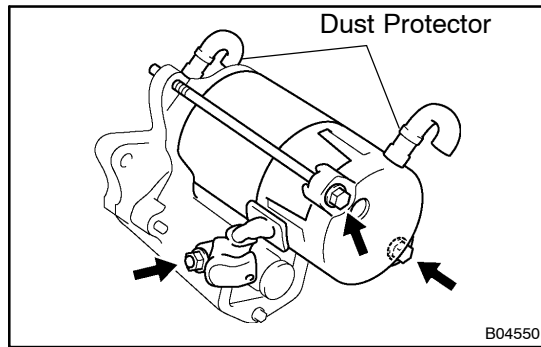




## DISASSEMBLY

### 1. REMOVE 2 DUST PROTECTORS

### 2. REMOVE FIELD FRAME AND ARMATURE

- (a) Remove the nut, and disconnect the lead wire from the magnetic switch terminal.

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

- (b) Remove the 2 through bolts.

**Torque: 9.3 N·m (95 kgf·cm, 82 in·lbf)**

- (c) Pull out the field frame together with the armature from the magnetic switch assembly.

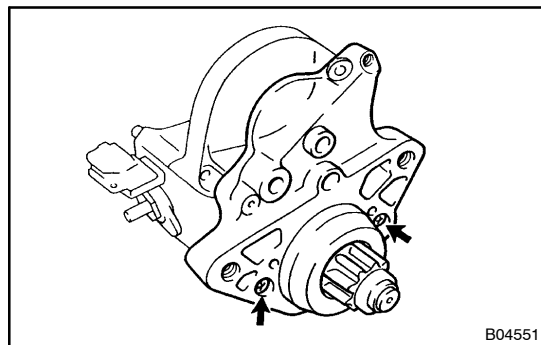
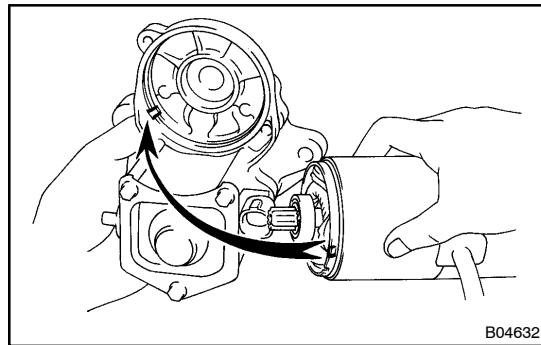
#### NOTICE:

**At the time of notice, please refer to the following items. Align the protrusion of the field frame with the groove of the magnetic switch.**

- (d) Remove the O-ring from the field frame.

#### HINT:

At the time of assembly, please refer to the following items. Use a new O-ring.



### 3. REMOVE STARTER HOUSING, CLUTCH ASSEMBLY AND GEAR

- (a) Remove the 2 screws.

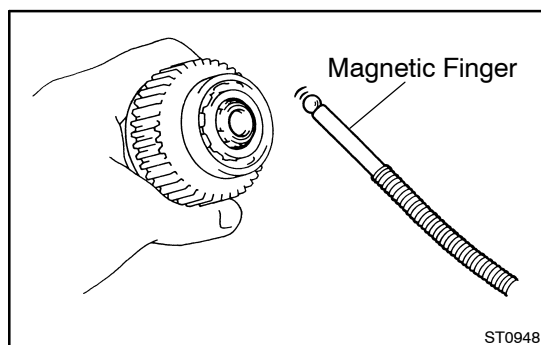
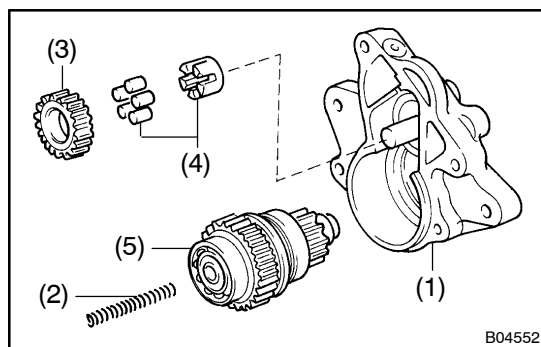
**Torque: 9.3 N·m (95 kgf·cm, 82 in·lbf)**

- (b) Remove these parts from the magnetic switch assembly:

- (1) Starter housing
- (2) Return spring
- (3) Idler gear
- (4) Bearing
- (5) Starter clutch assembly

#### HINT:

At the time of assembly, please refer to the following items. Apply grease to the return spring and insert the return spring into the clutch shaft hole.

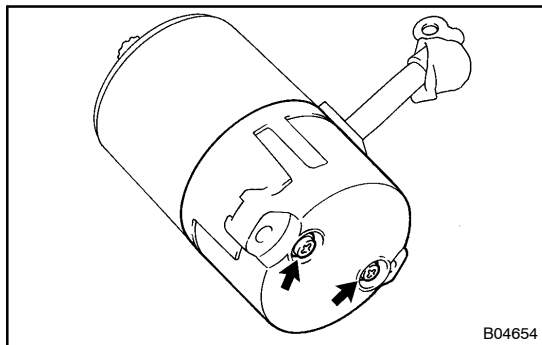


### 4. REMOVE STEEL BALL

Using a magnetic finger, remove the steel ball from the clutch shaft hole.

#### HINT:

At the time of assembly, please refer to the following items. Apply grease to the steel ball and insert the steel ball into the clutch shaft hole.

**5. REMOVE BRUSH HOLDER**

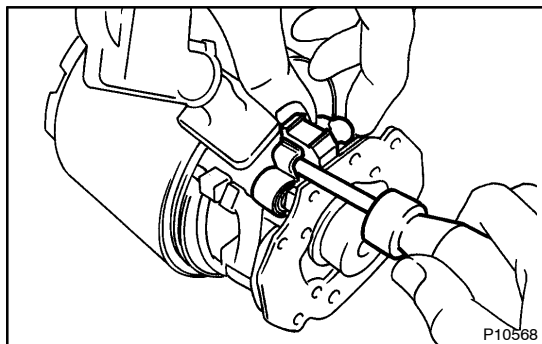
- (a) Remove the 2 screws w/ O-ring and end cover from the field frame.

**Torque: 3.8 N·m (39 kgf·cm, 34 in·lbf)**

- (b) Remove the O-ring from the field frame.

**HINT:**

At the time of assembly, please refer to the following items.  
Use a new O-ring.



- (c) Using a screwdriver, hold the spring back and disconnect the brush from the brush holder. Disconnect the 4 brushes, and remove the brush holder.

**NOTICE:**

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

**6. REMOVE ARMATURE FROM FIELD FRAME**