

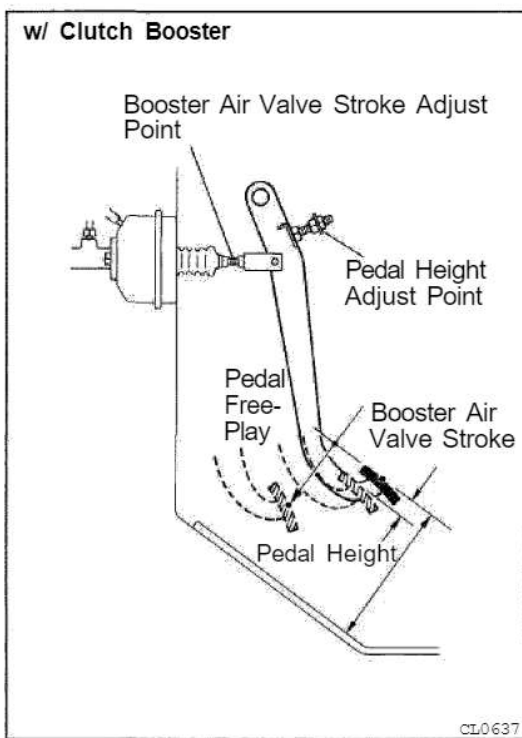
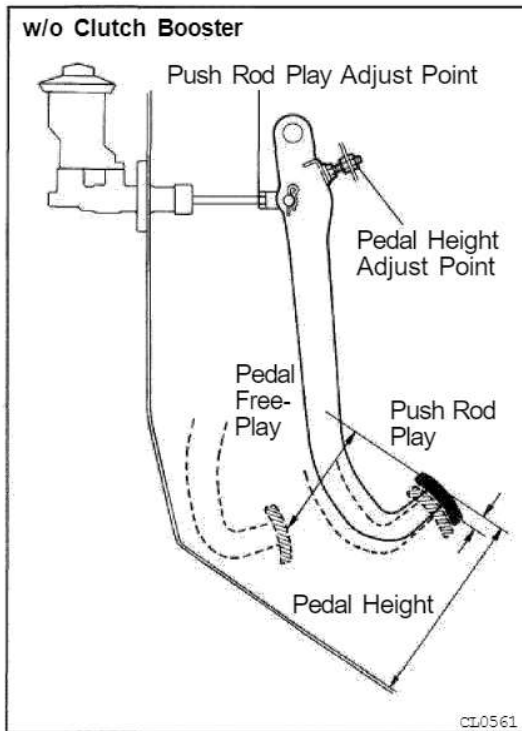
CLUTCH

	Page
TROUBLESHOOTING.....	CL-2
CHECK AND ADJUSTMENT OF CLUTCH PEDAL . . .	CL-3
OPERATIONAL TEST OF CLUTCH BOOSTER	CL-4
BLEEDING OF CLUTCH SYSTEM.....	CL-5
CLUTCH MASTER CYLINDER.....	CL-6
CLUTCH BOOSTER.....	CL-10
CLUTCH ACCUMULATOR.....	CL-17
CLUTCH RELEASE CYLINDER.....	CL-21
CLUTCH UNIT.....	CL-22

CL

TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Hard to shift or will not shift	Clutch pedal freeplay excessive	Adjust pedal freeplay	CL-3
	Clutch booster faulty	Inspect clutch booster	CL-10
	Clutch release cylinder faulty	Repair release cylinder	CL-21
	Clutch master cylinder faulty	Repair master cylinder	CL-6, 8
	Clutch disc out of true, lining greasy or broken	Inspect clutch disc	CL-22
	Splines on input shaft or clutch disc dirty or burred	Repair as necessary	CL-22
	Clutch pressure plate faulty	Replace pressure plate	CL-22
Transmission jumps out of gear	Pilot bearing worn	Replace pilot bearing	CL-22
Clutch slips	Clutch pedal freeplay insufficient	Adjust pedal freeplay	CL-3
	Clutch booster faulty	Inspect clutch booster	CL-10
	Clutch disc lining oily or worn out	Inspect clutch disc	CL-22
	Pressure plate faulty	Replace pressure plate	CL-22
	Release fork binds	Inspect release fork	CL-22
Clutch grabs/chatters	Clutch booster faulty	Inspect clutch booster	CL-10
	Clutch disc lining oily or worn out	Inspect clutch disc	CL-22
	Pressure plate faulty	Replace pressure plate	CL-22
	Clutch diaphragm spring bending	Align clutch diaphragm	CL-22
	Engine mounts loose	Repair as necessary	
Clutch pedal spongy	Air in clutch lines	Bleed clutch system	CL-5
	Clutch release cylinder faulty	Repair release cylinder	CL-21
	Clutch master cylinder faulty	Repair master cylinder	CL-6, 8
Clutch noisy	Loose part inside housing	Repair as necessary	
	Release bearing worn or dirty	Replace release bearing	CL-22
	Pilot bearing worn	Replace pilot bearing	CL-22
	Release fork or linkage sticks	Repair as necessary	



CHECK AND ADJUSTMENT OF CLUTCH PEDAL

1. CHECK THAT PEDAL HEIGHT IS CORRECT

Pedal height from asphalt sheet:
173 mm (6.81 in.)

2. IF NECESSARY, ADJUST PEDAL HEIGHT

Loosen the lock nut and turn the stopper bolt until the height is correct. Tighten the lock nut.

HINT: After adjusting the pedal height, check and adjust the pedal free play and push rod play or booster air valve stroke.

3-1. (w/o Clutch Booster)

CHECK THAT PEDAL FREEPLAY AND PUSH ROD PLAY ARE CORRECT

(Pedal Freeplay)

Push in on the pedal until the beginning of clutch resistance is felt.

Pedal freeplay: 13.0 — 23.0 mm (0.51 — 0.91 in.)

(Push rod play)

Push in on the pedal with a finger softly until the resistance begins to increase a little.

**Push rod play at pedal top: 1.0 — 5.0 mm
(0.039 - 0.197 in.)**

3-2. (w/ Clutch Booster)

CHECK PEDAL FREEPLAY AND BOOSTER AIR VALVE STROKE

(Pedal Freeplay)

Push in on the pedal until the clutch begins to resist.

Pedal freeplay: 15.0 - 30.0 mm (0.59 — 1.18 in.)

(Booster Air Valve Stroke)

(a) Stop the engine and depress the clutch pedal several times until there is no vacuum left in the clutch booster.

(b) Push in on the pedal with a finger softly until the resistance begins to increase a little.

**Booster air valve stroke at pedal top:
5.0 - 9.0 mm (0.20 - 0.35 in.)**

HINT: The booster air valve stroke is the amount of the stroke until the booster piston is moved by the booster air valve.

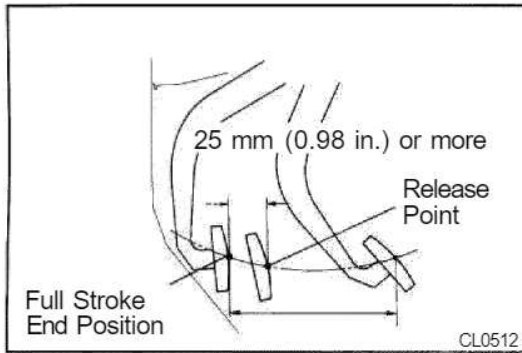
4. IF NECESSARY, ADJUST PEDAL FREEPLAY AND PUSH ROD PLAY OR BOOSTER AIR VALVE STROKE

(a) Loosen the lock nut and turn the push rod until the freeplay and push rod play are correct.

(b) Tighten the lock nut.

(c) After adjusting the pedal freeplay, check the pedal height.

(d) Connect the air duct and install the lower finish panel.

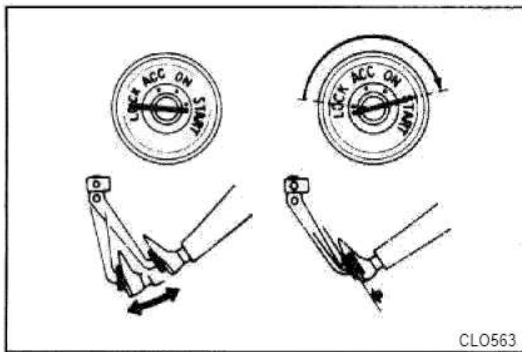
CL-4**CLUTCH — Check and Adjustment of Clutch Pedal
Operational Test of Clutch Booster****5. INSPECT CLUTCH RELEASE POINT**

- Pull the parking brake lever and install wheel stopper.
- Start the engine and idle the engine.
- Without depressing the clutch pedal, slowly shift lever into reverse position until the gears contact.
- Gradually depress the clutch pedal and measure the stroke distance from the point the gear noise stops (release point) up to the full stroke end position.

Standard distance: 25 mm (0.98 in.) or more (From pedal stroke end position to release point)

If the distance not as specified, perform the following operation.

- Inspect pedal height .
- Inspect push rod play and pedal freeplay.
- Bleed the clutch line.
- Inspect the clutch cover and disc.

**OPERATIONAL TEST OF CLUTCH BOOSTER**

HINT: 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.

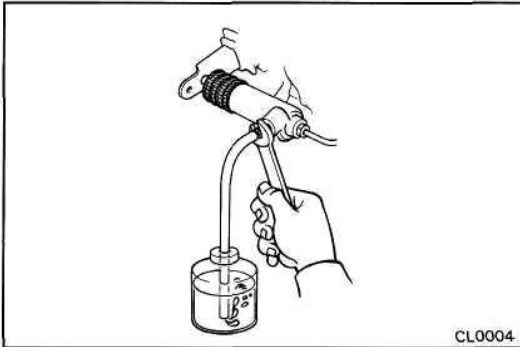
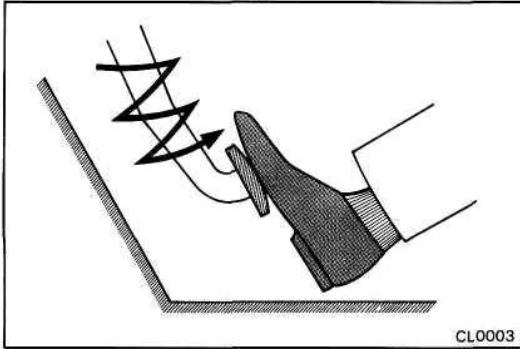
2. AIR-TIGHTNESS CHECK

- 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 light difference in pedal effort.
- Start the engine and turn it off after 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.

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

CLUTCH — Bleeding of Clutch System

CL-5

**BLEEDING OF CLUTCH SYSTEM**

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

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

1. FILL CLUTCH RESERVOIR WITH BRAKE FLUID

Check the reservoir frequently. Add fluid if necessary.

2. CONNECT VINYL TUBE TO BLEEDER PLUG

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

3. BLEED CLUTCH LINE

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

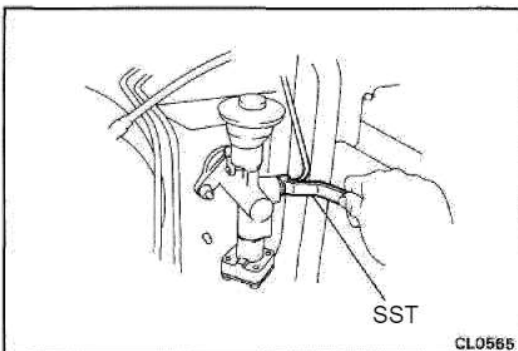
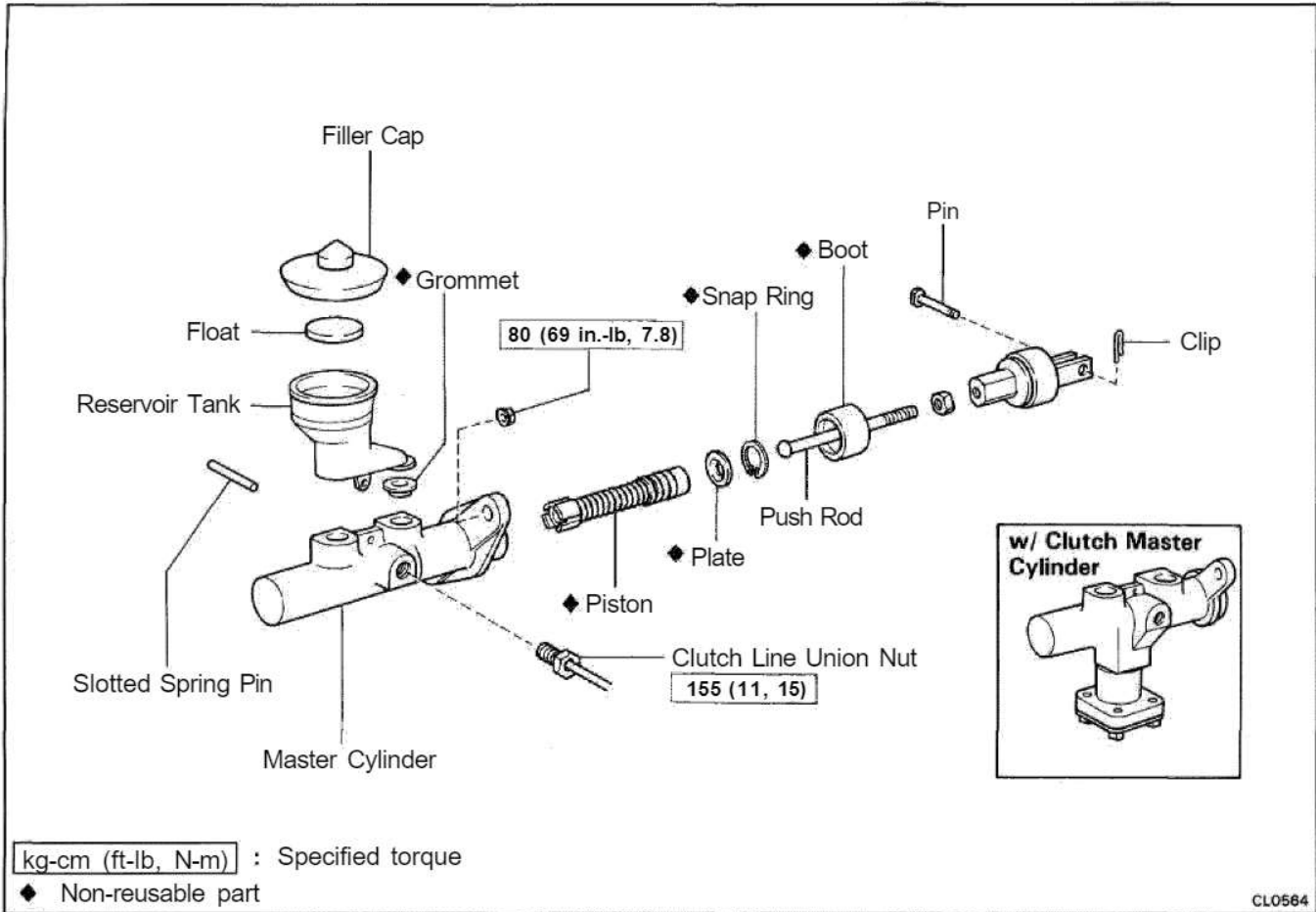
4. TIGHTEN BLEEDER PLUG

Torque: 110 kg-cm (8 ft-lb, 11 Nm)

CL-6

CLUTCH - Clutch Master Cylinder

CLUTCH MASTER CYLINDER (w/o Clutch Booster) COMPONENTS



REMOVAL AND INSTALLATION OF CLUTCH MASTER CYLINDER

(MAIN POINT OF REMOVAL AND INSTALLATION)

REMOVE MASTER CYLINDER

- Draw out fluid with syringe.
- Using SST, disconnect the clutch tube.
SST 09751-36011
- Remove the clip, clevis pin and return spring.
- Remove the nut from the room side.
- Remove the nut from the engine room side.
- Pull out the master cylinder.

DISASSEMBLY OF MASTER CYLINDER

1. REMOVE RESERVOIR TANK

- Using a pin punch and a hammer, drive out the slotted spring pin.
- Remove reservoir tank and grommet.

2. REMOVE PUSH ROD AND PISTON

INSPECTION OF MASTER CYLINDER

HINT: Clean the disassembled parts with compressed air.

1. INSPECT MASTER CYLINDER BORE FOR SCORING OR CORROSION

If a problem is found, clean or replace the cylinder.

2. INSPECT PISTON AND CUPS FOR WEAR, SCORING, CRACKS OR SWELLING

If either one requires replacement, use the parts from the cylinder kit.

3. INSPECT PUSH ROD FOR WEAR OR DAMAGE

If necessary, replace the push rod.

ASSEMBLY OF MASTER CYLINDER

1. COAT PARTS WITH LITHIUM SOAP BASE GLYCOL GREASE AS SHOWN

2. INSERT PISTON INTO CYLINDER

3. INSTALL PUSH ROD ASSEMBLY WITH SNAP RING

4. INSTALL RESERVOIR TANK

- Install reservoir tank and new grommet.
- Using a pin punch and a hammer, drive in the slotted spring pin.

INSTALLATION OF MASTER CYLINDER

(See page CL-6)

1. INSTALL MASTER CYLINDER

Install the mounting nut, and torque them.

Torque: 80 kg-cm (69 in.-lb, 7.8 Nm)

2. CONNECT CLUTCH LINE UNION

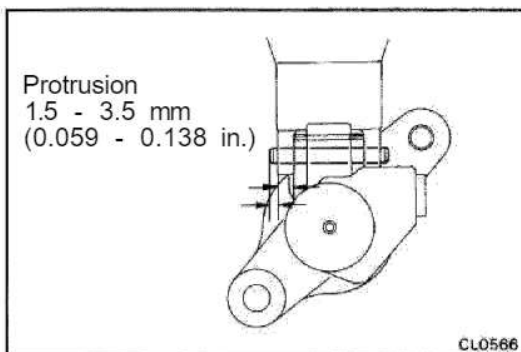
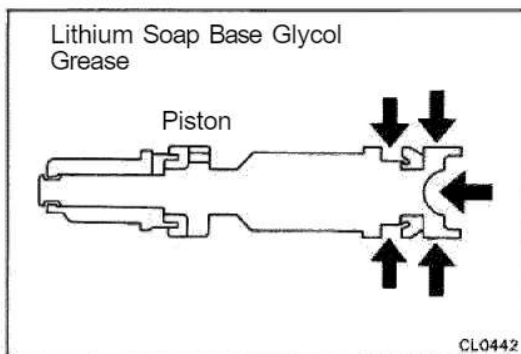
Using SST, connect the union.

SST 09751-36011

3. CONNECT PUSH ROD AND INSTALL PIN

Install the clip in the push rod pin.

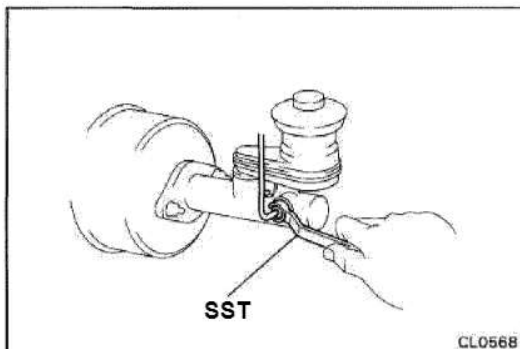
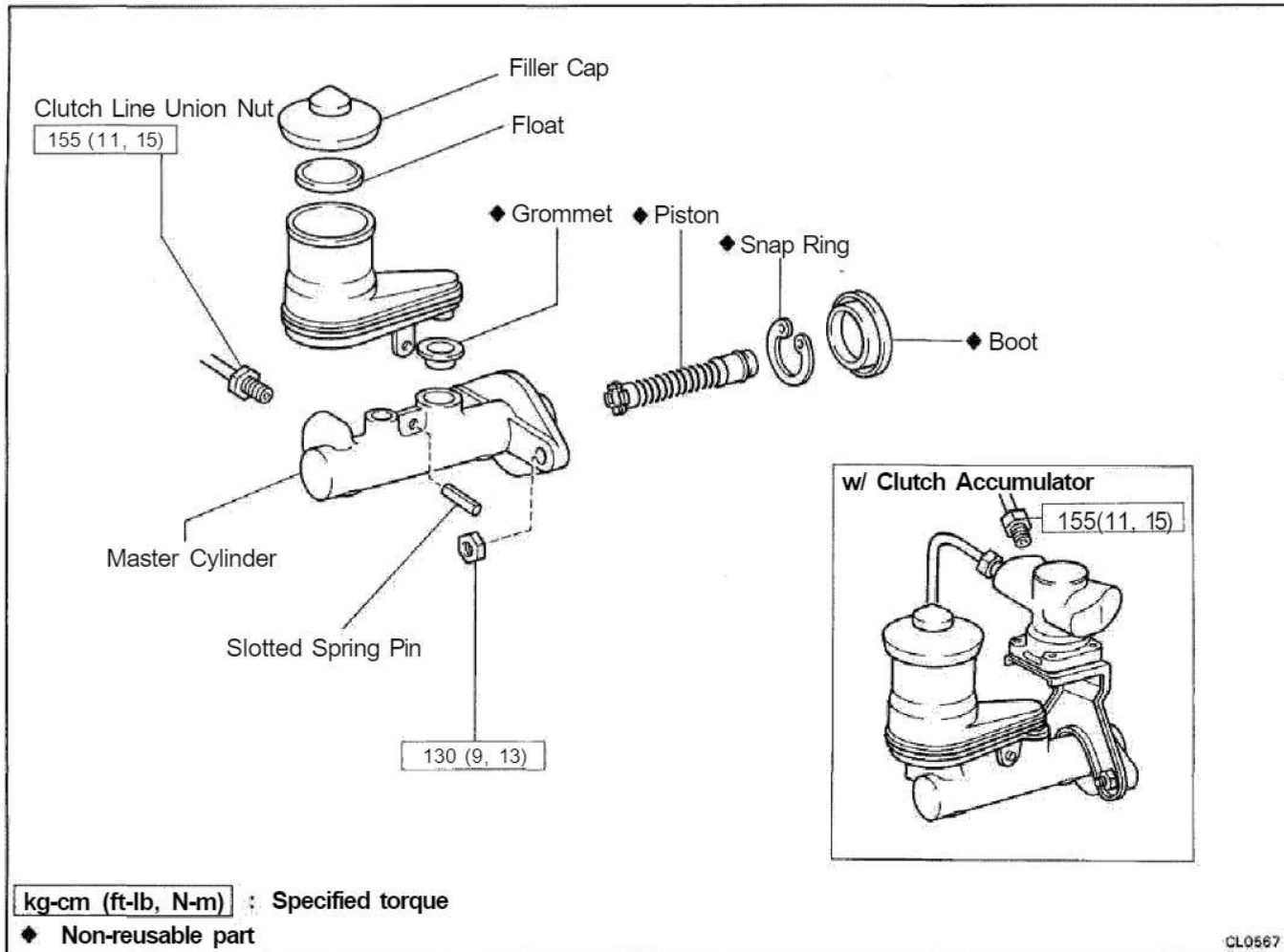
4. BLEED SYSTEM AND ADJUST CLUTCH PEDAL (See page CL-5)



CL-8

CLUTCH - Clutch Master Cylinder

(w/ Clutch Booster) COMPONENTS



REMOVAL AND INSTALLATION OF CLUTCH MASTER CYLINDER

(MAIN POINT OF REMOVAL AND INSTALLATION)

REMOVE MASTER CYLINDER

- Draw out fluid with syringe.
- Using SST, disconnect the clutch tube.
SST 09751-36011
- Remove the two nuts.
- Pull out the master cylinder.

DISASSEMBLY OF MASTER CYLINDER

1. REMOVE RESERVOIR TANK

- Using a pin punch and a hammer, drive out the slotted spring pin.
- Remove reservoir tank and grommet.

2. REMOVE PISTON

INSPECTION OF MASTER CYLINDER

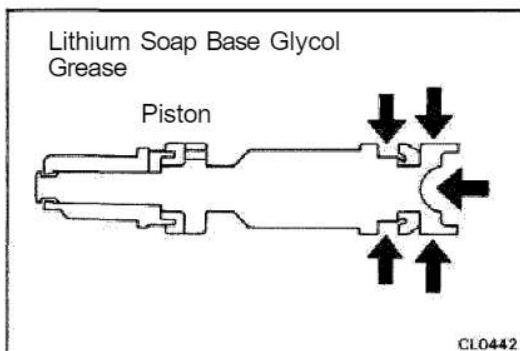
HINT: Clean the disassembled parts with compressed air.

1. INSPECT MASTER CYLINDER BORE FOR SCORING OR CORROSION

If a problem is found, clean or replace the cylinder.

2. INSPECT PISTON AND CUPS FOR WEAR, SCORING, CRACKS OR SWELLING

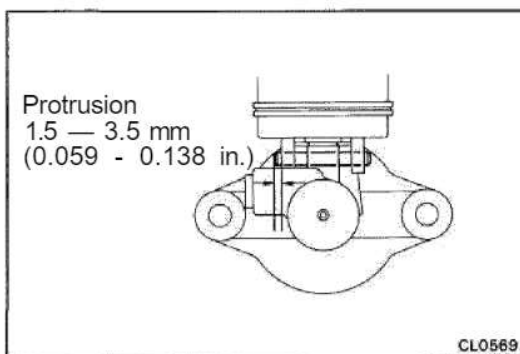
If either one requires replacement, use the parts from the cylinder kit.



ASSEMBLY OF MASTER CYLINDER

1. COAT PARTS WITH LITHIUM SOAP BASE GLYCOL GREASE AS SHOWN

2. INSTALL PISTON INTO CYLINDER



3. INSTALL RESERVOIR TANK

- Install reservoir tank and new grommet.
- Using a pin punch and a hammer, drive in the slotted spring pin.

INSTALLATION OF MASTER CYLINDER

(See page CL-8)

1. ADJUST LENGTH OF CLUTCH BOOSTER PUSH ROD (See step 1 on page CL-16)

2. INSTALL MASTER CYLINDER WITH MOUNTING NUTS

Torque: 130 kg-cm (9 ft-lb, 13 N·m)

3. CONNECT CLUTCH LINE UNION

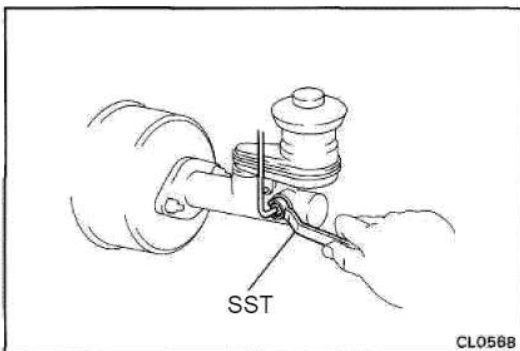
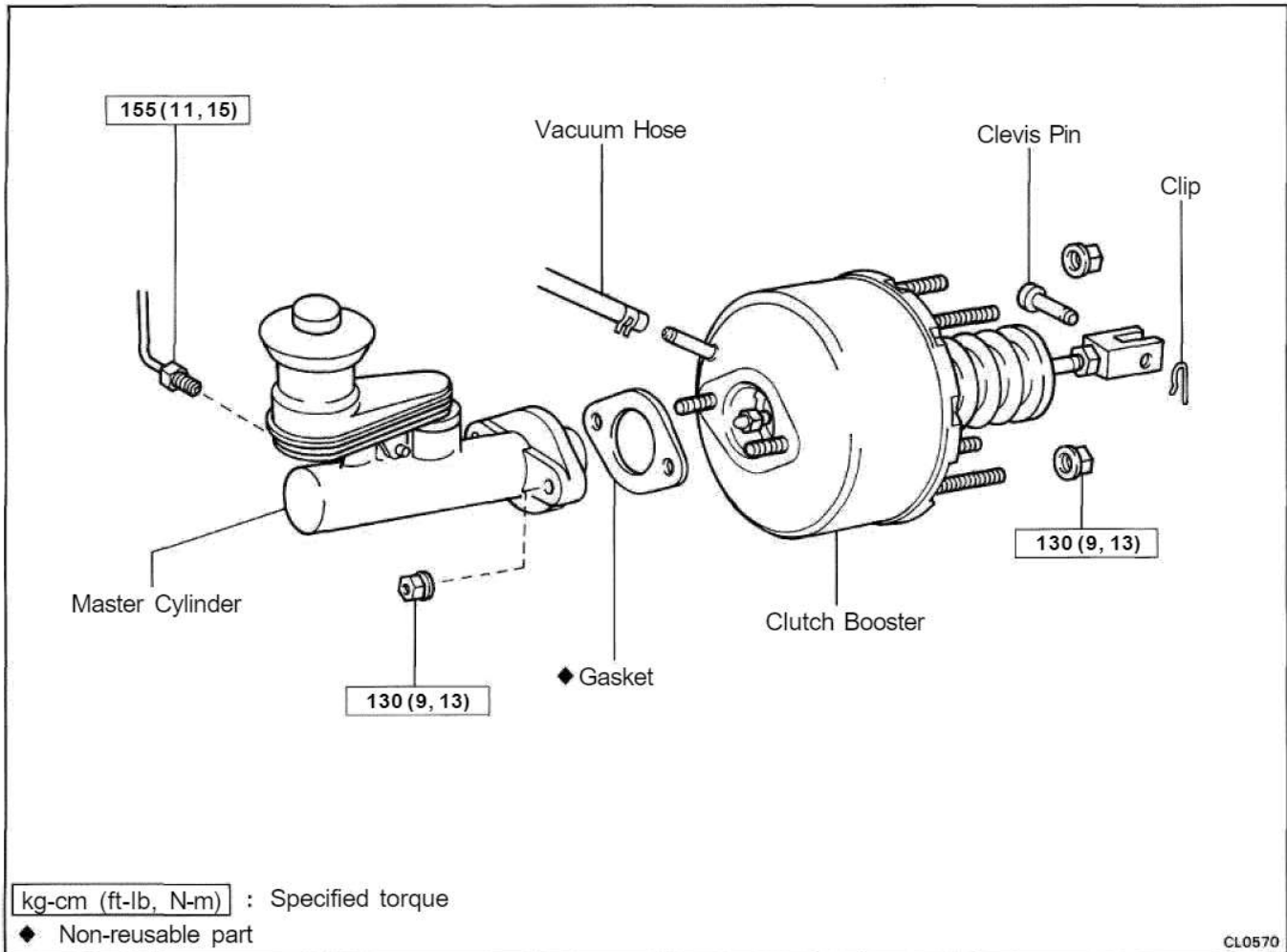
Using SST, connect the union.

SST 09751-36011

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

CL-10

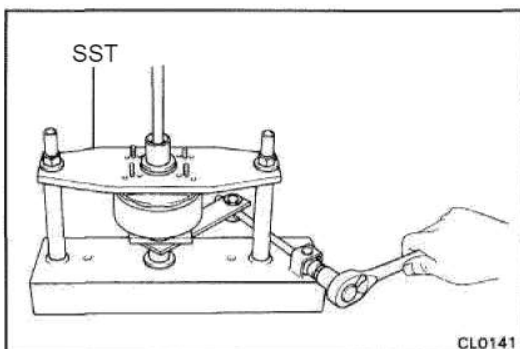
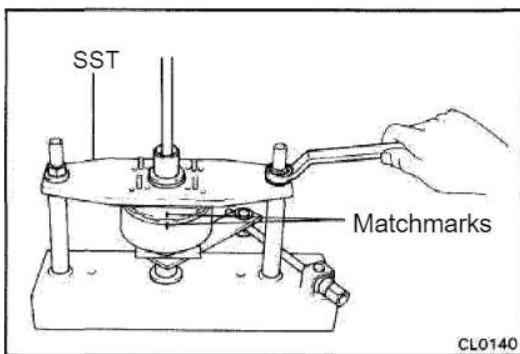
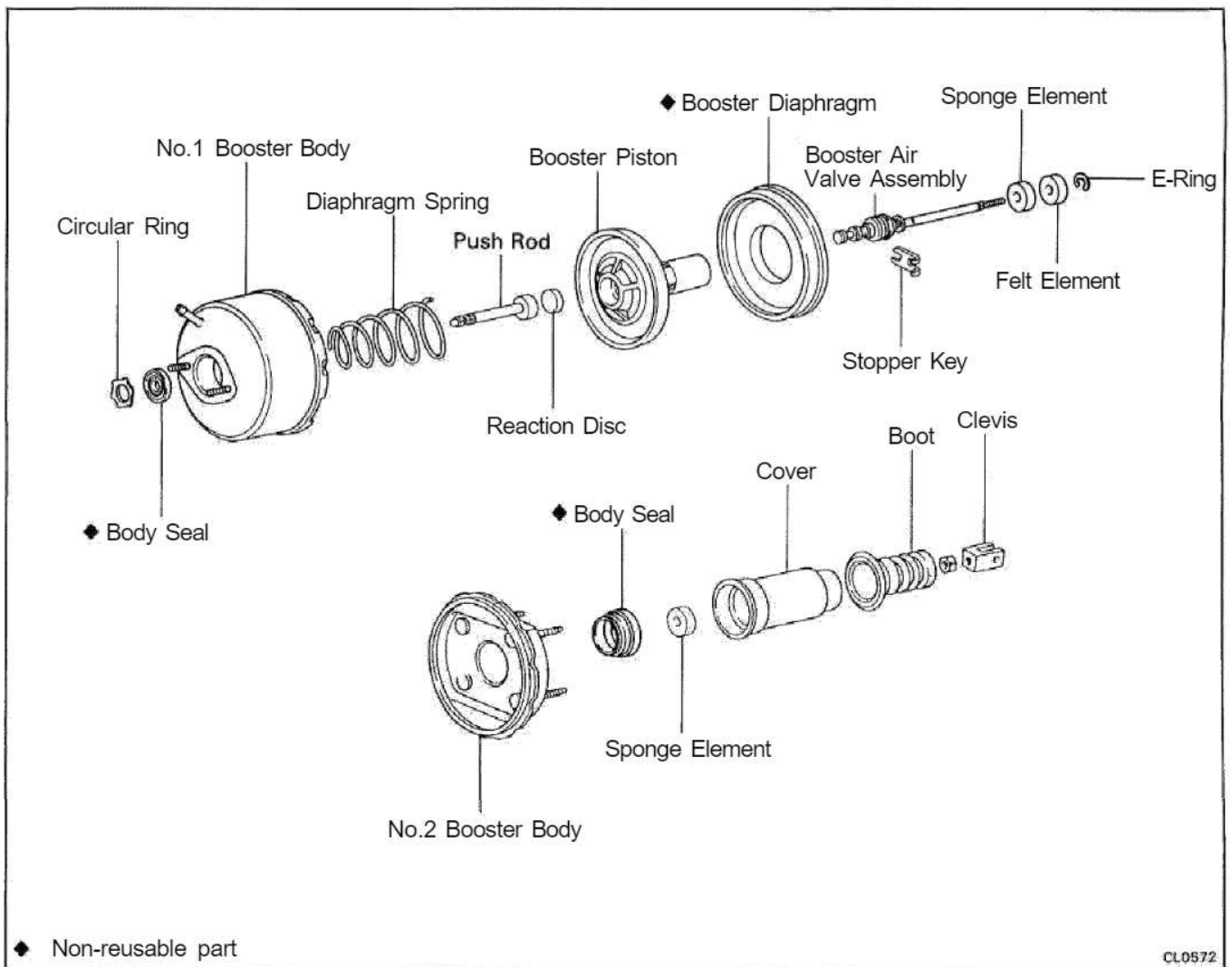
CLUTCH - Clutch Booster

CLUTCH BOOSTER**REMOVAL OF CLUTCH BOOSTER**

- 1. REMOVE MASTER CYLINDER**
(See page CL-8)
- 2. DISCONNECT VACUUM HOSE FROM CLUTCH BOOSTER**
- 3. REMOVE CLUTCH PIPE AND VACUUM PIPE CLAMP BOLTS**



- 4. DISCONNECT CLEVIS FROM CLUTCH PEDAL**
Remove the clip and clevis pin.
- 5. REMOVE CLUTCH BOOSTER**
 - Remove four nuts from the room side.
 - Pull out the clutch booster from engine room side.

CLUTCH - Clutch Booster**CL-11****COMPONENTS****DISASSEMBLY OF CLUTCH BOOSTER****1. REMOVE CLEVIS****2. REMOVE PISTON COVER AND BOOT**

- Remove the piston cover and boot.
- Remove the sponge element from the boot.

3. REMOVE SPONGE AND FELT ELEMENT

Using screwdriver, remove the E-ring and sponge and felt element.

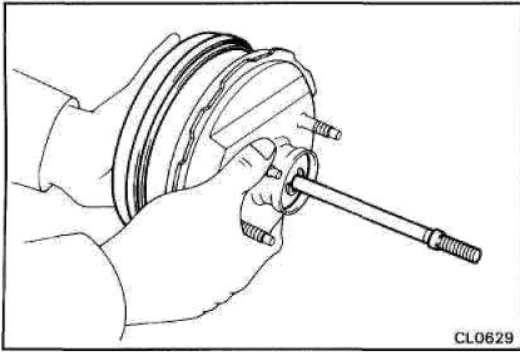
4. SEPARATE NO.1 AND NO.2 BOOSTER BODIES

- Put matchmarks on the No.1 and No.2 booster bodies.
- Set the booster in SST.

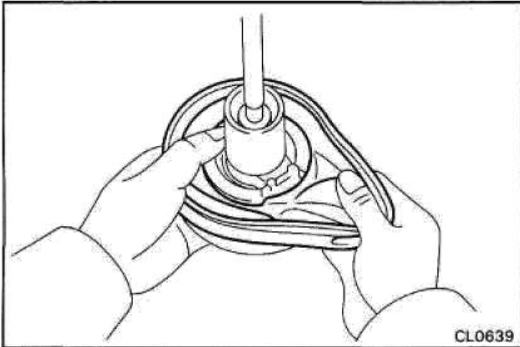
SST 09753-00013

NOTICE: Be careful not to tighten the two nuts of the SST too tightly.

- Turn the No.1 booster body clockwise, until the No.1 and No.2 booster bodies separate.

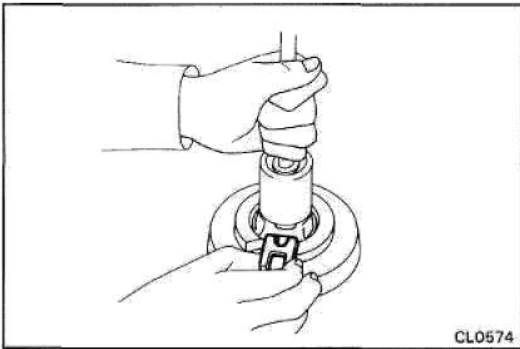
CL-12**CLUTCH - Clutch Booster**

- 5. REMOVE BOOSTER PISTON ASSEMBLY FROM NO.2 BOOSTER BODY**



- 6. REMOVE BOOSTER DIAPHRAGM FROM BOOSTER PISTON**

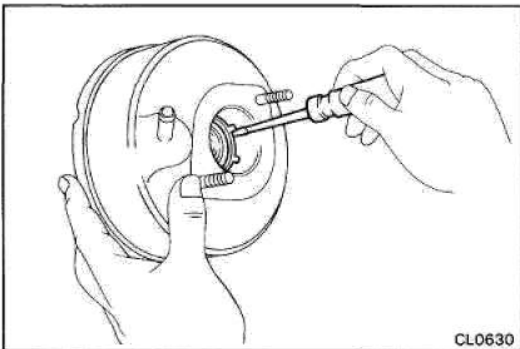
Pull off the diaphragm.



- 7. REMOVE BOOSTER AIR VALVE ASSEMBLY FROM BOOSTER PISTON**

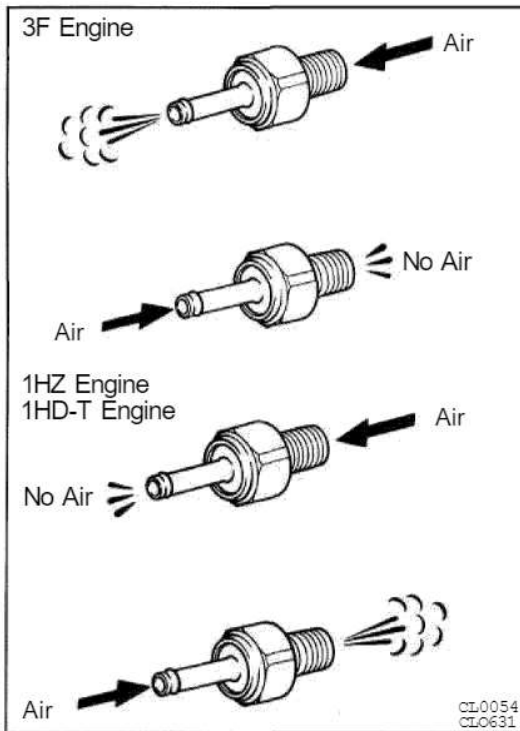
- (a) Push down the booster air valve in the booster piston and remove the stopper key.
- (b) Pull off the booster air valve assembly.

- 8. REMOVE REACTION DISC FROM BOOSTER PISTON**



- 9. REMOVE BODY SEAL FROM NO.1 BOOSTER BODY**

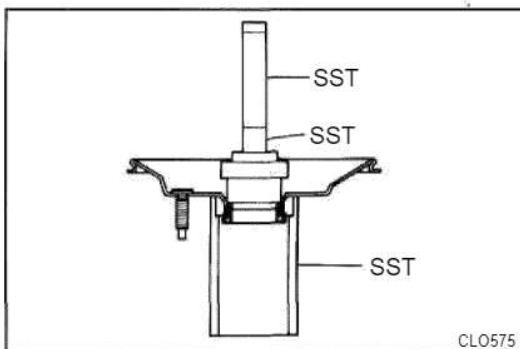
Using a screwdriver, pry out the circular ring and remove the body seal.



INSPECTION AND REPLACEMENT OF CLUTCH BOOSTER

1. INSPECT CHECK VALVE OPERATION

- Check that air flows from the vacuum tank side to the vacuum hose side.
- Check that air does not flow the vacuum hose side to the vacuum tank side.

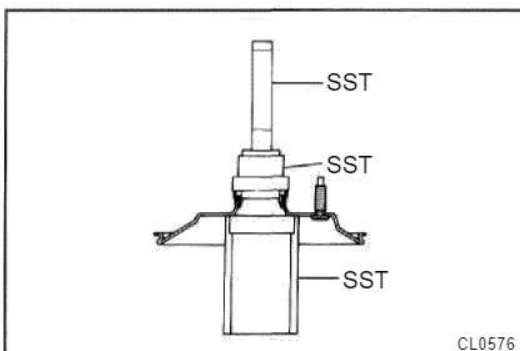


2. IF NECESSARY, REPLACE BODY SEAL FOR NO.2 BOOSTER BODY

- Using SST, remove the body sealer.

SST 09630-00012 (09631-00060), 09753-30020 and 09612-30012

HINT: Support the No.2 booster body using SST cylinder base only.



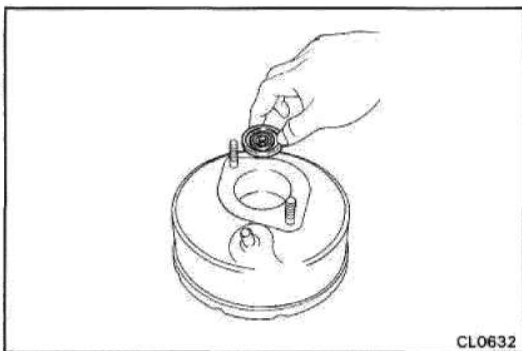
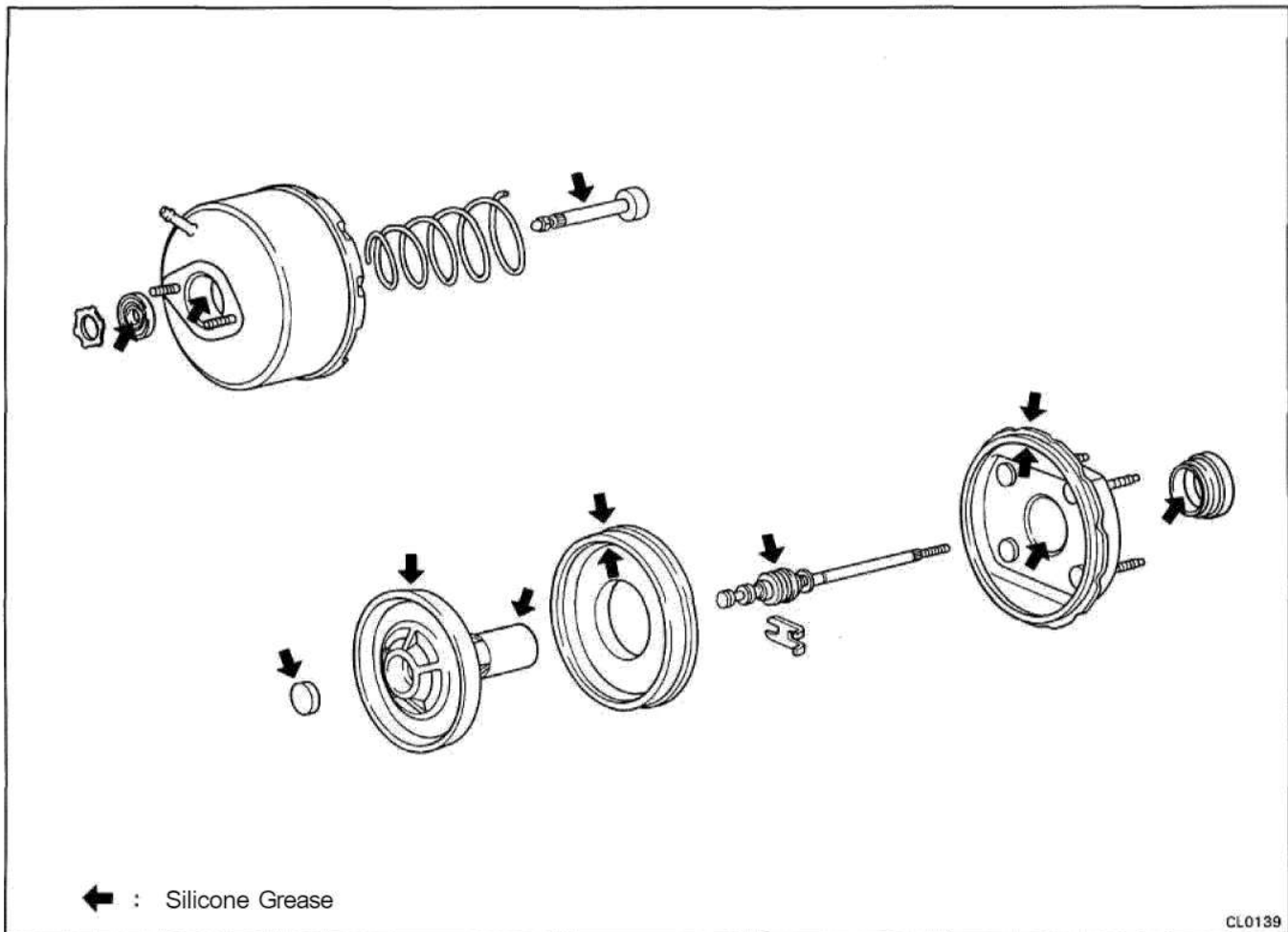
- Using SST, drive in the body sealer.

SST 09630-00012 (09631-00060), 09753-30020 and 09612-30012

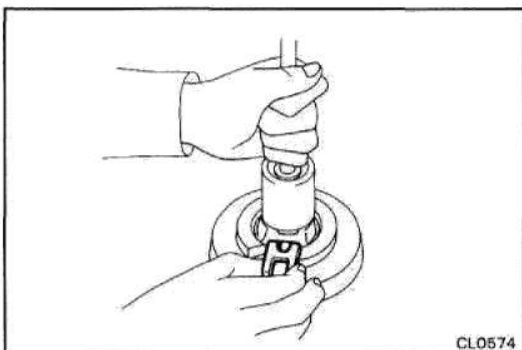
HINT: Support the No.2 booster body using SST cylinder base only.

CL-14**CLUTCH - Clutch Booster****ASSEMBLY OF CLUTCH BOOSTER**

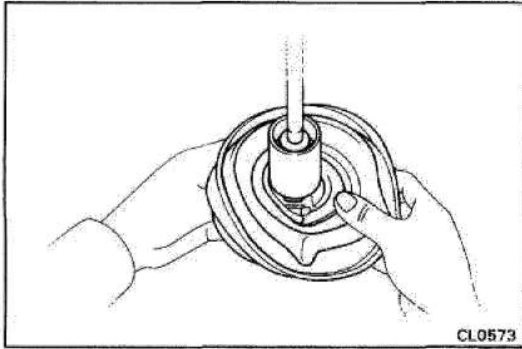
(See page CL-10)

1. APPLY SILICONE GREASE TO PARTS SHOWN BELOW**2. INSTALL BODY SEAL TO NO.1 BOOSTER BODY**

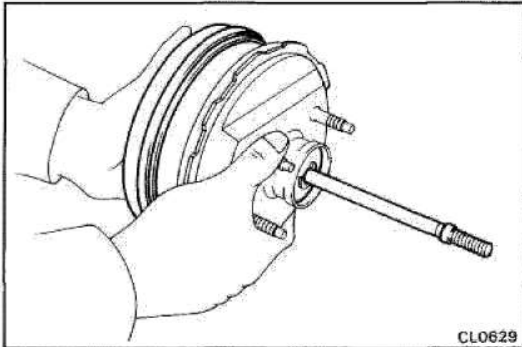
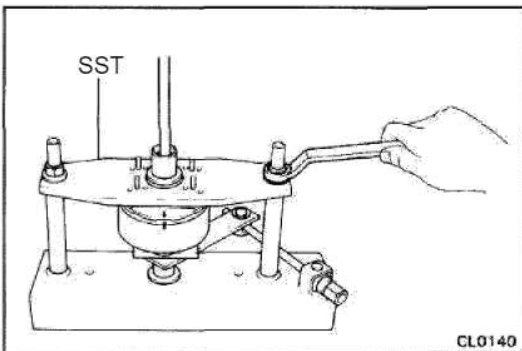
- (a) Place the body seal in position.
- (b) Secure the body seal with the circular ring.

**3. INSTALL BOOSTER AIR VALVE ASSEMBLY TO BOOSTER PISTON**

- (a) Insert the booster air valve in the booster piston.
- (b) Push the booster air valve in the booster piston and install the stopper key.

CLUTCH - Clutch Booster**CL-15****4. INSTALL DIAPHRAGM TO BOOSTER PISTON**

Push in the head of the diaphragm.

**5. INSTALL BOOSTER PISTON ASSEMBLY TO NO.2 BOOSTER BODY****6. INSTALL REACTION DISC TO BOOSTER PISTON****7. ASSEMBLY NO.1 AND NO.2 BOOSTER BODIES**

(a) Place the No.1 booster on SST.

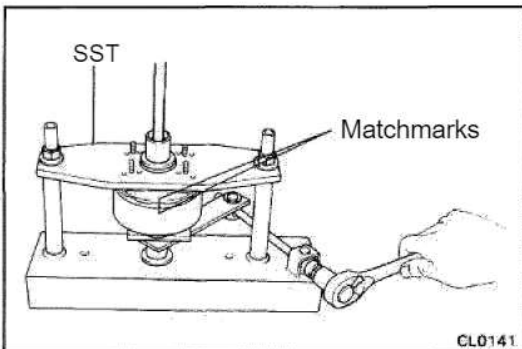
SST 09753-00013

(b) Place the push rod, diaphragm spring and No.2 booster body in the No.1 booster body.

(c) Compress the diaphragm spring between the No.1 and No.2 booster bodies.

NOTICE: Be careful not to tighten the two nuts of the SST too tightly.

(d) Turn the No.1 booster body counterclockwise, until the matchmarks match.

HINT: If the No. 1 booster body is too tight to be turned, apply more silicone grease on the diaphragm edge that contacts the No.1 and No.2 booster bodies.**8. INSTALL SPONGE AND FELT ELEMENT**

(a) Install the sponge and felt element into the booster.

(b) Install E-ring onto booster air valve assembly.

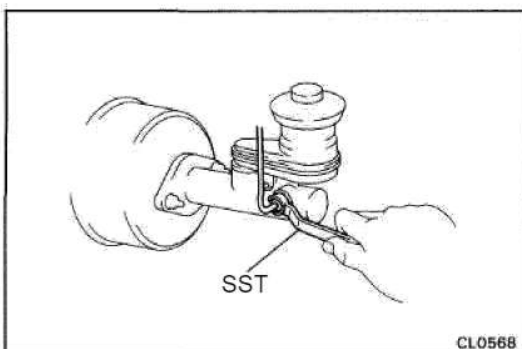
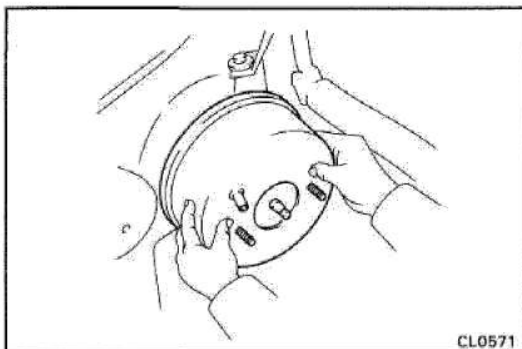
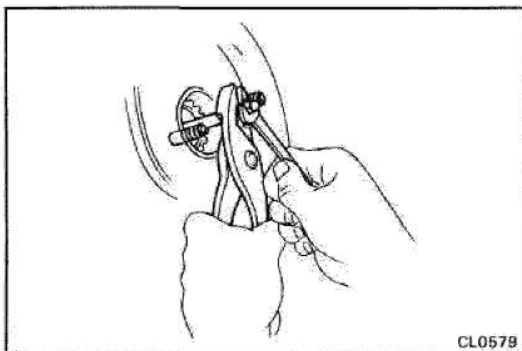
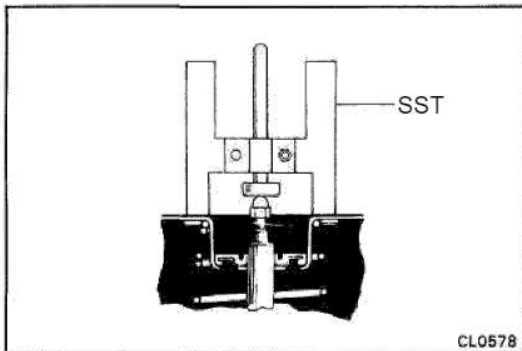
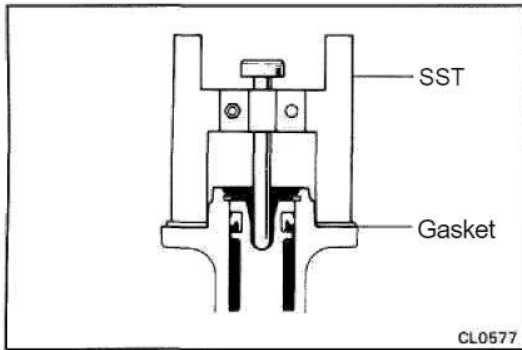
9. INSTALL PISTON COVER WITH BOOT

(a) Install the sponge element into the boot.

(b) Install the boot to the piston cover.

(c) Install a new gasket onto the booster and the piston cover with the boot.

10. INSTALL CLEVIS

CL-16**CLUTCH - Clutch Booster****INSTALLATION OF CLUTCH BOOSTER**

(See page CL-11)

1. ADJUST LENGTH OF BOOSTER PUSH ROD

- (a) Install the gasket on the master cylinder.
- (b) Set the SST on the gasket, and lower the pin until its tip slightly touches the piston.

SST 09737-00010

- (c) Turn the SST upside down, and set it on the booster.

SST 09737-00010

- (d) Measure the clearance between the booster push rod and pin head (SST).

Clearance: 0 mm (0 in.)

- (e) Adjust the booster push rod length until the push rod lightly touches the pin head.

HINT: When adjusting the push rod, depress the clutch pedal enough so that the push rod sticks out.

2. INSTALL CLUTCH BOOSTER

Install four nuts and the clutch booster.

3. CONNECT CLEVIS TO CLUTCH PEDAL

Connect the clevis to the clutch pedal with the clevis pin and clip.

4. INSTALL MASTER CYLINDER TO CLUTCH BOOSTER
(See page CL-8)**Torque: 130 kg-cm (9 ft-lb, 13 Nm)****5. CONNECT CLUTCH LINE UNION**

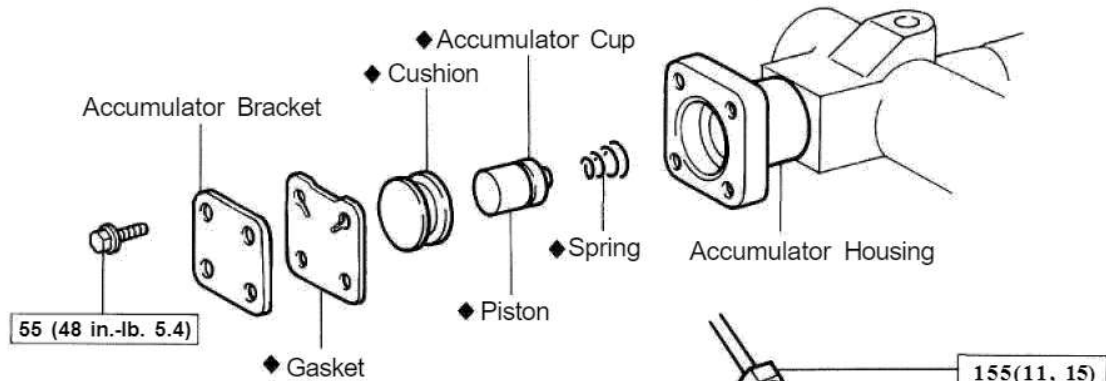
Using SST, connect the union.

SST 09751-36011

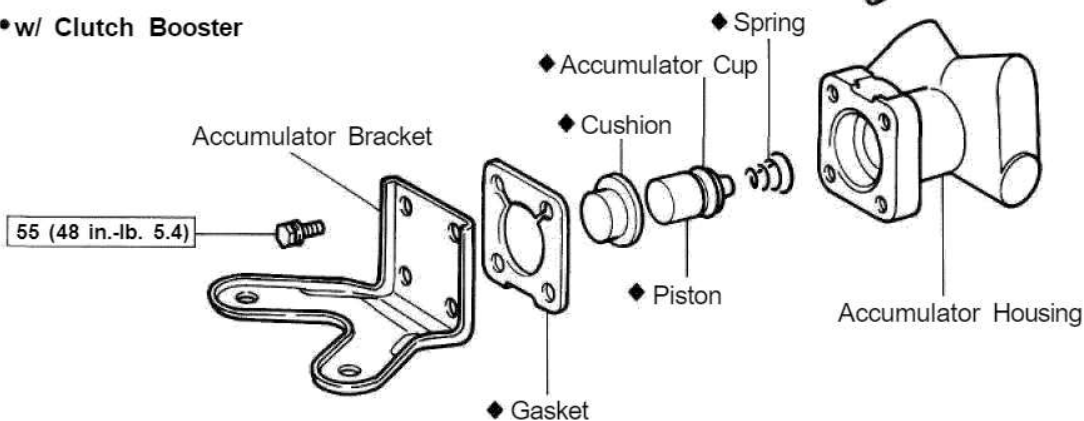
6. CONNECT VACUUM HOSE TO CLUTCH BOOSTER**7. ADJUST CLUTCH PEDAL AND BLEED SYSTEM**
(See page CL-5)

CLUTCH ACCUMULATOR COMPONENTS

•w/o Clutch Booster



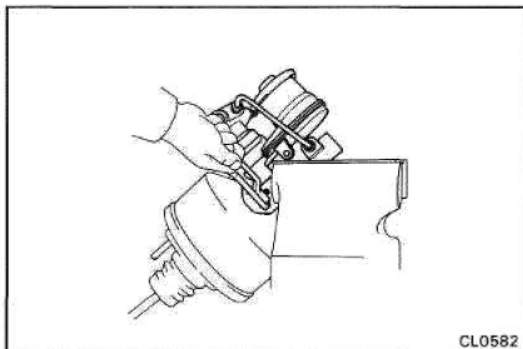
•w/ Clutch Booster



kg-cm (ft-lb, N-m) : Specified torque

◆ Non-reusable part

CL0580
CL0581



CL0582

REMOVAL OF CLUTCH ACCUMULATOR (MAIN POINT OF REMOVAL AND INSTALLATION)

(w/o Clutch Booster)

REMOVE MASTER CYLINDER

(See page CL-6)

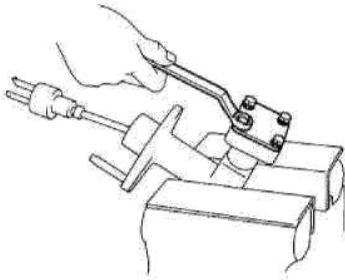
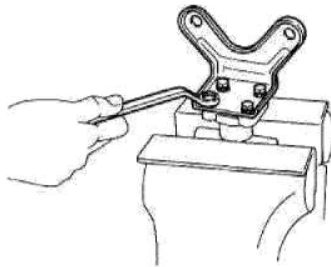
(w/ Clutch Booster)

1. REMOVE MASTER CYLINDER

(See page CL-8)

2. REMOVE CLUTCH ACCUMULATOR

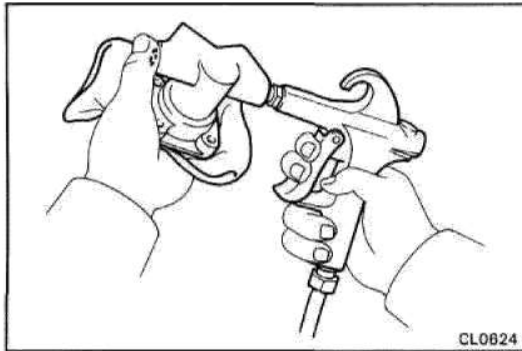
Remove two bolts and clutch accumulator with bracket.

CL-18**CLUTCH — Clutch Accumulator****w/o Clutch Booster****w/ Clutch Booster**CL0583
CL0584**DISASSEMBLY OF CLUTCH ACCUMULATOR****1. REMOVE CLUTCH BRACKET**

- (a) Remove four bolts and the bracket.
- (b) Remove the gasket from the bracket.

2. REMOVE CUSHION**3. REMOVE PISTON AND SPRING**

Using compressed air, remove the piston and spring.

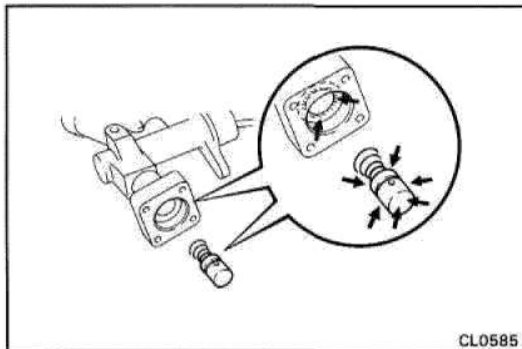


CL0824

ASSEMBLY OF CLUTCH ACCUMULATOR**(w/o Clutch Booster)**

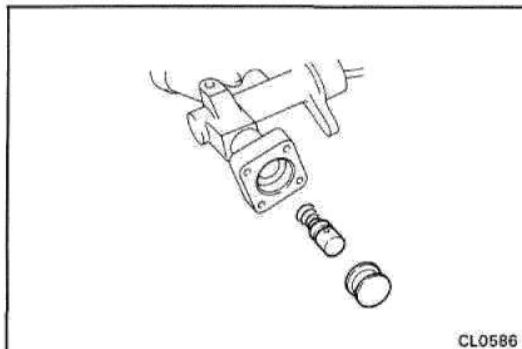
(See page CL-17)

1. COAT PISTON AND ACCUMULATOR BODY WITH LITHIUM SOAP BASE GLYCOL GREASE, AS SHOWN

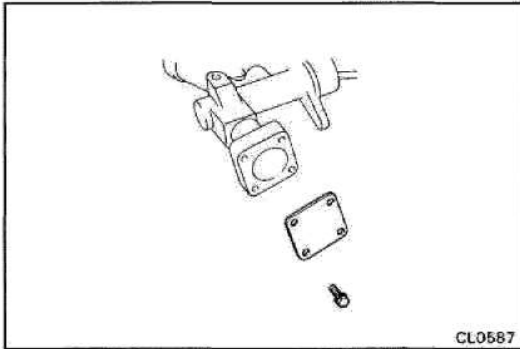


CL0585

2. INSTALL SPRING, PISTON AND CUSHION INTO ACCUMULATOR

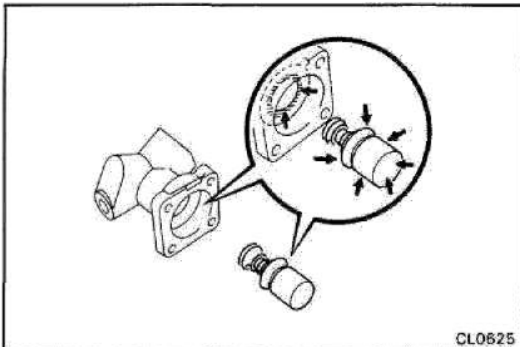


CL0586

CLUTCH — Clutch Accumulator**CL-19****3. INSTALL ACCUMULATOR BRACKET**

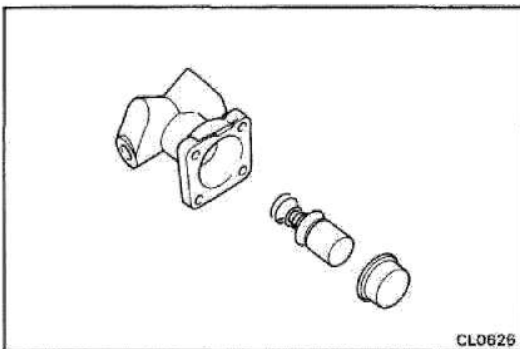
- (a) Install a new gasket to the bracket.
- (b) Install the bracket to the accumulator and tighten the four bolts.

Torque: 55 kg-cm (48 in.-lb, 5.4 N-m)

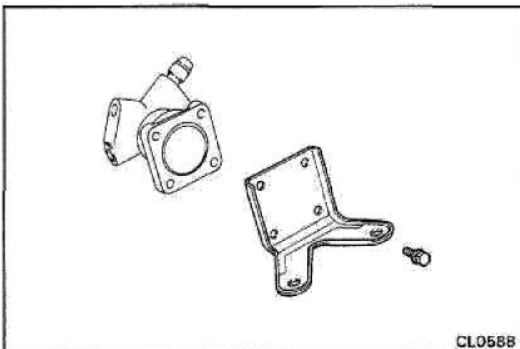
**(w/ Clutch Booster)**

(See page CL-17)

- 4. COAT PISTON AND ACCUMULATOR BODY WITH LITHIUM SOAP BASE GLYCOL GREASE, AS SHOWN**



- 5. INSTALL SPRING, PISTON AND CUSHION INTO ACCUMULATOR**

**6. INSTALL ACCUMULATOR BRACKET**

- (a) Install a new gasket to the bracket.
- (b) Install the bracket to the accumulator and tighten the four bolts.

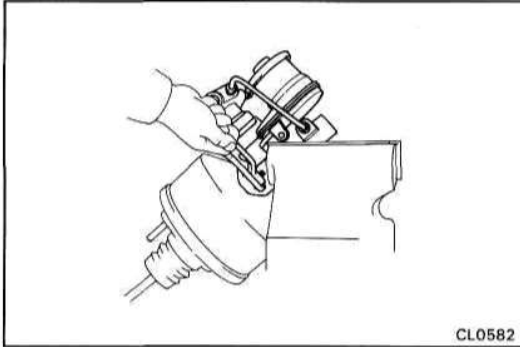
Torque: 55 kg-cm (48 in.-lb, 5.4 N-m)

CL-20**CLUTCH — Clutch Accumulator****INSTALLATION OF CLUTCH ACCUMULATOR
(w/o Clutch Booster)**

INSTALL MASTER CYLINDER
(See page CL-6)

(w/ Clutch Booster)**1. INSTALL CLUTCH ACCUMULATOR**

Install two bolts and clutch accumulator with bracket.

**2. CONNECT CLUTCH LINE TUBE**

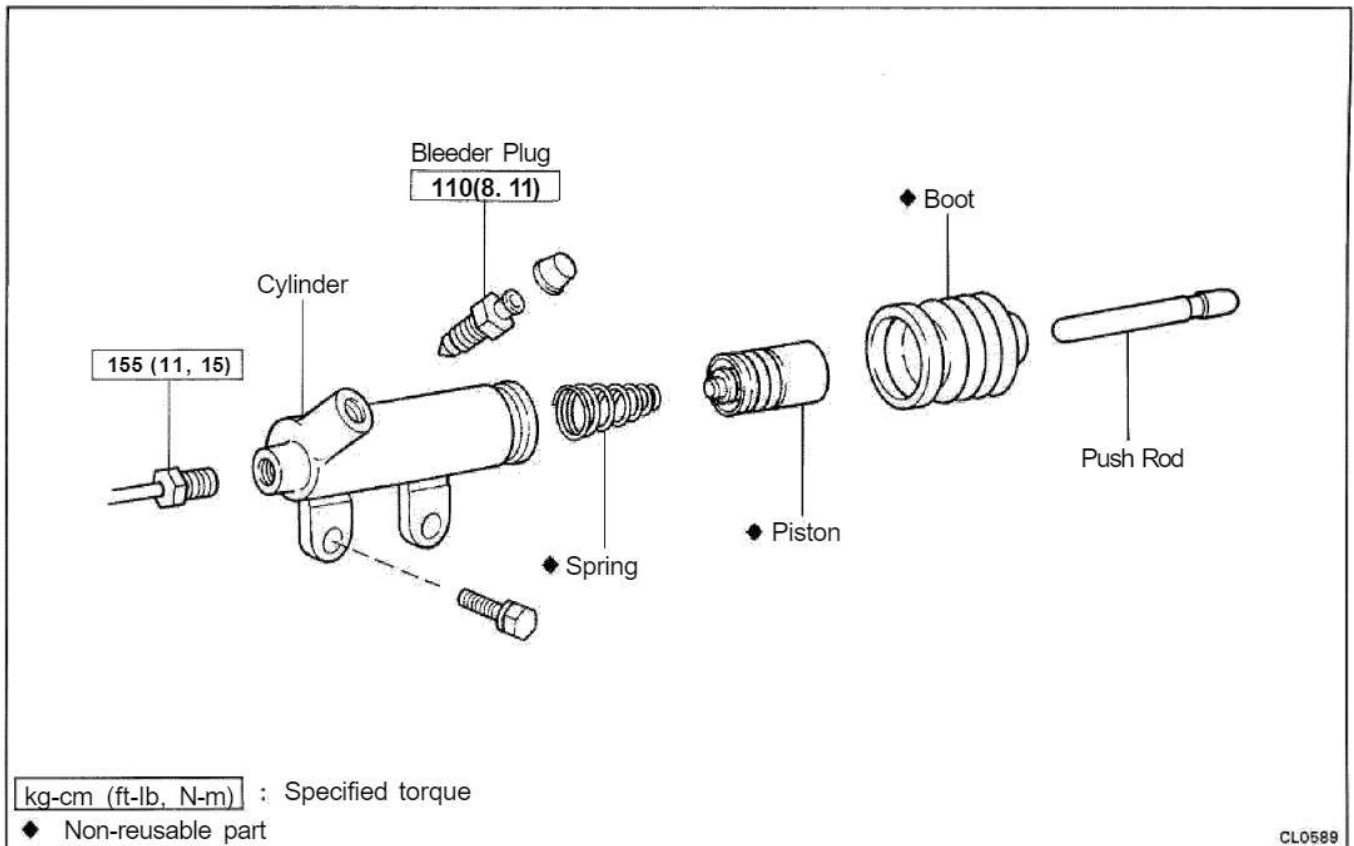
Using SST, connect the clutch line tube.

SST 09751-36011

Torque: 155 kg-cm (11 ft-lb, 15 N-m)

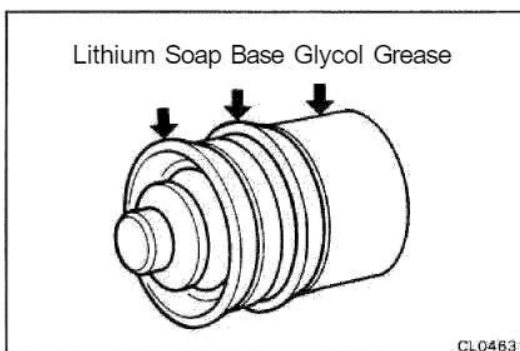
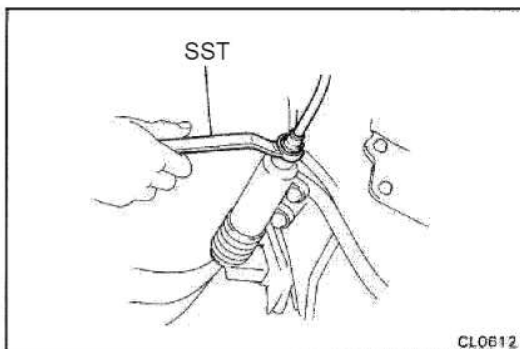
3. INSTALL MASTER CYLINDER
(See page CL-8)**4. FILL RESERVOIR WITH BRAKE FLUID AND BLEED
CLUTCH SYSTEM****5. CHECK FOR LEAKS**

CLUTCH RELEASE CYLINDER COMPONENTS



REMOVAL AND INSTALLATION OF CLUTCH RELEASE CYLINDER

(MAIN POINT OF REMOVAL AND INSTALLATION)



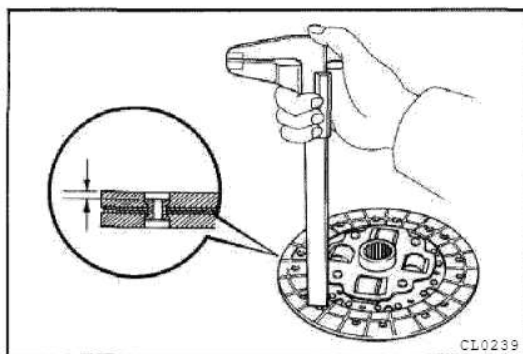
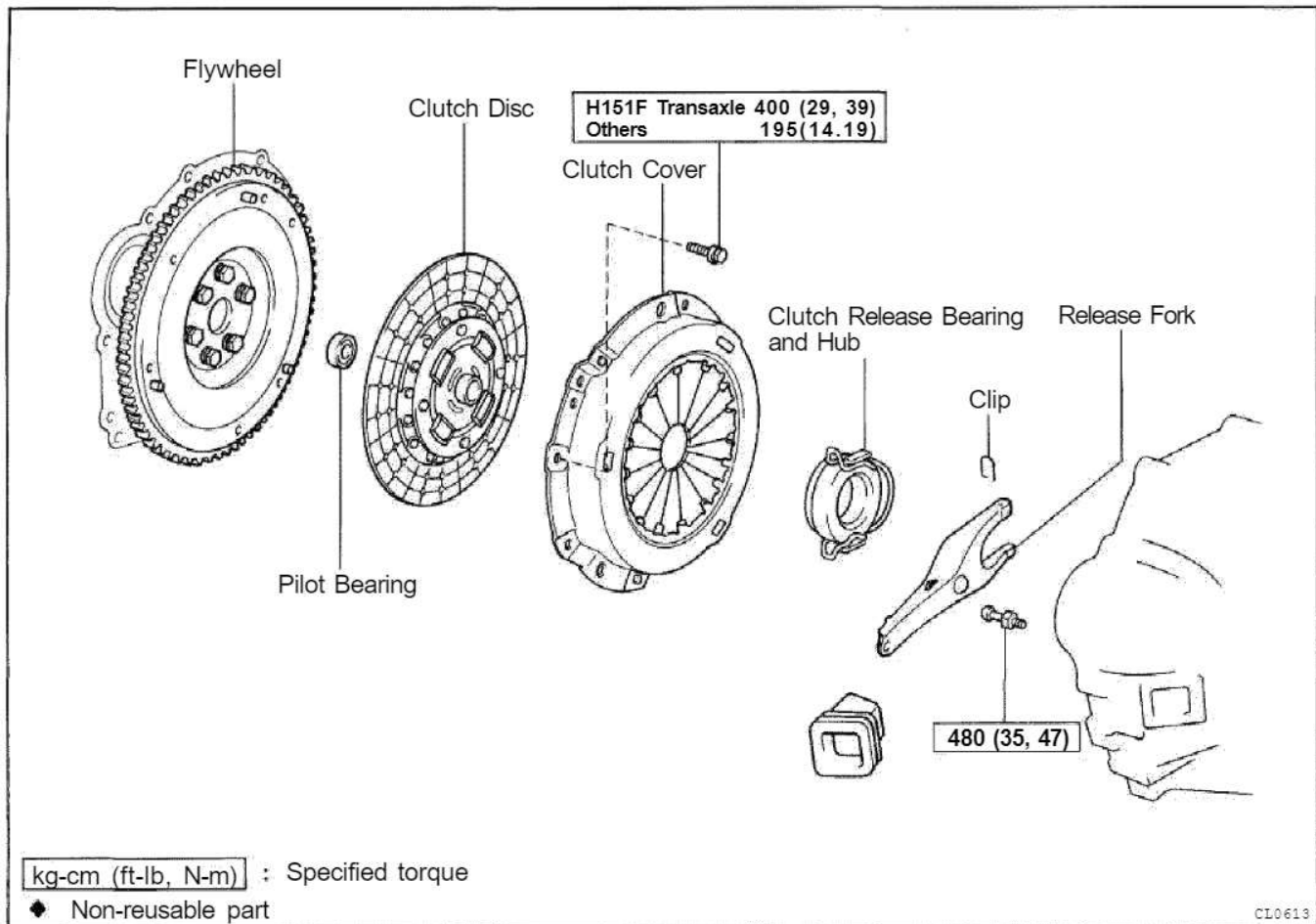
- 1. DISCONNECT AND CONNECT CLUTCH LINE TUBE**
Using SST, disconnect and connect the tube.
SST 09751-36011
- 2. INSPECT RELEASE CYLINDER BORE FOR SCORING OR CORROSION**
If a problem is found, clean or replace the cylinder.
- 3. INSPECT PISTON AND CUPS FOR WEAR, SCORING, CRACKS OR SWELLING**
If either one requires replacement, use the parts from the cylinder kit.
- 4. INSPECT PUSH ROD FOR WEAR OR DAMAGE**
If necessary, replace the push rod.
- 5. COAT PISTON WITH LITHIUM SOAP BASE GLYCOL GREASE AS SHOWN**
- 6. BLEED CLUTCH SYSTEM**
(See page CL-5)

CL-22

CLUTCH - Clutch Unit

CLUTCH UNIT**REMOVAL OF CLUTCH UNIT**

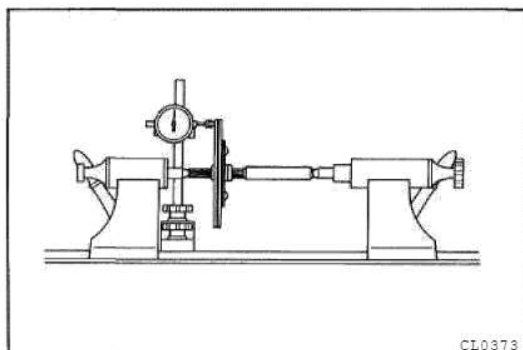
Remove the parts as shown.

**INSPECTION OF CLUTCH PARTS****1. INSPECT CLUTCH DISC FOR WEAR OR DAMAGE**

Using calipers, measure the rivet head depth.

Maximum rivet depth: 0.3 mm (0.012 in.)

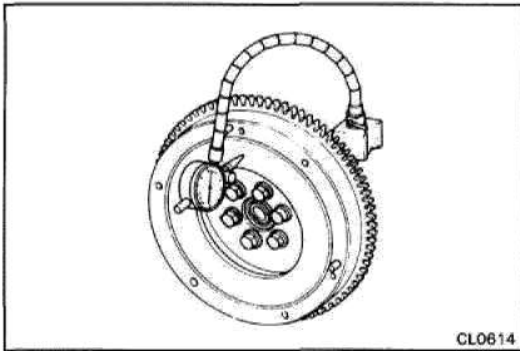
If a problem is found, replace the clutch disc.

**2. INSPECT CLUTCH DISC RUNOUT**

Using a dial indicator, check the disc runout.

Maximum runout: 0.8 mm (0.031 in.)

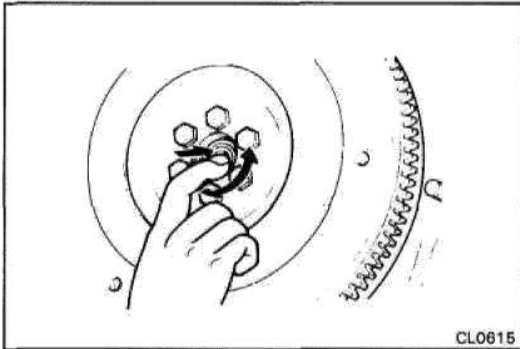
If runout is excessive, replace the clutch disc.

CLUTCH - Clutch Unit**CL-23****3. INSPECT FLYWHEEL RUNOUT**

Using a dial indicator, check the flywheel runout.

Maximum runout: 0.1 mm (0.004 in.)

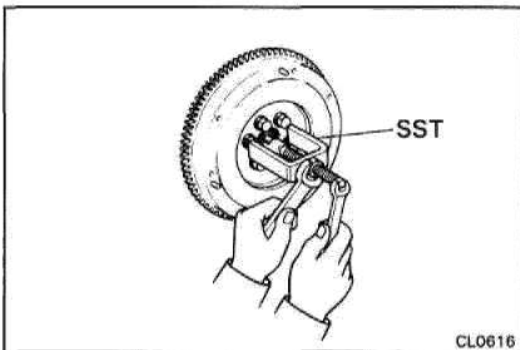
If runout is excessive, replace the flywheel.

**4. INSPECT PILOT BEARING**

Turn the bearing by hand while applying force in the axial direction.

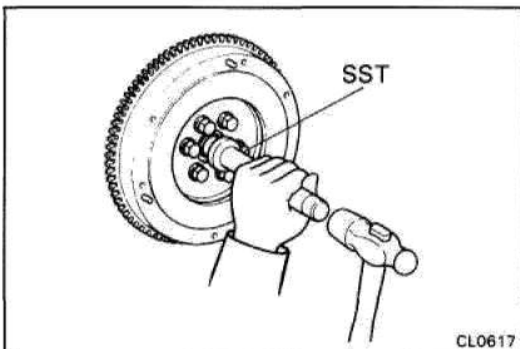
If the bearing sticks or has much resistance, replace the pilot bearing.

HINT: The bearing is permanently lubricated and requires no cleaning or lubrication.

**5. IF NECESSARY, REPLACE PILOT BEARING**

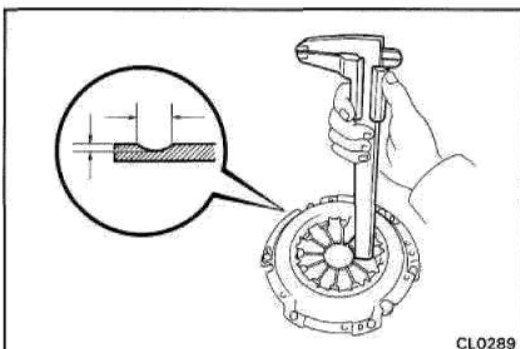
(a) Using SST, remove the pilot bearing.

SST 09303-35011



(b) Using SST, install the pilot bearing.

SST 09304-30012

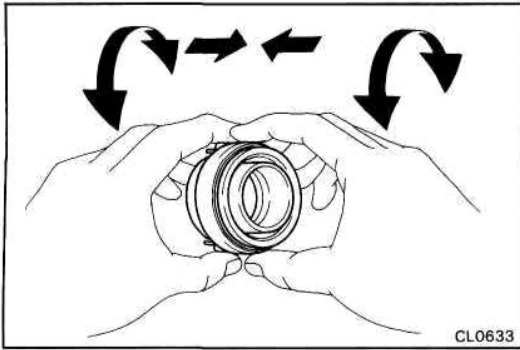
**6. INSPECT DIAPHRAGM SPRING FOR WEAR**

Using calipers, measure the diaphragm spring for depth and width of wear.

Maximum: Depth 0.6 mm (0.024 in.)

Width 5.0 mm (0.197 in.)

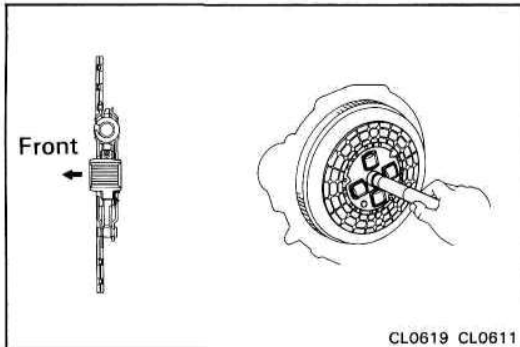
If necessary, replace the clutch cover.

CL-24**CLUTCH - Clutch Unit****7. INSPECT RELEASE BEARING**

Turn the bearing by hand while applying force in the axial direction.

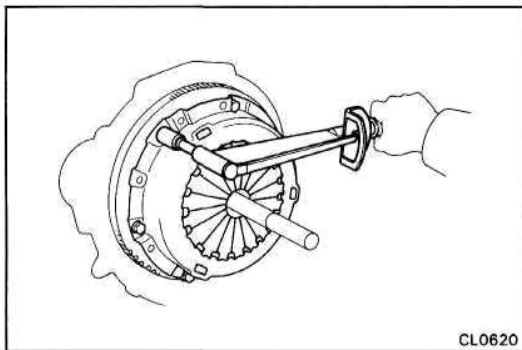
HINT: The bearing is permanently lubricated and requires no cleaning or lubrication.

If a problem is found, replace the bearing.

**INSTALLATION OF CLUTCH UNIT
(MAIN POINT OF INSTALLATION)****1. INSTALL CLUTCH DISC AND COVER ON FLYWHEEL**

Insert the SST in the clutch disc, and then set them and the cover in position.

SST 09301-55022

**2. INSTALL CLUTCH COVER**

(a) Align the matchmarks on the clutch cover and flywheel.

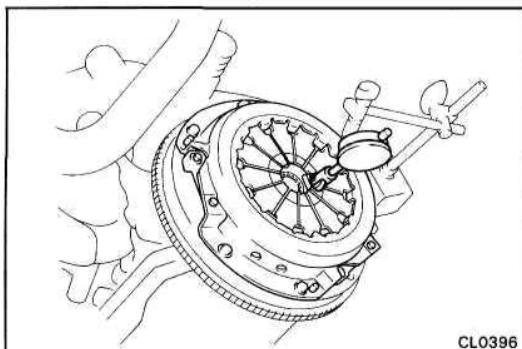
(b) Torque the bolts on the clutch cover in the order shown.

Torque:

1HD-T Engine 400 kg-cm (29 ft-lb, 39 Nm)

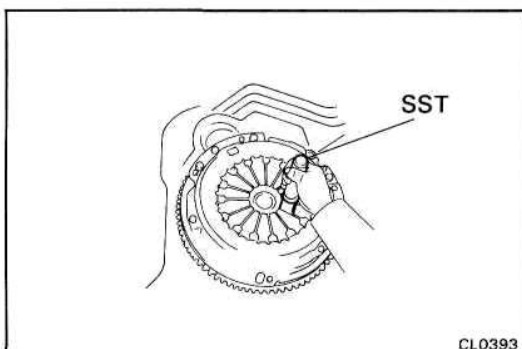
Others 195 kg-cm (14 ft-lb, 19 Nm)

HINT: Temporarily tighten the No.1 and No.2 bolts.

**3. CHECK DIAPHRAGM SPRING TIP ALIGNMENT**

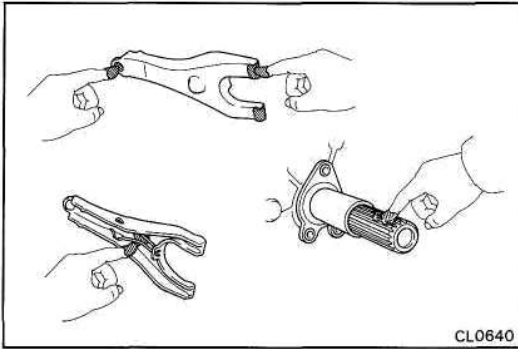
Using SST, check the diaphragm spring tip alignment.

Maximum non-alignment: 0.5 mm (0.020 in.)



If alignment is not as specified, using SST, adjust the diaphragm spring tip alignment.

SST 09333-00013

CLUTCH - Clutch Unit**CL-25**

4. APPLY MOLYBDENUM DISULPHIDE LITHIUM BASE GREASE (NLGI NO.2) AS SHOWN