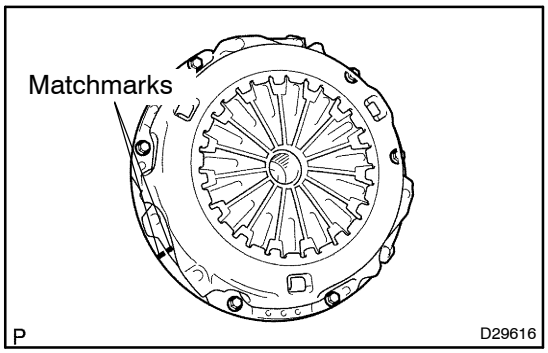
CLUTCH UNIT (1GR–FE)

4206B–01

OVERHAUL

1. **SEPARATE BATTERY NEGATIVE TERMINAL**
2. **REMOVE ENGINE UNDER COVER ASSY REAR**
3. **REMOVE PROPELLER SHAFT ASSY (SHORT BODY TYPE) (See Pub. No. RM990E, page 30–12)**
4. **REMOVE PROPELLER SHAFT ASSY (LONG BODY TYPE) (See Pub. No. RM990E, page 30–12)**
5. **REMOVE PROPELLER SHAFT ASSY FRONT (See Pub. No. RM990E, page 30–4)**
6. **REMOVE EXHAUST FRONT PIPE ASSY NO.2 (See page 15–3)**
7. **REMOVE EXHAUST PIPE ASSY FRONT (See page 15–3)**
8. **REMOVE MANUAL TRANSMISSION UNIT ASSY (See page 41–4)**
9. **REMOVE CLUTCH RELEASE BEARING ASSY**
10. **REMOVE CLUTCH RELEASE FORK SUB–ASSY**
11. **REMOVE RELEASE BEARING HUB CLIP**
12. **REMOVE RELEASE FORK SUPPORT**

(a) Remove the release fork support from manual transmission unit assy.



13. **REMOVE CLUTCH COVER ASSY**

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

(b) Loosen each set bolt one turn at a time until spring tension is released.

(c) Remove the set bolts, and pull off the clutch cover.

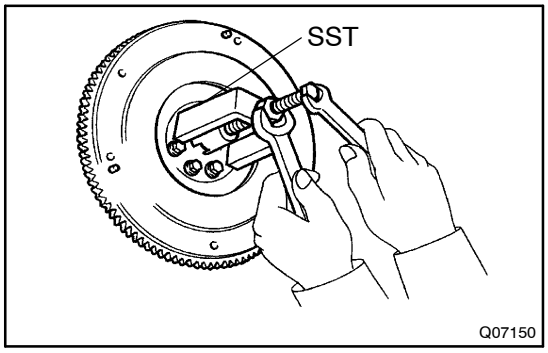
NOTICE:

Do not drop the clutch disc.

14. **REMOVE CLUTCH DISC ASSY**

NOTICE:

Keep the lining part of the clutch disc assy, the pressure plate and surface of the flywheel away from oil and foreign attachment.

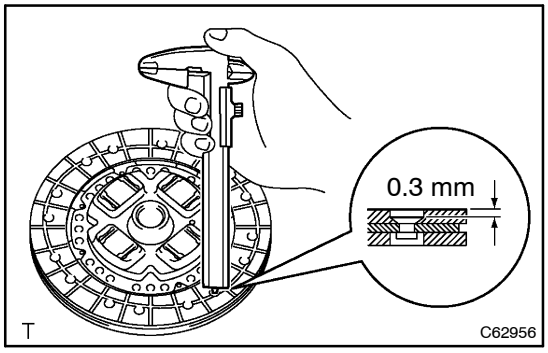


15. **REMOVE INPUT SHAFT BEARING**

(a) Remove 2 bolts at opposite diagonal points to make space for the SST.

(b) Using SST, remove the input shaft bearing.

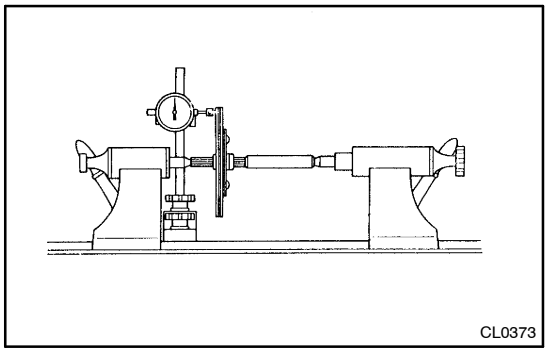
SST 09303–35011



16. INSPECT CLUTCH DISC ASSY

(a) Using vernier calipers, measure the rivet head depth.
Maximum rivet depth: 0.3 mm (0.012 in.)

If necessary, replace the clutch disc.

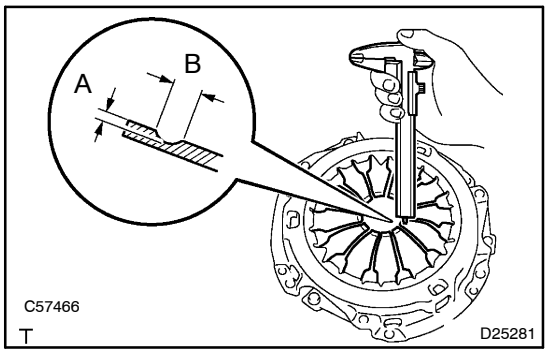


(b) Install the clutch disc to the transmission unit assy.

NOTICE:
Install the clutch disc in the correct direction

(c) Using a dial indicator, check for the disc runout.
Minimum runout: 0.8 mm (0.031 in.)

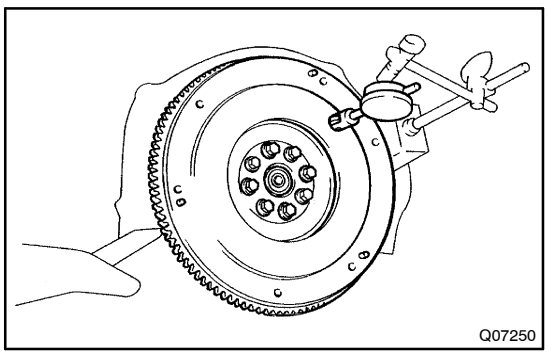
If necessary, replace the clutch disc.



17. INSPECT CLUTCH COVER ASSY

(a) Using vernier calipers, inspect the diaphragm spring for depth and width of wear.
Maximum:
A (Depth): 0.5 mm (0.020 in.)
B (Width): 6.0 mm (0.236 in.)

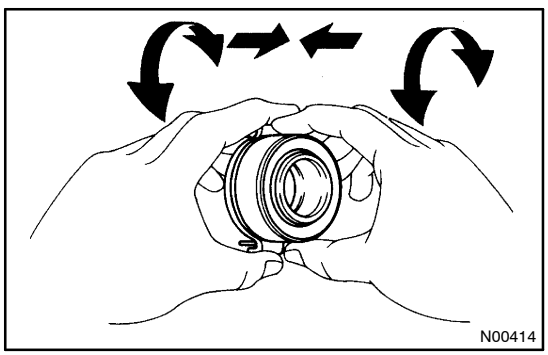
If necessary, replace clutch cover assy.



18. INSPECT FLYWHEEL SUB–ASSY

(a) Using a dial indicator, inspect for the flywheel runout.
Maximum runout: 0.1 mm (0.004 in.)

If necessary, replace the flywheel.

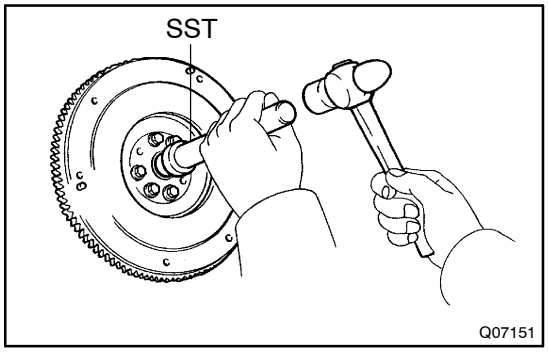


19. INSPECT CLUTCH RELEASE BEARING ASSY

(a) 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 necessary, replace the release bearing.

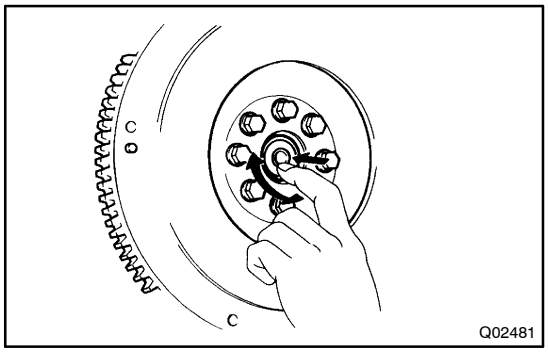


20. INSTALL INPUT SHAFT BEARING

(a) Using SST and a hammer, install a new input shaft bearing.
SST 09304–12012

HINT:
After installing the input shaft bearing to the hub, check that it rotates smoothly.

(b) Install 2 new bolts.
Torque: 27 N·m (270 kgf·cm, 20 ft·lbf)

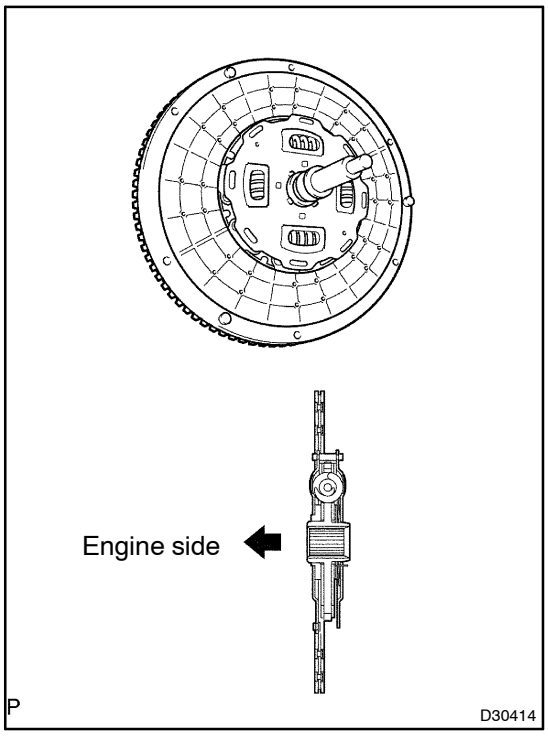


21. INSPECT INPUT SHAFT BEARING

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

If the bearing sticks or has much resistance, replace the input shaft bearing.

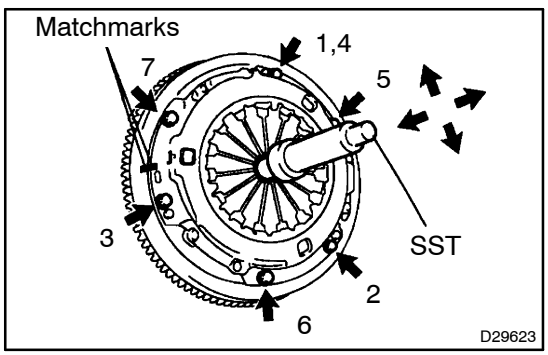
HINT:
The bearing is permanently lubricated and requires no clearing or lubrication.



22. INSTALL CLUTCH DISC ASSY

(a) Insert SST in to the clutch disc, then install them in the flywheel.
SST 09301–00110

NOTICE:
Install the clutch disc in the correct direction.



23. INSTALL CLUTCH COVER ASSY

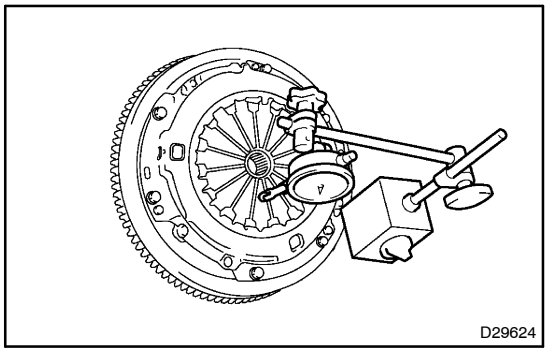
(a) Align the matchmarks on the clutch cover and flywheel.

(b) Following the procedures shown in the illustration, tighten the 6 bolts, in the order starting from the bolt locating near the knock pin on the top.
Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)

HINT:

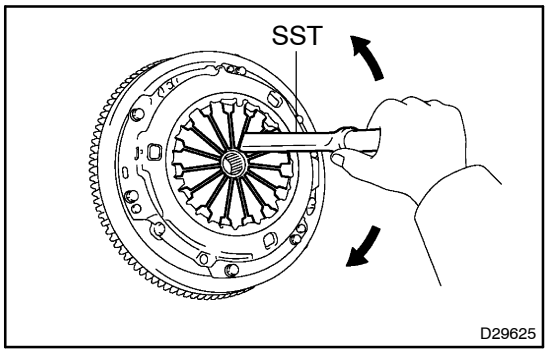
- Following the order in the illustration, tighten all the bolts evenly.

- Move SST up and down, right and left lightly, after checking that the disc is in the center, tighten the bolts.
  SST 09301–00110



24. INSPECT AND ADJUST CLUTCH COVER ASSY

(a) Using a dial indicator with roller instrument, check the diaphragm spring tip alignment.
Maximum non–alignment: 0.5 mm (0.020 in.)



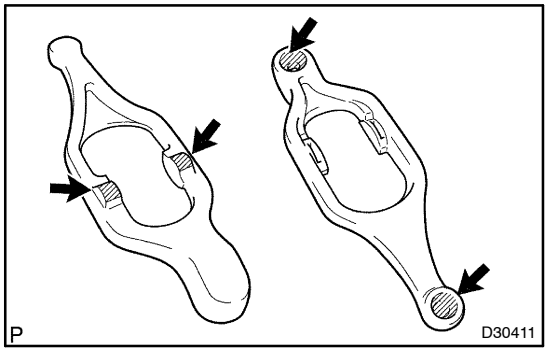
(b) If alignment is not as specified, using SST, adjust the diaphragm spring tip alignment.
SST 09333–00013

25. INSTALL RELEASE FORK SUPPORT

(a) Install the release fork support to the manual transmission unit assy.
Torque: 47 N·m (479 kgf·cm, 35 ft·lbf)

26. INSTALL RELEASE BEARING HUB CLIP

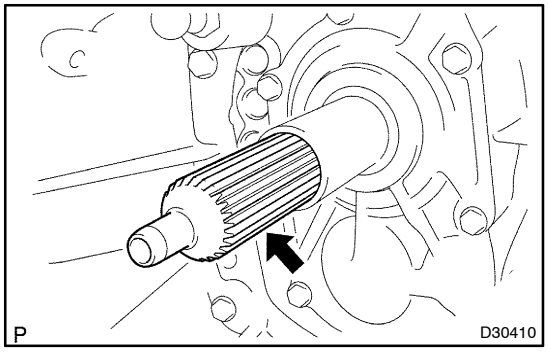
(a) Install the release bearing hub clip to the release bearing assy.



27. INSTALL CLUTCH RELEASE FORK SUB–ASSY

(a) Apply release hub grease to the release fork and release bearing assy contact, release fork and push rod contact and release fork pivot points.
Sealant:
Part No. 08887–01806, RELEASE HUB GREASE or equivalent

(b) Install the release fork to the release bearing assy.



28. INSTALL CLUTCH RELEASE BEARING ASSY

(a) Apply the clutch spline grease to the input shaft spline.
Sealant:
Part No. 08887–01706, CLUTCH SPLINE GREASE or equivalent

(b) Install the release fork with release bearing assy to the manual transaxle assy.

NOTICE:

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

29. INSTALL MANUAL TRANSMISSION UNIT ASSY (See page 41–4)
30. INSTALL EXHAUST PIPE ASSY FRONT (See page 15–3)
31. INSTALL EXHAUST FRONT PIPE ASSY NO.2 (See page 15–3)
32. INSTALL PROPELLER SHAFT ASSY (LONG BODY TYPE) (See Pub. No. RM990E, page 30–18)
33. INSTALL PROPELLER SHAFT ASSY (SHORT BODY TYPE) (See Pub. No. RM990E, page 30–18)
34. INSTALL PROPELLER SHAFT ASSY FRONT (See Pub. No. RM990E, page 30–9)
35. INSTALL ENGINE UNDER COVER ASSY REAR
    Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)
36. CONNECT BATTERY NEGATIVE TERMINAL