## 9. Reverse Clutch


(1) Reverse clutch drum
(2) Lip seal
(3) Reverse clutch piston
(4) Lathe cut seal ring
(5) Spring
(6) Spring retainer
(7) Snap ring
(8) Dish plate
(9) Driven plate
(10) Drive plate
(11) Retaining plate
(12) Snap ring
(13) High clutch drum

## A: DISASSEMBLY

1) Remove the snap ring (12), and take out the retaining plate (11), drive plates (10), driven plates (9), and dish plate (8).
2) Using the ST1, ST2 and ST3, remove the snap ring (7) and take out the spring retainer (6) and springs (5).
ST1 398673600 COMPRESSOR
ST2 398177700 INSTALLER
ST3 399893600 PLIERS
3) Take out the piston (3) by applying compressed air.

## B: INSPECTION

1) Drive plate facing for wear and damage
2) Snap ring for wear, return spring for breakage or setting, and spring retainer for deformation
3) Lip seal and lathe cut seal ring for damage
4) Piston check ball for operation

## C: ASSEMBLY


(1) Reverse clutch drum
(2) Lip seal
(3) Reverse clutch piston
(4) Lathe cut seal ring
(5) Spring
(6) Spring retainer
(8) Dish plate
(11) Retaining plate
(9) Driven plate
(12) Snap ring
(7) Snap ring (10) Drive plate
(B) High clutch drum

1) Using the $\mathrm{ST} 1, \mathrm{ST} 2$ and ST 3 as those used in disassembling, assemble piston (3) the springs (5), spring retainer (6) and snap ring (7).
ST1 398673600 COMPRESSOR
ST2 398177700 INSTALLER
ST3 399893600 PLIERS
2) Assemble the dish plate (8), driven plates (9), drive plates (10) and retaining plate (11) in that order and attach the snap ring (12).
NOTE:
Pay attention to the orientation of the dish plate.
3) Checking operation:

Apply compressed air intermittently to the oil hole, and check the reverse clutch for smooth operation.
4) Measuring clearance (Retaining plate selection):

## Standard value:

$$
0.5-0.8 \mathrm{~mm}(0.020-0.031 \mathrm{in})
$$

## Allowable limit:

## 1.2 mm (0.047 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) |
| :--- | :---: | :---: |
|  | $31567 A A 350$ | $4.6(0.181)$ |
| - Available retaining plates | $31567 A A 360$ | $4.8(0.189$ |
|  | $31567 A A 370$ | $5.0(0.197$ |
|  | $31567 A A 380$ | $5.2(0.205$ |
|  | $31567 A A 390$ | $5.4(0.213)$ |

