

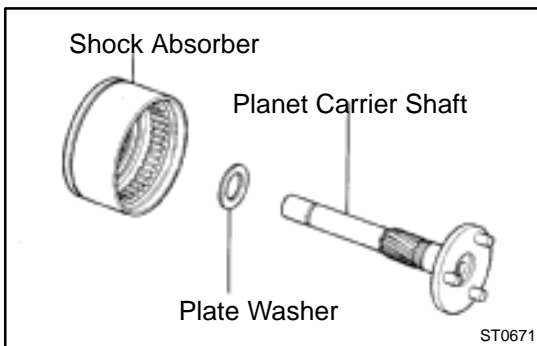
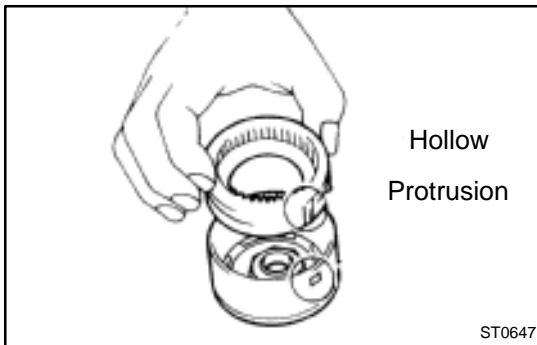
REASSEMBLY

HINT:

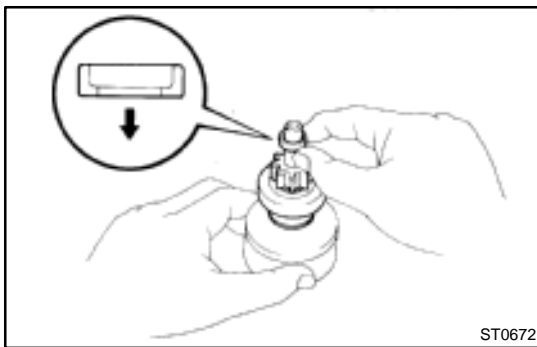
Use high temperature-resistant grease to lubricate the bearings and sliding parts when assembling the starter.

1. INSTALL INTERNAL GEAR AND PLANET CARRIER SHAFT

- (a) Apply grease to the internal gear touching the shock absorber and planetary gears.
- (b) Align the hollow of the internal gear with the protrusion inside the shock absorber.
- (c) Insert and turn the internal gear so that it interlocks with the shock absorber.

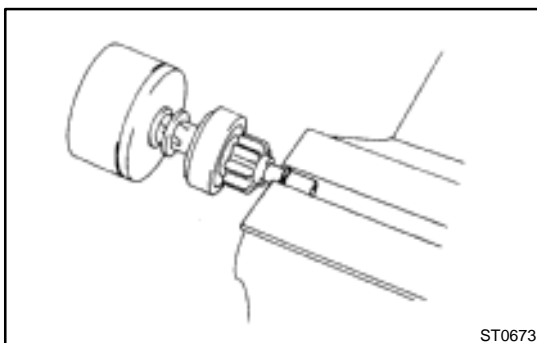


- (d) Apply turbine oil to the center bearing.
- (e) Apply grease to the plate washer, and install it to the planet carrier shaft.
- (f) Install the planet carrier shaft to the shock absorber.
- (g) Using snap ring pliers, install the plate washer and snap ring.

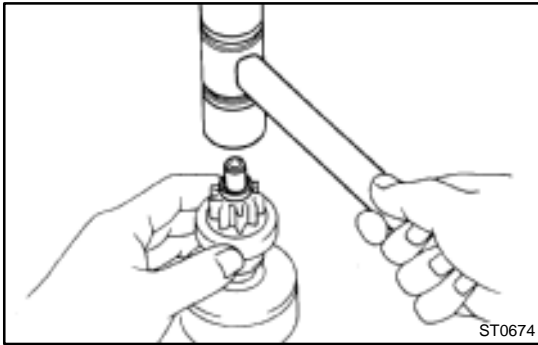


2. INSTALL STARTER CLUTCH

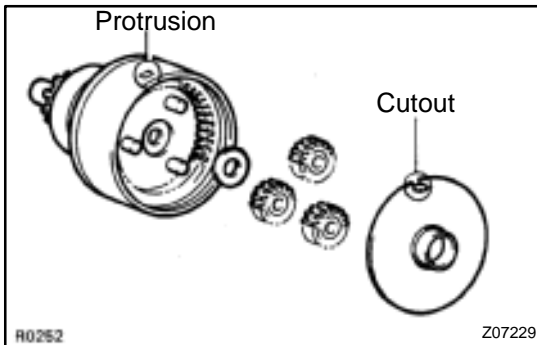
- (a) Apply grease to the bushing and spline of the starter clutch stop collar.
- (b) Place the starter clutch and stop collar on the planet carrier shaft.



- (c) Apply grease to the snap ring, and install it to the planet carrier shaft groove.
- (d) Using a vise, compress the snap ring.

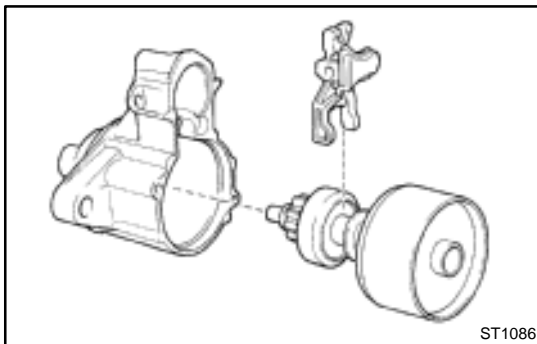


- (e) Hold the starter clutch, tap the planet carrier shaft and install the stop collar onto the snap ring with a plastic-faced hammer.



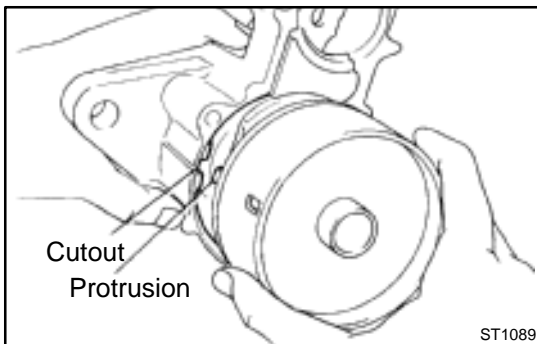
3. INSTALL PLANETARY GEARS

- (a) Apply grease to the planetary gears and flange pin parts of the planet carrier shaft.
 (b) Install the plate washer and 3 planetary gears.
 (c) Align the cutout of the plate with the protrusion inside the shock absorber, and install the plate.



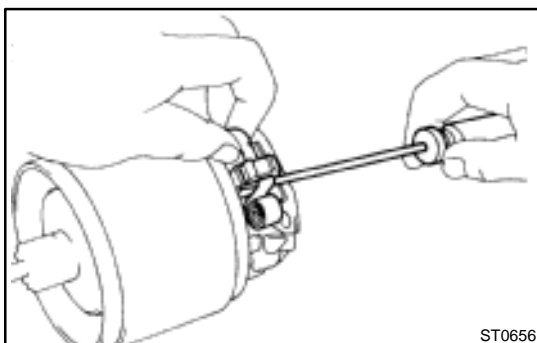
4. INSTALL DRIVE LEVER AND STARTER CLUTCH WITH SHOCK ABSORBER

- (a) Apply turbine oil to the bearing of the starter drive housing.
 (b) Apply grease to the drive lever touching the starter pivot part of the drive lever.
 (c) Install the drive lever to the starter clutch.



- (d) Align the protrusion of the shock absorber with the cutout of the drive housing and install them.

5. PLACE ARMATURE INTO FIELD FRAME



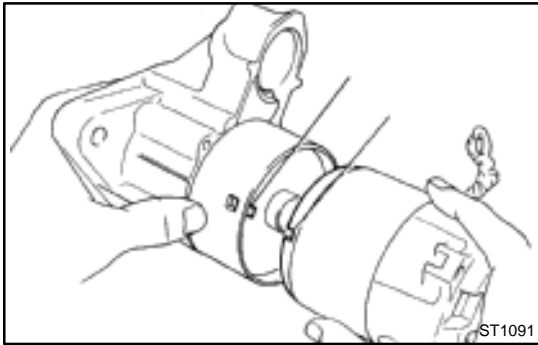
6. INSTALL BRUSH HOLDER

- (a) Place the brush holder in position on the armature.
 (b) Using a screwdriver, hold the brush spring back, and connect the brush into the brush holder. Connect the 4 brushes.

NOTICE:

Check that positive (+) lead wires are not grounded.

- (c) Install a new O-ring to the groove of the field frame.
 (d) Apply turbine oil to the bearing of the end cover.



- (e) Install the end cover to the field frame with 2 screws.

Torque: 1.5 N·m (15 kgf·cm, 13 in.-lbf)

7. INSTALL FIELD FRAME AND ARMATURE ASSEMBLY

- (a) Install a new O-ring to the groove of the field frame.
(b) Align the cutout of the field frame with the protrusion of the shock absorber.
(c) Install the field frame and armature assembly with the 2 through bolts.

Torque: 5.9 N·m (60 kgf·cm, 52 in.-lbf)

8. INSTALL MAGNETIC SWITCH

- (a) Install the plunger cover to the magnetic switch.
(b) Hang the plunger of the magnetic switch to the drive lever from the upper side.
(c) Install the magnetic switch with the 2 nuts.

Torque: 8.3 N·m (85 kgf·cm, 73 in.-lbf)

- (d) Connect the lead wire to the terminal, and install the nut.

Torque: 9.8 N·m (100 kgf·cm, 87 in.-lbf)