

4) Measurement of backlash (Selection of washer)
Measure the gear backlash with ST1 and ST2, and insert ST2 through the access window of the case.

NOTE:

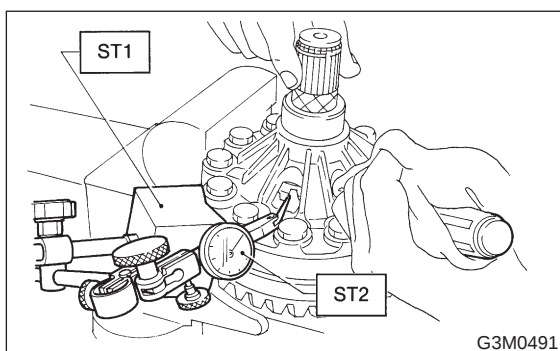
Measure the backlash by applying a pinion tooth between two bevel gear teeth.

ST1 498247001 MAGNET BASE

ST2 498247100 DIAL GAUGE

Standard value:

0.13 — 0.18 mm (0.0051 — 0.0071 in)

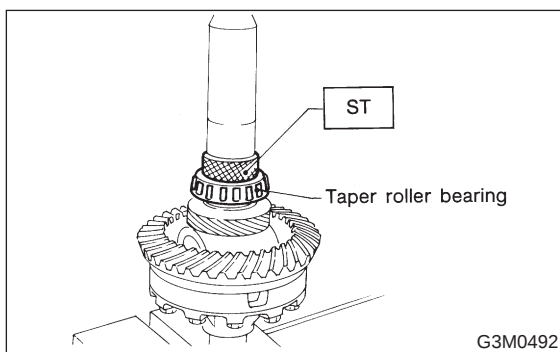


5) Install the speedometer drive gear. Then force-fit the taper roller bearing with a press and ST.

CAUTION:

Be sure to position correctly the locking end of the speedometer drive gear.

ST 398487700 DRIFT



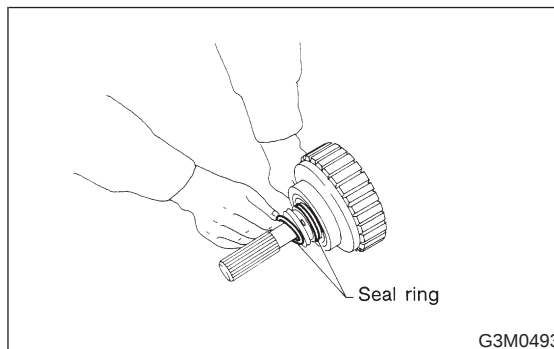
23. Transfer Clutch

A: DISASSEMBLY

1) Remove the seal ring.

CAUTION:

Be careful not to damage the seal ring.

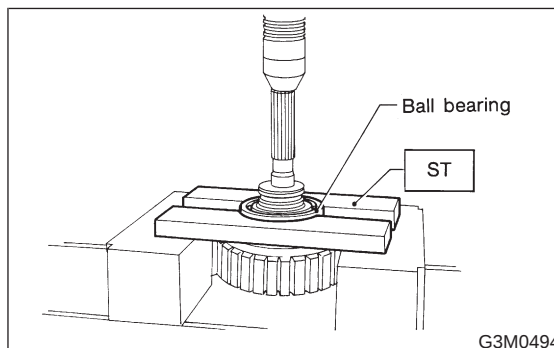


2) Using a press and ST, remove the ball bearing.

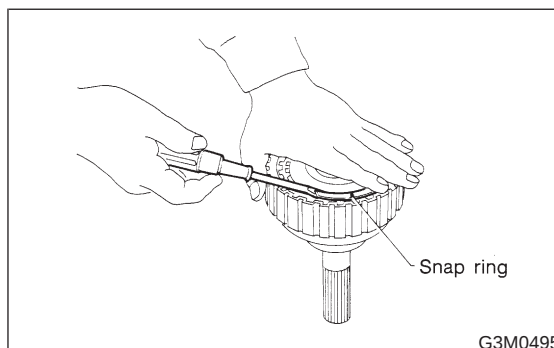
CAUTION:

Do not reuse the bearing.

ST 498077000 REMOVER

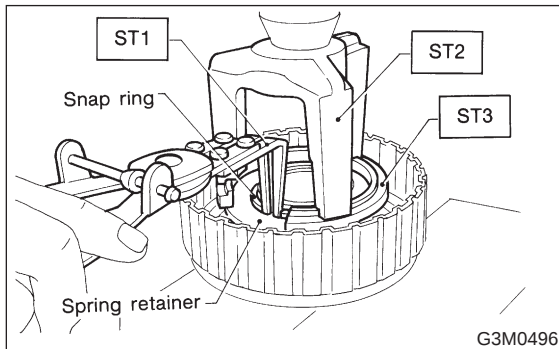


3) Remove the snap ring, and take out the pressure plate, drive plates, and driven plates.

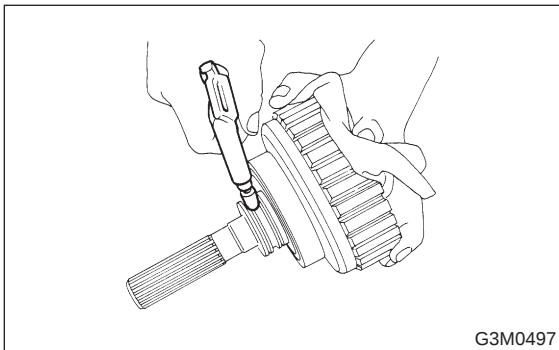


4) Remove the snap ring with ST1, ST2, ST3 and press, and take out the spring retainer.

ST1 399893600 PLIERS
ST2 398673600 COMPRESSOR
ST3 498627000 SEAT



5) Apply compressed air to the rear drive shaft to remove the piston.



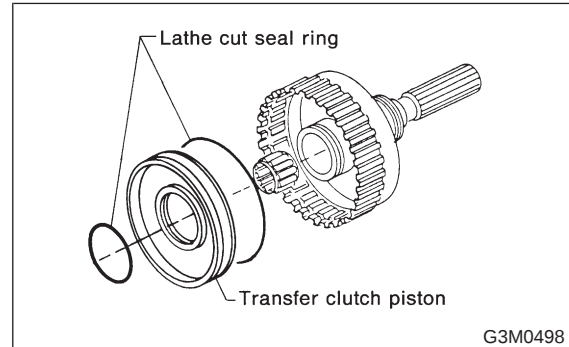
B: INSPECTION

- 1) Check the drive plate facing for wear and damage.
- 2) Check the snap ring for wear, return spring for permanent set and breakage, and spring retainer for deformation.
- 3) Check the lathe cut ring for damage.

C: ASSEMBLY

1) Install the lathe cut seal ring to the I.D./O.D. of the transfer clutch piston.

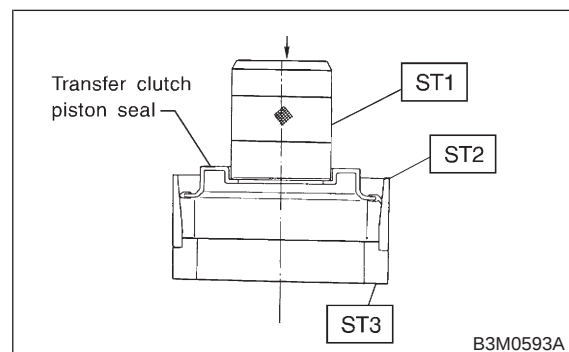
CAUTION:
Always discard lathe cut seal rings, and install new ones.



- 2) Install piston.
 - (1) Connect transfer clutch piston to rear drive shaft (until it reaches hole in valve body).
 - (2) Install spring retainer to transfer clutch piston.
 - (3) Using ST1, ST2 and ST3, attach transfer piston seal to ST2.

CAUTION:
Be careful not to tilt transfer piston seal.

ST1 499247400 INSTALLER
ST2 499257400 PISTON GUIDE
ST3 498267400 TABLE



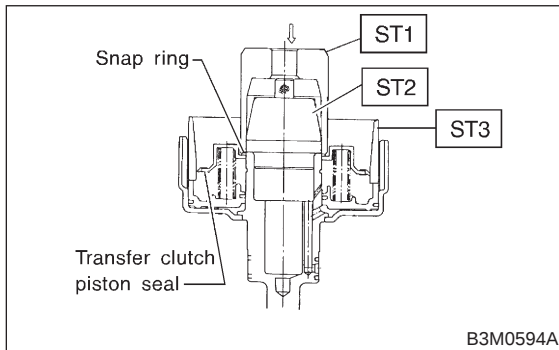
(4) Place ST3 onto rear drive shaft so that spring can be inserted into hole in transfer piston seal.

(5) Attach ST2 to rear drive shaft. Using ST1, press into place.

CAUTION:

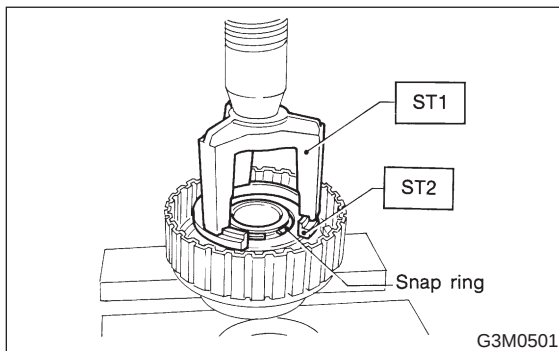
Do not allow lip of transfer piston seal to fold back.

ST1 499247400 INSTALLER
ST2 499257300 SNAP RING OUTER GUIDE
ST3 499257400 PISTON GUIDE

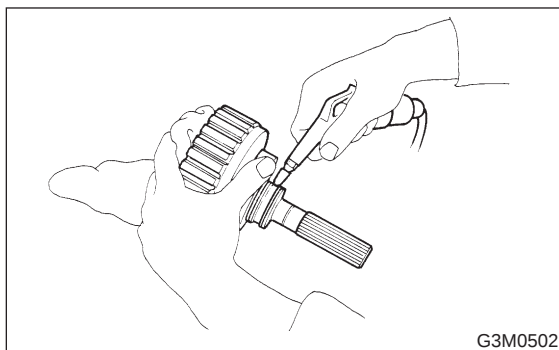


3) Install the driven plates, drive plates, and pressure plate, and secure with a snap ring with ST1, ST2 and a press.

ST1 398673600 COMPRESSOR
ST2 498627000 SEAT



4) Apply compressed air to see if the assembled parts move smoothly.



5) Check the clearance.

NOTE:

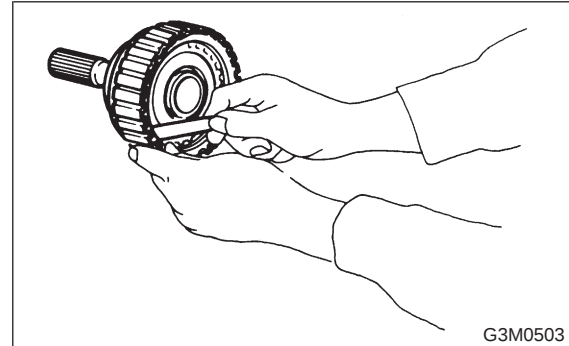
Before measuring clearance, place the same thickness of shim on both sides to prevent pressure plate from tilting. If the clearance is not within the specified range, select a proper pressure plate.

Standard value:

0.2 — 0.6 mm (0.008 — 0.024 in)

Allowable limit:

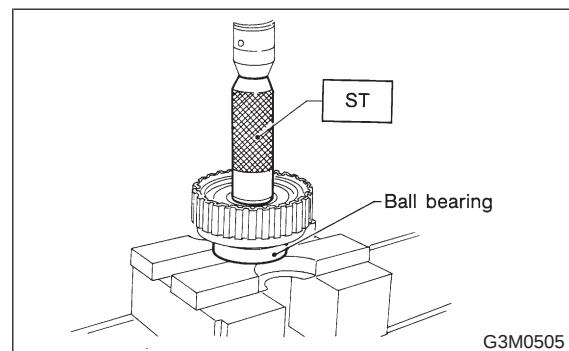
1.6 mm (0.063 in)



Pressure plates	
Part No.	Thickness mm (in)
31593AA151	3.3 (0.130)
31593AA161	3.7 (0.146)
31593AA171	4.1 (0.161)
31593AA181	4.5 (0.177)

6) Press-fit the ball bearing with ST.

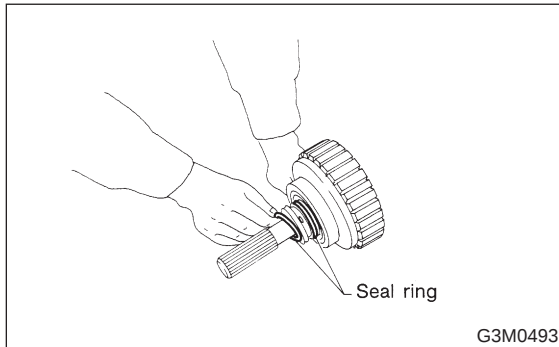
ST 899580100 INSTALLER



7) Coat the seal ring with vaseline, and install it in the seal ring groove of the shaft.

CAUTION:

Do not expand the seal ring excessively when installing.



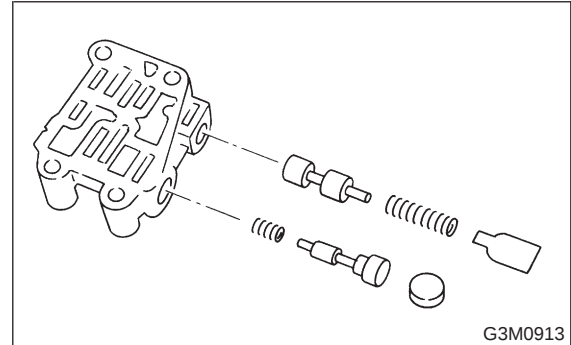
24. Transfer Valve Body

A: DISASSEMBLY

- 1) Remove the plate. Then remove the spring and pilot valve together.
- 2) Remove the straight pin and pry out the plug with a screwdriver. Then extract the spring and transfer clutch valve together.

CAUTION:

Be careful not to damage the valve and valve body.



B: INSPECTION

Check each component for harmful cuts, damage, or other faults.

C: ASSEMBLY

To assemble, reverse the removal sequence.

NOTE:

Make sure the valve slides smoothly after assembling.