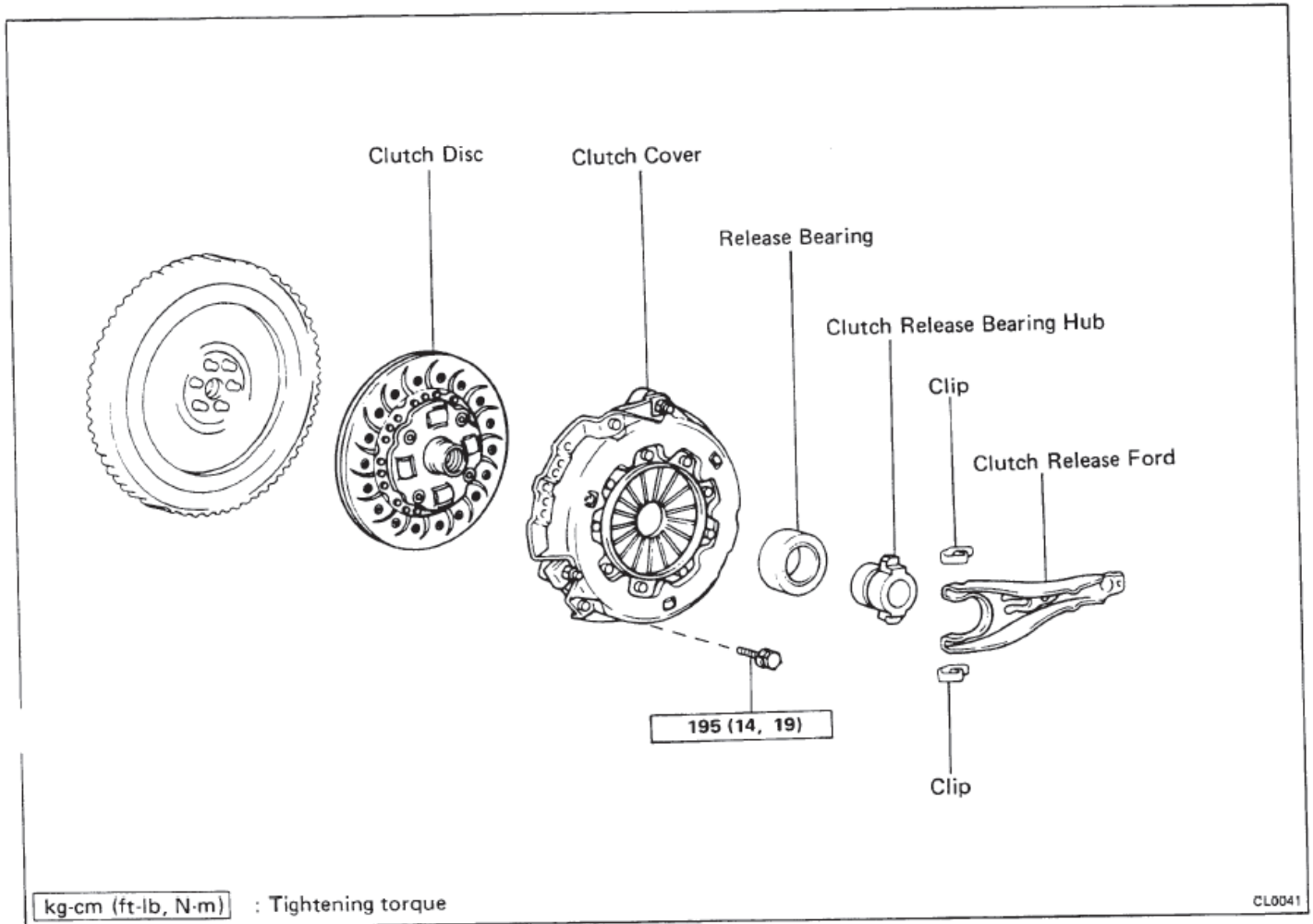


## CLUTCH UNIT COMPONENTS



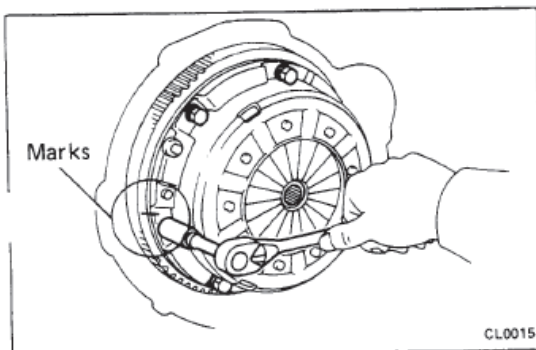
## REMOVAL OF CLUTCH UNIT

### REMOVE TRANSMISSION

NOTE: Do not drain the transmission oil.

### REMOVE CLUTCH COVER AND DISC

- Put alignment marks on the clutch cover and flywheel.
- Loosen the set bolts one turn at a time until spring tension is released.
- Remove the set bolts and pull off the clutch cover and disc.



## INSTALLATION OF CLUTCH UNIT

### INSPECT PILOT BEARING

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

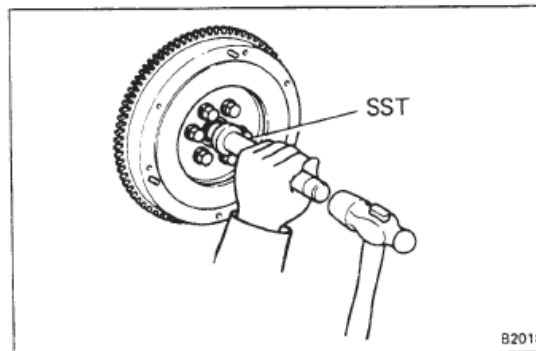
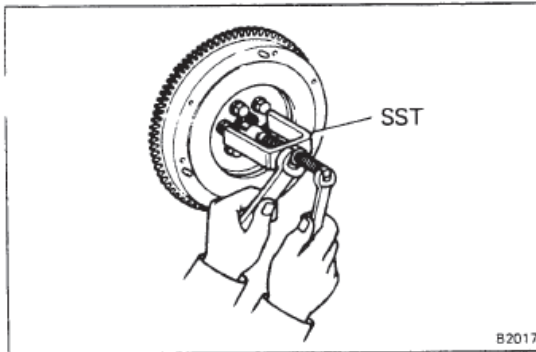
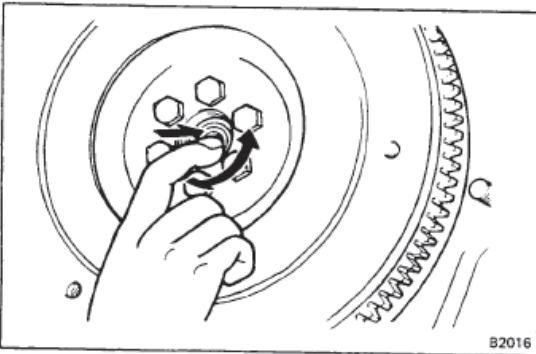
If the bearing sticks or has much resistance, replace the pilot bearing.

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

### IF NECESSARY, REPLACE PILOT BEARING

(a) Using SST, remove the pilot bearing.

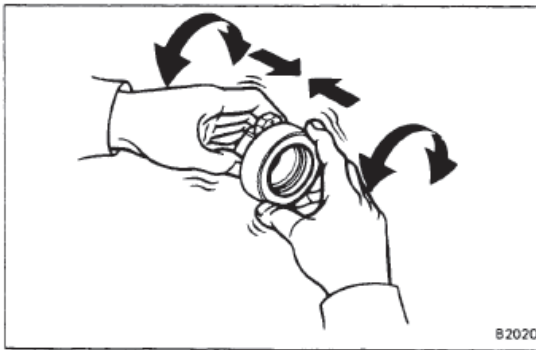
SST 09303-35011



(b) Using SST, install the pilot bearing.

SST 09304-30012

NOTE: After assembling the pilot bearing to the hub, ensure that it rotates smoothly.



### INSPECT RELEASE BEARING

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

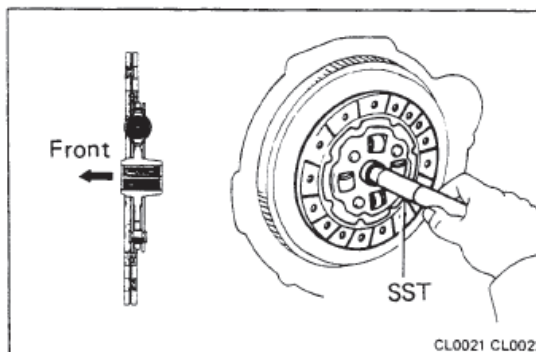
If bearing sticks or has much resistance, replace the release bearing.

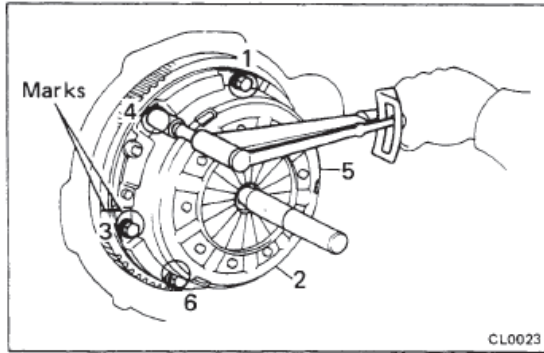
NOTE: The bearing is permanently lubricated and requires no cleaning or lubrication.

### INSTALL DISC ON FLYWHEEL

Using SST, install the disc on the flywheel.

SST 09301-20020

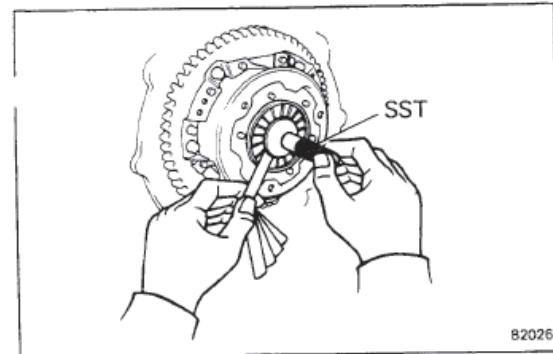




## INSTALL CLUTCH COVER

- Align the marks on the clutch cover and flywheel.
- Tighten the bolts evenly. Make several passes around the cover until it is snug. Torque the bolts.

**Torque: 195 kg-cm (14 ft-lb, 19 N·m)**



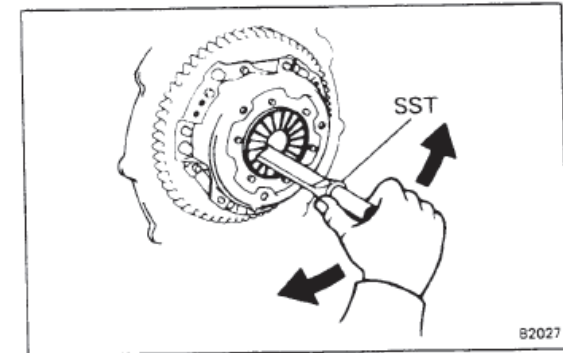
## CHECK DIAPHRAGM SPRING TIP ALIGNMENT

Using a feeler gauge and SST, measure the gap between the spring tips and the tool.

**SST 09302-30031**

**Maximum gap: 0.5 mm (0.020 in.)**

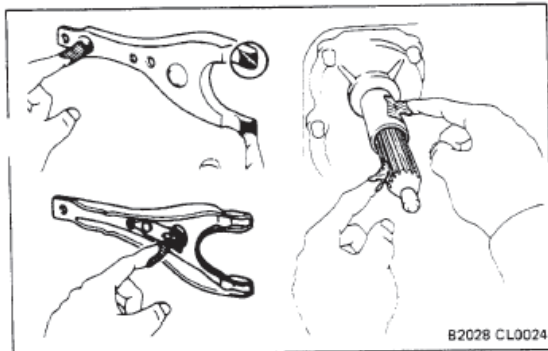
If the gap is excessive, adjust as follows.



## IF NECESSARY, ADJUST SPRINGS

Using SST, bend the springs to correct alignment.

**SST 09333-00012**

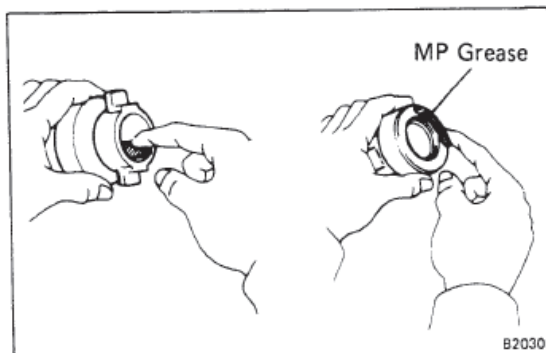


## APPLY MOLYBDENUM DISULPHIDE LITHIUM BASE GREASE (NLGI NO.2) OR MP GREASE

- Apply molybdenum disulphide lithium base grease to the following parts:

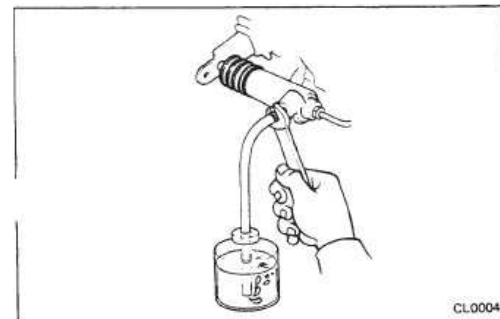
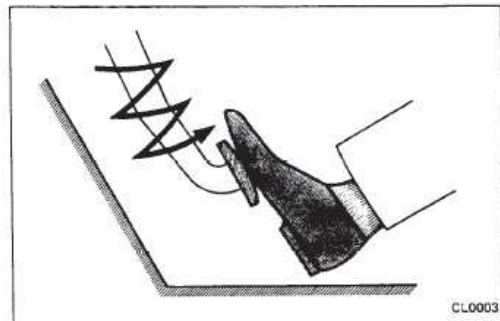
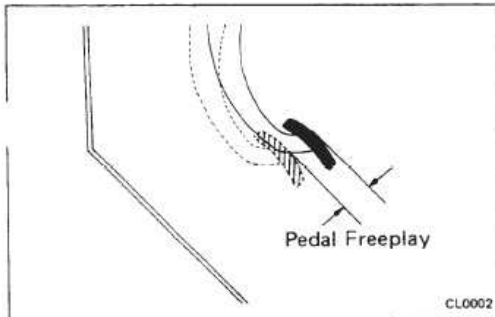
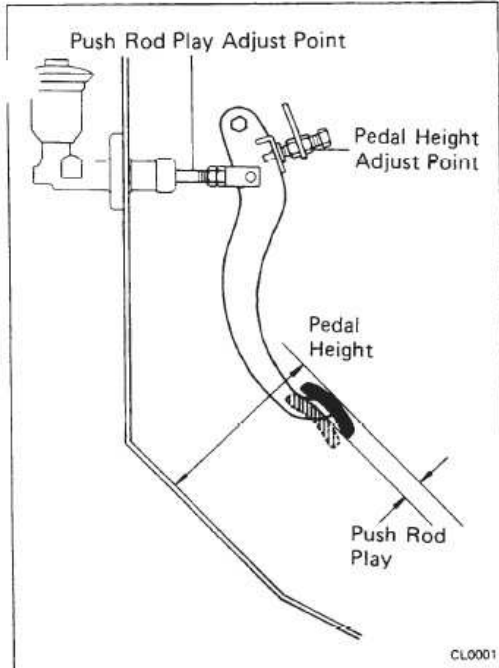
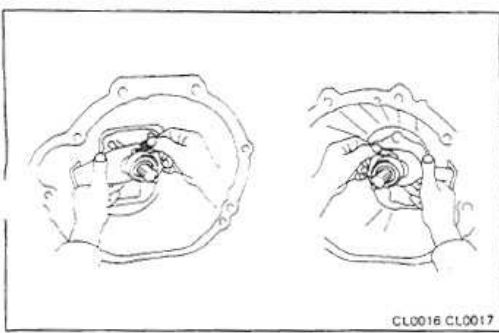
- Release fork and hub contact point
- Release fork and push rod contact point
- Release fork pivot point
- Clutch disc spline
- Release bearing hub inside groove

- Apply MP grease to release bearing.



## INSTALL BOOT, FORK, HUB AND BEARING ON TRANSMISSION

### INSTALL TRANSMISSION



## CHECK AND ADJUSTMENT OF CLUTCH PEDAL

### 1. CHECK THAT PEDAL HEIGHT AND PUSH ROD PLAY ARE CORRECT

Pedal height from asphalt sheet: 144 mm  
(5.67 in.)

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

If incorrect, adjust the pedal height and push rod play.

### 2. IF NECESSARY, ADJUST PEDAL HEIGHT AND PUSH ROD PLAY

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

(b) Loosen the lock nut and turn the push rod until the push rod play is correct. Tighten the lock nut.

### 3. CHECK THAT PEDAL FREEPLAY IS CORRECT

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

Pedal freeplay: 5 – 15 mm (0.20 – 0.59 in.)

### 4. IF NECESSARY, ADJUST PEDAL FREEPLAY

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

(b) Tighten the lock nut.

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

## 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 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.

## TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Hard to shift or will not shift	Clutch pedal freeplay excessive	Adjust pedal freeplay	CL-3
	Air in clutch lines	Bleed clutch system	CL-3
	Clutch release cylinder faulty	Repair release cylinder	CL-5
	Clutch master cylinder faulty	Repair master cylinder	CL-4
	Clutch disc out of true, runout is excessive or lining broken	Inspect clutch disc	CL-8
	Splines on input shaft or clutch disc dirty or burred	Repair as necessary	CL-7
	Clutch pressure plate faulty	Replace pressure plate	CL-9
Transmission jumps out of gear	Clutch pilot bearing worn	Replace pilot bearing	CL-9
Clutch slips	Clutch pedal freeplay insufficient	Adjust pedal freeplay	CL-3
	Clutch disc lining oily or worn out	Inspect clutch disc	CL-8
	Pressure plate faulty	Replace pressure plate	CL-9
	Release fork binding	Inspect release fork	
Clutch grabs/chatters	Clutch disc lining oily or worn out	Inspect clutch disc	CL-8
	Pressure plate faulty	Replace pressure plate	CL-9
	Clutch diaphragm spring bent	Align clutch diaphragm	CL-11
	Engine mounts loose	Repair as necessary	
Clutch pedal spongy	Air in clutch lines	Bleed clutch system	CL-3
	Clutch release cylinder faulty	Repair release cylinder	CL-5
	Clutch master cylinder faulty	Repair master cylinder	CL-4
Clutch noisy	Loose part inside housing	Repair as necessary	
	Release bearing worn or dirty	Replace release bearing	CL-10
	Pilot bearing worn	Replace pilot bearing	CL-9
	Release fork or linkage sticking	Repair as necessary	