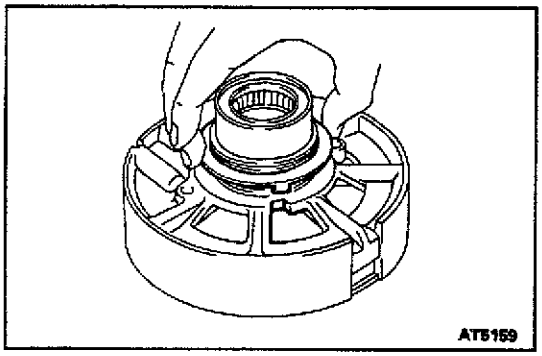
18. INSTALL OVERDRIVE SUPPORT ASSEMBLY

(a) Coat the bearing and race with petroleum jelly and install it onto the overdrive support assembly.

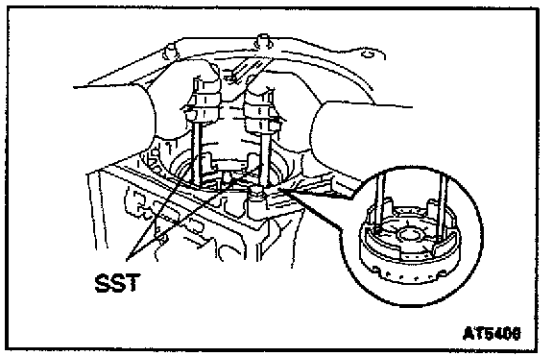
Bearing and race diameter

mm (in.)

	Inside	Outside
Race	36.8 (1.449)	50.9 (2.004)
Bearing	33.6 (1.323)	50.3 (1.980)

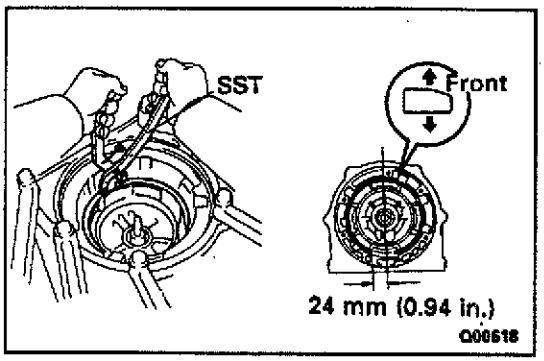


(b) Confirm the thrust washer is installed correctly.
HINT: Make sure that the lug shape matches the hole on the O/D support.

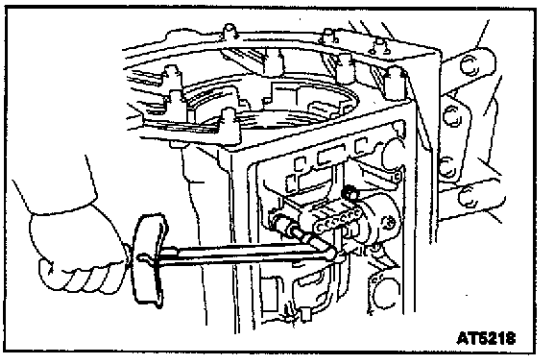


(c) Using 2 bolts of SST, aim the bolt and oil holes of the overdrive support toward the valve body side, and align them with the bolt holes of the transmission case and insert.
SST 09350–30020 (09350–07020)

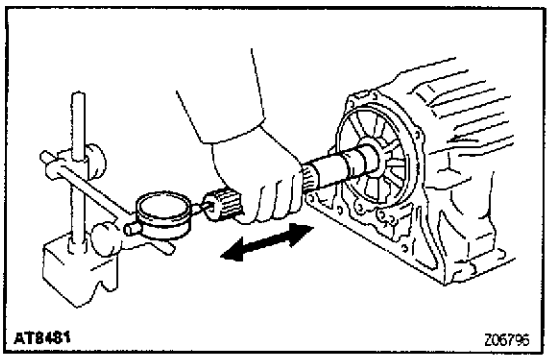
(d) Temporarily tighten the 2 bolts.



(e) Using SST, install the snap ring.
SST 09350–30020 (09350–07060)
HINT: Install the snap ring open end toward the valve body.



(f) Torque the 2 bolts.
Torque: 25 N·m (260 kgf·cm, 19 ft·lbf)



19. CHECK OUTPUT SHAFT

(a) Using a dial indicator, measure the end play of the output shaft with hand.

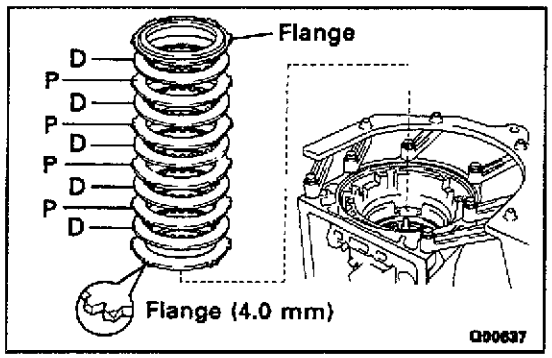
End play:

0.27 – 0.86 mm (0.0106 – 0.0339 in.)

If the values are non–standard, check for an improper installation.

(b) Check to see that output shaft rotates smoothly.

AT



20. INSTALL FLANGES, PLATES AND DISCS OF OVERDRIVE BRAKE

(a) Install the 4.0 mm (0.157 in.) thick flange (flat ring) with the rounded edge side of the flange facing the discs.

(b) Install the plates and discs.

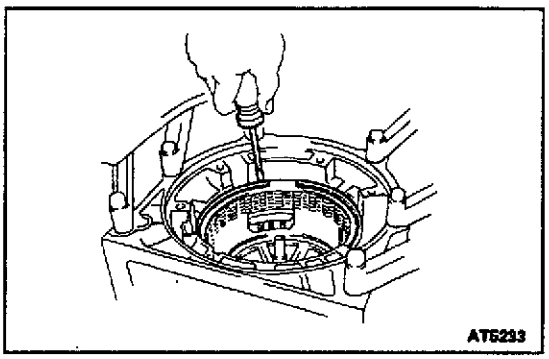
Install in order: P = Plate D = Disc

PREVIA:

D–P–D–P–D

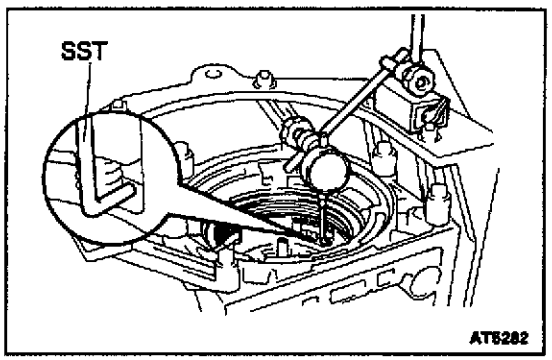
OTHERS:

D–P–D–P–D–P–D



(c) Install the flange (stepped ring) with the flat side of the flange facing the disc.

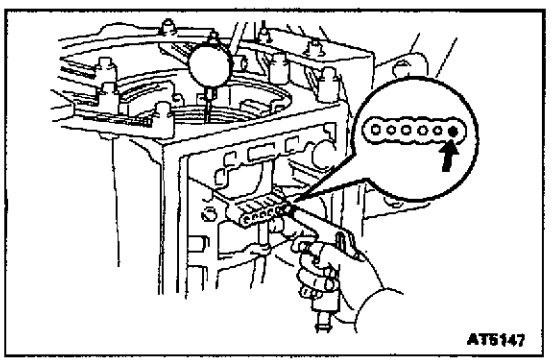
(d) Using a screwdriver, install the snap ring.



21. CHECK PISTON STROKE OF OVERDRIVE BRAKE

(a) Place SST and a dial indicator onto the overdrive brake piston.

SST 09350–30020 (09350–06120)



(b) Measure the stroke while applying and releasing compressed air (392–785 kPa, 4–8 kgf/cm², 57–114 psi).

Piston stroke:

PREVIA:

1.40 – 1.70 mm (0.0551 – 0.0669 in.)

OTHERS:

1.40 – 1.70 mm (0.0551 – 0.0669 in.)

If the piston stroke is less than the limit, parts may have been assembled incorrectly, check and reassemble again.

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

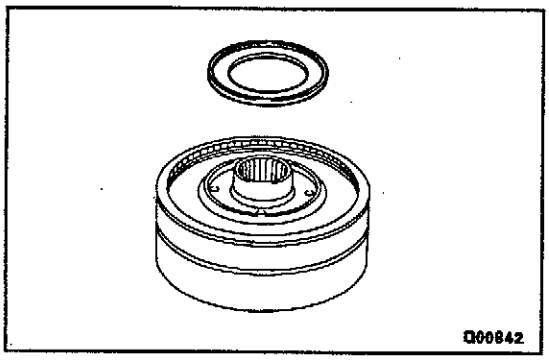
HINT: There are 7 different thicknesses for the flange.

Flange thickness

mm (in.)

No.	Thickness	No.	Thickness
77	3.3 (0.130)	81	3.8 (0.150)
78	3.5 (0.138)	82	3.9 (0.154)
79	3.6 (0.142)	83	4.0 (0.157)
80	3.7 (0.146)		

AT



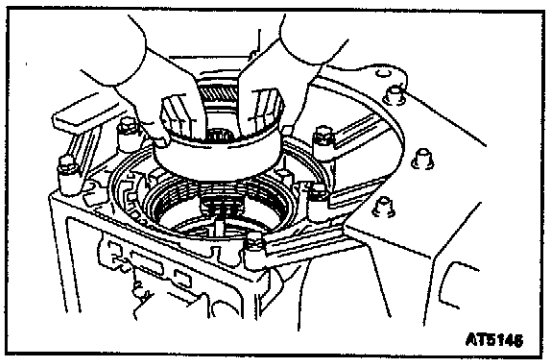
22. INSTALL OVERDRIVE PLANETARY GEAR UNIT WITH OVERDRIVE DIRECT CLUTCH AND ONE–WAY CLUTCH

(a) Coat the race with petroleum jelly and install them onto the overdrive support.

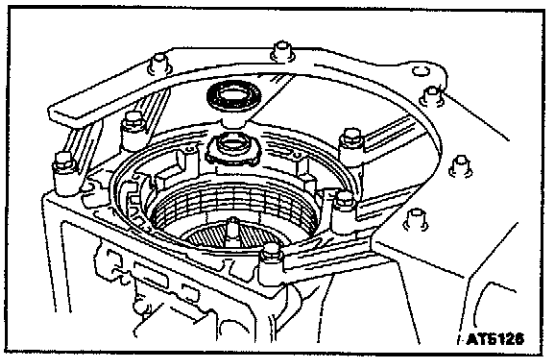
Race diameter

mm (in.)

	Inside	Outside
Race	37.1 (1.461)	59.0 (2.323)



(b) Install the overdrive planetary ring gear.

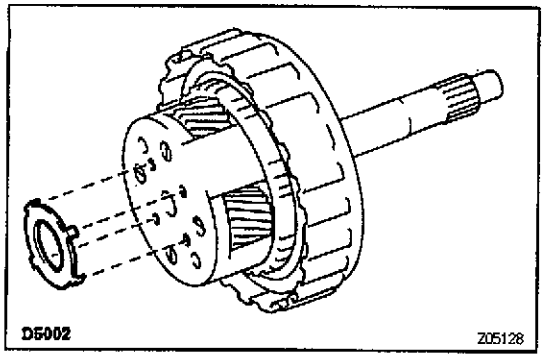


(c) Coat the bearing and race with petroleum jelly and install them onto the planetary ring gear.

Bearing and race diameter

mm (in.)

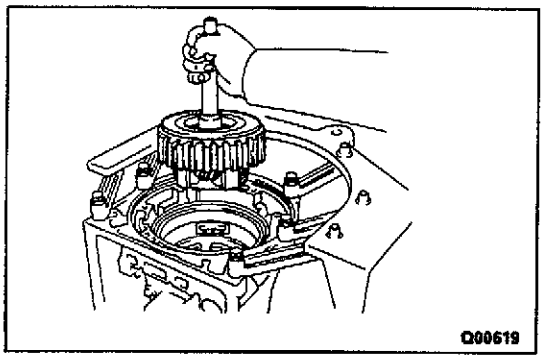
	Inside	Outside
Bearing	26.0 (1.024)	46.8 (1.843)
Race	24.2 (0.953)	47.8 (1.882)



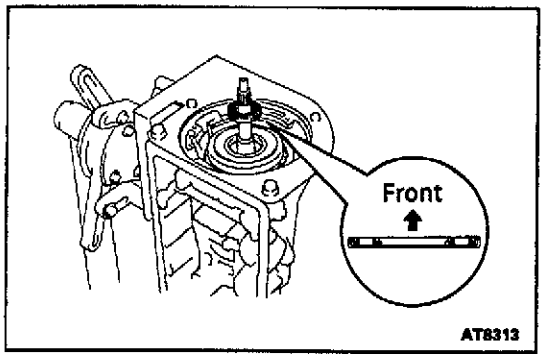
(d) Coat the race with petroleum jelly and install it onto the planetary gear.
Race diameter

mm (in.)

	Inside	Outside
Race	27.1 (1.067)	41.8 (1.646)



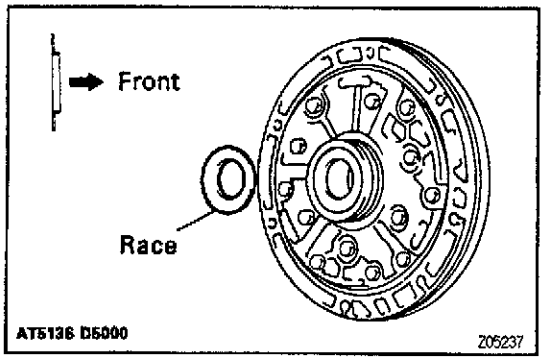
(e) Install the overdrive planetary gear with the overdrive direct clutch and one–way clutch.



(f) Coat the assembled bearing and race with petroleum jelly and install it onto the overdrive direct clutch.
Bearing and race diameter

mm (in.)

	Inside	Outside
Bearing and race	28.9 (1.138)	50.2 (1.976)



23. INSTALL OIL PUMP INTO CASE

(a) Coat the race with petroleum jelly and install it onto the oil pump.
Race diameter

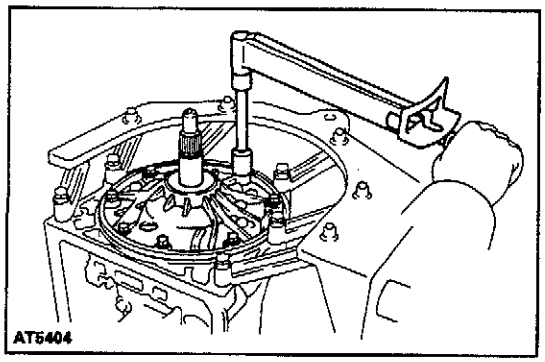
mm (in.)

	Inside	Outside
Race	28.1 (1.106)	47.3 (1.862)

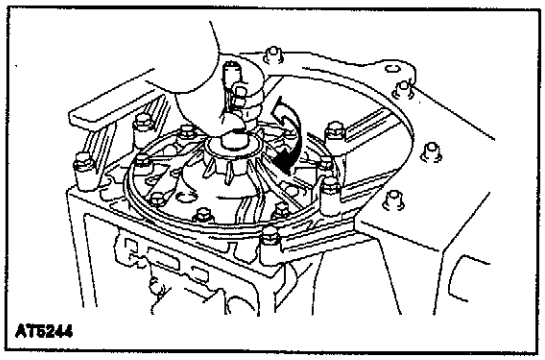
(b) Coat a new O–ring with ATF and install it around the pump body.

(c) Place the oil pump through the input shaft, and align the bolt holes of the pump body with the transmission case.

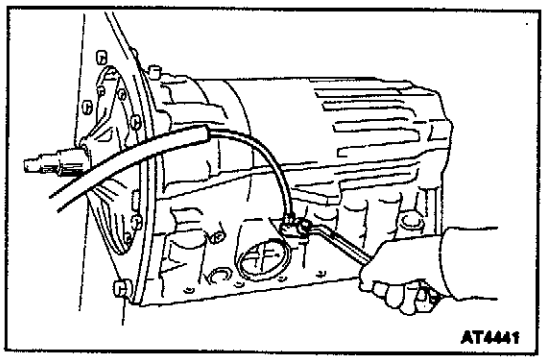
(d) Hold the input shaft, and lightly press the oil pump body to slide the oil seal rings into the O/D direct clutch drum.
NOTICE: Do not push on the oil pump strongly, or the oil seal ring will stick to the direct clutch drum.



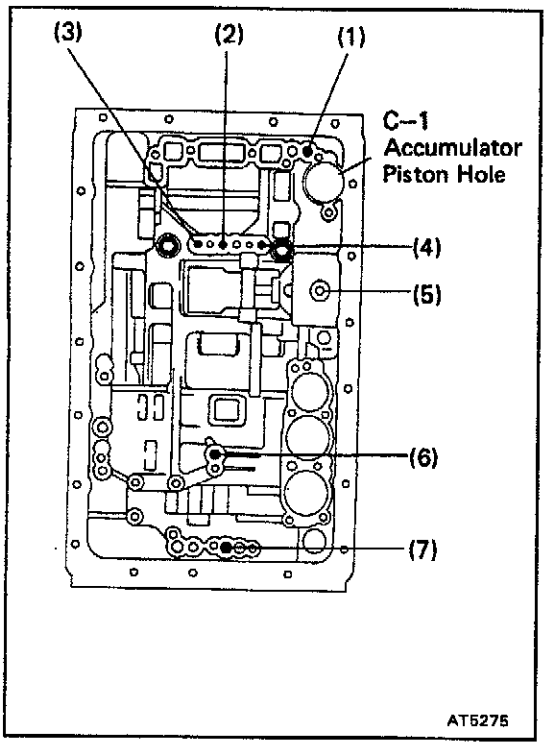
(e) Install the 7 bolts.
Torque: 22 N·m (220 kgf-cm, 16 ft-lbf)



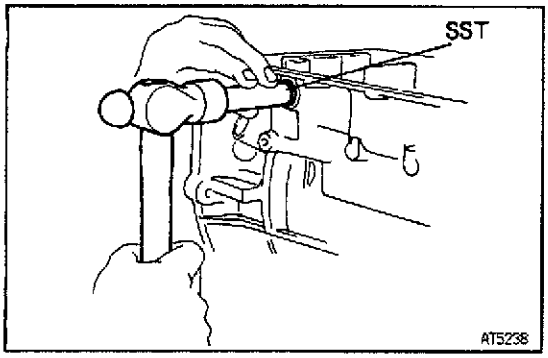
24. CHECK INPUT SHAFT ROTATION
Make sure the input shaft rotates smoothly.



25. INSTALL THROTTLE CABLE
(a) Coat a new O–ring with ATF and install it to the cable.
(b) Install the cable to the case.



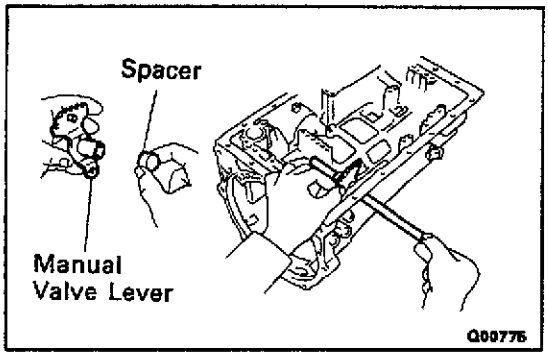
26. INDIVIDUAL PISTON OPERATION INSPECTION
Check for the sound of operation while applying compressed air into the oil hole indicated in the illustration.
HINT: When inspecting the O/D direct clutch, check with the C_0 accumulator piston hole closed.
If there is no noise, disassemble and check the installation condition of the parts.
(1) O/D direct clutch
(2) Direct clutch
(3) Forward clutch
(4) O/D brake
(5) Second coast brake
(6) Second brake
(7) First and reverse brake



27. INSTALL MANUAL VALVE LEVER, SHAFT AND OIL SEAL

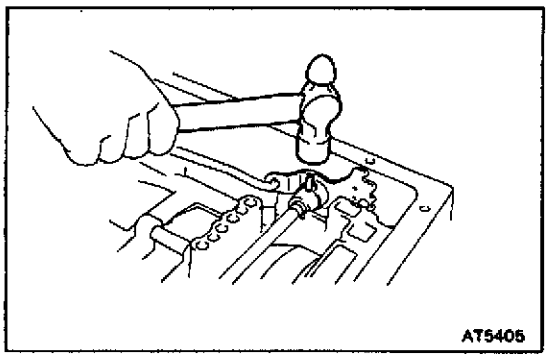
(a) Using SST, drive in 2 new oil seals.
SST 09350–30020 (09350–07110)

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

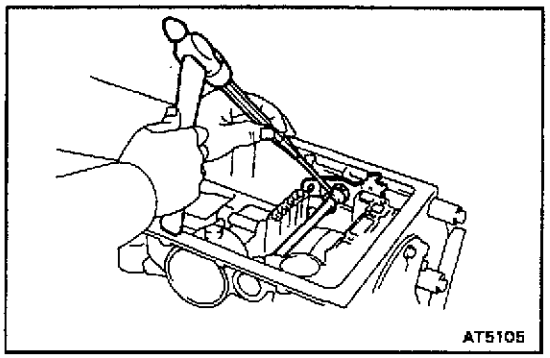


(c) Install a new spacer to the manual valve lever.

(d) Install the manual valve lever shaft to the transmission case through the manual valve lever.

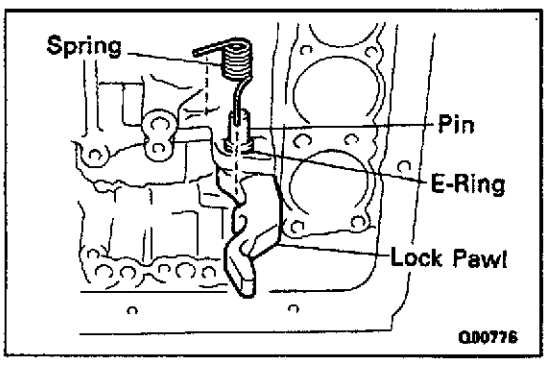


(e) Using a hammer, drive in a new spring pin.



(f) Match the manual valve lever indentation with the spacer hole and calk them the punch.

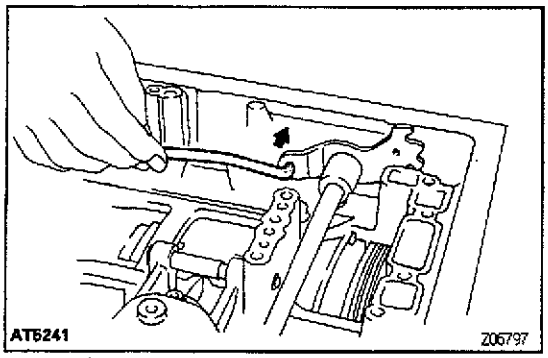
(g) Make sure the shaft rotates smoothly.



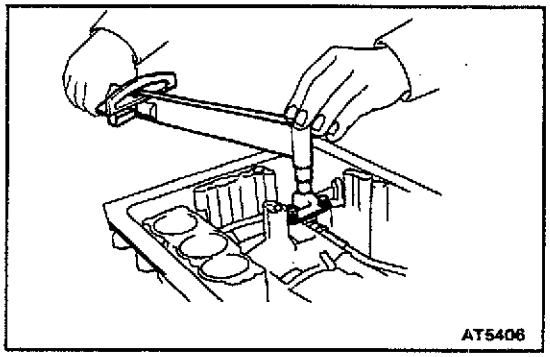
28. INSTALL PARKING LOCK PAWL AND ROD

(a) Install the E–ring to the shaft.

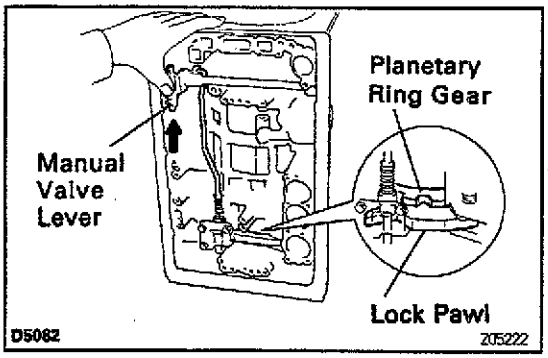
(b) Install the parking lock pawl, shaft and spring.



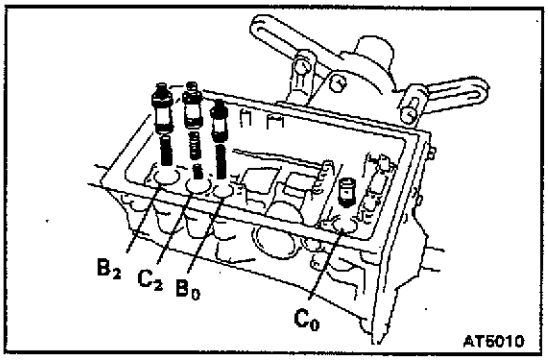
(c) Connect the parking lock rod to the manual valve lever.



(d) Install the parking lock pawl bracket and torque the 3 bolts.
Torque: 7.4 N·m (75 kgf-cm, 65 in.-lbf)



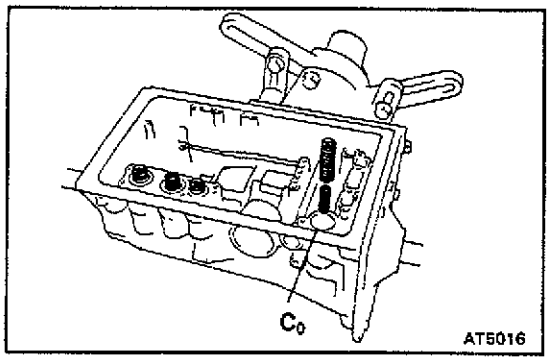
(e) Shift the manual valve lever to the P position, and confirm that the planetary ring gear is correctly locked up by the pawl.



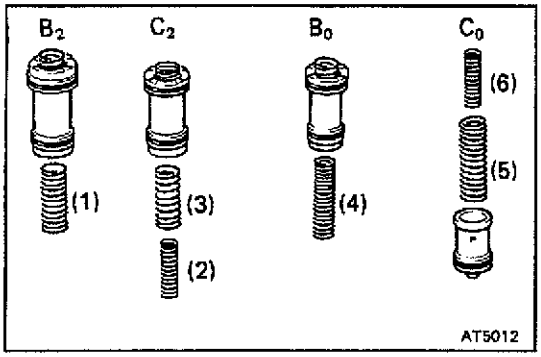
29. INSTALL ACCUMULATOR SPRINGS AND PISTONS

(a) Coat the new O—rings with ATF and install them to the pistons.

(b) Install the 3 springs and four accumulator pistons to the bore.
HINT: The pistons are marked in relief with either C_0, B_0, C_2 or B_2 to differentiate between them.



(c) Install the 2 springs to the C_0 accumulator piston.



AT

- **Accumulator Spring**

TRUCK, 4 RUNNER, T100:

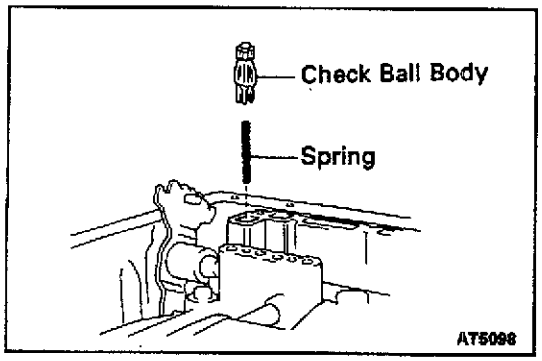
Spring	Free length Outer diameter	Color
(1) B_2	70.5 mm (2.776 in.) 19.7 mm (0.776 in.)	Yellow
(2) C_2 (Inner)	42.1 mm (1.657 in.) 14.7 mm (0.579 in.)	Pink
(3) C_2 (Outer)	70.2 mm (2.764 in.) 20.2 mm (0.795 in.)	Purple
(4) B_0	62.0 mm (2.441 in.) 16.0 mm (0.630 in.)	Green
(5) C_0 (Outer)	46.0 mm (1.811 in.) 14.0 mm (0.551 in.)	Yellow
(6) C_0 (Inner)	74.6 mm (2.397 in.) 20.9 mm (0.823 in.)	Orange

SUPRA:

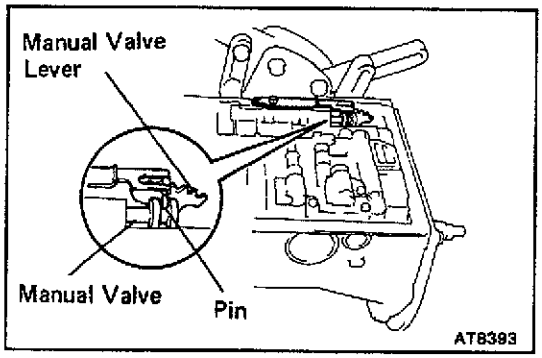
Spring	Free length Outer diameter	Color
(1) B_2	73.4 mm (2.890 in.) 19.9 mm (0.783 in.)	Red
(2) C_2 (Inner)	42.1 mm (1.657 in.) 14.7 mm (0.579 in.)	Pink
(3) C_2 (Outer)	70.2 mm (2.764 in.) 20.2 mm (0.795 in.)	Purple
(4) B_0	67.0 mm (2.638 in.) 16.2 mm (0.638 in.)	White & Blue
(5) C_0 (Outer)	46.0 mm (1.811 in.) 14.0 mm (0.551 in.)	Yellow
(6) C_0 (Inner)	74.6 mm (2.397 in.) 20.9 mm (0.823 in.)	Orange

PREVIA:

Spring	Free length Outer diameter	Color
(1) B_2	75.3 mm (2.965 in.) 20.0 mm (0.787 in.)	White & Red
(2) C_2 (Inner)	42.1 mm (1.657 in.) 14.7 mm (0.579 in.)	Pink
(3) C_2 (Outer)	70.2 mm (2.764 in.) 20.2 mm (0.795 in.)	Purple
(4) B_0	67.0 mm (2.638 in.) 16.2 mm (0.638 in.)	White & Blue
(5) C_0 (Outer)	46.0 mm (1.811 in.) 14.0 mm (0.551 in.)	Yellow
(6) C_0 (Inner)	74.6 mm (2.397 in.) 20.9 mm (0.823 in.)	Orange



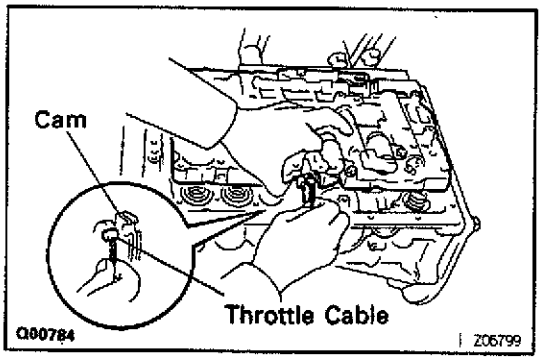
30. INSTALL CHECK BALL BODY AND SPRING



AT08M–01

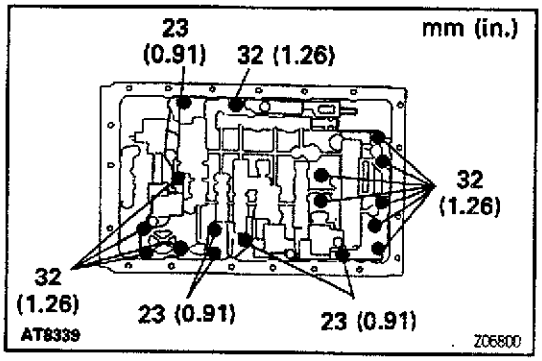
31. INSTALL VALVE BODY

(a) Align the groove of the manual valve to pin of the lever.

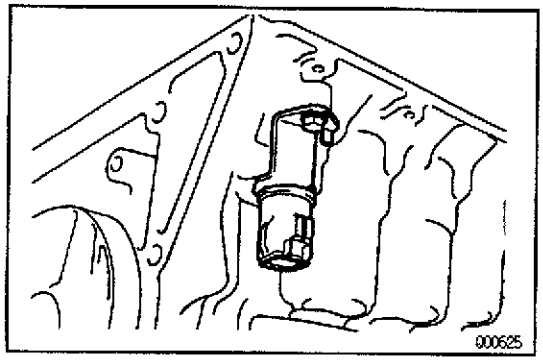


(b) Connect the throttle cable to the cam.

(c) Confirm the springs into the accumulator pistons are installed correctly.



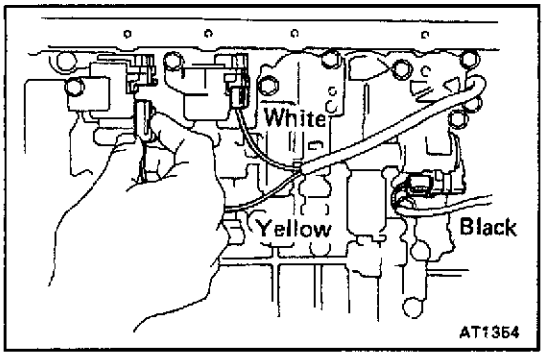
(d) Install the 17 bolts.
HINT: Each bolt length is indicated in the illustration.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)



32. INSTALL SOLENOID WIRING

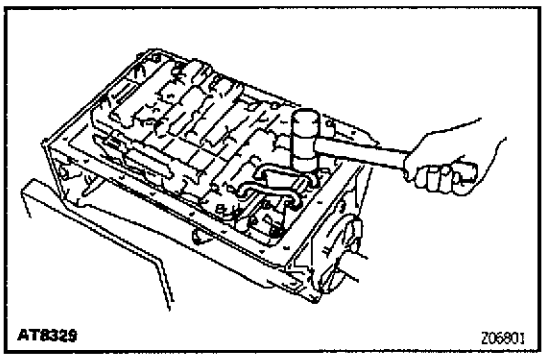
(a) Coat a new O–ring with ATF and install it to the grommet.

(b) Install the solenoid wiring to the case and install the stopper plate.



(c) Connect the connectors to the No.1, No.2 and lock–up solenoids.

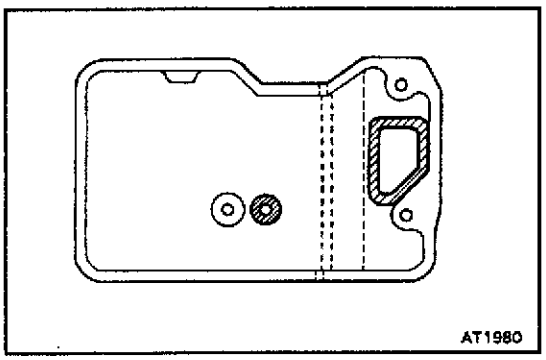
T



33. INSTALL OIL TUBES

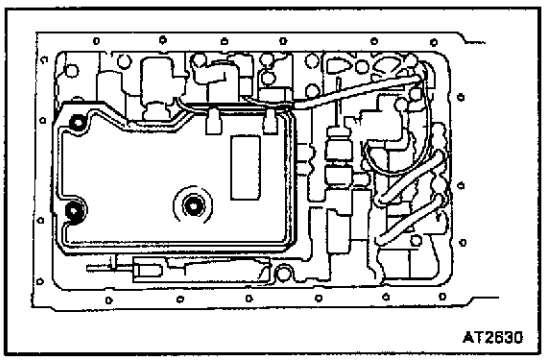
Using a plastic hammer, install the tubes into position.

NOTICE: Be careful not to bend or damage the tubes.



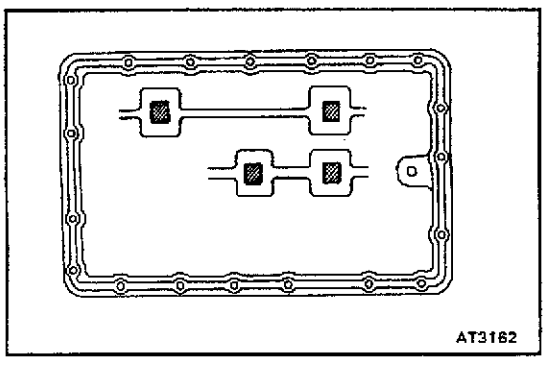
34. INSTALL OIL STRAINER AND GASKETS

(a) Install the 2 new gaskets in the oil strainer.



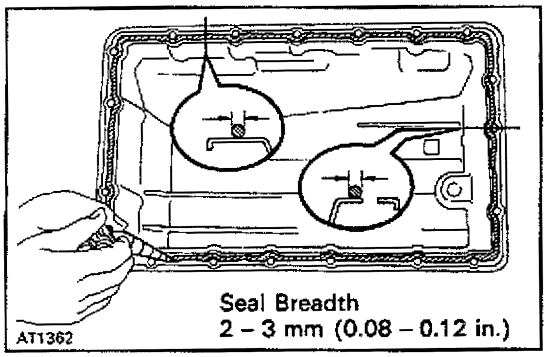
(b) Install and torque the 3 bolts.
Torque: 10 N·m (100 kgf·cm, 7 ft·lbf)

(c) Clamp the solenoid wire.



35. INSTALL MAGNETS IN PAN

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



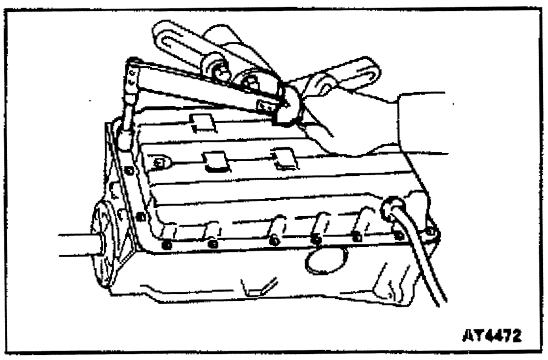
36. INSTALL OIL PAN

(a) Remove any packing material and be careful not to drop oil on the contacting surfaces of the transmission case and oil pan.

(b) Apply seal packing to the oil pan.

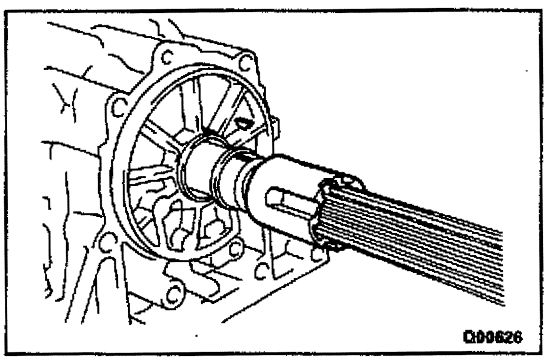
Seal packing:

Part No. 08826—00090, THREE BOND 1281 or equivalent



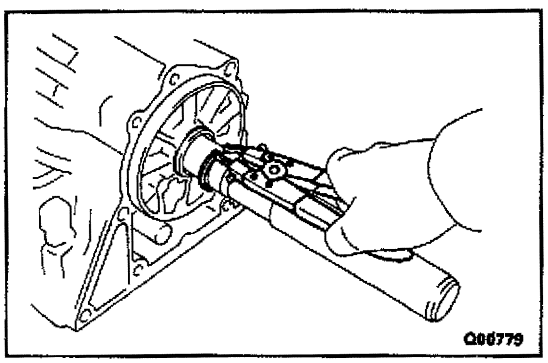
(c) Install and torque the 19 bolts.

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



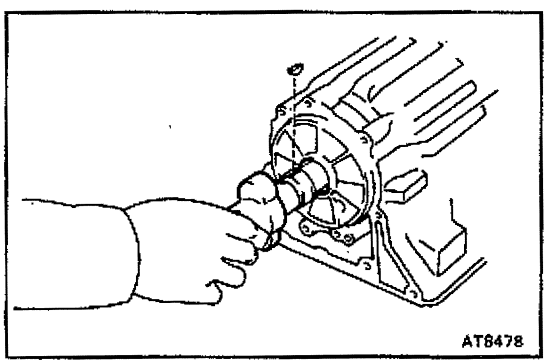
37. INSTALL SENSOR ROTOR AND KEY

SUPRA:



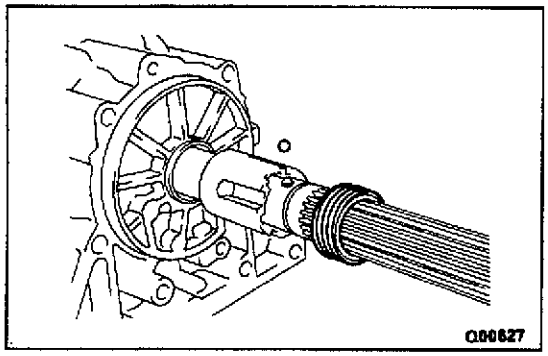
OTHERS:

(a) Using snap ring pliers, install the snap ring.



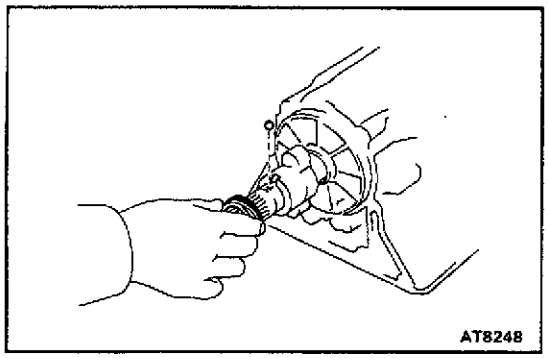
(b) Install the key on the output shaft.

(c) Align the groove of the sensor rotor with the key, install the sensor rotor.



38. INSTALL SPEEDOMETER DRIVE GEAR AND BALL

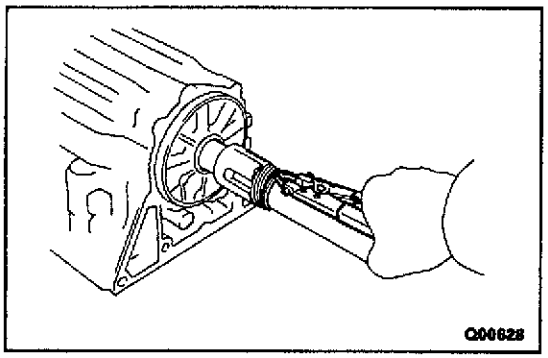
SUPRA:



OTHERS:

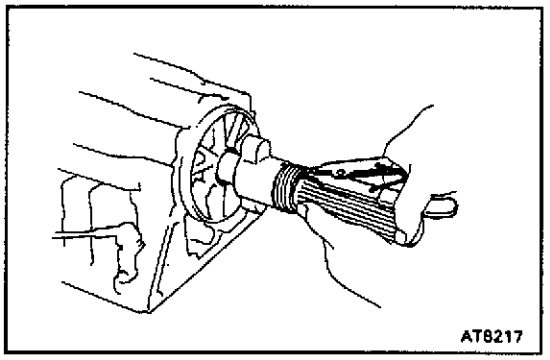
(a) Install the lock ball on the output shaft.

(b) Align the groove of the drive gear with the ball, install the drive gear.

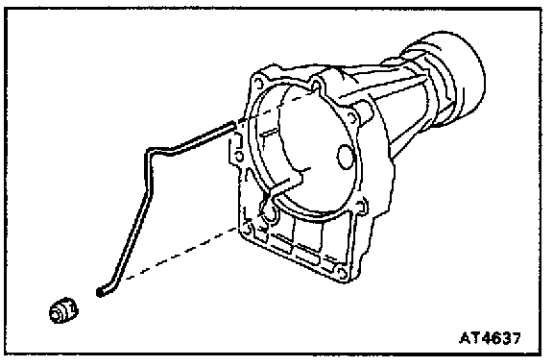


SUPRA:

(c) Using snap ring pliers, install the snap ring.



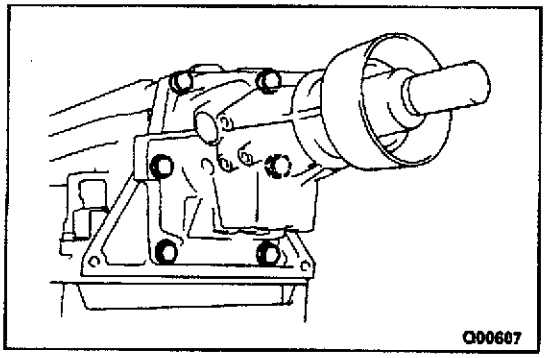
OTHERS:



39. INSTALL EXTENSION HOUSING AND NEW GASKET

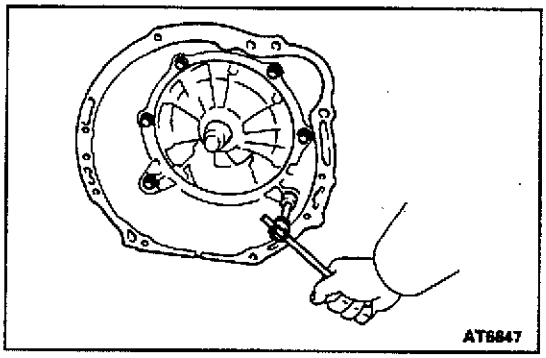
(a) Install the oil apply tube and a new gasket to the extension housing.

(b) Install the oil apply tube and a new gasket to the extension housing.



(c) Apply seal packing or equivalent to the 6 bolts.
Seal packing:
Part No. 08826–00070, THREE BOND 1324 or equivalent

(d) Install the extension housing with a new gasket to the case. install and torque the 6 bolts.
HINT: The 2 lower bolts are shorter.
Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)

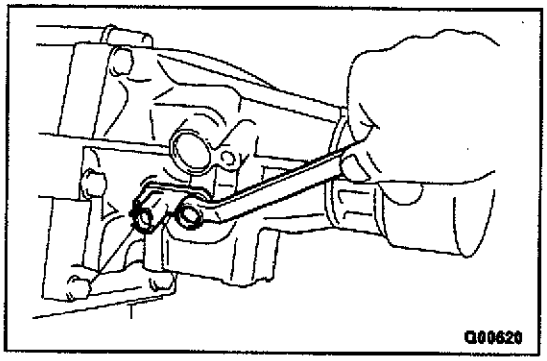


40. INSTALL TRANSMISSION HOUSING

(a) Clean the threads of the bolts and case with white gasoline.

(b) Apply seal packing or equivalent to the six bolts.
Seal packing:
Part No. 08826–00070, THREE BOND 1324 or equivalent

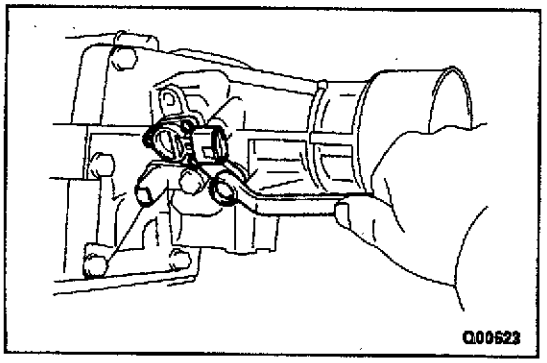
(c) Install and torque the 6 bolts.
Torque:
10 mm bolt 34 N·m (345 kgf·cm, 25 ft·lbf)
12 mm bolt 57 N·m (580 kgf·cm, 42 ft·lbf)



41. INSTALL NO.2 VEHICLE SPEED SENSOR

(a) Install the O–ring from the sensor.

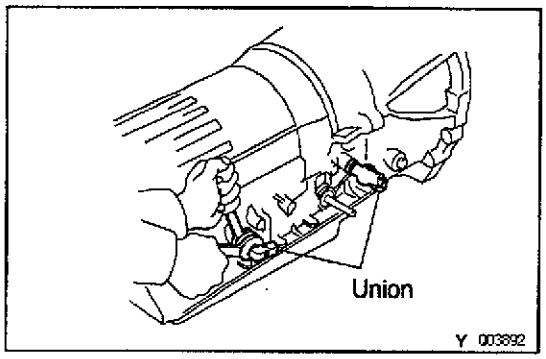
(b) Install the No.2 vehicle speed sensor.



42. INSTALL NO.1 VEHICLE SPEED SENSOR

(a) Install the O–ring from the sensor.

(b) Install the No.1 vehicle speed sensor.

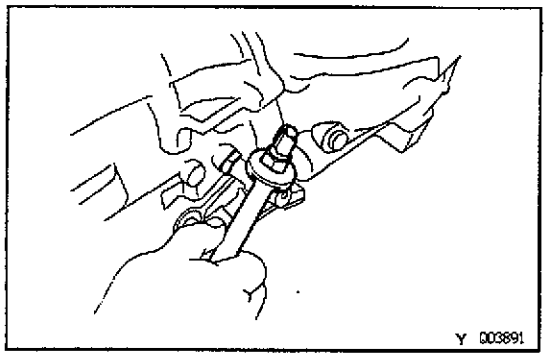


43. INSTALL UNION AND ELBOW

(a) Coat the new O–rings with ATF and install them to union and elbow.

(b) Install the front union.
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

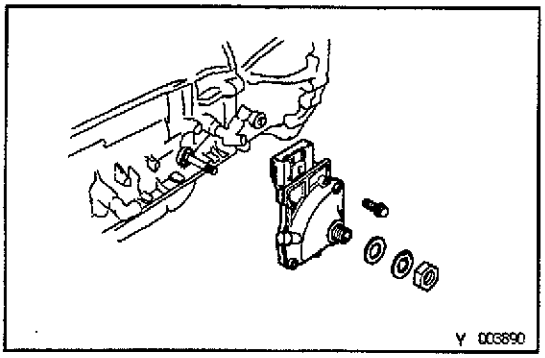
(c) Install the rear union.
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)



44. SUPRA, T100
INSTALL A/T OIL TEMPERATURE SENSOR

(a) Coat new O–ring with ATF and install it to the oil temperature sensor.

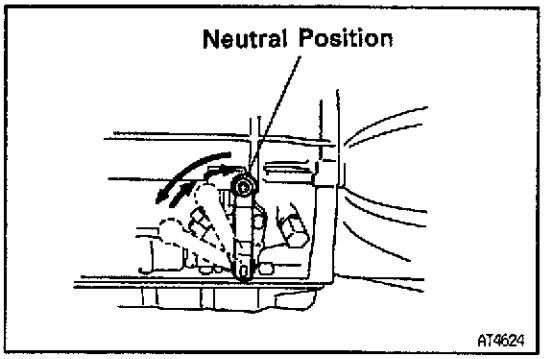
(b) Install the sensor.
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)



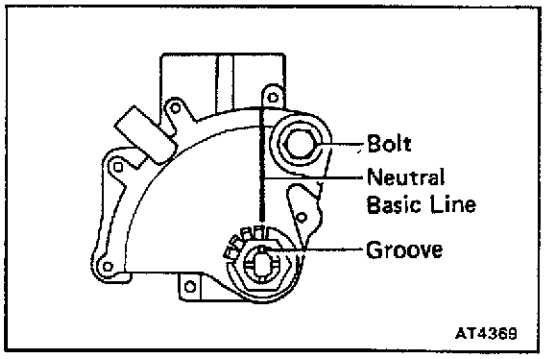
45. INSTALL PARK/NEUTRAL POSITION SWITCH

(a) Install the park / neutral position switch onto the manual valve lever shaft and temporarily tighten the adjusting bolt.

(b) Install the grommet and a new lock washer. Install and torque the nut.
Torque: 6.9 N·m (70 kgf·cm, 61 in.·lbf)

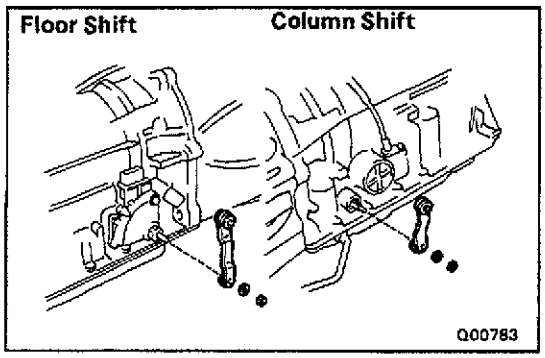


(c) Using the control shaft lever, fully turn the manual lever shaft back and return 2 notches. It is now in neutral.

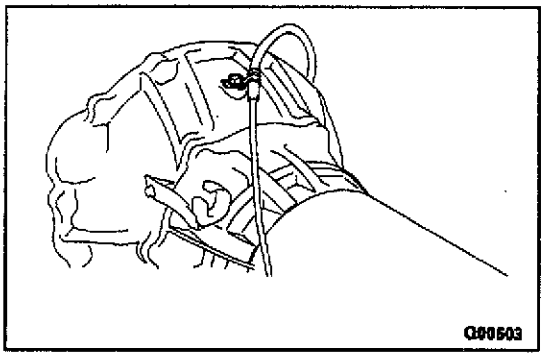


(d) Align the neutral basic line and the switch groove, and tighten the adjusting bolt.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)

(e) Bend the tabs of the lock washer.
HINT: Bend at least 2 of the lock washer tabs.



46. INSTALL CONTROL SHAFT LEVER
Torque: 16 N·m (160 kgf·cm, 12 ft·lbf)



47. SUPRA, PREVIA:
INSTALL WIRE HARNESS CLAMP AND THROTTLE CABLE CLAMP