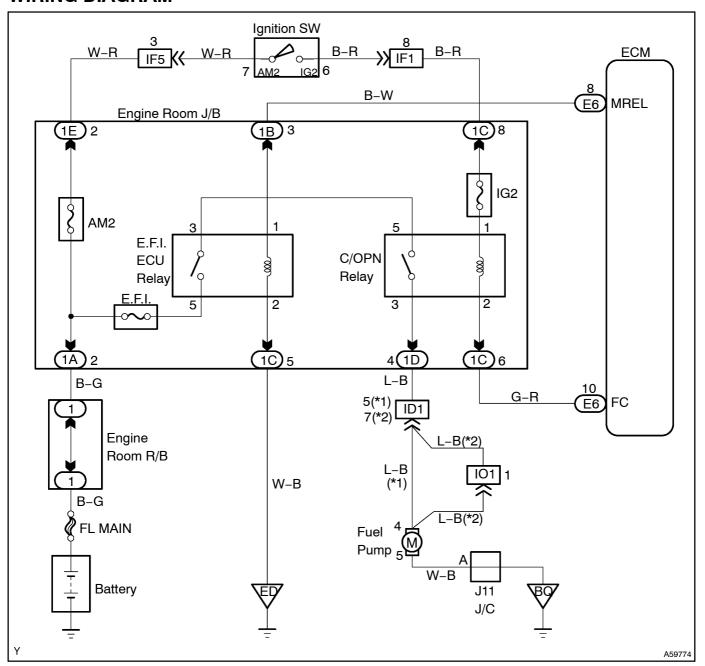
FUEL PUMP CONTROL CIRCUIT

CIRCUIT DESCRIPTION

In the diagram below, when the engine is cranked, current flows from terminal ST of the ignition switch to the starter relay coil and also current flows to terminal STA of ECM (STA signal).

When the STA signal and NE signal are input to the ECM, Tr is turned ON, current flows to the coil of the circuit opening relay, the relay switches on, power is supplied to the fuel pump and the fuel pump operates. While the NE signal is generated (engine running), the ECM keeps Tr ON (circuit opening relay ON) and the fuel pump also keeps operating.

WIRING DIAGRAM



INSPECTION PROCEDURE

When using Hand-held Tester:

- 1 PERFORM[ACTIVE]TEST[BY[HAND-HELD]TESTER(OPERATION[OF]CIRCUIT OPENING[RELAY)
- (a) Select the active test mode on the thand-held tester.
- (b) Turn the ignition switch ON, and perform the active test at the engine stop.

Result: The circuit opening relay operates.

ок

PROCEED[] TO[] NEXT[] CIRCUIT[] INSPECTION SHOWN[DN[PROBLEM[\$YMPTOMS[TABLE]]

NG

2 | CHECK[FOR[ECM[POWER[\$OURCE[CIRCUIT[[See]page]05-278]]

NG∐

REPAIR OR REPLACE

OK

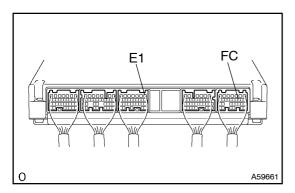
3 | INSPECTE.F.I. CIRCUIT OPENING RELAY ASSY See page 10-8)

NG

 $\begin{array}{l} \textbf{REPLACE} \sqsubseteq \textbf{E.F.I.} \sqsubseteq \textbf{CIRCUIT} \sqsubseteq \textbf{OPENING} \sqsubseteq \textbf{RELAY} \\ \textbf{ASSY} \end{array}$

OK

4 INSPECT ECM (CHECK VOLTAGE)



- (a) Turn the ignition switch ON.
- (b) Measure the voltage between terminal FC and E1 of the ECM connector.

Voltage: 9 - 14 V

OK

Go to step 6

NG

5

CHECK WIRE HARNESS OR CONNECTOR(CIRCUIT OPENING RELAY-ECM)

NG \

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

ОК

CHECK AND REPLACE ECM

CAMRY[REPAIR[MANUAL]] (RM915E)

6 | INSPECT[FUEL[PUMP[(See[page 11-39)

NG > R

REPLACE FUEL PUMP

OK

7 CHECK WIRE HARNESS OR CONNECTOR(CHECK FOR OPEN)

(a) Check for open in harness and connector between circuit opening relay and fuel pump, and fuel pump and body ground.

Result: Continuity

NG

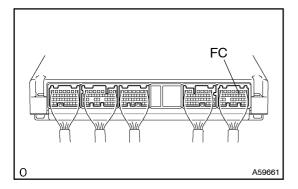
REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE ECM

When not using Hand-held Tester:

1 | CHECK OPERATION OF FUEL PUMP

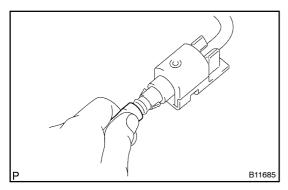


- (a) Turn the ignition switch ON.
- (b) Connect between terminal FC of the ECM connector and the ody ground.
- (c) Check[for[fuel[pressure[]n[the[fuel[]nlet[]nose[]when[]t[]s pinched[]off.

Result: There[is] pressure[in] fuel[inlet] hose.

HINT:

At this time, you will hear the fuel return flowing hoise.



OK[]

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE

NG

2 CHECK[FOR[ECM[POWER[\$OURCE[CIRCUIT[(See[page[05-278)

NG

REPAIR OR REPLACE

OK

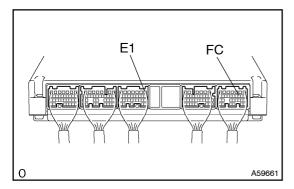
3 | INSPECT E.F.I. CIRCUIT OPENING RELAY ASSY (See page 10-8)

NG

REPLACE E.F.I. CIRCUIT OPENING RELAY ASSY

OK

4 | INSPECT[ECM(CHECK[VOLTAGE)



- (a) Turn the ignition switch ON.
- (b) Measure the voltage between terminal FC and F1 of the ECM connector.

Voltage: 9 - 14 V

OK □

Go[to[step[6

NG

5 | CHECK[WIRE[HARNESS[OR[CONNECTOR(CIRCUIT[OPENING[RELAY-ECM)

OK)

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

NG

CHECK[AND[REPLACE[ECM

6 | INSPECT[FUEL[PUMP[See page 11-39]

NG

REPLACE FUEL PUMP

OK

7

CHECK WIRE HARNESS OR CONNECTOR (OPEN BETWEEN TERMINAL 3 OF CIRCUIT OENING RELAY AND TERMINAL 3 OF E.F.I. ECU RELAY)

NG `

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE ECM