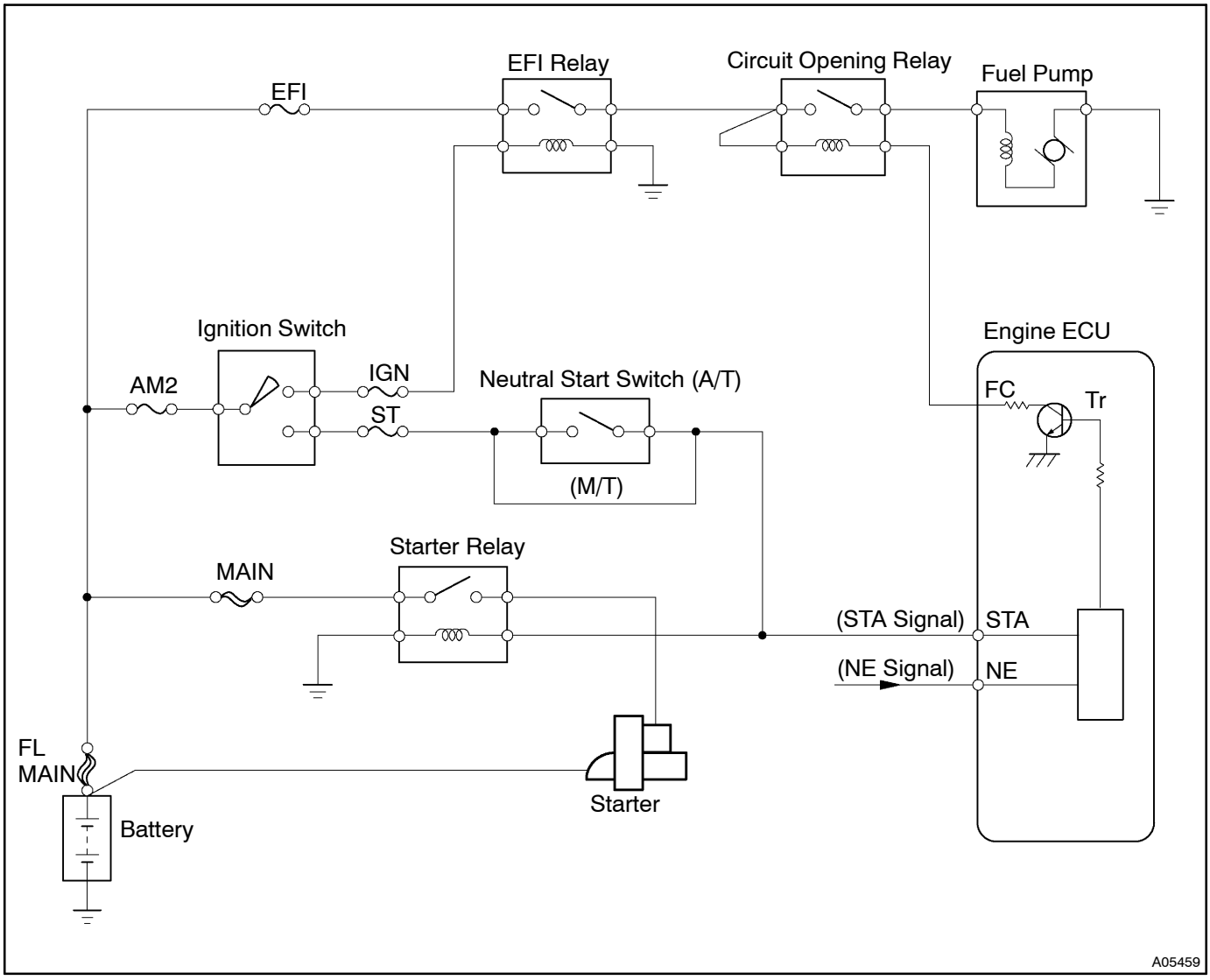
DI32M–04

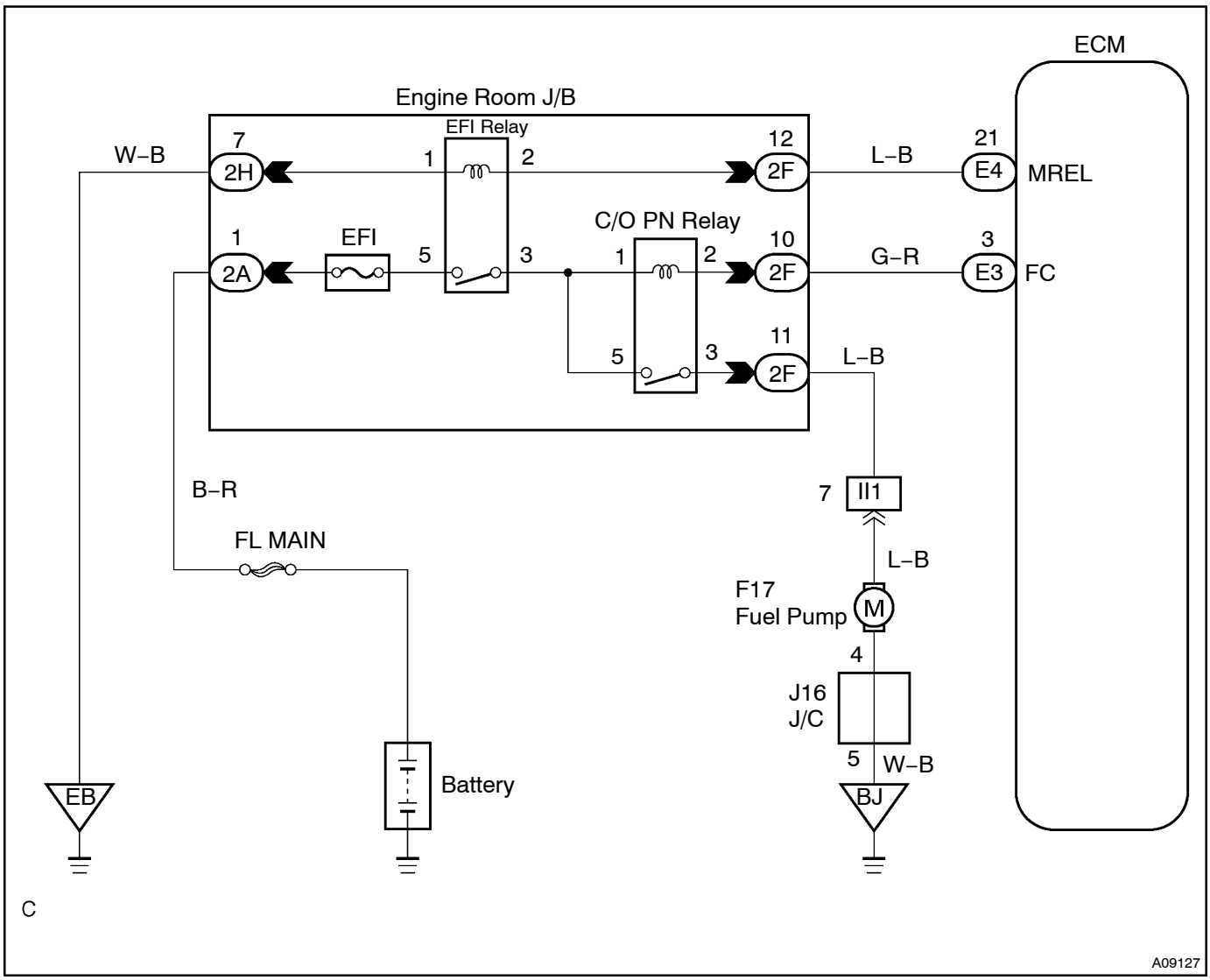
Fuel Pump Control Circuit

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 engine ECU (STA signal).
When the STA signal and NE signal are input to the engine ECU, Tr is turned ON, current flows to 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 engine ECU keeps Tr ON (circuit opening relay ON) and the fuel pump also keeps operating.

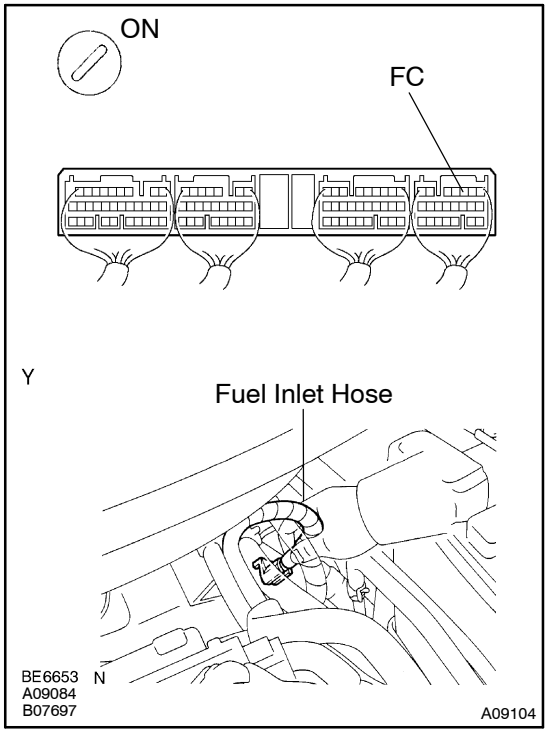


WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check fuel pump operation.



PREPARATION:

(a) Connect the hand held tester to the DLC3.
(b) Turn the ignition switch ON and hand–held tester main switch ON.
(c) Select the active test mode on the hand–held tester.
(d) If you have no hand–held tester, connect the positive (+) and negative (–) leads from the battery to the fuel pump connector (See Page FI–6).

CHECK:

Check that the pulsation damper screw rises up when the fuel pump operates.

OK:

The pulsation damper screw rises up.

OK	Proceed to next circuit inspection shown on problem symptoms table (See page DI–24).

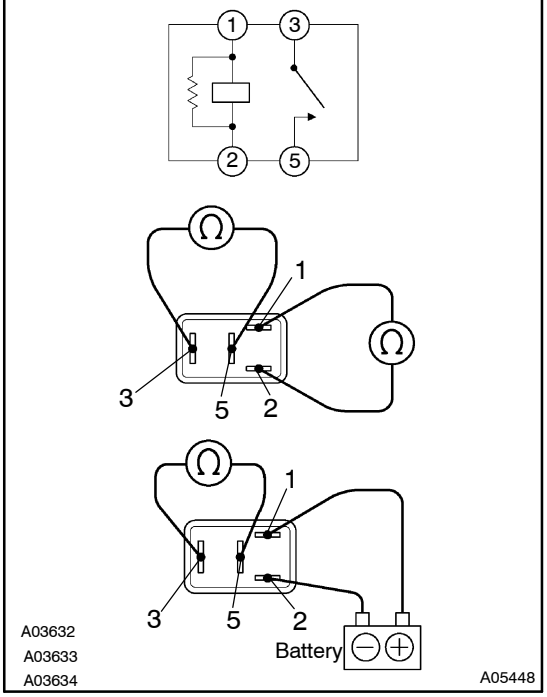
NG

2	Check for engine ECU power source circuit (See page DI–129).

NG	Repair or replace.

OK

3	Check circuit opening relay.



PREPARATION:

Remove the circuit opening relay from the instrument panel J/B.

CHECK:

Check continuity between terminals of circuit opening relay shown below.

OK:

Terminals 3 and 5	Open
Terminals 1 and 2	Continuity (Reference value 74 Ω)

CHECK:

(a) Apply battery positive voltage between terminals 1 and 2.

(b) Check continuity between terminals 3 and 5.

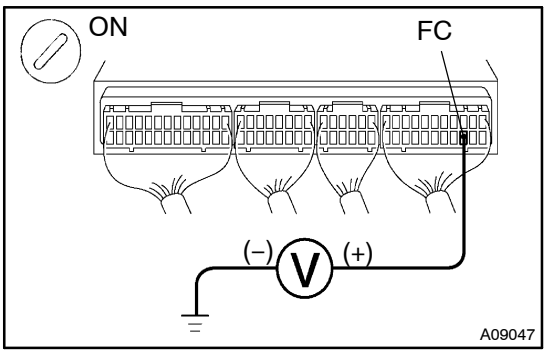
OK:

Terminals 3 and 5	Continuity

NG → **Replace circuit opening relay.**

OK

4	Check voltage between terminal FC of engine ECU and body ground.



PREPARATION:

(a) Remove glove compartment (See page FI–61).

(b) Turn ignition switch ON.

CHECK:

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

OK:

Voltage: 9 – 14 V

NG → **Check for open in harness and connector between EFI main relay and circuit opening relay, circuit opening relay and engine ECU.**

OK

5	Check fuel pump (See page FI–6).

NG → Repair or replace fuel pump.

OK

6	Check for open in harness and connector between circuit opening relay and fuel pump, fuel pump and body ground (See page IN–20).

NG → Repair or replace harness or connector.

OK

Check and replace engine ECU (See page IN–20).