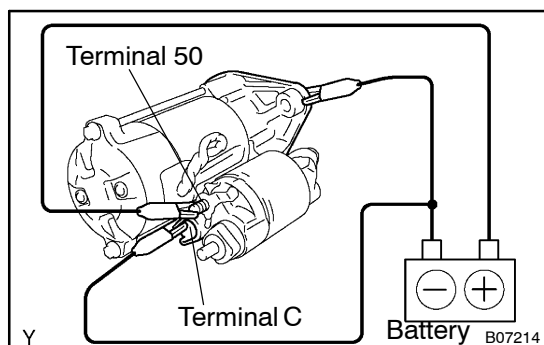


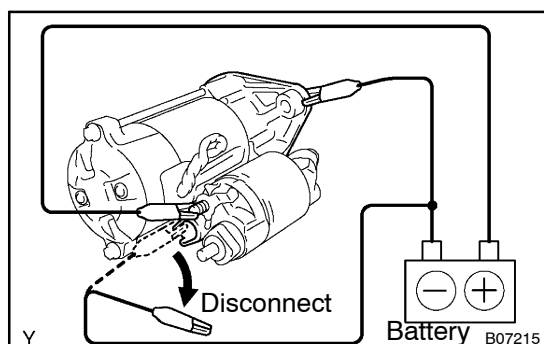
TEST**NOTICE:**

These tests must be done within 3 to 5 seconds to avoid burning out the coil.

**1. DO PULL-IN TEST**

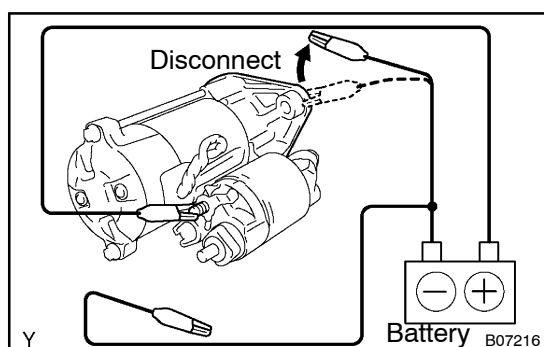
- (a) Disconnect the field coil lead from terminal C.
- (b) Connect the battery to the magnetic switch as shown. Check that the clutch pinion gear moves outward.

If the clutch pinion gear does not move, replace the magnetic switch.

**2. DO HOLD-IN TEST**

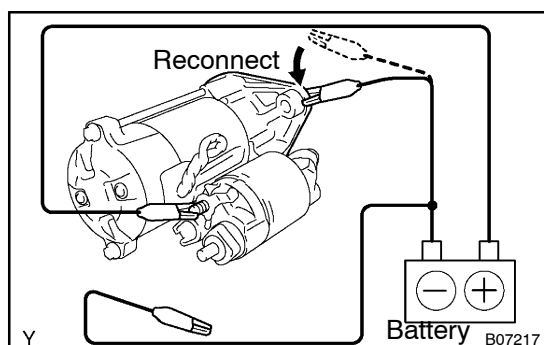
With the battery connected as above and with the clutch pinion gear out, disconnect the negative (-) lead from terminal C. Check that the clutch pinion gear remains out.

If the clutch pinion gear returns inward, replace the magnetic switch.

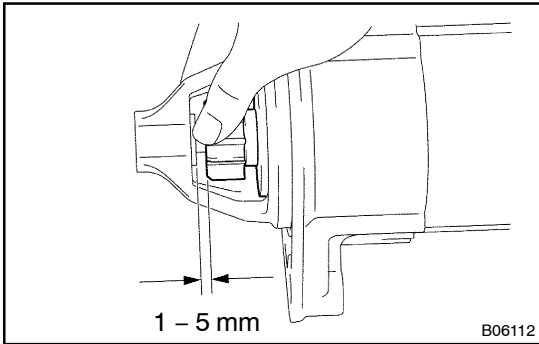
**3. INSPECT CLUTCH PINION GEAR RETURN**

Disconnect the negative (-) lead from the starter housing. Check that the clutch pinion gear returns inward.

If the clutch pinion gear does not return, replace the magnetic switch.

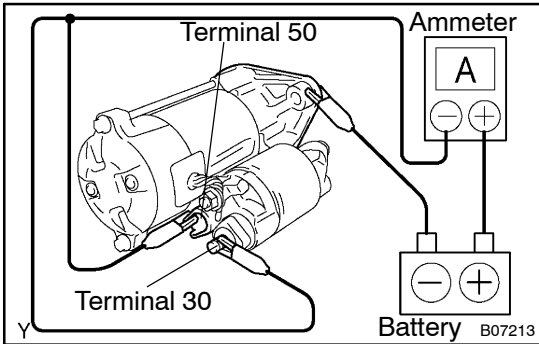
**4. INSPECT CLUTCH PINION GEAR CLEARANCE**

- (a) Reconnect the negative (-) lead to the starter housing.



- (b) Move the pinion gear toward the armature to remove slack and measure the clearance between the pinion gear end and stop collar.

Standard clearance: 1 – 5 mm (0.04 – 0.20 in.)



5. DO NO-LOAD PERFORMANCE TEST

- (a) Connect the field coil lead to terminal C. Make sure the lead is not grounded.
- (b) Connect the battery and ammeter to the starter as shown.
- (c) Check that the starter rotates smoothly and steadily with the clutch pinion gear moving out. Check that the ammeter reads the specified current.

Specified current: 90 A or less at 11.5 V