

## Fuel Pump Control Circuit

### CIRCUIT DESCRIPTION

Refer to DTC P0230 on [page DI-125](#).

### WIRING DIAGRAM

Refer to DTC P0230 on [page DI-125](#).

### INSPECTION PROCEDURE

When using hand-held tester:

- |   |   |
|---|---|
| 1 | Check fuel pump operation (See Pub. No. RM630E, page FI-7). |
|---|---|

OK

Go to step 8.

NG

- |   |   |
|---|---|
| 2 | Connect hand-held tester, and check operation of fuel pump relay. |
|---|---|

#### PREPARATION:

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON and push the hand-held tester main switch ON.
- (c) Enter the following menus: DIAGNOSIS / OBD/MOBD / ACTIVE TEST / FUEL PUMP / SPD.

#### CHECK:

Check the operation of the fuel pump relay when it is switched ON and OFF by the hand-held tester.

#### OK:

Operating noise can be heard from the relay.

OK

Go to step 4.

NG

- |   |   |
|---|---|
| 3 | Check operation of fuel pump relay (See Pub. No. RM630E, page FI-54). |
|---|---|

NG

Replace fuel pump relay.

OK

**4** Check fuel pump (See Pub. No. RM630E, page FI-7).

**NG**

Repair or replace fuel pump.

**OK**

**5** Check circuit opening relay (See Pub. No. RM630E, page FI-53).

**NG**

Replace circuit opening relay.

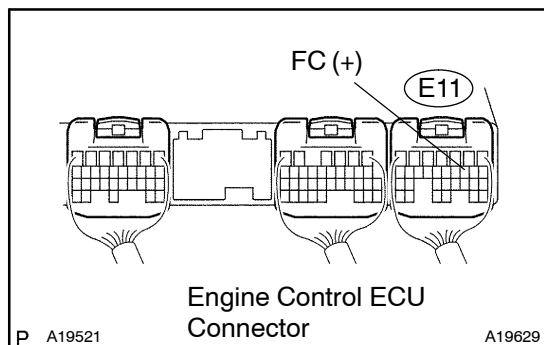
**OK**

**6** Check for open in harness and connector between EFI or ECD relay and fuel pump, and fuel pump and body ground (See page IN-20).

**NG**

Repair or replace harness or connector.

**OK**

**7 Check voltage between terminal FC and E1 of engine control ECU connector.****PREPARATION:**

Turn the ignition switch ON.

**CHECK:**

Measure the voltage between terminal FC of the engine control ECU connector and body ground.

**OK:**

**Voltage: 9 to 14 V**

**NG**

**Check for open in harness and connector between battery and FC terminal of engine control ECU (See page IN-20).**

**OK**

**Proceed to problem symptoms table (See page DI-34).**

**8 Check fuel pump resistor (See Pub. No. RM630E, page FI -59).****NG**

**Replace fuel pump resistor.**

**OK**

**Check for open in harness and connector between circuit opening relay and fuel pump resistor, and fuel pump resistor and fuel pump (See page IN-20).**

**When not using hand-held tester:**

**1** Check operation of fuel pump (See Pub. No. RM630E, page FI-7).

OK

Go to step 7.

NG

**2** Check operation of fuel pump relay (See Pub. No. RM630E, page FI-54).

NG

Replace fuel pump relay.

OK

**3** Check fuel pump (See Pub. No. RM630E, page FI-7).

NG

Repair or replace fuel pump.

OK

**4** Check circuit opening relay (See Pub. No. RM630E, page FI-53).

NG

Replace circuit opening relay.

OK

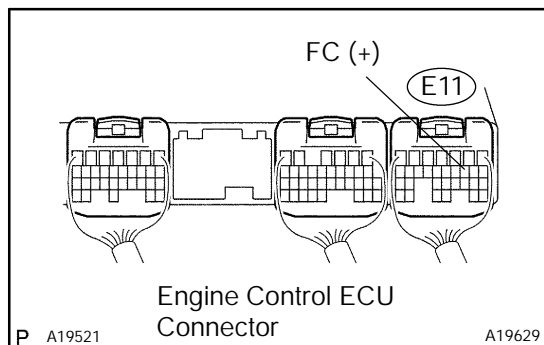
**5** Check for open in harness and connector between EFI or ECD relay and fuel pump, and fuel pump and body ground (See page IN-20).

NG

Repair or replace harness or connector.

OK

- |          |   |
|----------|---|
| <b>6</b> | <b>Check voltage between terminal FC of engine control ECU connector and body ground.</b> |
|----------|---|

**PREPARATION:**

Turn the ignition switch ON.

**CHECK:**

Measure the voltage between terminal FC of the engine control ECU connector and body ground.

**OK:**

**Voltage: 9 to 14 V**

**NG**

Check for open in harness and connector between battery and FC terminal of engine control ECU ([See page IN-20](#)).

**OK**

Proceed to problem symptoms table ([See page DI-34](#)).

- |          |  |
|----------|--|
| <b>7</b> | <b>Check fuel pump resistor (See Pub. No. RM630E, page FI-59).</b> |
|----------|--|

**NG**

Replace fuel pump resistor.

**OK**

Check for open in harness and connector between circuit opening relay and fuel pump resistor, fuel pump resistor and fuel pump ([See page IN-20](#)).