

OPERATIONAL TEST OF CLUTCH BOOSTER

NOTE: If there is leakage or lack of vacuum, repair before testing.

1. OPERATING CHECK

With the engine stopped, depress the clutch pedal several times. Then, with the pedal at the mid point, start the engine and confirm that the pedal sinks down slightly.

2. AIR-TIGHT CHECK

- (a) Depress the clutch pedal several times with the engine stopped. Then, start the engine and depress the clutch pedal and check that there is a slight difference in pedal effort.
- (b) Start the engine and turn it off after there is sufficient vacuum in the booster. Depress the clutch pedal and confirm that the effort required for at least one time is equal to that with the engine running.

NOTE: If (a) and (b) are not as stipulated, inspect the vacuum check valve and, if necessary, the clutch booster also.

BLEEDING OF CLUTCH SYSTEM

NOTE: If any work is done on the clutch system, or if air is suspected in the clutch lines, bleed the system of air.

CAUTION: Do not let brake fluid remain on a painted surface. Wash it off immediately.

1. FILL BRAKE RESERVOIR WITH BRAKE FLUID

Check the reservoir after bleeding. Add fluid, if necessary.

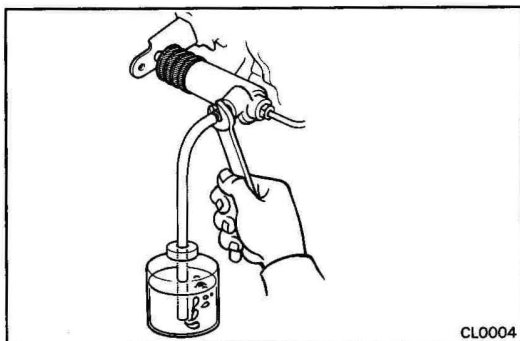
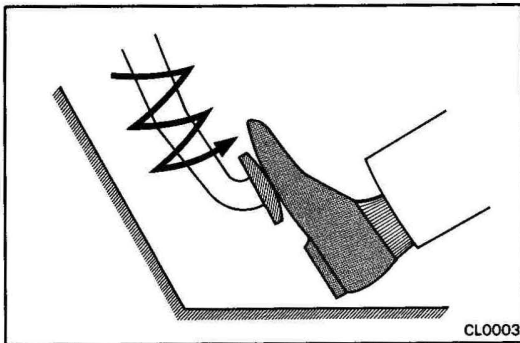
2. CONNECT VINYL TUBE TO RELEASE CYLINDER BLEEDER PLUG

Insert the other end of the tube in a half-filled container of brake fluid.

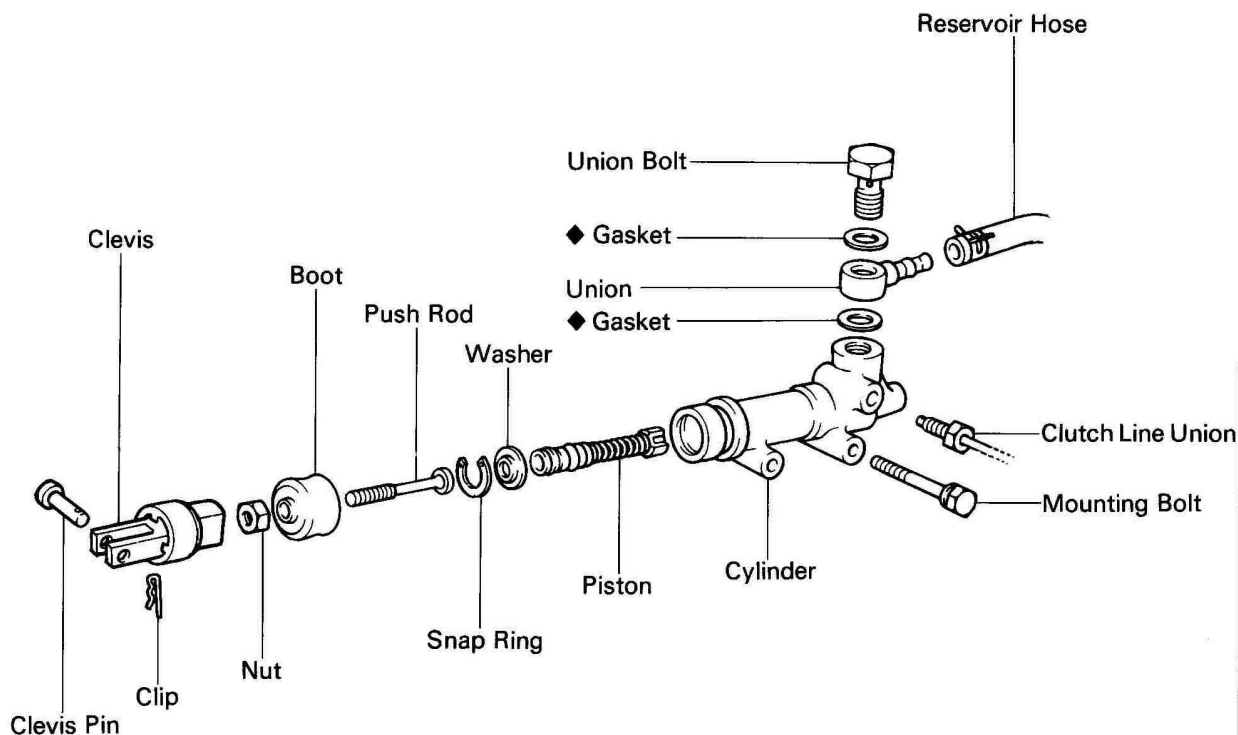
3. BLEED CLUTCH LINE

- (a) Slowly pump the clutch pedal several times.
- (b) While having an assistant press on the pedal, loosen the bleeder plug until fluid starts to run out. Then close the bleeder plug.
- (c) Repeat this procedure until there are no more air bubbles in the fluid.
- (d) Torque the bleeder plug.

Torque: 110 kg-cm (8 ft-lb, 11 N·m)



CLUTCH MASTER CYLINDER (w/o Clutch Booster) COMPONENTS

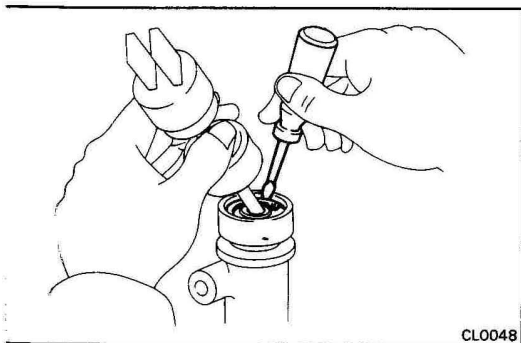


◆ : Non-reusable part

CL0047

REMOVAL OF MASTER CYLINDER

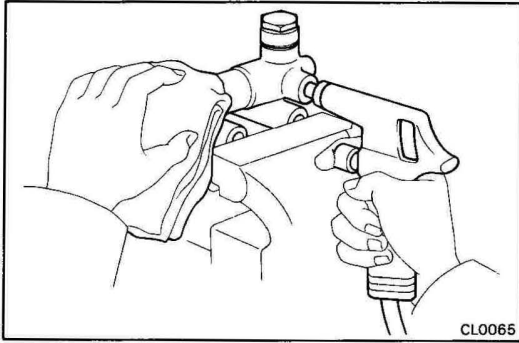
1. DRAW OUT FLUID WITH SYRINGE
2. (Wide Cab : LHD only)
DISCONNECT AIR SIDE LH DUCT
3. REMOVE CLEVIS PIN AND CLIP
4. DISCONNECT RESERVOIR HOSE
5. DISCONNECT CLUTCH LINE UNION
Using SST, disconnect the union.
SST 09751-36011
6. REMOVE MASTER CYLINDER
Remove the mounting bolts and pull off the master cylinder.



CL0048

DISASSEMBLY OF MASTER CYLINDER

1. REMOVE PUSH ROD AND SNAP RING
 - (a) Pull back the boot and using a screwdriver, remove the snap ring.
 - (b) Pull off the push rod and washer.



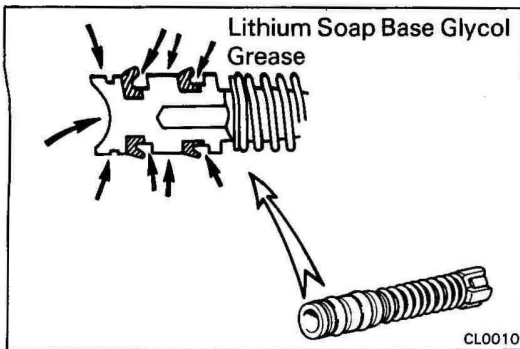
2. REMOVE PISTON

Using compressed air, remove the piston from the cylinder.

3. REMOVE UNION

INSPECTION OF MASTER CYLINDER

Inspect the disassembled parts for wear, rust, or damage.



ASSEMBLY OF MASTER CYLINDER

1. COAT PARTS WITH LITHIUM SOAP BASE GLYCOL GREASE

2. INSERT PISTON INTO CYLINDER

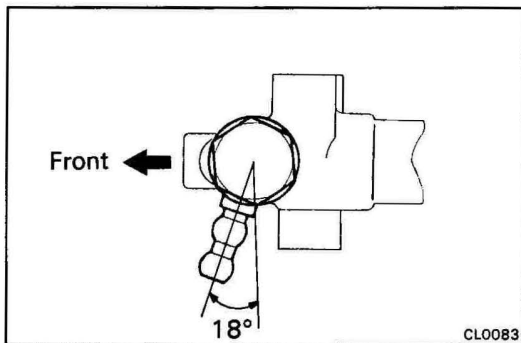
3. INSTALL PUSH ROD ASSEMBLY WITH SNAP RING

4. INSTALL UNION

(a) Install the union as shown.

(b) Torque the union.

Torque: 550 kg-cm (40 ft-lb, 54 N·m)



INSTALLATION OF MASTER CYLINDER

1. INSTALL MASTER CYLINDER WITH MOUNTING BOLTS

2. CONNECT CLUTCH LINE UNION

Using SST, connect the union.

SST 09751-36011

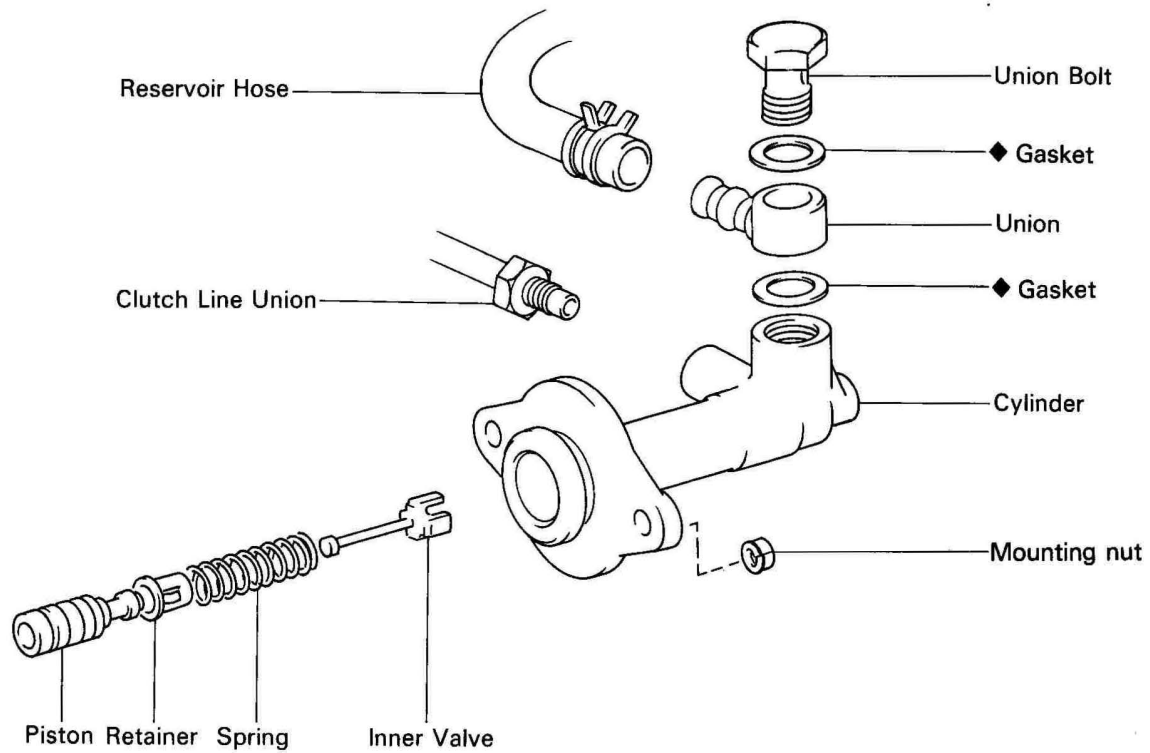
3. CONNECT RESERVOIR HOSE

4. INSTALL CLEVIS PIN AND CLIP

5. ADJUST CLUTCH PEDAL AND BLEED SYSTEM (See page CL-3)

6. (Wide Cab : LHD only) CONNECT AIR SIDE LH DUCT

(w/ Clutch Booster) COMPONENTS

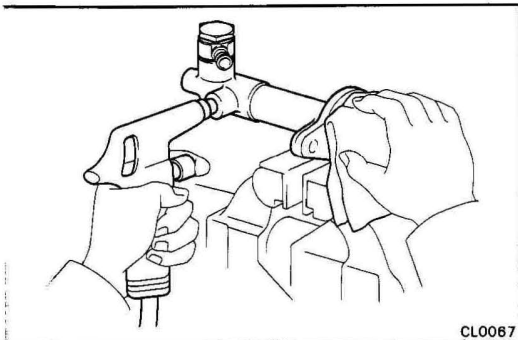


◆ : Non-reusable part

CL0066

REMOVAL OF MASTER CYLINDER

1. DRAW OUT FLUID WITH SYRINGE
2. (Wide Cab : LHD only)
DISCONNECT AIR SIDE LH DUCT
3. DISCONNECT RESERVOIR HOSE
4. DISCONNECT CLUTCH LINE UNION
Using SST, disconnect the union.
SST 09751-36011
5. REMOVE MASTER CYLINDER
Remove the mounting nuts and pull off the master cylinder.



CL0067

DISASSEMBLY OF MASTER CYLINDER

1. REMOVE MASTER CYLINDER
Using compressed air, remove the piston from the cylinder.
2. REMOVE UNION