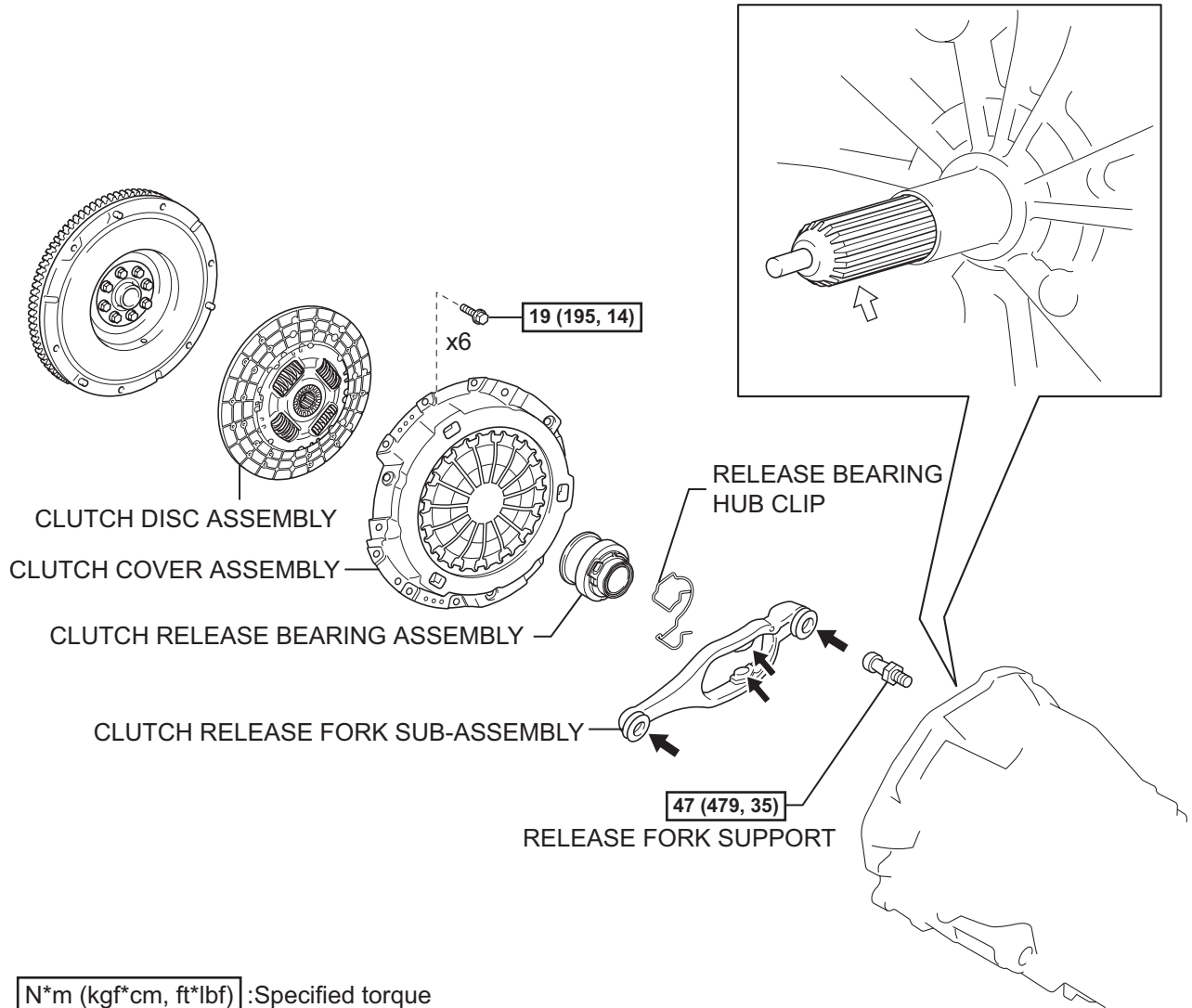


# CLUTCH UNIT COMPONENTS



**N\*m (kgf\*cm, ft\*lbf)** :Specified torque

← Clutch spline grease   ← Release hub grease

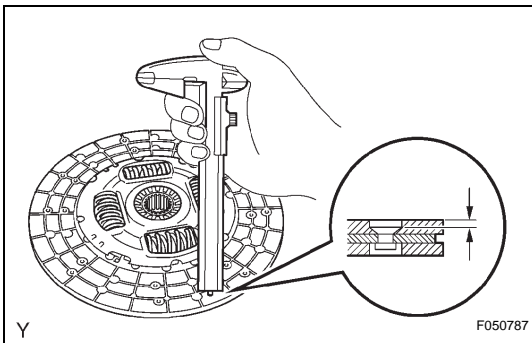
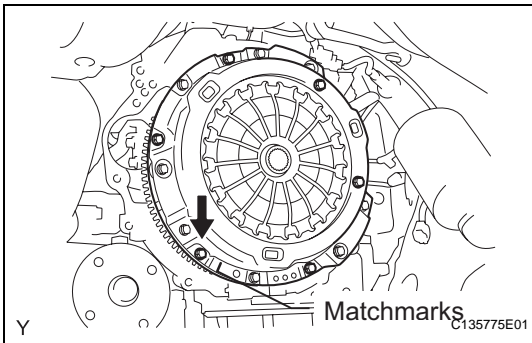
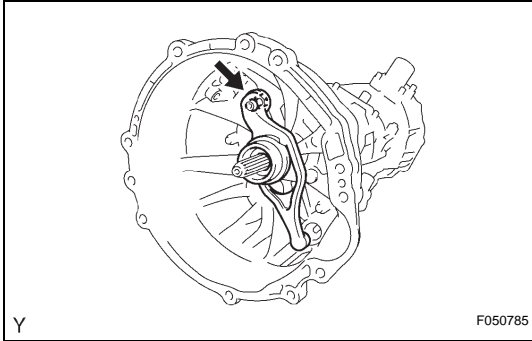
**CL**

Y

C133790E01

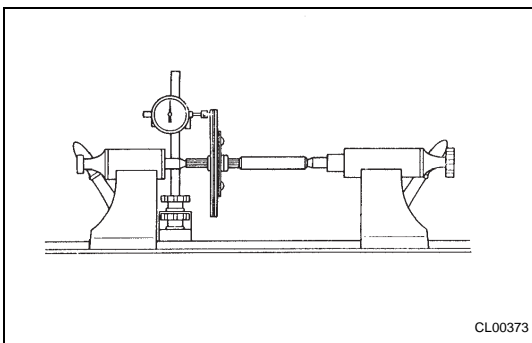
## REMOVAL

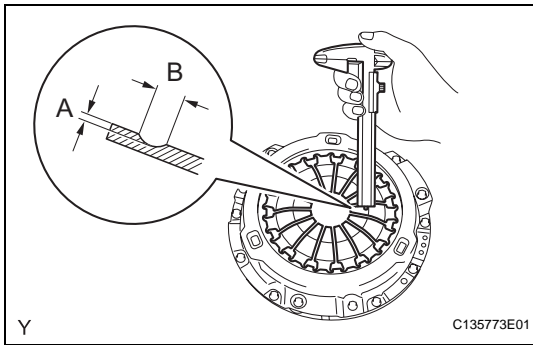
1. **REMOVE MANUAL TRANSMISSION ASSEMBLY**  
(See page [MT-8](#))
2. **REMOVE CLUTCH RELEASE FORK SUB-ASSEMBLY**
  - (a) Remove the clutch release fork together with the clutch release bearing from the transmission assembly.
3. **REMOVE CLUTCH RELEASE BEARING ASSEMBLY**
  - (a) Remove the clutch release bearing assembly from the clutch release fork.
4. **REMOVE RELEASE FORK SUPPORT**
  - (a) Remove the release fork support from the transaxle assembly.
5. **REMOVE RELEASE BEARING HUB CLIP**
6. **REMOVE CLUTCH COVER ASSEMBLY**
  - (a) Align the matchmark on the clutch cover assembly with the one on the flywheel sub-assembly.
  - (b) Loosen each set bolt one turn at a time until the spring tension is released.
  - (c) Remove the 6 bolts and clutch cover assembly.  
**NOTICE:**  
Do not drop the clutch disc assembly.
7. **REMOVE CLUTCH DISC ASSEMBLY**  
**NOTICE:**  
Keep the lining part of the clutch disc assembly, pressure plate and surface of the flywheel sub-assembly free from oil and foreign matter.



## INSPECTION

1. **INSPECT CLUTCH DISC ASSEMBLY**
  - (a) Using vernier calipers, measure the rivet head depth.  
**Maximum rivet depth:**  
**0.3 mm (0.012 in.)**  
If necessary, replace the clutch disc assembly.
  - (b) Install the clutch disc assembly onto the transaxle assembly.  
**NOTICE:**  
Insert the clutch disc assembly in the correct orientation.
  - (c) Using a dial indicator, check the clutch disc assembly runout.  
**Minimum runout:**  
**0.7 mm (0.028 in.)**  
If necessary, replace the clutch disc assembly.





## 2. INSPECT CLUTCH COVER ASSEMBLY

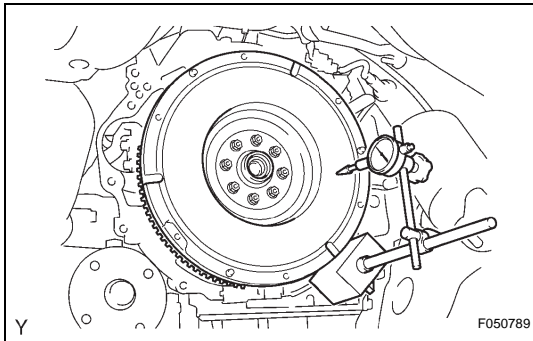
- (a) Using vernier calipers, inspect the depth and width of wear of the diaphragm spring.

### Minimum:

**A (Depth): 0.5 mm (0.020 in.)**

**B (Width): 6.0 mm (0.236 in.)**

If necessary, replace the clutch cover assembly.



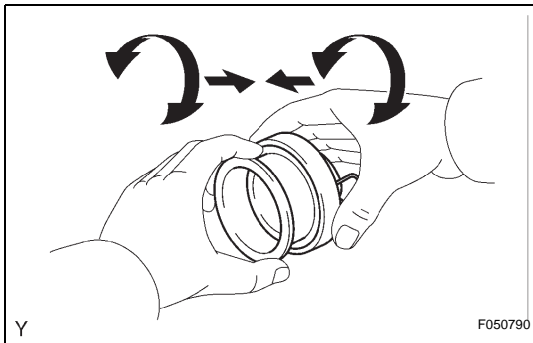
## 3. INSPECT FLYWHEEL SUB-ASSEMBLY

- (a) Using a dial indicator, inspect the flywheel sub-assembly runout.

### Maximum runout:

**0.1 mm (0.004 in.)**

If necessary, replace the flywheel sub-assembly.



## 4. INSPECT CLUTCH RELEASE BEARING ASSEMBLY

- (a) Turn the release bearing by hand while applying force in the axial direction.

### HINT:

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

If necessary, replace the release bearing assembly.

## INSTALLATION

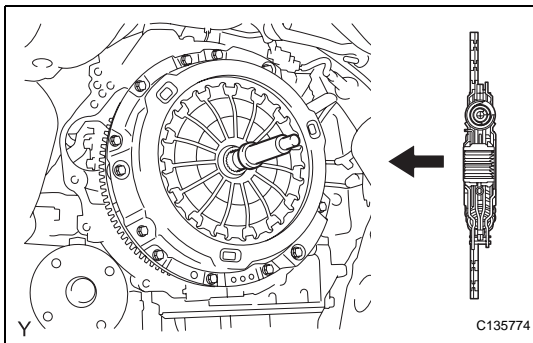
### 1. INSTALL CLUTCH DISC ASSEMBLY

- (a) Insert SST into the clutch disc assembly, then insert them into the flywheel sub-assembly.

**SST 09301-00220**

### NOTICE:

**Insert the clutch disc assembly in the correct orientation.**



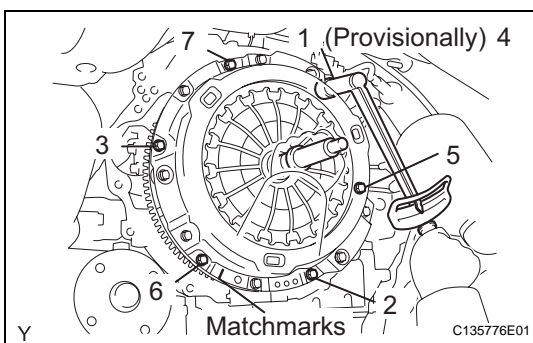
### 2. INSTALL CLUTCH COVER ASSEMBLY

- (a) Align the matchmarks on the clutch cover assembly and flywheel sub-assembly.
- (b) Following the procedures shown in the illustration, tighten the 6 bolts, in the order starting with the bolt located near the knock pin on the top.

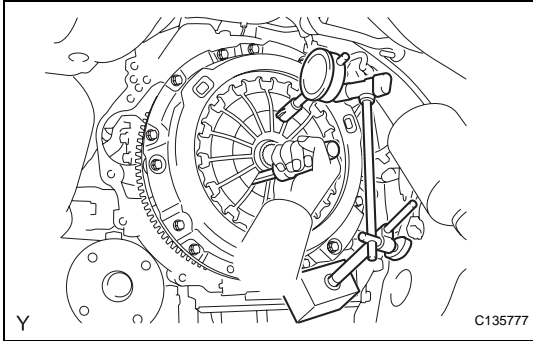
**Torque: 19 N\*m (195 kgf\*cm, 14 ft.\*lbf)**

### HINT:

- Following the order in the illustration, uniformly tighten the bolts.



- Move SST up and down, right and left lightly, after checking that the disc is in the center, and tighten the bolts.



### 3. INSPECT AND ADJUST CLUTCH COVER ASSEMBLY

- (a) Using a dial indicator with roller instrument, check the diaphragm spring tip alignment.

**Maximum non-alignment:**

**0.5 mm (0.020 in.)**

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

**SST 09333-00013**

### 4. INSTALL RELEASE FORK SUPPORT

- (a) Install the release fork support onto the transaxle assembly.

**Torque: 47 N\*m (479 kgf\*cm, 35 ft.\*lbf)**

### 5. INSTALL RELEASE BEARING HUB CLIP

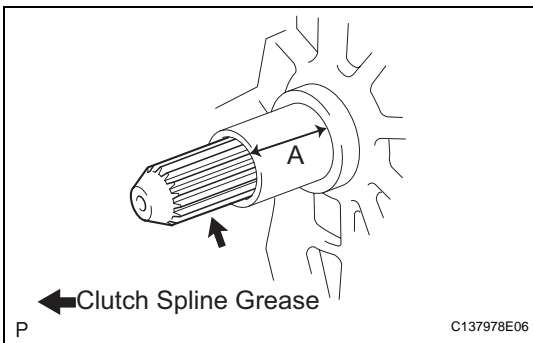
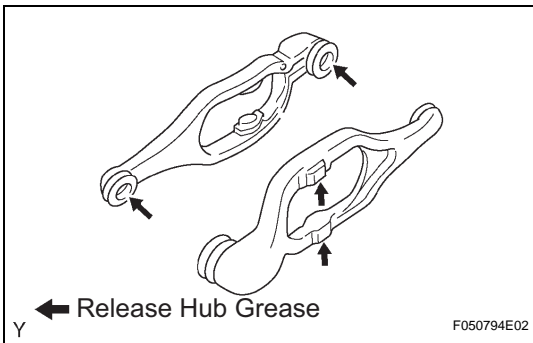
### 6. INSTALL CLUTCH RELEASE FORK SUB-ASSEMBLY

- (a) Apply release hub grease to the release fork and release bearing assembly contact surfaces, release fork and push rod contact surface and release fork pivot point.

**Sealant:**

**Toyota Genuine Release Hub Grease or Equivalent**

- (b) Install the release fork onto the release bearing assembly.



### 7. INSTALL CLUTCH RELEASE BEARING ASSEMBLY

- (a) Apply clutch spline grease to the input shaft spline.

**Sealant:**

**Toyota Genuine Clutch Spline Grease or Equivalent**

**NOTICE:**

**Do not apply grease to portion A shown in the illustration.**

- (b) Install the bearing onto the release fork, and then install them onto the transaxle assembly.

**NOTICE:**

**After installation, move the fork forward and backward to check that the release bearing slides smoothly.**

### 8. INSTALL MANUAL TRANSMISSION ASSEMBLY

(See page [MT-11](#))