

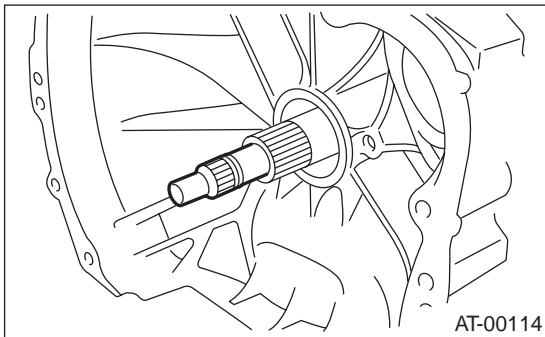
2-4 BRAKE

AUTOMATIC TRANSMISSION

40.2-4 Brake

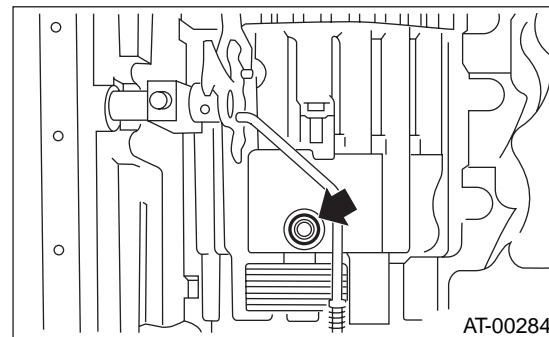
A: REMOVAL

- 1) Remove the transmission assembly from the vehicle. <Ref. to AT-39, REMOVAL, Automatic Transmission Assembly.>
- 2) Extract the torque converter clutch assembly. <Ref. to AT-84, REMOVAL, Torque Converter Clutch Assembly.>
- 3) Remove the input shaft.

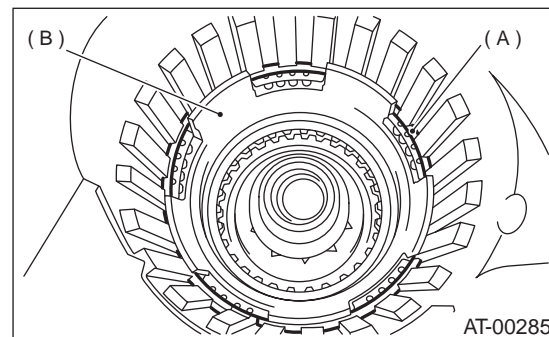


- 4) Disconnect the air breather hose. <Ref. to AT-82, REMOVAL, Air Breather Hose.>
- 5) Lift-up lever behind the transmission harness connector and disconnect it from stay.
- 6) Disconnect inhibitor switch connector from stay.
- 7) Remove the oil charger pipe. <Ref. to AT-83, REMOVAL, Oil Charger Pipe.>
- 8) Remove the oil cooler inlet and outlet pipes with washers. <Ref. to AT-77, REMOVAL, ATF Cooler Pipe and Hose.>
- 9) Remove rear vehicle speed sensor, and separate the transmission case and extension case. <Ref. to AT-85, REMOVAL, Extension Case.>
- 10) Remove the reduction drive gear. (MPT model) <Ref. to AT-103, REMOVAL, Reduction Drive Gear.>
- 11) Remove the center differential carrier. (VTD model) <Ref. to AT-105, REMOVAL, Center Differential Carrier.>
- 12) Remove reduction driven gear. <Ref. to AT-100, REMOVAL, Reduction Driven Gear.>
- 13) Separation of torque converter clutch case and transmission case. <Ref. to AT-108, REMOVAL, Torque Converter Clutch Case.>
- 14) Remove the oil pan and control valve body. <Ref. to AT-60, REMOVAL, Control Valve Body.>
- 15) Remove the oil pump housing. <Ref. to AT-111, REMOVAL, Oil Pump.>

- 16) Remove 2-4 brake seal.

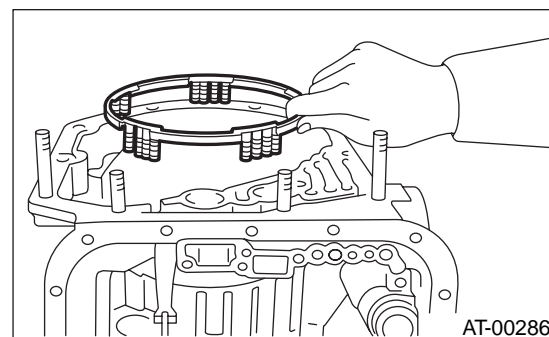


- 17) Take out the high clutch and reverse clutch assembly. <Ref. to AT-129, REMOVAL, High Clutch and Reverse Clutch.>
- 18) Take out the thrust needle bearing, planetary gear assembly and the low clutch assembly. <Ref. to AT-135, REMOVAL, Planetary Gear and Low Clutch.>
- 19) Remove snap ring.



- (A) Snap ring
(B) 2-4 brake piston

- 20) Take out 2-4 brake return spring.

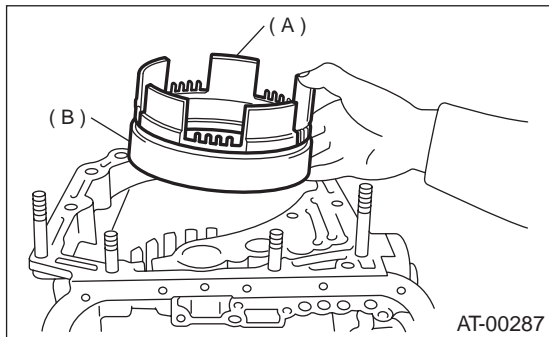


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2-4 BRAKE

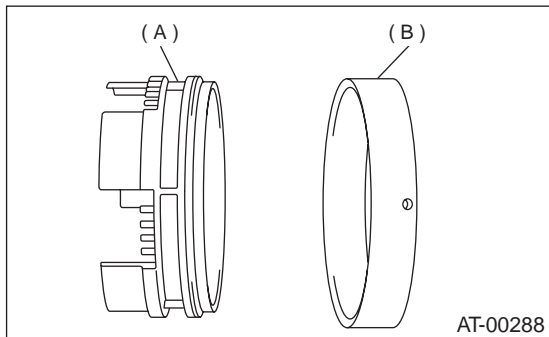
AUTOMATIC TRANSMISSION

21) Remove the 2-4 brake piston and piston retainer without damaging.



- (A) 2-4 brake piston
- (B) 2-4 brake piston retainer

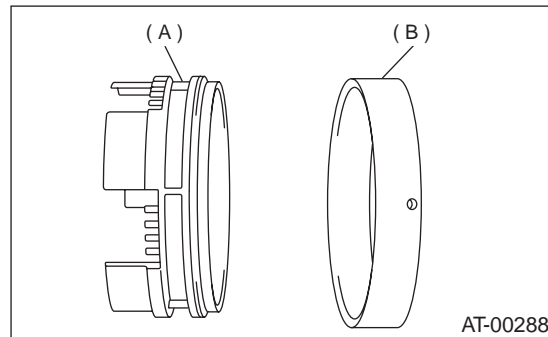
22) Separate 2-4 brake piston and piston retainer.



- (A) 2-4 brake piston
- (B) 2-4 brake piston retainer

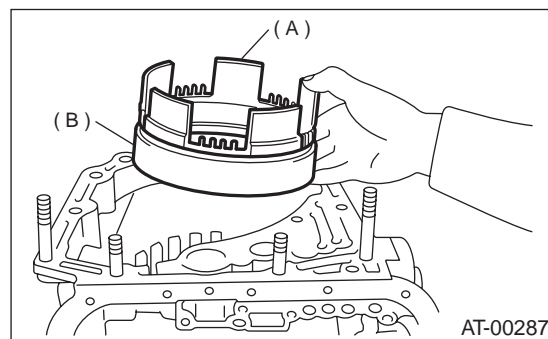
B: INSTALLATION

1) Install 2-4 brake piston to 2-4 brake piston retainer.



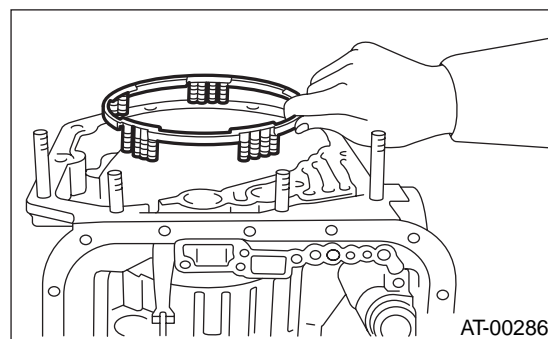
- (A) 2-4 brake piston
- (B) 2-4 brake piston retainer

2) Install the 2-4 brake piston and 2-4 brake retainer by aligning hole of 2-4 brake retainer and hole of transmission case.



- (A) 2-4 brake piston
- (B) 2-4 brake piston retainer

3) Install 2-4 brake piston return spring to transmission case.

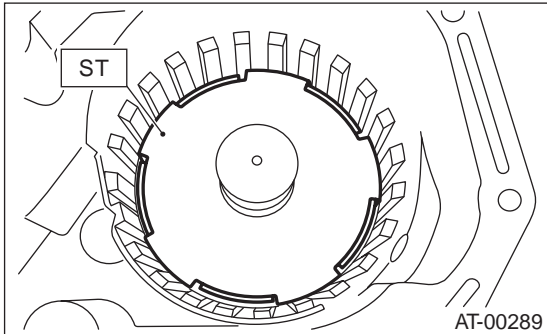


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2-4 BRAKE

AUTOMATIC TRANSMISSION

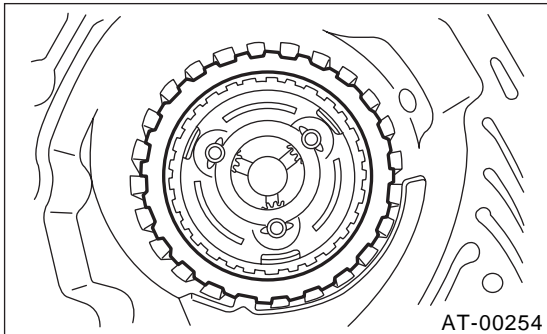
4) Position snap ring in transmission. Using ST, press the snap ring into place.
ST 498677100 COMPRESSOR



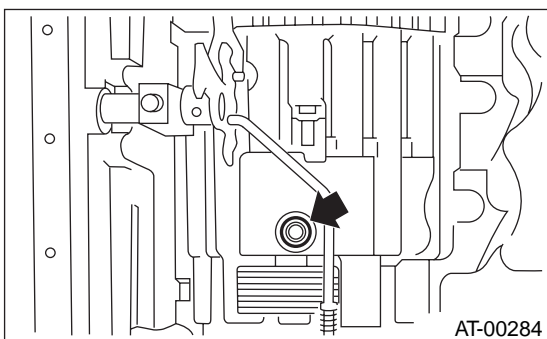
5) Install planetary gear and low clutch assembly to transmission case.

Install carefully while rotating the low clutch and planetary gear assembly slowly paying special attention not to damage the seal ring. <Ref. to AT-136, INSTALLATION, Planetary Gear and Low Clutch.>

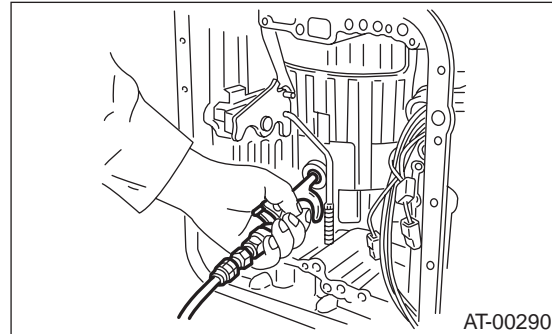
6) Install pressure plate, drive plate, driven plate, retaining plate and snap ring.



7) Install a new 2-4 brake oil seal to transmission case.

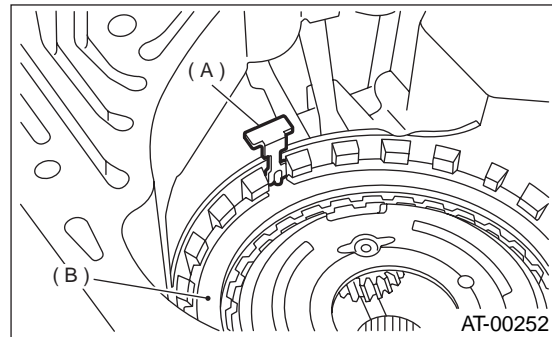


8) After all 2-4 brake component parts have been installed, blow in air intermittently and confirm the operation of the brake.



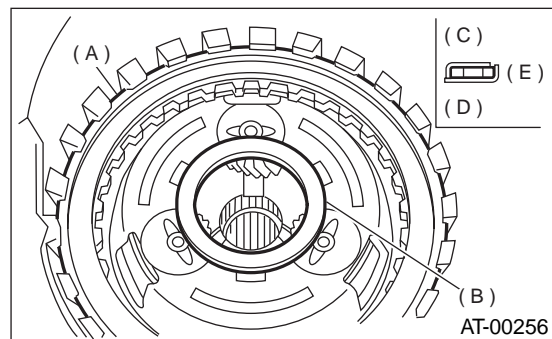
9) Check the clearance between the retaining plate and the snap ring. <Ref. to AT-148, INSPECTION, 2-4 Brake.>

10) Be careful not to mistake the location of the leaf spring to be inserted.



- (A) Leaf spring
- (B) Retaining plate

11) Install thrust needle bearing in the correct direction.



- (A) Snap ring
- (B) Thrust needle bearing
- (C) Upside
- (D) Downside

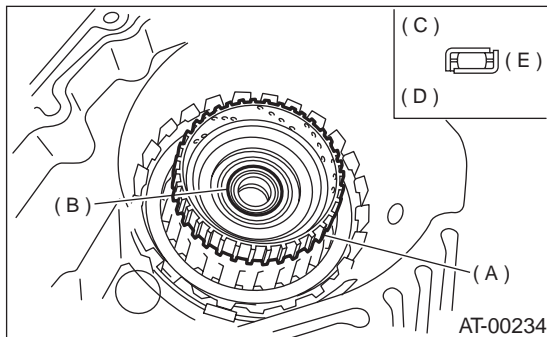
12) Install front sun gear.

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13) Install thrust needle bearing in the correct direction.



- (A) High clutch hub
- (B) Thrust needle bearing
- (C) Upside
- (D) Downside
- (E) Outside

14) Install the high clutch assembly. <Ref. to AT-130, INSTALLATION, High Clutch and Reverse Clutch.>

15) Install oil pump housing to transmission case. <Ref. to AT-112, INSTALLATION, Oil Pump.>

16) Install the control valve body and oil pan. <Ref. to AT-61, INSTALLATION, Control Valve Body.>

17) Install the torque converter clutch case assembly to the transmission case assembly. <Ref. to AT-109, INSTALLATION, Torque Converter Clutch Case.>

18) Install the reduction driven gear. <Ref. to AT-101, INSTALLATION, Reduction Driven Gear.>

19) Install the reduction drive gear. (MPT model) <Ref. to AT-103, INSTALLATION, Reduction Drive Gear.>

20) Install the center differential carrier. (VTD model) <Ref. to AT-105, INSTALLATION, Center Differential Carrier.>

21) Insert inhibitor switch and transmission connector into stay.

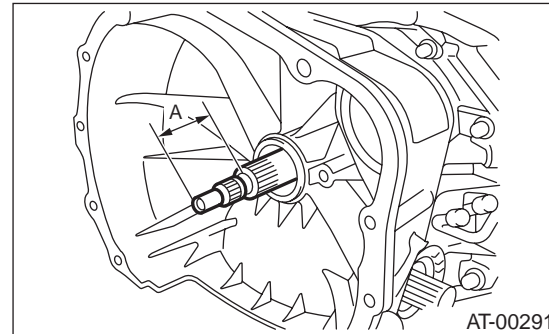
22) Install air breather hose. <Ref. to AT-82, INSTALLATION, Air Breather Hose.>

23) Install the oil cooler pipes. <Ref. to AT-79, INSTALLATION, ATF Cooler Pipe and Hose.>

24) Install the oil charger pipe with O-ring. <Ref. to AT-83, INSTALLATION, Oil Charger Pipe.>

25) Insert the input shaft while turning lightly by hand.

Normal protrusion A:
50 — 55 mm (1.97 — 2.17 in)



26) Install the torque converter clutch assembly. <Ref. to AT-84, INSTALLATION, Torque Converter Clutch Assembly.>

27) Install the transmission assembly to the vehicle. <Ref. to AT-42, INSTALLATION, Automatic Transmission Assembly.>

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C: INSPECTION

- Drive plate facing for wear and damage
- Snap ring for wear and spring retainer for deformation
- Lip seal and lathe cut seal ring for damage
- Measure the total end play and adjust to within specifications.<Ref. to AT-116, ADJUSTMENT, Oil Pump.>

1) Inspect the clearance between the retaining plate and the snap ring.

NOTE:

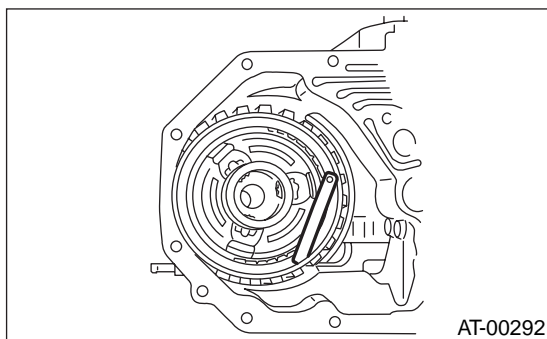
Select a retaining plate with a suitable value from the following table, so that the clearance becomes the standard value.

Standard value:

0.8 — 1.2 mm (0.031 — 0.047 in)

Allowable limit:

1.5 mm (0.059 in)



Available retaining plates	
Part No.	Thickness mm (in)
31567AA612	5.6 (0.220)
31567AA622	5.8 (0.228)
31567AA632	6.0 (0.236)
31567AA642	6.2 (0.244)
31567AA652	6.4 (0.252)
31567AA662	6.6 (0.260)

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