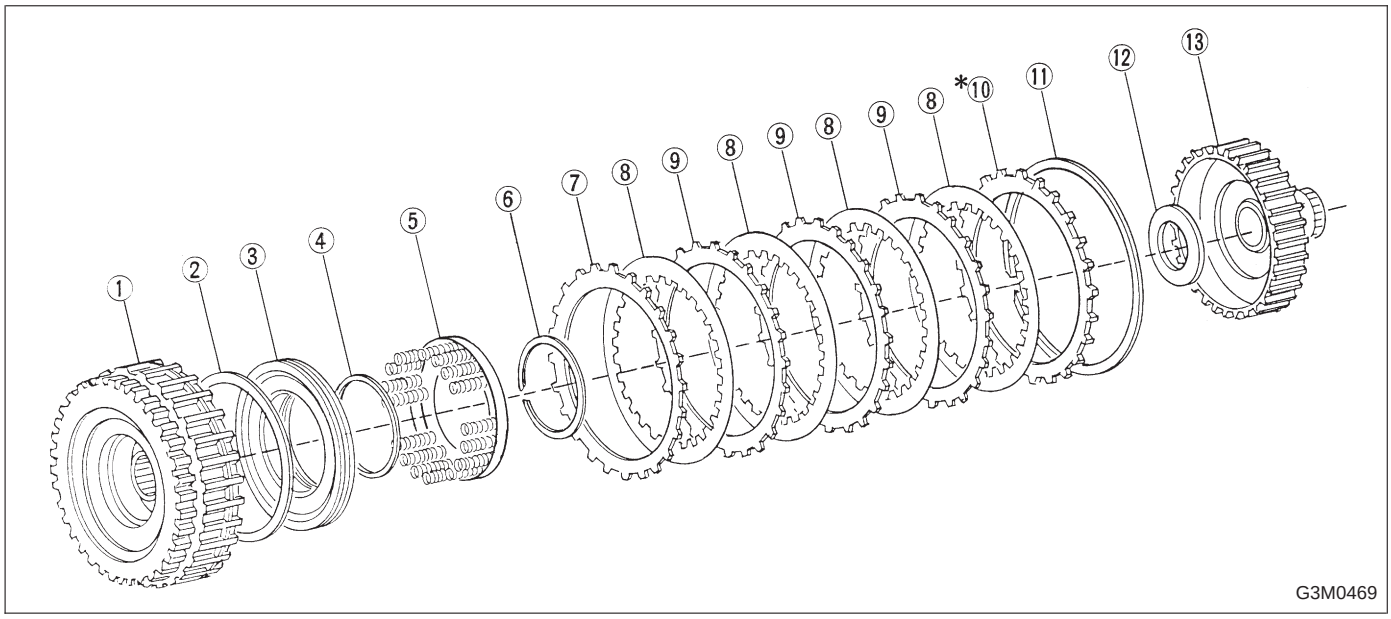
10. High Clutch



① High clutch drum
② Lathe cut seal ring
③ High clutch piston
④ Lathe cut seal ring
⑤ Spring retainer
⑥ Snap ring
⑦ Driven plate (Thinner)
⑧ Drive plate
⑨ Driven plate (Thicker)
⑩ Retaining plate
⑪ Snap ring
⑫ Thrust needle bearing
⑬ High clutch hub

A: DISASSEMBLY

1) Remove the snap ring ⑪, and take out the retaining plate ⑩, drive plates ⑧, and driven plates ⑦, ⑨.
2) Using the ST1, ST2 and ST3, remove the snap ring ⑥ and take out the spring retainer ⑤.

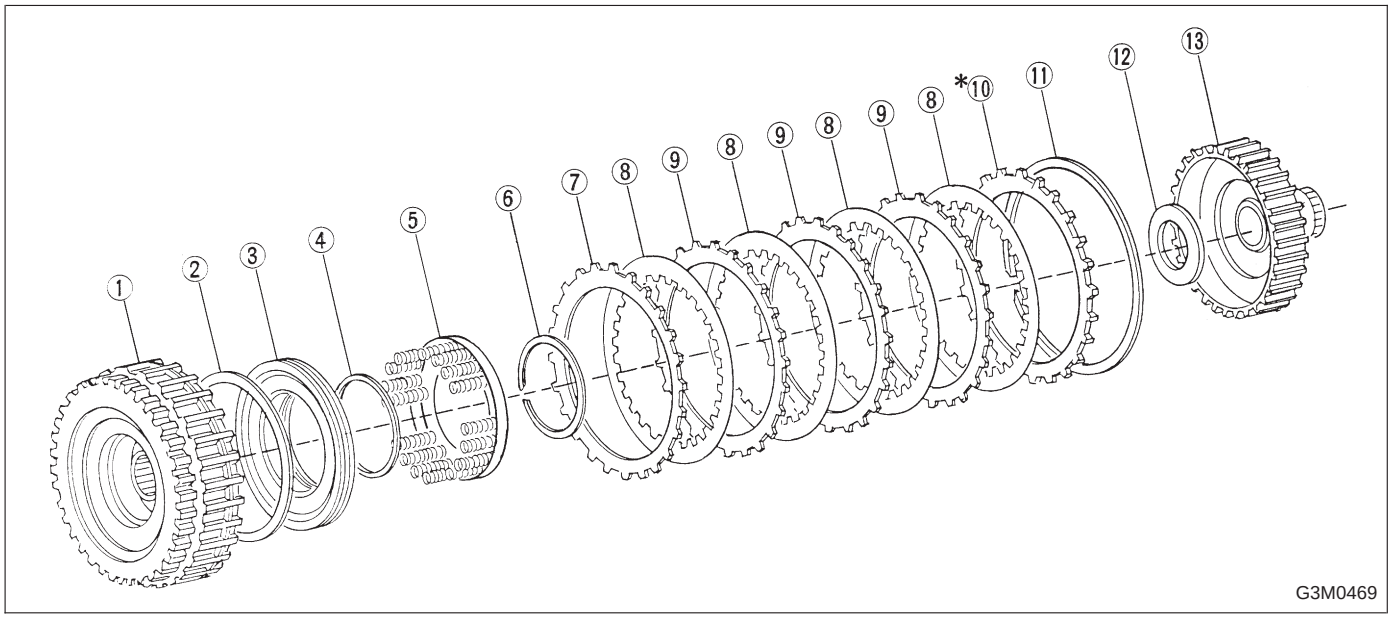
ST1 398673600 COMPRESSOR
ST2 398177700 INSTALLER
ST3 399893600 PLIERS

3) Apply compressed air to the clutch drum ① to remove the piston ③.

B: INSPECTION

1) Drive plate facing for wear and damage
2) Snap ring for wear, return spring for setting and breakage, and spring retainer for deformation
3) Lathe cut rings (large) (small) for damage
4) Piston check ball for smooth operation

C: ASSEMBLY



① High clutch drum
② Lathe cut seal ring
③ High clutch piston
④ Lathe cut seal ring
⑤ Spring retainer
⑥ Snap ring
⑦ Driven plate (Thinner)
⑧ Drive plate
⑨ Driven plate (Thicker)
⑩ Retaining plate
⑪ Snap ring
⑫ Thrust needle bearing
⑬ High clutch hub

1) Using the ST1, ST2 and ST3 as those used in disassembling, assemble the piston ③, spring retainer ⑤, and snap ring ⑥.

ST1 398673600 COMPRESSOR
ST2 398177700 INSTALLER
ST3 399893600 PLIERS

2) Install the driven plate (thinner) ⑦, drive plates ⑧, driven plates (thicker) ⑨, and retaining plate ⑩ in that order. Then attach the snap ring ⑪.

3) Checking operation:
Apply compressed air intermittently to the oil hole, and check the high clutch for smooth operation.

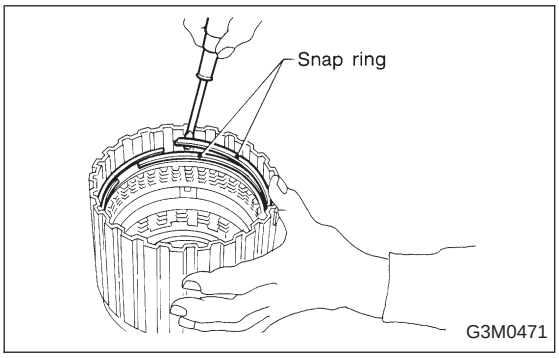
4) Measuring clearance (Retaining plate selection)

Standard value:
1.8 — 2.2 mm (0.071 — 0.087 in)

Allowable limit:
2.6 mm (0.102 in)

NOTE:
Before measuring clearance, place the same thickness of shim on both sides to prevent retaining plate from tilting.

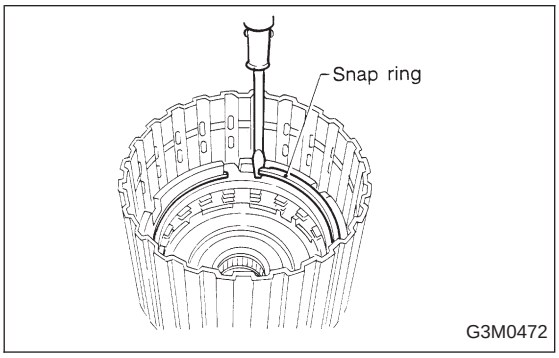
	Part No.	Thickness mm (in)
• Available retaining plates	31567AA190	3.6 (0.142)
	31567AA200	3.8 (0.150)
	31567AA210	4.0 (0.157)
	31567AA220	4.2 (0.165)
	31567AA230	4.4 (0.173)
	31567AA240	4.6 (0.181)
	31567AA250	4.8 (0.189)
	31567AA260	5.0 (0.197)



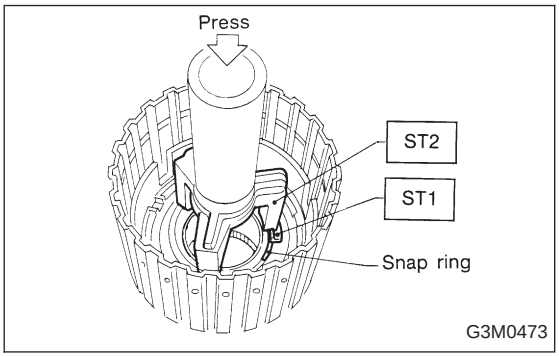
11. Forward Clutch Drum

A: DISASSEMBLY

1) Remove two snap rings from the forward clutch drum.
2) Remove the retaining plate, drive plates, driven plates and dish plate. (Forward clutch)

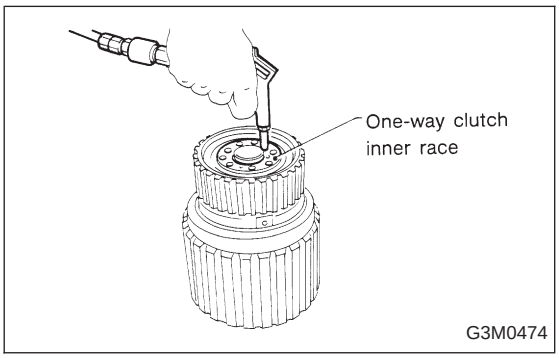


3) Remove the snap ring from the forward clutch drum.
4) Remove the retaining plate, drive plates, driven plates and dish plate. (Overrunning clutch)



5) Compress the spring retainer, and remove the snap ring from the forward clutch, by using ST1 and ST2.

ST1 498627100 SEAT
ST2 398673600 COMPRESSOR



6) Install the one-way clutch inner race to the forward clutch drum, and apply compressed air to remove the over-running piston and forward piston.