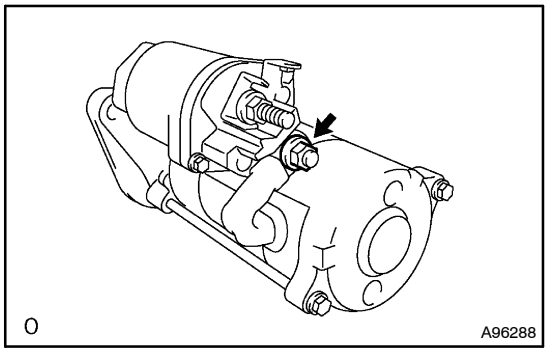
STARTING SYSTEM (N04C–TF)

190YL–01

INSPECTION



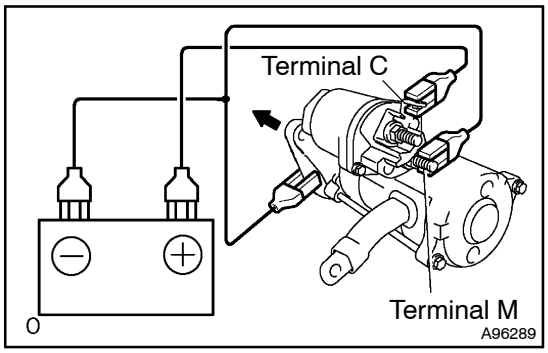
1. INSPECT STARTER ASSY

NOTICE:

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

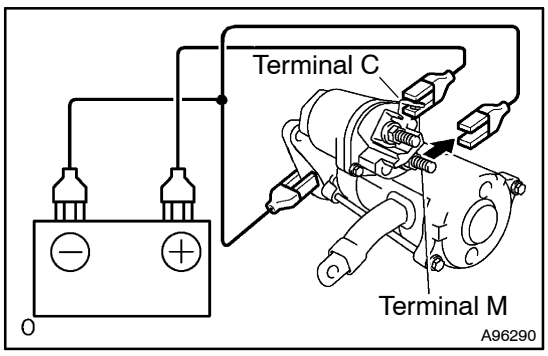
(a) Perform a pull–in test.

(1) Disconnect the lead wire from terminal M.



(2) Connect the battery to the magnetic switch as shown in the illustration on the left. Check that the clutch pinion gear extends.

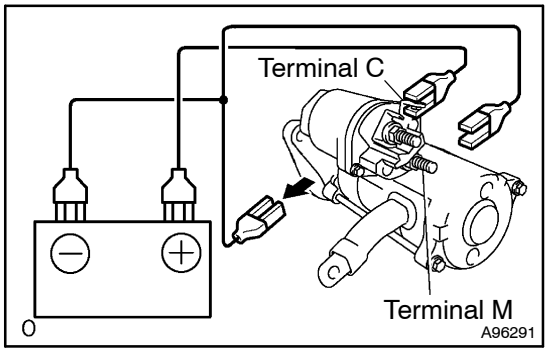
If the clutch pinion gear does not move, replace the magnetic switch assy.



(b) Perform a hold–in test.

(1) With the battery connected as above and the clutch pinion gear extended, disconnect the negative (–) lead from terminal M. Check that the pinion gear remains extended.

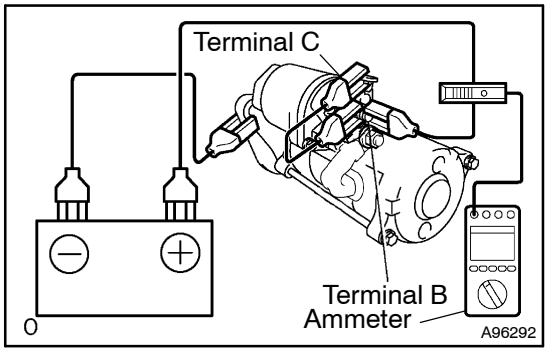
If the clutch pinion gear returns inward, replace the magnetic switch assy.



(c) Check that the clutch pinion gear returns.

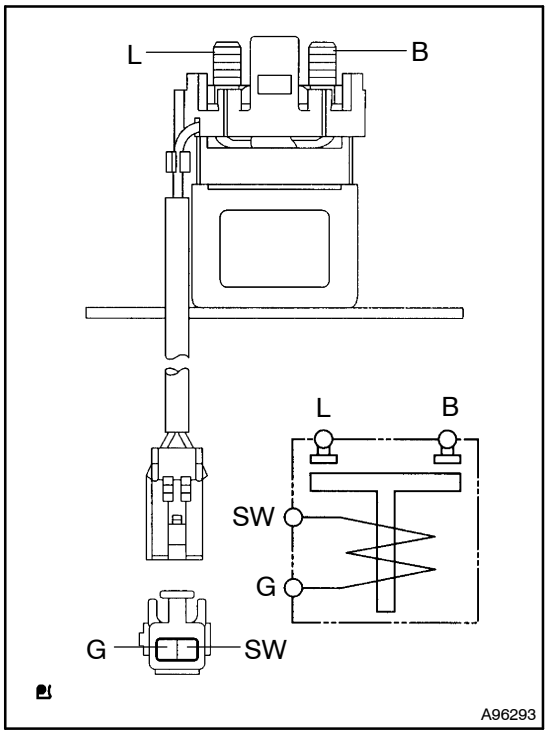
(1) Disconnect the negative (–) leads from the switch body. Check that the clutch pinion gear returns inward.

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



(d) Perform a no–load performance test.
(1) Connect the lead wire to terminal M. Make sure that the lead is not grounded.
Torque: 13.5 N·m (138 kgf·cm, 10 ft·lbf)
(2) Clamp the starter in a vise.
(3) Connect the battery and an ammeter to the starter as shown in the illustration.
(4) Check that the starter rotates smoothly and steadily with the clutch pinion gear extended. Check that the ammeter reads the specified current.
Standard: Below 120 A

If the current is not as specified, replace the starter assy.

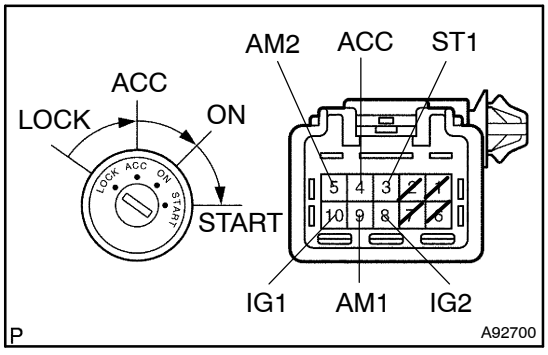


2. INSPECT RELAY (Marking: STARTER)

(a) Remove the STARTER relay from the R/B No. 2.
(b) Measure the resistance of the STARTER relay.
Standard:

Tester Connection	Specified Condition
L – B	10 kΩ or higher
L – B	Below 1 Ω (when battery voltage is applied to terminals SW and G)

If the result is not as specified, replace the relay.



3. INSPECT IGNITION OR STARTER SWITCH ASSY

(a) Measure the resistance of the switch.
Standard:

Tester Connection	Switch Condition	Specified Condition
–	LOCK	10 kΩ or higher
9 (AM1) – 4 (ACC)	ACC	Below 1 Ω
9 (AM1) – 4 (ACC) 9 (AM1) – 10 (IG1) 5 (AM2) – 8 (IG2)	ON	Below 1 Ω
9 (AM1) – 3 (ST1) 9 (AM1) – 10 (IG1) 5 (AM2) – 8 (IG2)	START	Below 1 Ω

If the result is not as specified, replace the switch assy (see Pub. No. RM1008E, page 50–8).