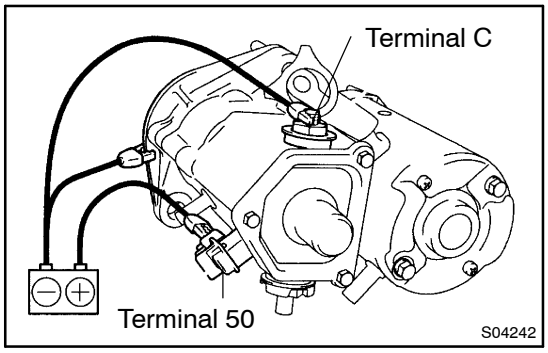
# STARTING SYSTEM (1KD–FTV)

## INSPECTION

190JB–01




### 1. STARTER ASSY

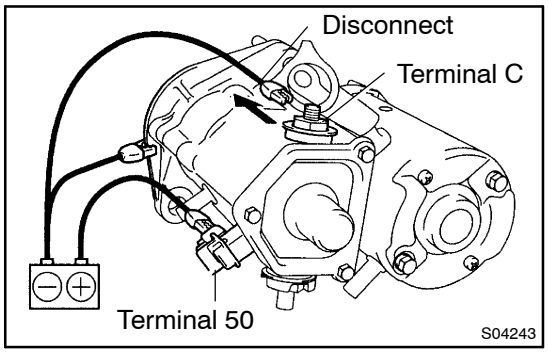
**NOTICE:**

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

(a) Do pull–in test.

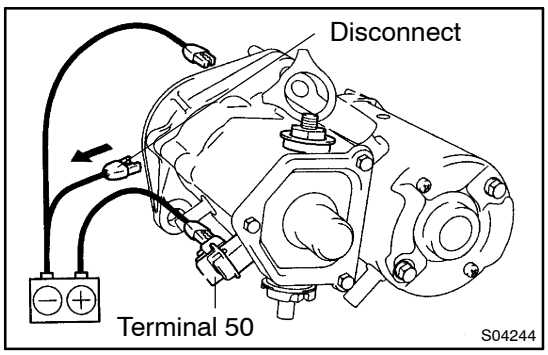
(1) Disconnect the field coil lead wire from terminal C.

(2) Connect the battery to the magnetic switch as shown. Check that the clutch pinion gear moves outward.



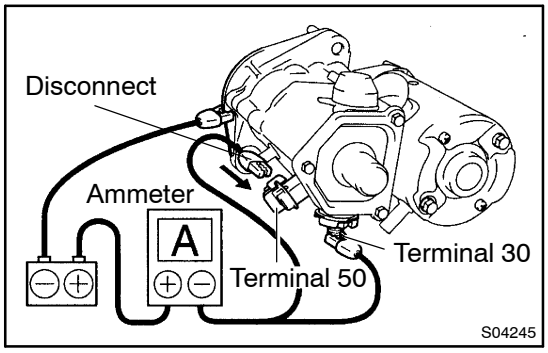

(b) Do holding test.

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




(c) Inspect clutch pinion gear return.

(1) Disconnect the negative (–) lead from the switch body. Check that the clutch pinion gear returns inward.




(d) Perform the operation test without road.

(1) Connect the field coil lead wire to terminal C.

**Torque:**

**2.2 kw 5.9 N·m (60 kgf·cm, 52 in.·lbf)**

**2.7 kw 24 N·m (245 kgf·cm, 18 ft·lbf)**

**3.0 kw 24 N·m (245 kgf·cm, 18 ft·lbf)**

(2) Grip the starter with a vise.

(3) Connect the battery and ammeter to the starter as shown.

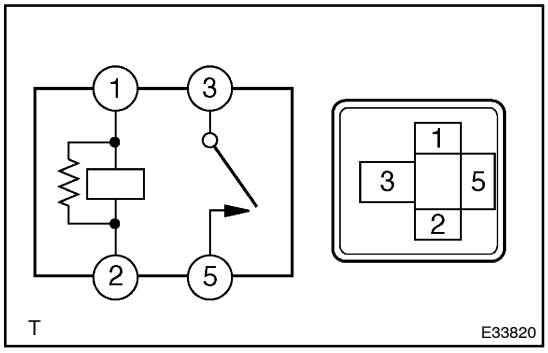
(4) Check that the ammeter reads the specified current.

**Specified current:**

**2.2kw 120 A or less at 11.5 V**

**2.7kw 180 A or less at 11.5 V**

**3.0kw 220 A or less at 11.5 V**




**2. STARTER RELAY ASSY**

(a) Continuity inspection.

(1) Using an ohmmeter, check that there is continuity between each terminal.

**Specified condition:**

| Between terminals | Specified condition |
|---|---|
| 1 – 2 | Continuity |
| 3 – 5 | No continuity |

(2) Using an ohmmeter, check that there is continuity between terminals 3 and 5 when the between voltage is applied across terminals 1 and 2.

**Specified condition: Continuity**