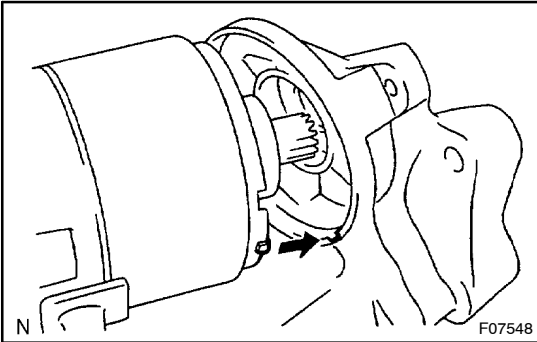


DISASSEMBLY

1. REMOVE DUST PROTECTOR
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:

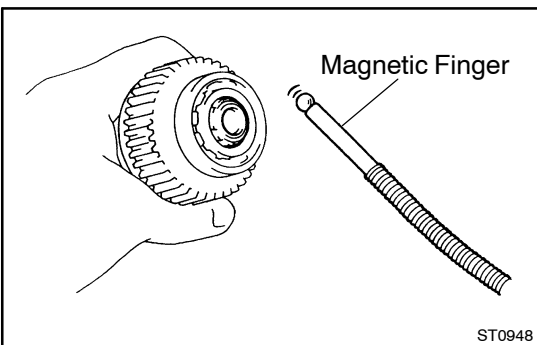
At the time of reassembly, use a new O-ring.

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 the starter housing, return spring and starter clutch assembly.
- (c) Remove the idler gear and bearing.

HINT:

At the time of reassembly, 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 reassembly, apply grease to the steel ball and insert the steel ball into the clutch shaft hole.

5. REMOVE BRUSH HOLDER

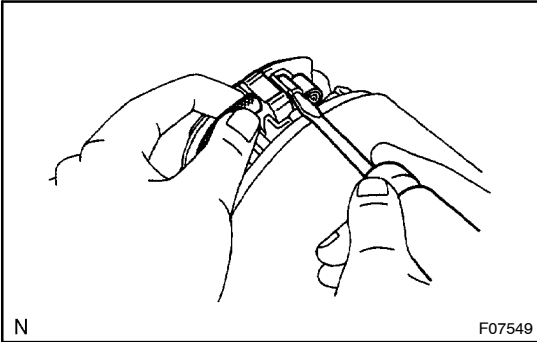
- (a) Remove the 2 screws w/ O-ring and end cover from the field frame.

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 reassembly, 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