

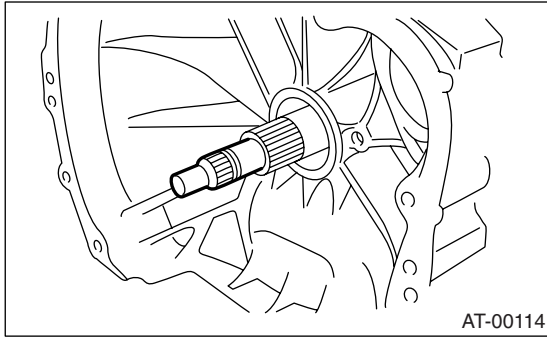
# AT TRANSMISSION MAIN CASE

## AUTOMATIC TRANSMISSION

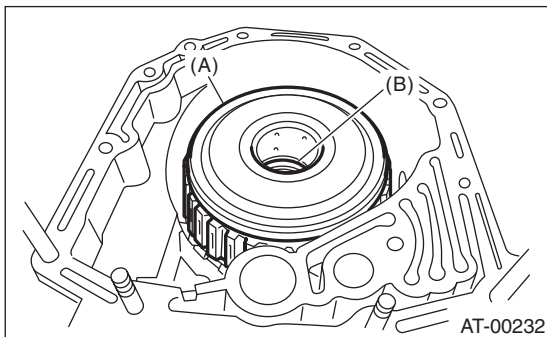
### 37.AT Transmission Main Case

#### A: REMOVAL

- 1) Remove the transmission assembly from the vehicle. <Ref. to 4AT-39, REMOVAL, Automatic Transmission Assembly.>
- 2) Extract the torque converter clutch assembly. <Ref. to 4AT-84, REMOVAL, Torque Converter Clutch Assembly.>
- 3) Remove the input shaft.

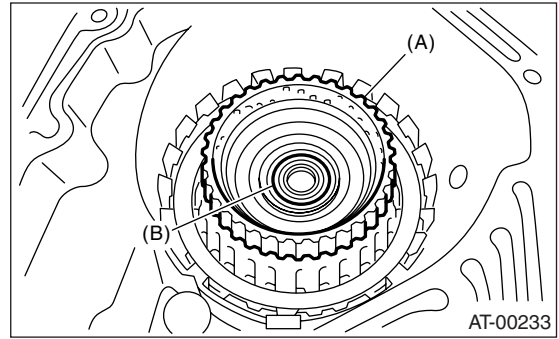


- 4) Lift-up lever behind the transmission harness connector and disconnect it from stay.
- 5) Disconnect inhibitor switch connector from stay.
- 6) Disconnect the air breather hose.
- 7) Remove the ATF charger pipe. <Ref. to 4AT-83, REMOVAL, ATF Charger Pipe.>
- 8) Remove the ATF cooler inlet and outlet pipes. <Ref. to 4AT-79, REMOVAL, ATF Cooler Pipe and Hose.>
- 9) Separation of torque converter clutch case and transmission case. <Ref. to 4AT-97, REMOVAL, Torque Converter Clutch Case.>
- 10) Remove the oil pump housing. <Ref. to 4AT-100, REMOVAL, Oil Pump Housing.>
- 11) Take out the high clutch & reverse clutch assembly and thrust needle bearing.



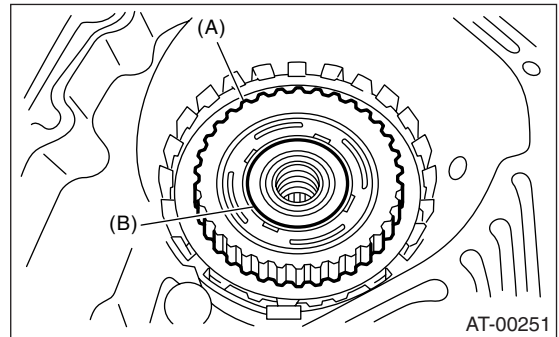
- (A) High clutch & reverse clutch assembly
- (B) Thrust needle bearing

- 12) Take out the high clutch hub and the thrust needle bearing.



- (A) High clutch hub
- (B) Thrust needle bearing

- 13) Take out the front sun gear and the thrust needle bearing.

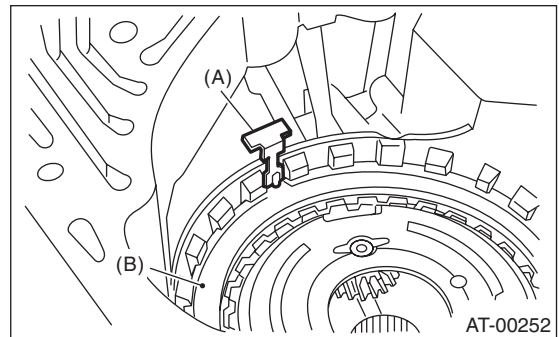


- (A) Front sun gear
- (B) Thrust needle bearing

- 14) Pull out leaf spring of 2-4 brake without folding.

#### NOTE:

Remove it while pressing down on lower leaf spring.

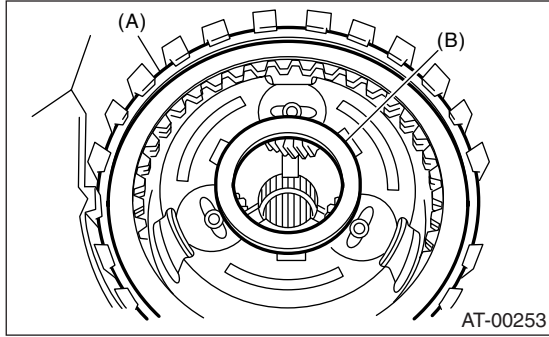


- (A) Leaf spring
- (B) Retaining plate

# AT TRANSMISSION MAIN CASE

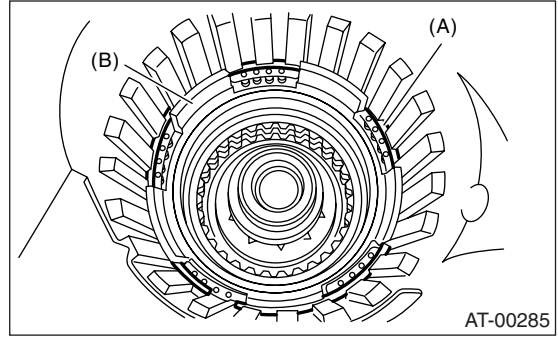
AUTOMATIC TRANSMISSION

15) Remove snap ring and thrust needle bearing.



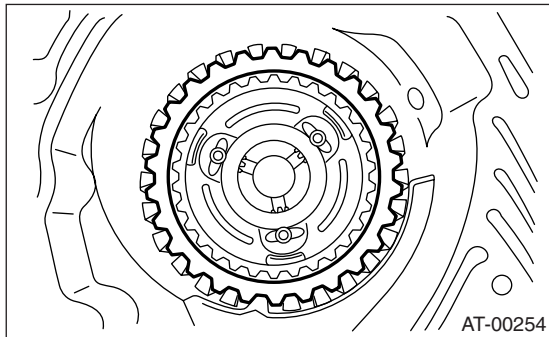
- (A) Snap ring
- (B) Thrust needle bearing

19) Remove snap ring.

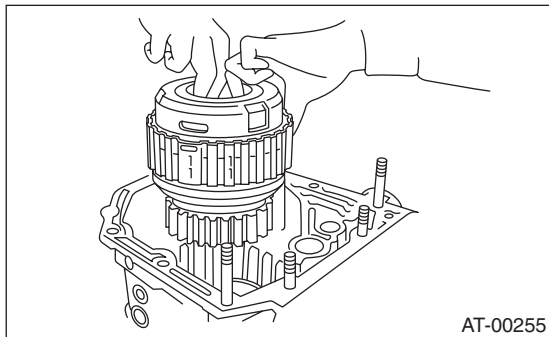


- (A) Snap ring
- (B) 2-4 brake piston

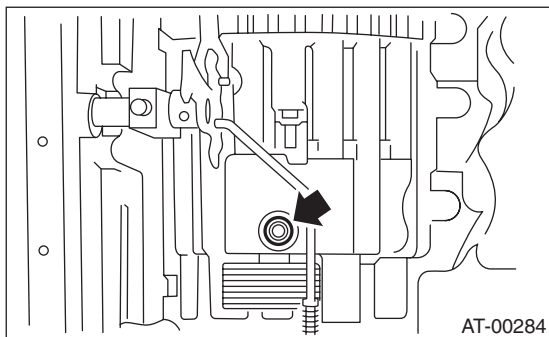
16) Take out retaining plate, drive plate and driven plate of 2-4 brake.



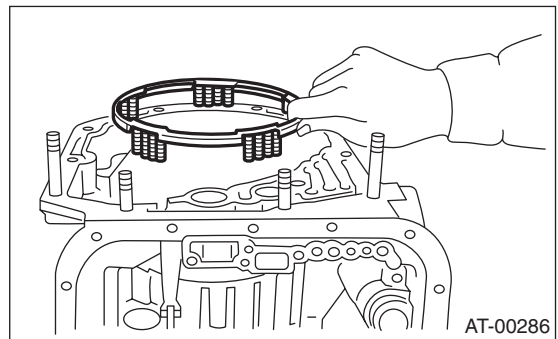
17) Take out the thrust needle bearing, planetary gear assembly and the low clutch assembly.



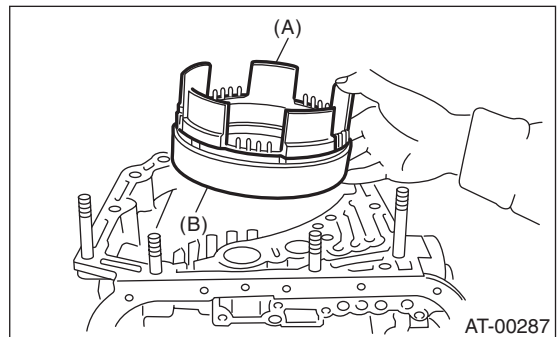
18) Remove 2-4 brake seal.



20) Take out 2-4 brake spring retainer.



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

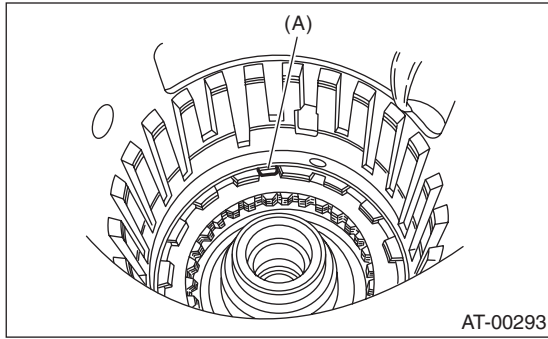


- (A) 2-4 brake piston
- (B) 2-4 brake piston retainer

# AT TRANSMISSION MAIN CASE

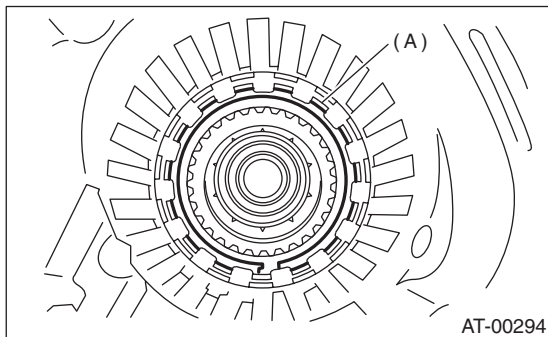
## AUTOMATIC TRANSMISSION

22) Pull out the leaf spring of low & reverse without folding.



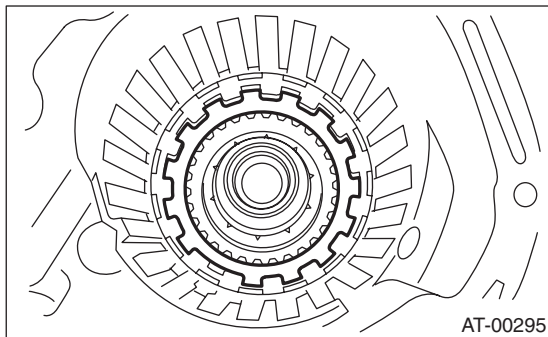
(A) Leaf spring

23) Remove snap ring.

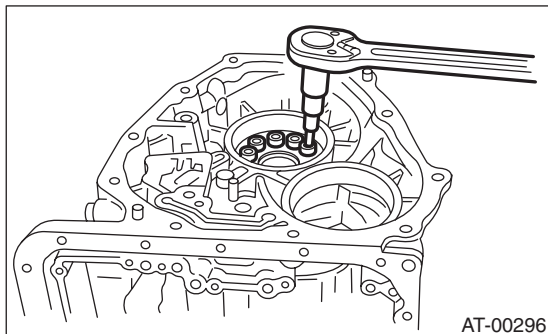


(A) Snap ring

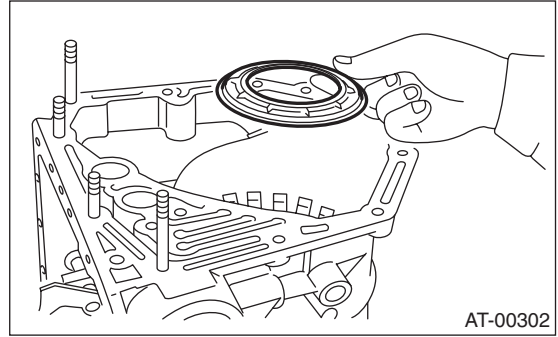
24) Take out retaining plate, drive plate, driven plate and dish plate of low & reverse.



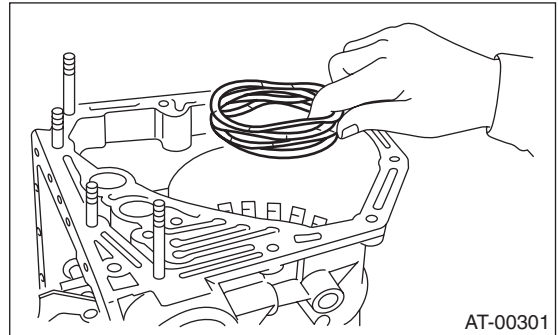
25) Turn the transmission case upside down, and then take out the socket bolts while holding the one-way clutch inner race with hand.



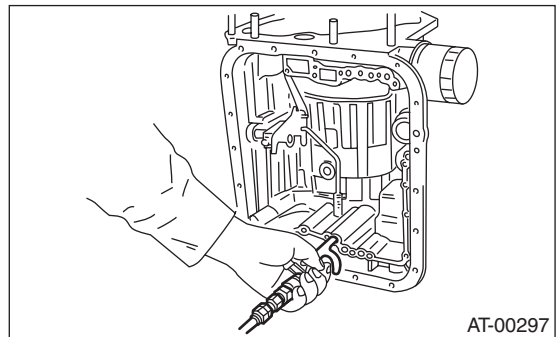
26) Take out the spring retainer.



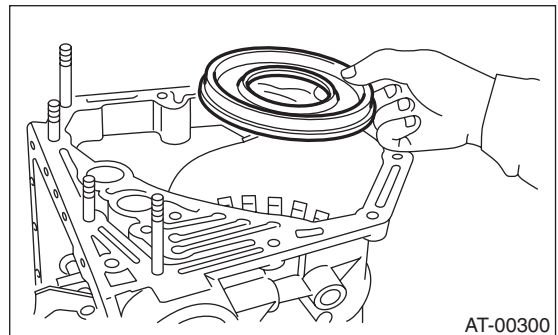
27) Take out the return spring.



28) Apply compressed air.



29) Take out the low & reverse piston.

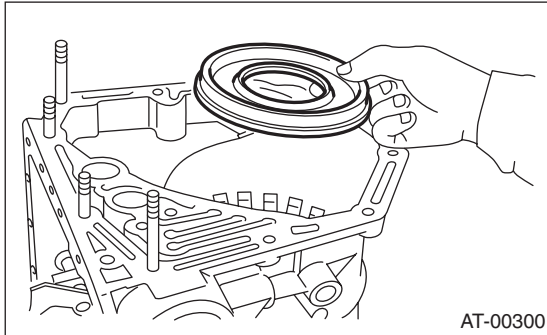


## B: INSTALLATION

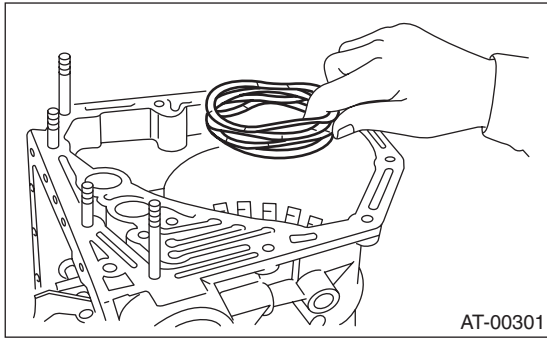
1) Install the low and reverse piston without tilting.

### CAUTION:

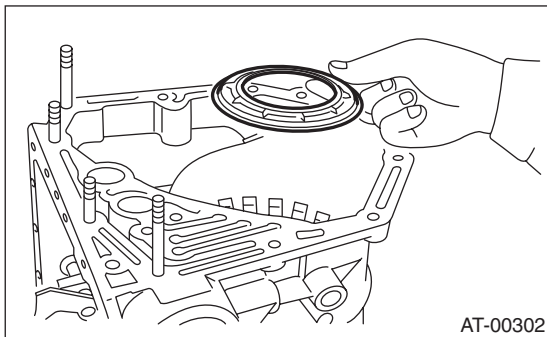
Be careful not to damage the lip seal.



2) Install return spring.



3) Install spring retainer.

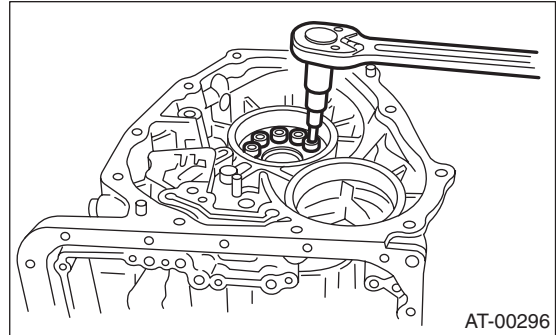


4) Install the one-way clutch inner race.

5) Tighten socket head bolts evenly from the rear side of the transmission case.

### Tightening torque:

**25 N·m (2.5 kgf·m, 18.1 ft·lb)**



6) Place the front side of transmission body up.

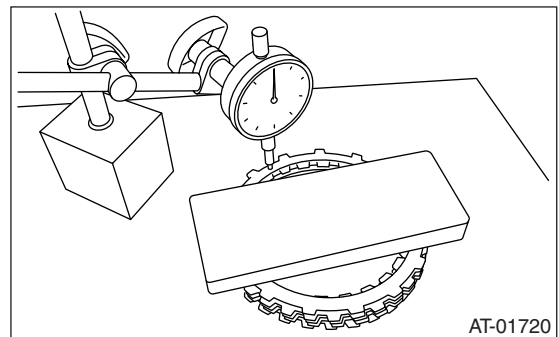
7) Install thrust needle bearing.

8) Place the dish plate, driven plate, drive plate and retaining plate in this order on a surface plate.

9) Set the micro gauge and read the value indicated on the micro gauge scale, and then place the flat board on the plate.

### NOTE:

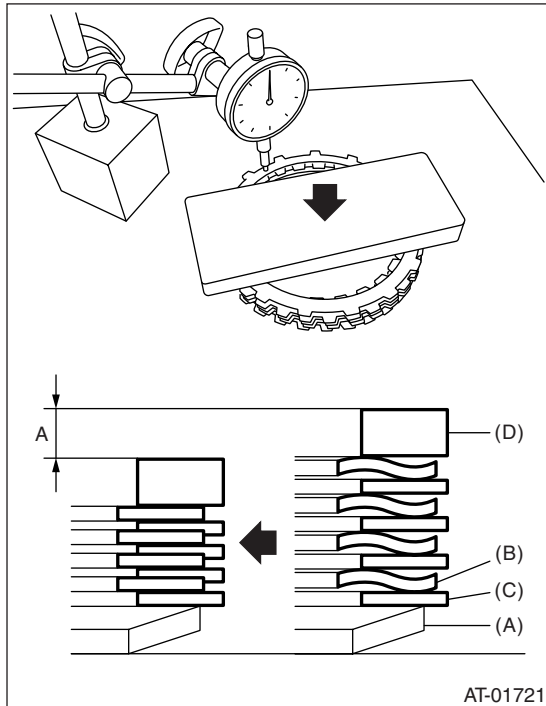
The measured value, which is read in procedure above, becomes the zero-point.



# AT TRANSMISSION MAIN CASE

## AUTOMATIC TRANSMISSION

10) Measure and record the height A with pushing down the center of retaining plate with 83 N (8.5 kgf, 18.7 lb) using push/pull gauge. Measure the height at equally-spaced three point or more, and then calculate the average value.

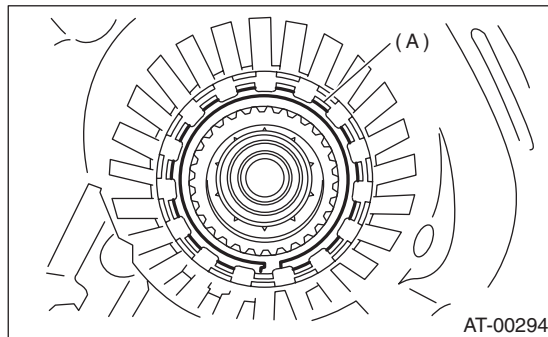


- (A) Dish plate
- (B) Driven plate
- (C) Drive plate
- (D) Retaining plate

11) Installation of the low & reverse brake:  
Install the dish plate, driven plate, drive plate and retaining plate, and then secure them with snap ring.

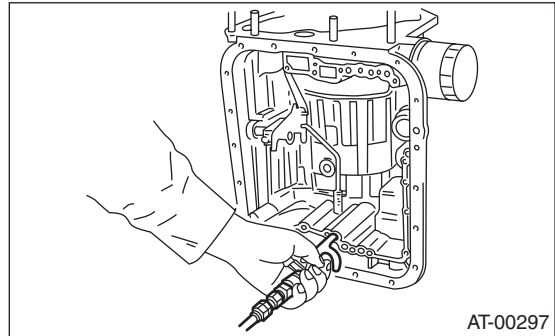
### NOTE:

Pay attention to the orientation of dish plate.

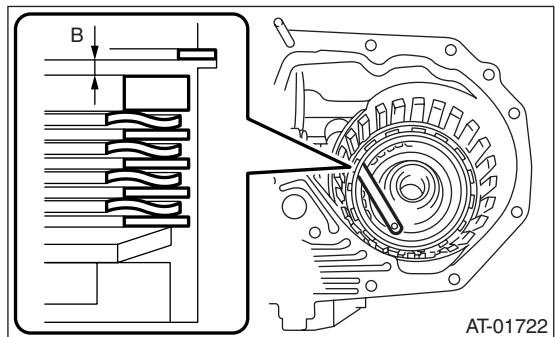


- (A) Snap ring

12) Apply compressed air intermittently to check for operation.



13) Measure and record the clearance B after placing the same thickness shims on both side of plate to prevent the plate from tilting.



- (B) Clearance between retaining plate and snap ring

14) Calculation of piston stroke:

Calculate the piston stroke with recorded A and B, and then select the retaining plate to complete the piston stroke within the standard value. If the result of calculation exceeds the service limit, replace the new drive plate and adjust the piston stroke within specification.

$$T = A + B$$

T: Piston stroke

A: Collapse of drive plate

B: Clearance between retaining plate and snap ring

**Turbo model**

**Initial standard value:**

**2.7 — 3.2 mm (0.106 — 0.126 in)**

**Service limit:**

**4.2 mm (0.165 in)**

**Non-turbo model**

**Initial standard value:**

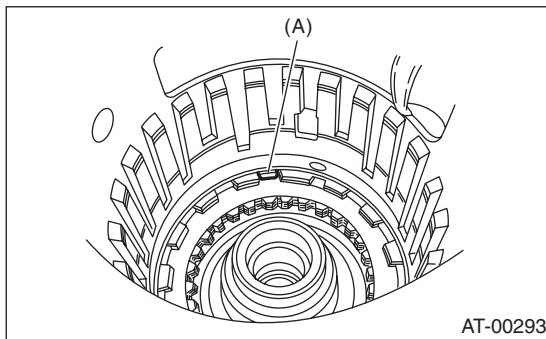
**2.4 — 2.9 mm (0.094 — 0.114 in)**

**Service limit:**

**3.9 mm (0.154 in)**

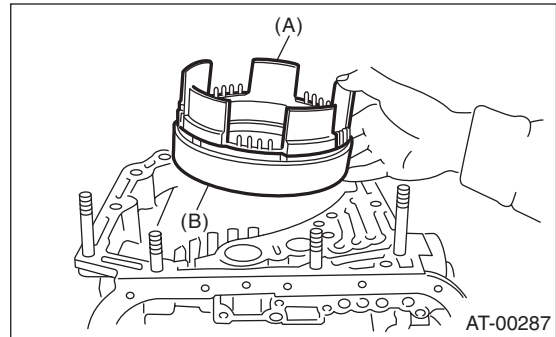
Retaining plates	
Part No.	Thickness mm (in)
31667AA320	4.1 (0.161)
31667AA330	4.4 (0.173)
31667AA340	4.7 (0.185)
31667AA350	5.0 (0.197)
31667AA360	5.3 (0.209)
31667AA370	5.6 (0.220)
31667AA380	5.9 (0.232)

15) Install the low & reverse brake leaf spring.



(A) Leaf spring

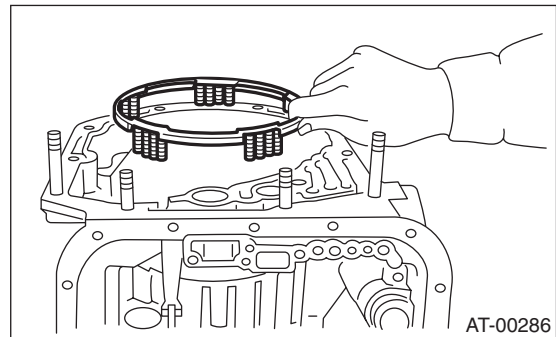
16) Install the 2-4 brake piston and 2-4 brake retainer by aligning hole of 2-4 brake retainer and hole of transmission case.



(A) 2-4 brake piston

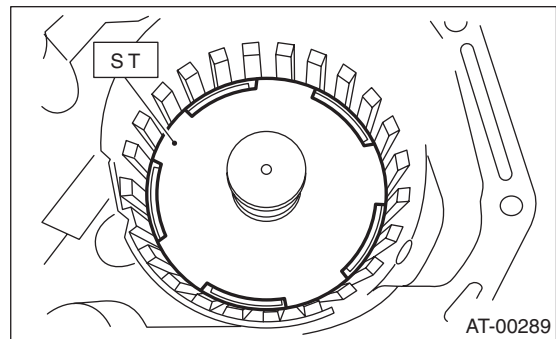
(B) 2-4 brake piston retainer

17) Install 2-4 brake piston spring retainer to transmission case.



18) Position snap ring in transmission. Using ST, press the snap ring into place.

ST 498677100 COMPRESSOR



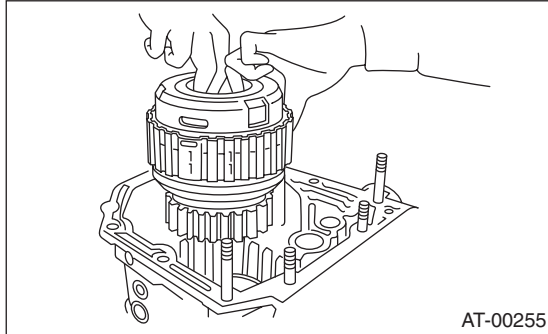
# AT TRANSMISSION MAIN CASE

## AUTOMATIC TRANSMISSION

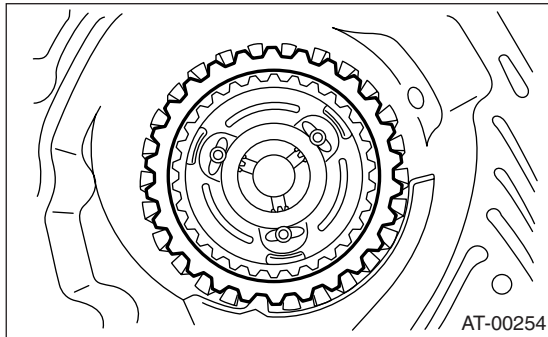
19) Install planetary gear and low clutch assembly to transmission case.

**CAUTION:**

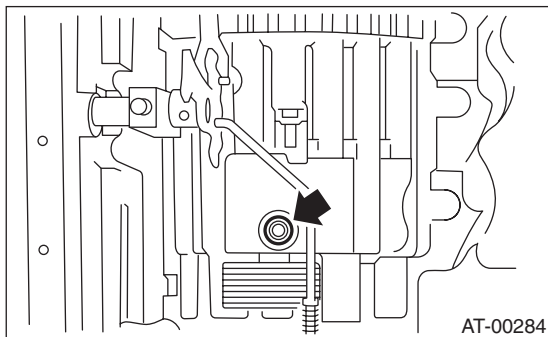
**Install carefully while rotating the low clutch and planetary gear assembly slowly paying special attention not to damage the seal ring.**



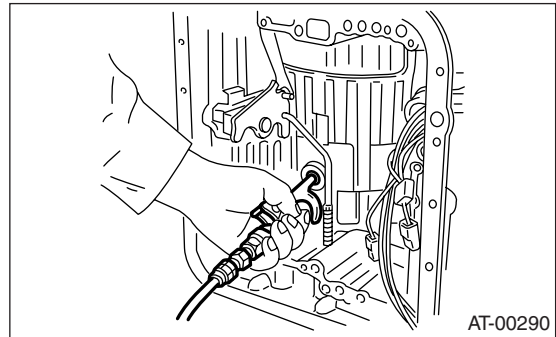
20) Install pressure plate and drive plate, driven plate, retaining plate and snap ring of 2-4 brake.



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



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



23) Check the clearance between the retaining plate and the snap ring.

**NOTE:**

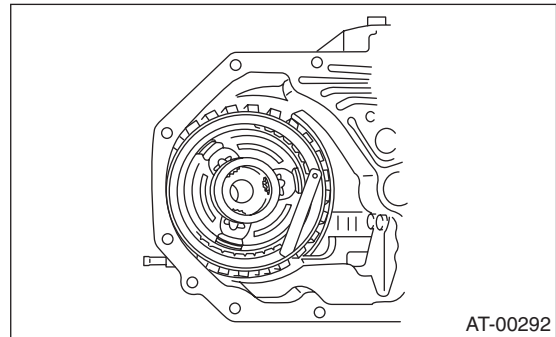
Select a retaining plate with a suitable value from the following table, so that the clearance becomes the standard value.

**Standard value:**

**0.8 — 1.2 mm (0.031 — 0.047 in)**

**Allowable limit:**

**1.5 mm (0.059 in)**



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)

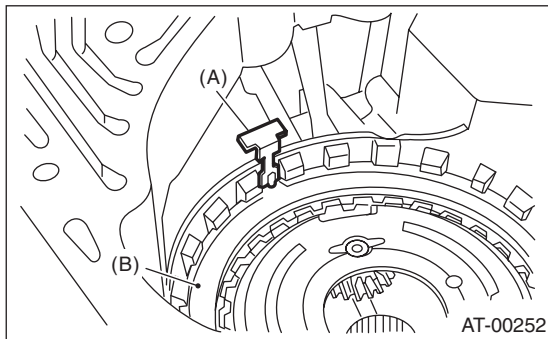
# AT TRANSMISSION MAIN CASE

AUTOMATIC TRANSMISSION

24) Install the leaf spring of 2-4 brake.

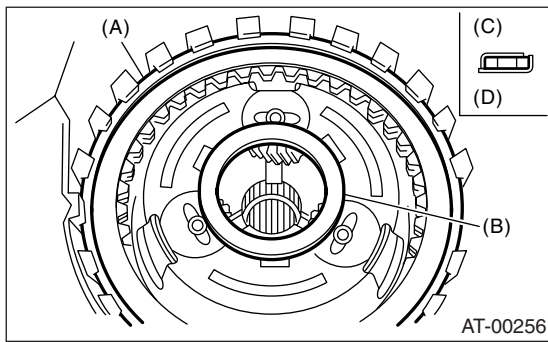
**CAUTION:**

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



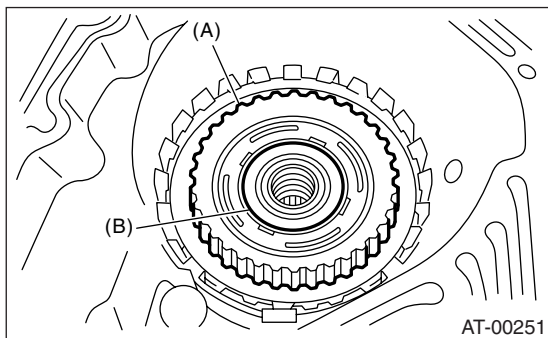
- (A) Leaf spring
- (B) Retaining plate

25) Install thrust needle bearing in the correct direction.



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

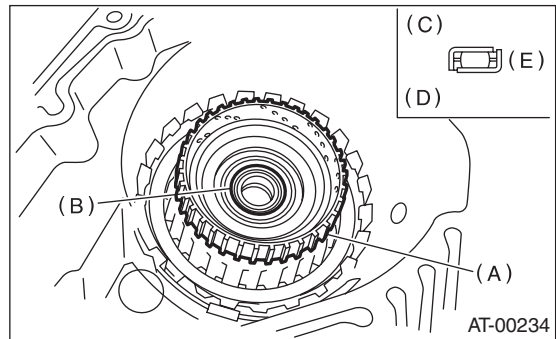
26) Install front sun gear and thrust needle bearing.



- (A) Front sun gear
- (B) Thrust needle bearing

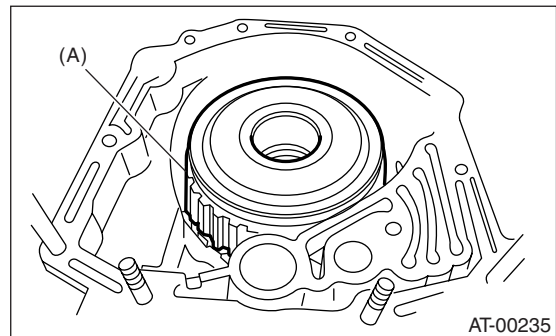
27) Apply Vaseline to thrust needle bearing, and then install the thrust needle bearing to the high clutch hub and install the high clutch hub by correctly engaging the splines of the front planetary carrier.

28) Install the thrust needle bearing in proper direction.



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

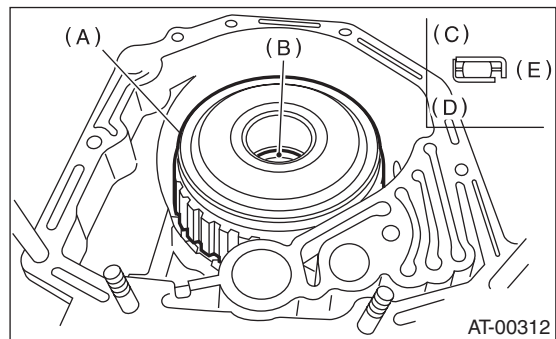
29) Install the high clutch assembly and reverse clutch assembly.



- (A) High clutch and reverse clutch assembly

30) Adjust total end play. <Ref. to 4AT-105, ADJUSTMENT, Oil Pump Housing.>

31) Install the thrust needle bearing in proper direction.



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



# AT TRANSMISSION MAIN CASE

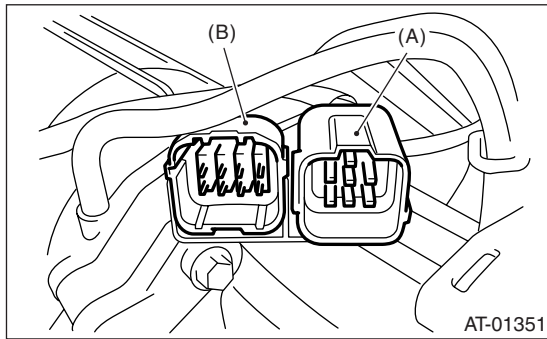
## AUTOMATIC TRANSMISSION

32) Install the oil pump housing assembly with new gasket.

33) Install the torque converter clutch case assembly to the transmission case assembly. <Ref. to 4AT-98, INSTALLATION, Torque Converter Clutch Case.>

34) Insert inhibitor switch and transmission connector into stay.

35) Install air breather hose. <Ref. to 4AT-82, INSTALLATION, Air Breather Hose.>



- (A) Transmission harness
- (B) Inhibitor switch harness

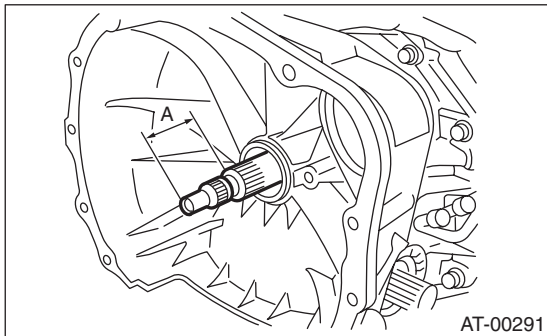
36) Install ATF cooler pipes. <Ref. to 4AT-80, INSTALLATION, ATF Cooler Pipe and Hose.>

37) Install the ATF charger pipe with O-ring. <Ref. to 4AT-83, INSTALLATION, ATF Charger Pipe.>

38) Insert the input shaft while turning lightly by hand and verify the protrusion amount.

### Normal protrusion A:

**50 — 55 mm (1.97 — 2.17 in)**



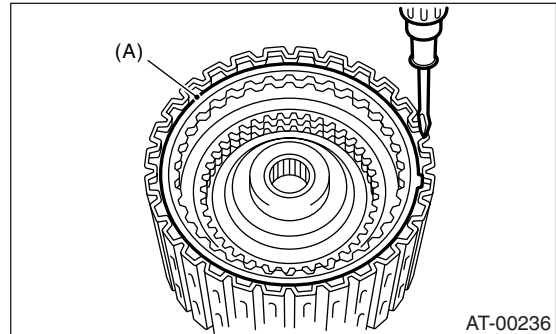
39) Install the torque converter clutch assembly. <Ref. to 4AT-84, INSTALLATION, Torque Converter Clutch Assembly.>

40) Install the transmission assembly to the vehicle. <Ref. to 4AT-42, INSTALLATION, Automatic Transmission Assembly.>

## C: DISASSEMBLY

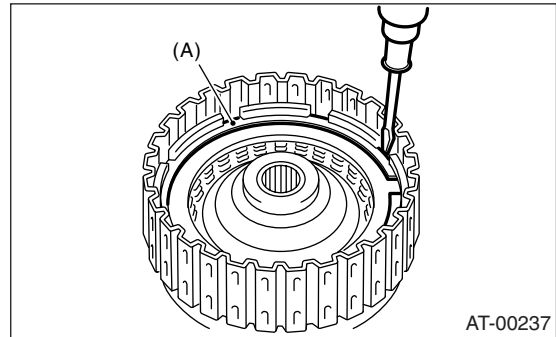
### 1. HIGH CLUTCH, REVERSE CLUTCH

1) Remove the snap ring, and take out the retaining plate, drive plates and driven plates.



- (A) Snap ring

2) Remove snap ring, and take out the retaining plate, drive plates and driven plates.

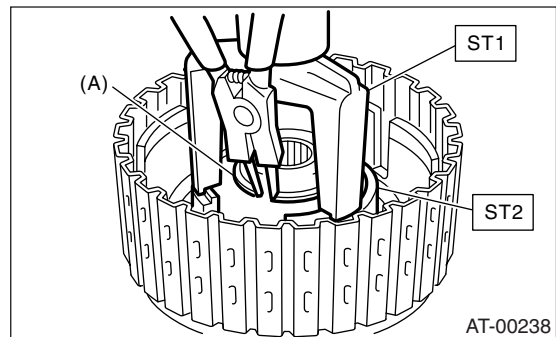


- (A) Snap ring

3) Using ST1 and ST2, remove snap ring.

ST1 398673600 COMPRESSOR

ST2 498627100 SEAT

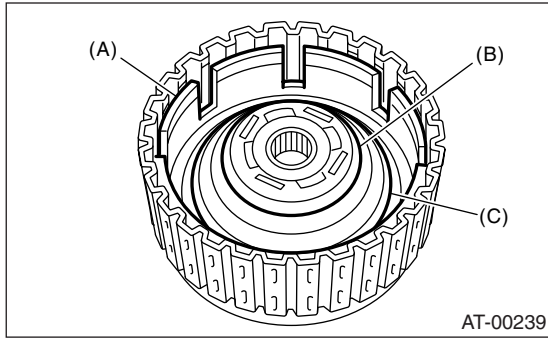


- (A) Snap ring

# AT TRANSMISSION MAIN CASE

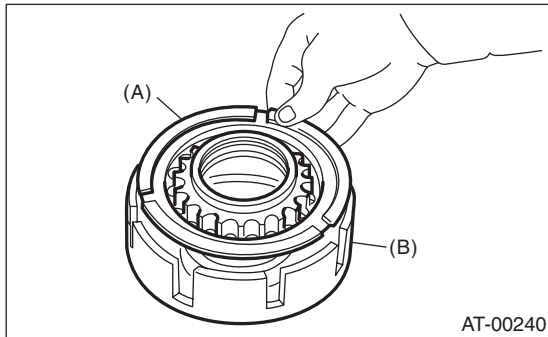
AUTOMATIC TRANSMISSION

4) Take out clutch cover, spring retainer, high clutch piston and reverse clutch piston.



- (A) Reverse clutch piston
- (B) Clutch cover
- (C) Return spring

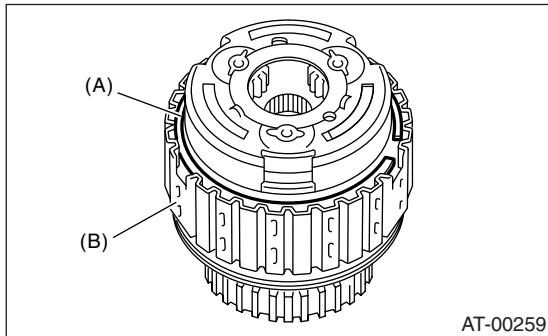
5) Remove D-rings and lip seal from high clutch piston and reverse clutch piston.



- (A) High clutch piston
- (B) Reverse clutch piston

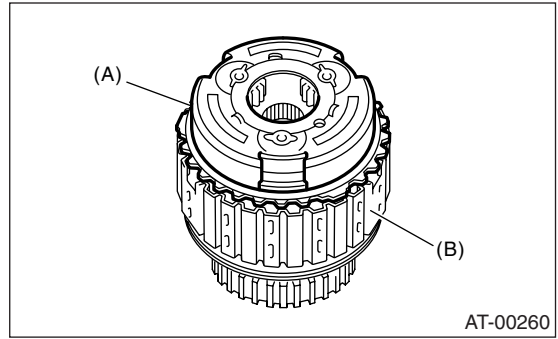
## 2. PLANETARY GEAR, LOW CLUTCH

1) Remove snap ring from the low clutch drum.



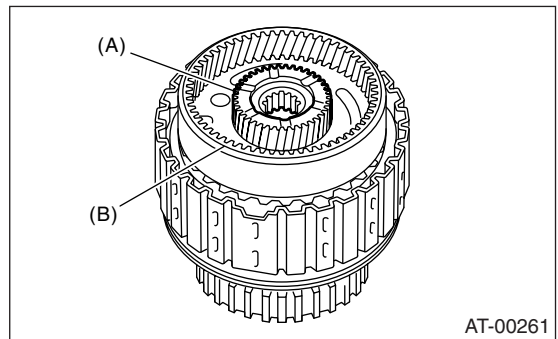
- (A) Snap ring
- (B) Low clutch drum

2) Take out front planetary carrier.



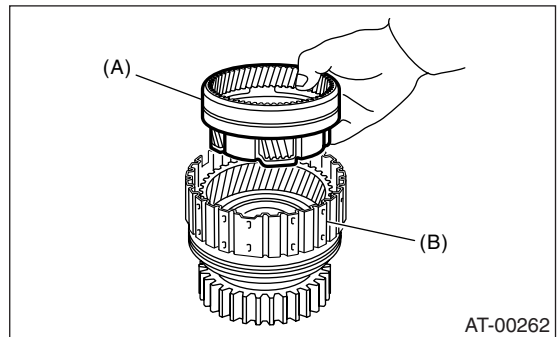
- (A) Front planetary carrier
- (B) Low clutch drum

3) Take out rear sun gear.



- (A) Rear sun gear
- (B) Rear planetary carrier

4) Take out rear planetary carrier, washer and thrust needle bearing.

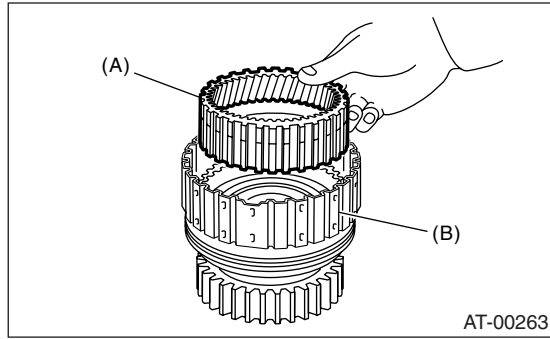


- (A) Rear planetary carrier
- (B) Low clutch drum

# AT TRANSMISSION MAIN CASE

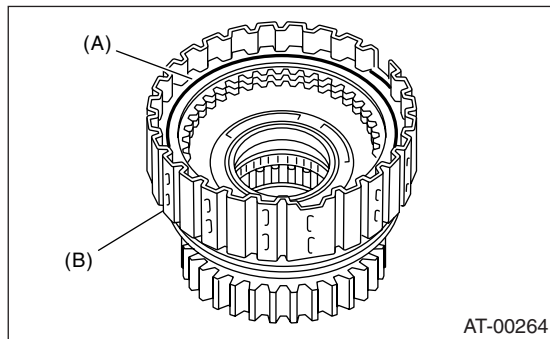
## AUTOMATIC TRANSMISSION

5) Take out rear internal gear.



- (A) Rear internal gear
- (B) Low clutch drum

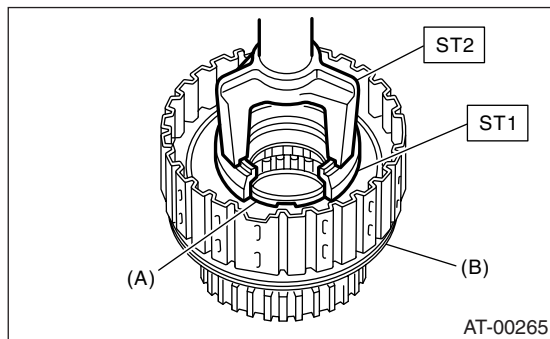
6) Remove the snap ring from the low clutch drum.



- (A) Snap ring
- (B) Low clutch drum

7) Compress the spring retainer low & reverse brake, and remove the snap ring from the low clutch drum, by using ST1 and ST2.

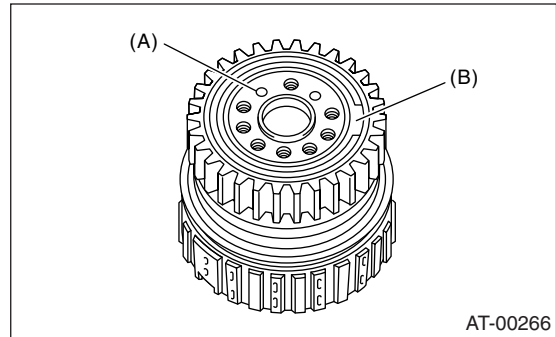
ST1 498627100 SEAT  
ST2 398673600 COMPRESSOR



- (A) Snap ring
- (B) Low clutch drum

8) Remove one-way clutch. <Ref. to 4AT-118, REMOVAL, AT Transmission Main Case.>

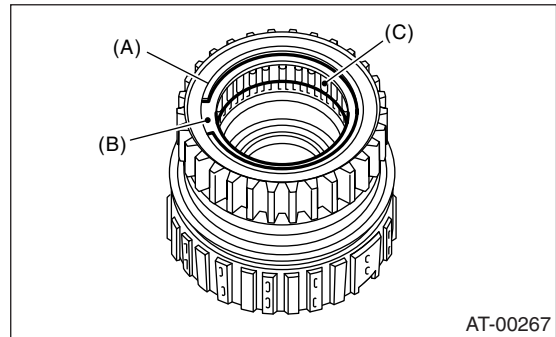
9) Install the one-way clutch inner race to the low clutch drum, and apply compressed air to remove the low clutch piston.



- (A) Apply compressed air
- (B) One-way clutch inner race

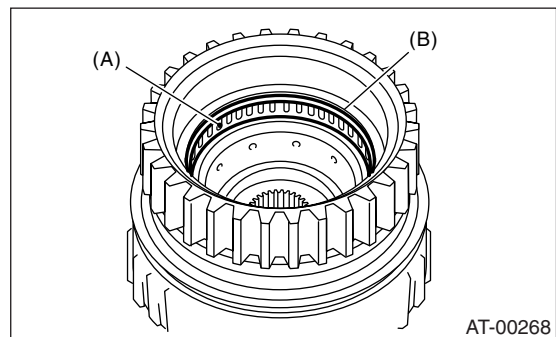
10) Remove the one-way clutch inner race.

11) Remove the one-way clutch after taking out the snap ring.



- (A) Snap ring
- (B) Plate
- (C) One-way clutch

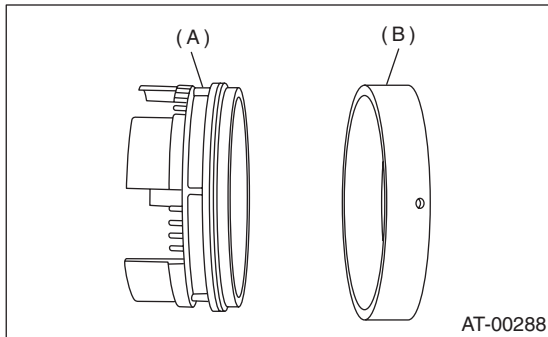
12) Remove the needle bearing after taking out the snap ring.



- (A) Needle bearing
- (B) Snap ring

### 3. 2-4 BRAKE

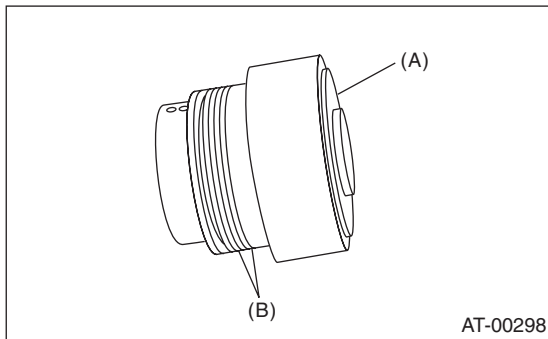
1) Separate 2-4 brake piston and piston retainer.



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

### 4. ONE-WAY CLUTCH INNER RACE

1) Remove seal rings.

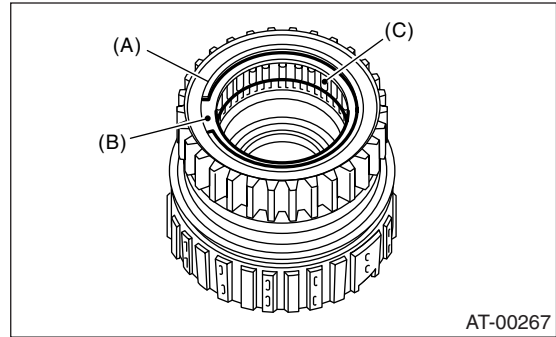


- (A) One way clutch inner race
- (B) Seal rings

2) Using ST, remove needle bearing.  
ST 398527700 PULLER ASSY

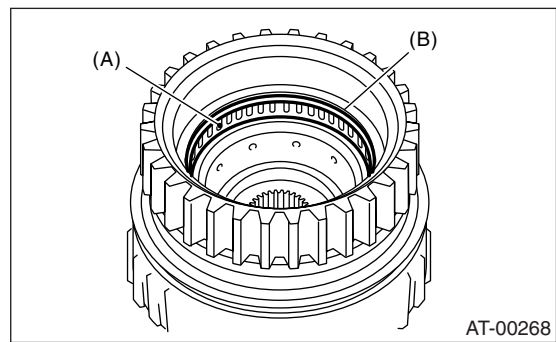
### 5. ONE-WAY CLUTCH OUTER RACE

1) Remove the one-way clutch after taking out the snap ring.



- (A) Snap ring
- (B) Plate
- (C) One-way clutch

2) Remove the needle bearing after taking out the snap ring.



- (A) Needle bearing
- (B) Snap ring

# AT TRANSMISSION MAIN CASE

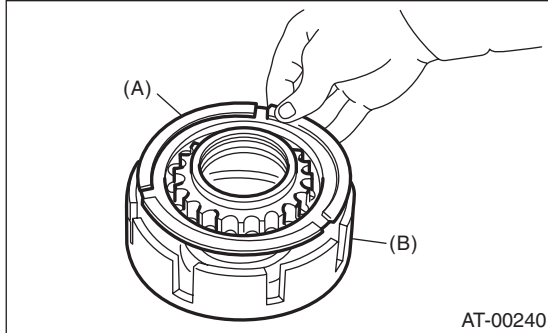
## AUTOMATIC TRANSMISSION

### D: ASSEMBLY

#### 1. HIGH CLUTCH, REVERSE CLUTCH

1) Install new D-rings and lip seal to high clutch piston and reverse clutch piston.

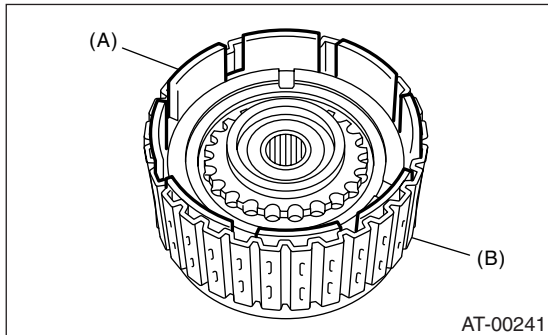
2) Install high clutch piston to reverse clutch piston.



(A) High clutch piston  
(B) Reverse clutch piston

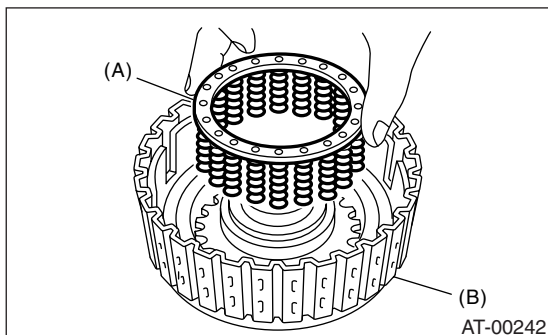
3) Install reverse clutch assembly to high clutch drum.

Align the groove on the reverse clutch piston with the groove on the high clutch drum during installation.



(A) Reverse clutch piston  
(B) High clutch drum

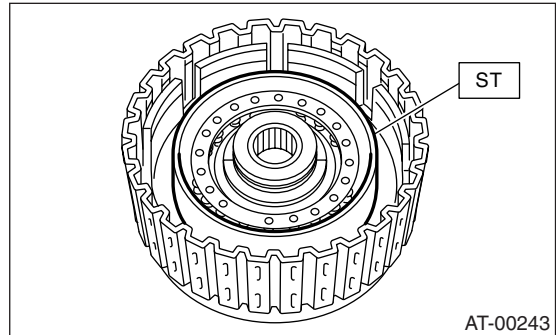
4) Install spring retainer to high clutch piston.



(A) Return spring  
(B) High clutch drum

5) Install ST to high clutch piston.

ST 498437000 HIGH CLUTCH PISTON GUIDE



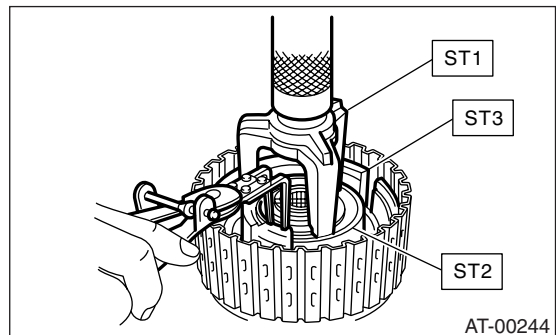
6) Avoid folding the high clutch piston seal, when installing the cover to high clutch piston.

7) Using ST1 and ST2, install snap ring.

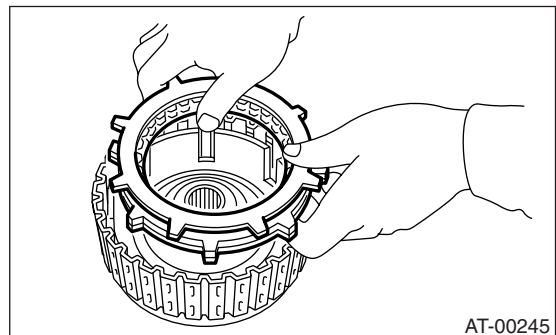
ST1 398673600 COMPRESSOR

ST2 498627100 SEAT

ST3 498437000 HIGH CLUTCH PISTON GUIDE



8) Install the thickest driven plate to piston side, and then install the driven plate, drive plate, retaining plate to high clutch drum.

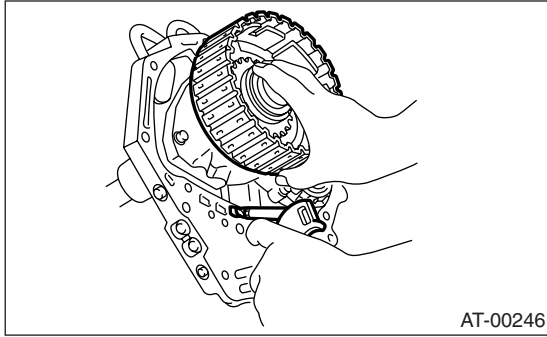


9) Install snap ring to high clutch drum.

# AT TRANSMISSION MAIN CASE

AUTOMATIC TRANSMISSION

10) Apply compressed air intermittently to check for operation.



AT-00246

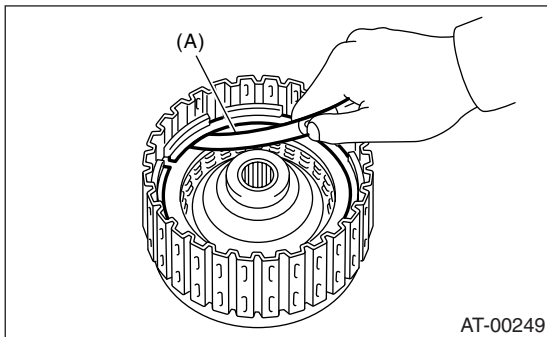
11) Measure the clearance between the retaining plate of high clutch and snap ring. At this time, do not press down retaining plate.

**Standard value:**

**0.8 — 1.1 mm (0.031 — 0.043 in)**

**Allowable limit:**

**1.5 mm (0.059 in)**



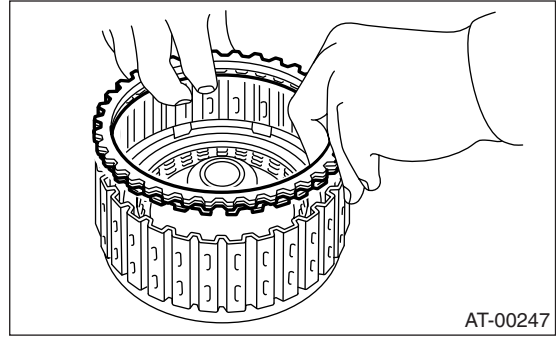
AT-00249

(A) Thickness gauge

If specified tolerance limits are exceeded, select a suitable retaining plate.

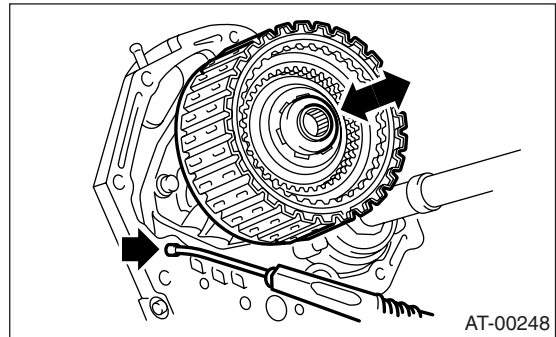
Retaining plate	
Part No.	Thickness mm (in)
31567AA710	4.7 (0.185)
31567AA720	4.8 (0.189)
31567AA730	4.9 (0.193)
31567AA740	5.0 (0.197)
31567AA670	5.1 (0.201)
31567AA680	5.2 (0.205)
31567AA690	5.3 (0.209)
31567AA700	5.4 (0.213)

12) Install driven plate, drive plate, retaining plate and snap ring.



AT-00247

13) Apply compressed air intermittently to check for operation.



AT-00248

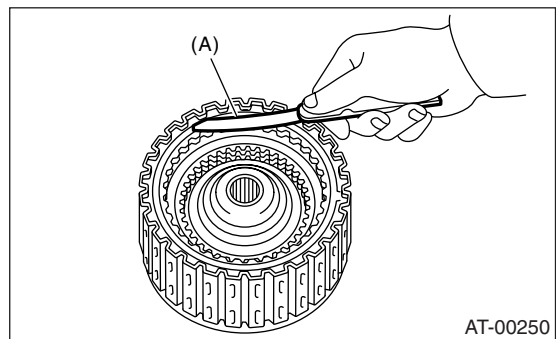
14) Measure the clearance between the retaining plate of reverse clutch and snap ring. At this time, do not press down retaining plate.

**Standard value:**

**0.5 — 0.8 mm (0.020 — 0.031 in)**

**Allowable limit:**

**1.2 mm (0.047 in)**



AT-00250

(A) Thickness gauge

# AT TRANSMISSION MAIN CASE

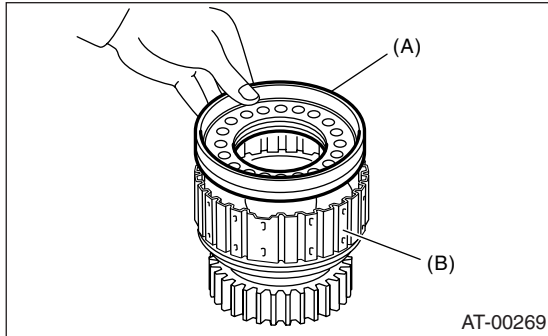
## AUTOMATIC TRANSMISSION

If specified tolerance limits are exceeded, select a suitable retaining plate.

Retaining plates	
Part No.	Thickness mm (in)
31567AA910	4.0 (0.157)
31567AA920	4.2 (0.165)
31567AA930	4.4 (0.173)
31567AA940	4.6 (0.181)
31567AA950	4.8 (0.189)
31567AA960	5.0 (0.197)
31567AA970	5.2 (0.205)
31567AA980	5.4 (0.213)

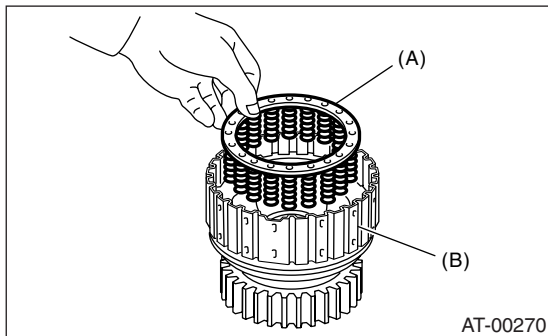
## 2. PLANETARY GEAR, LOW CLUTCH

- 1) Install D-ring to low clutch piston.
- 2) Fit the low clutch piston to the low clutch drum.



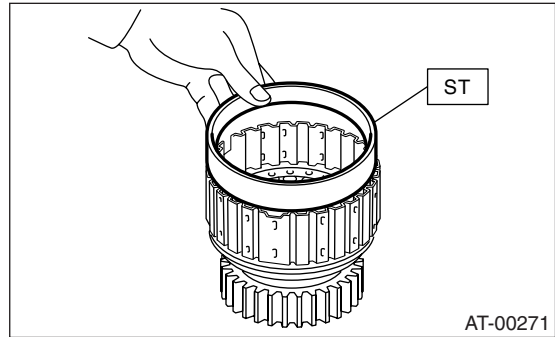
- (A) Low clutch piston
- (B) Low clutch drum

- 3) Install spring retainer to low clutch piston.



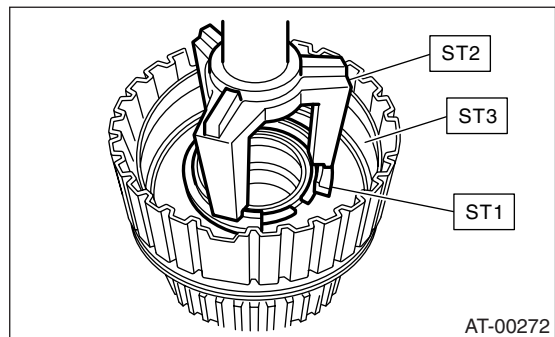
- (A) Spring retainer
- (B) Low clutch drum

- 4) Install ST to low clutch drum.  
ST 498437100 LOW CLUTCH PISTON GUIDE

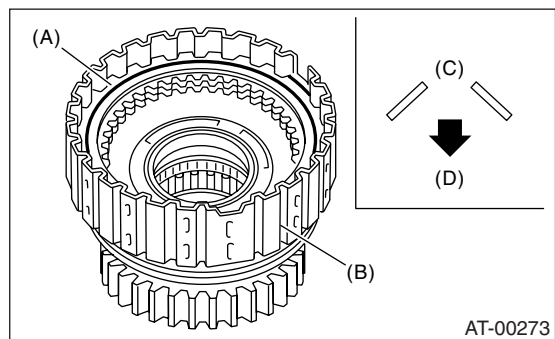


- 5) Set the cover on the piston with a press using ST1 and ST2, and attach the snap ring. At this time, be careful not to fold cover seal during installation.

- ST1 498627100 SEAT
- ST2 398673600 COMPRESSOR
- ST3 498437100 LOW CLUTCH PISTON GUIDE

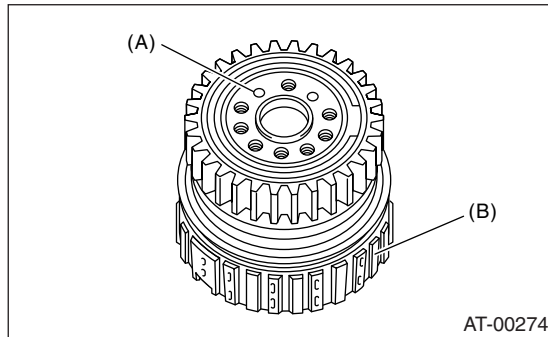


- 6) Install the dish plate, driven plates, drive plates, and retaining plate, and secure with the snap ring.



- (A) Snap ring
- (B) Low clutch drum
- (C) Dish plate
- (D) Low clutch piston side

- 7) Check the low clutch for operation.  
 (1) Remove one-way clutch. <Ref. to 4AT-118, REMOVAL, AT Transmission Main Case.>  
 (2) Set the one-way clutch inner race, and apply compressed air for checking.



- (A) Apply compressed air  
 (B) Low clutch drum

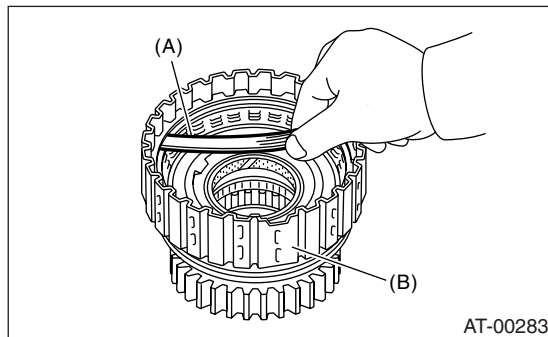
- 8) Checking low clutch clearance.  
 (1) Place the same thickness of shim on both sides to prevent retaining plate from tilting.  
 (2) Inspect clearance between retaining plate and operation of the low clutch.

**Standard value:**

**0.7 — 1.1 mm (0.028 — 0.043 in)**

**Allowable limit:**

**1.6 mm (0.063 in)**

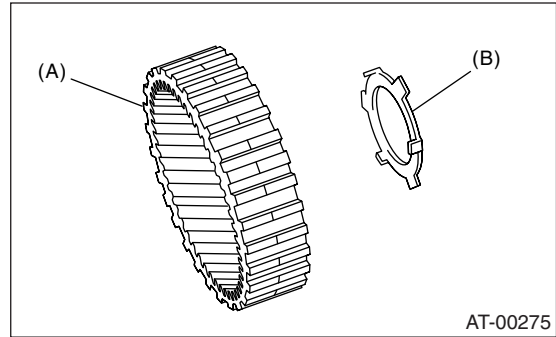


- (A) Thickness gauge  
 (B) Low clutch drum

If the clearance is out of the specified range, select a proper retaining plate so that the standard clearance can be obtained.

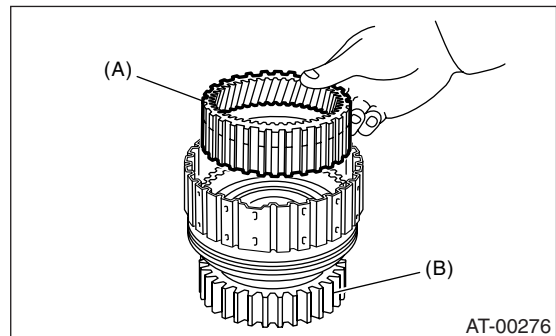
Retaining plates	
Part No.	Thickness mm (in)
31567AA830	3.8 (0.150)
31567AA840	4.0 (0.157)
31567AA850	4.2 (0.165)
31567AA860	4.4 (0.173)
31567AA870	4.6 (0.181)

- 9) Install washer to rear internal gear.



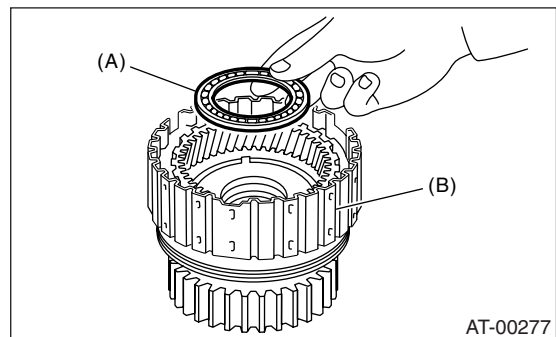
- (A) Rear internal gear  
 (B) Washer

- 10) Install rear internal gear.



- (A) Rear internal gear  
 (B) Low clutch drum

- 11) Install thrust needle bearing in the correct direction.



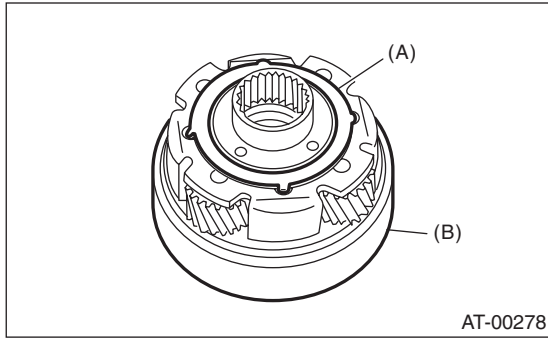
- (A) Thrust needle bearing  
 (B) Low clutch drum



# AT TRANSMISSION MAIN CASE

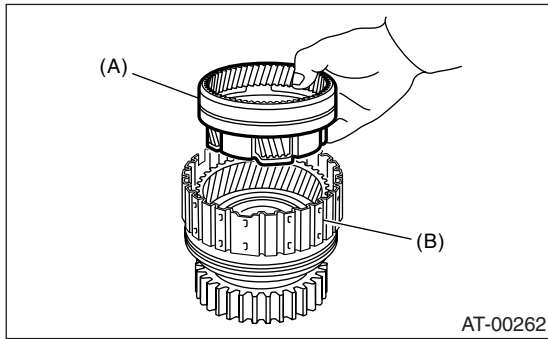
## AUTOMATIC TRANSMISSION

12) Install the washer by aligning protrusion of washer and hole of rear planetary carrier.



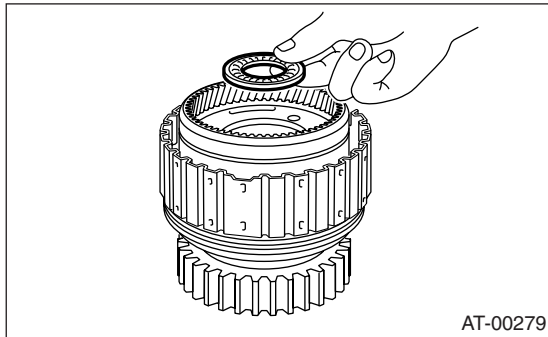
- (A) Washer
- (B) Rear planetary carrier

13) Install rear planetary carrier to low clutch drum.



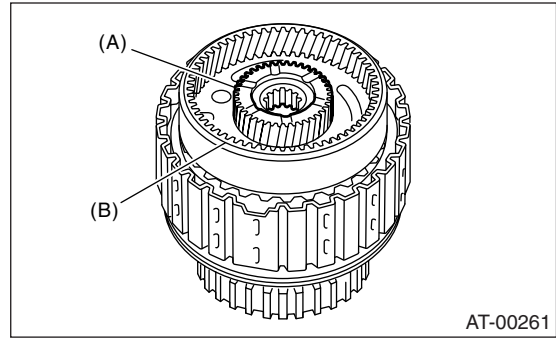
- (A) Rear planetary carrier
- (B) Low clutch drum

14) Install thrust needle bearing in the correct direction.



AT-00279

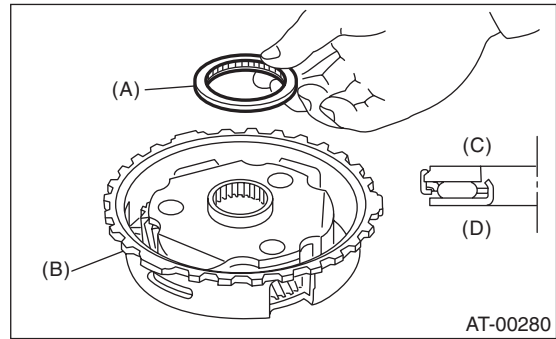
15) Install the rear sun gear in proper direction.



AT-00261

- (A) Rear sun gear
- (B) Rear planetary carrier

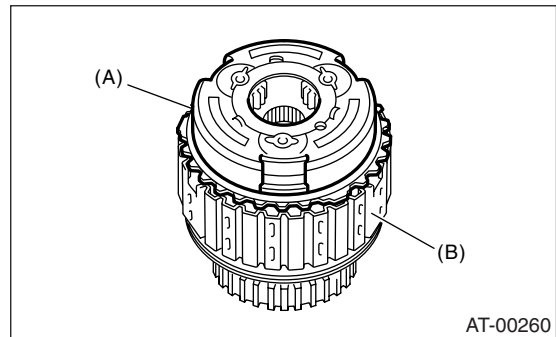
16) Install the thrust needle bearing in proper direction.



AT-00280

- (A) Thrust needle bearing
- (B) Front planetary carrier
- (C) Rear sun gear side
- (D) Front planetary carrier side

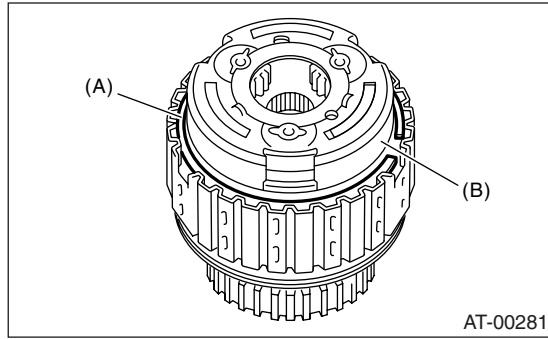
17) Install front planetary carrier to low clutch drum.



AT-00260

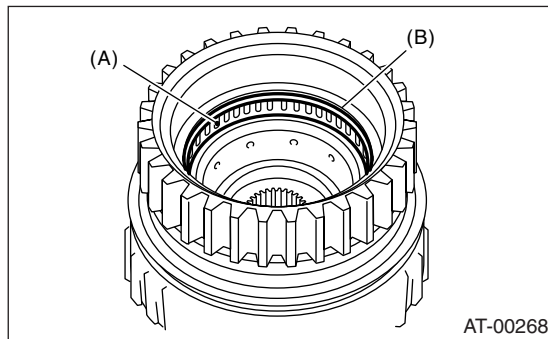
- (A) Front planetary carrier
- (B) Low clutch drum

18) Install snap ring to low clutch drum.



- (A) Snap ring
- (B) Front planetary carrier

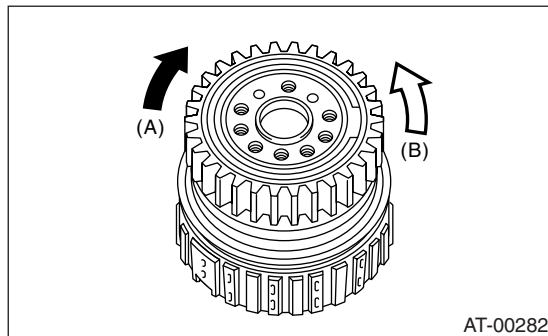
19) Install the needle bearing, and secure with the snap ring.



- (A) Needle bearing
- (B) Snap ring

20) Install the one-way clutch and one-way clutch inner race, and secure with the snap ring.

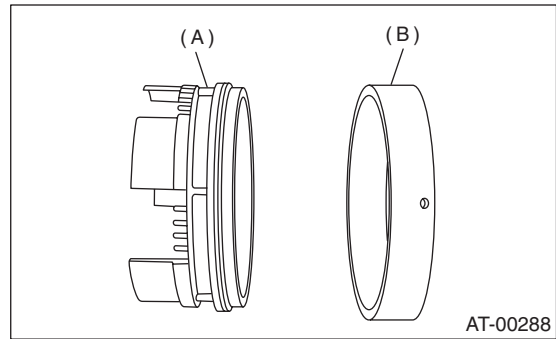
21) Set the one-way clutch inner race to low clutch drum. Make sure that the forward clutch is free in the clockwise direction and locked in the counter-clockwise direction, as viewed from the front of the vehicle.



- (A) Locked
- (B) Free

### 3. 2-4 BRAKE

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

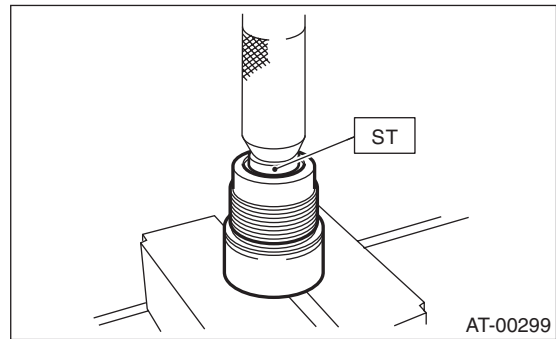


- (A) 2-4 brake piston
- (B) 2-4 brake piston retainer

### 4. ONE-WAY CLUTCH INNER RACE

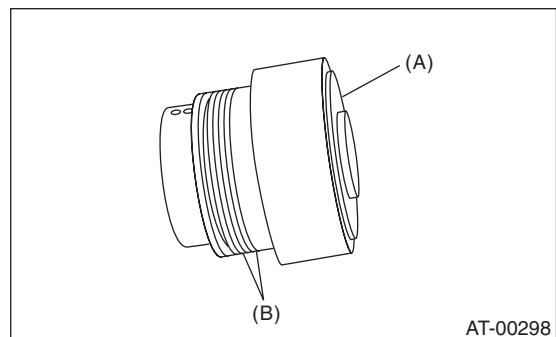
1) Using a press and ST, install the needle bearing to the inner race.

ST 398497701 SEAT



2) Apply Vaseline to the groove of the inner race and to the new seal ring.

3) Install two seal rings to one-way clutch inner race.



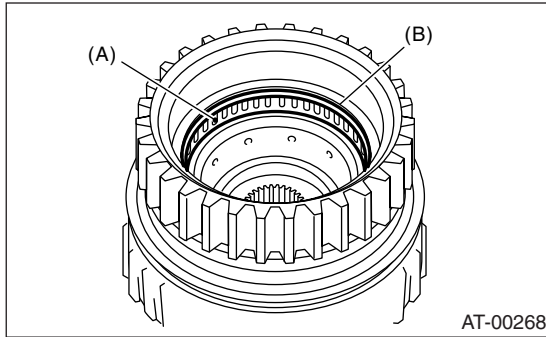
- (A) One way clutch inner race
- (B) Seal rings

# AT TRANSMISSION MAIN CASE

## AUTOMATIC TRANSMISSION

### 5. ONE-WAY CLUTCH OUTER RACE

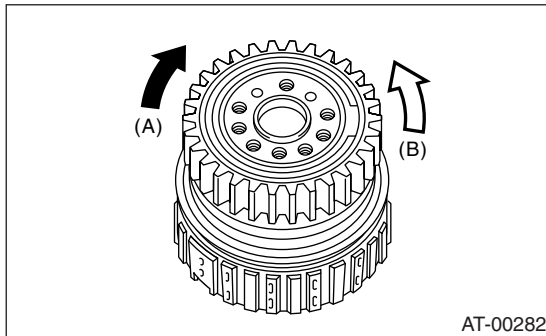
1) Install the needle bearing, and secure with the snap ring.



- (A) Needle bearing
- (B) Snap ring

2) Install the one-way clutch and one-way clutch inner race, and secure with the snap ring.

3) Set the one-way clutch inner race low clutch drum. Make sure that the forward clutch is free in the clockwise direction and locked in the counter-clockwise direction, as viewed from the front of the vehicle.



- (A) Locked
- (B) Free

### E: INSPECTION

#### 1. HIGH CLUTCH AND REVERSE CLUTCH

Inspect the following items.

- Drive plate facing for wear and damage
- Snap ring for wear, return spring for setting and breakage, and snap ring retainer for deformation
- Lip seal and D-ring for damage
- Piston and drum check ball for operation
- Adjust total end play. <Ref. to 4AT-105, ADJUSTMENT, Oil Pump Housing.>

#### 2. PLANETARY GEAR AND LOW CLUTCH

Inspect the following items.

- Drive plate facing for wear and damage
- Snap ring for wear, return spring for breakage or setting, and spring retainer for deformation
- Lip seal and D-ring for damage
- Piston check ball for operation
- Measure the total end play and adjust to within specifications.

<Ref. to 4AT-105, ADJUSTMENT, Oil Pump Housing.>

#### 3. 2-4 BRAKE

Inspect the following items.

- Drive plate facing for wear and damage
- Snap ring for wear and spring retainer for deformation
- Lip seal and D-ring for damage
- Measure the total end play and adjust to within specifications. <Ref. to 4AT-105, ADJUSTMENT, Oil Pump Housing.>

#### 4. ONE-WAY CLUTCH

- Make sure the snap ring is not worn and the seal rings are not damaged.
- Measure the total end play and adjust to within specifications. <Ref. to 4AT-105, ADJUSTMENT, Oil Pump Housing.>

#### 5. LOW AND REVERSE BRAKE

Check for the following.

- Drive plate facing for wear or damage
- Snap ring for wear and spring retainer for deformation