DI3ME–04

DTC	12	Fuel Tank Select Relay Malfunction

CIRCUIT DESCRIPTION

Refer to DTC 11 on page DI–90.

DTC No.	DTC Detection Condition	Trouble Area
12	Conditions (a), (b) and (c) continue: (a) Fuel tank changeover switch OFF (Voltage of FPMS terminal is low) (b) Voltage of FPM1 terminal is low (c) Voltage of FPM2 terminal is high	• Fuel tank select relay • Open or short in main fuel pump circuit • Main fuel pump • Fuel pump relay • Circuit opening relay • Short in sub fuel tank forcing driving relay circuit • Sub fuel tank forcing driving relay • Short in sub fuel pump circuit (+B short) • Engine ECU

WIRING DIAGRAM

Refer to DTC 11 on page DI–90.

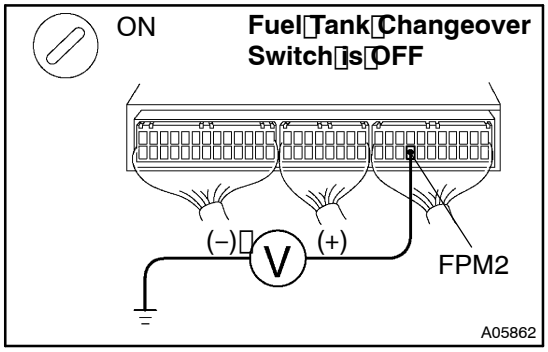
INSPECTION PROCEDURE

1	Check fuel tank select relay (See page FI–46).

NG → Replace fuel tank select relay.

OK

2	Check voltage between terminal FPM2 of engine ECU connector and body ground.



PREPARATION:

(a) Remove the glove compartment (See page IN–19).
(b) Turn the ignition switch ON.
(c) The fuel tank changeover switch is OFF.

CHECK:

Turn the ignition switch ON, and after 4 seconds or more, measure the voltage between terminal FPM2 of the engine ECU connector and body ground.

OK:

Voltage: 0 – 3.0 V

OK → Go to step 5.

NG

3	Check sub fuel tank forcing driving relay (See page FI–48).

NG → Replace sub fuel tank forcing driving relay, and then go to step 5.

OK

4	Check for short in harness and connector between sub fuel tank forcing driving relay and engine ECU (See page IN–19).

NG → Repair or replace harness for connector, and then go to step 5.

OK

Check and replace engine ECU (See page IN–19).

5	Check voltage between terminal FPM1 of engine ECU connector and body ground (See page DI–90, step 1).

OK → Go to step 8.

NG

6	Check fuel pump relay (See page FI–44).

NG → Replace fuel pump relay.

OK

7	Check circuit opening relay (See page FI–42).

NG → Replace circuit opening relay.

OK

8	Check operation of main fuel pump (See page DI–90, step 5).

HINT:
If you have no hand–held tester, and then go to step 9.

OK → Go to step 11.

NG

9	Check main fuel pump (See page FI–6).

NG → Replace main fuel pump.

OK

10	Check for open or short in harness and connector between main fuel pump and fuel tank select relay, fuel tank select relay and fuel pump relay, and fuel pump relay and circuit opening relay (See page IN–19).

NG → Repair or replace.

OK

11	Check for open and short in harness and connector between fuel tank select relay and engine ECU (See page IN–19).

NG → Repair or replace harness or connector.

OK

Check and replace engine ECU (See page IN–19).