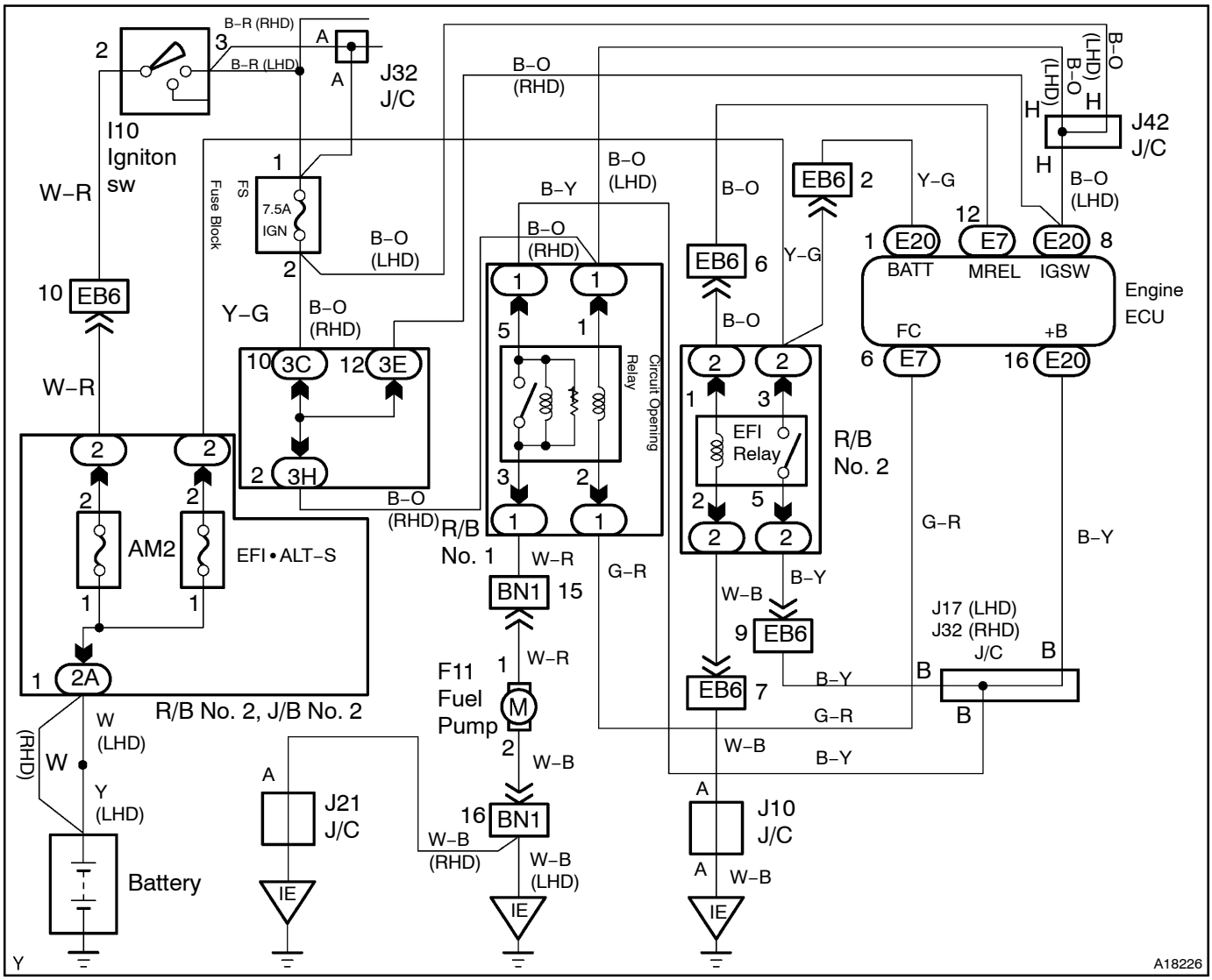
Fuel Pump Control Circuit

CIRCUIT DESCRIPTION

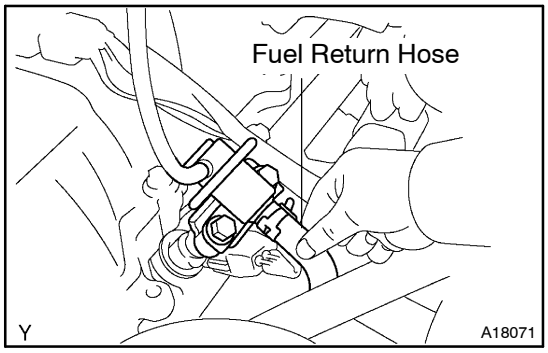
In the diagram below, when the engine is cranked, current flows from terminal ST of the ignition switch to the starter relay coil and also current flows to terminal STA of the engine ECU (STA signal).
When the STA signal and NE signal are input to the engine ECU, Tr is turned ON, current flows to the 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 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 push the 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–1 of Pub. No. RM652E).

CHECK:

Check the fuel pressure in the fuel return hose when it is pinched by hand.

OK:

There is pressure in the fuel return hose.

HINT:

At this time, you will hear a fuel flowing noise.

OK	**Proceed to next circuit inspection shown on problem symptoms table (See page DI–21).**

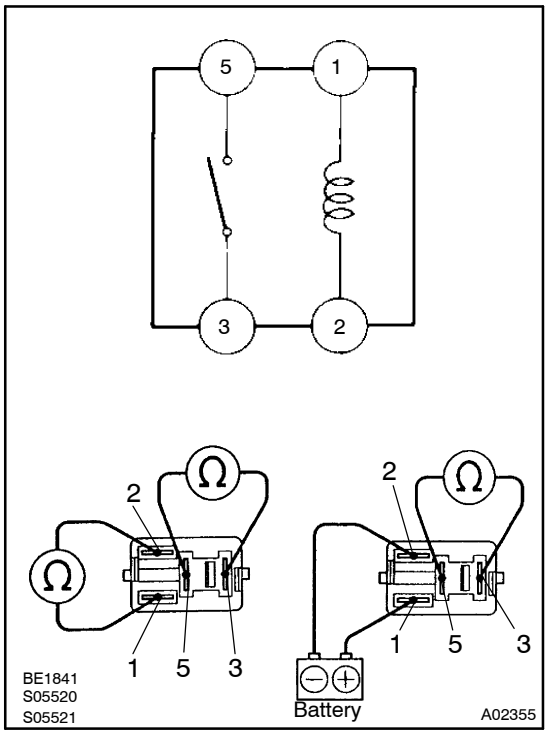
NG

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

NG	**Repair or replace.**

OK

3	Check circuit opening relay.



PREPARATION:

(a) Remove the lower instrument cover.

(b) Remove the circuit opening relay.

CHECK:

Check the continuity between the 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 the continuity between terminals 3 and 5.

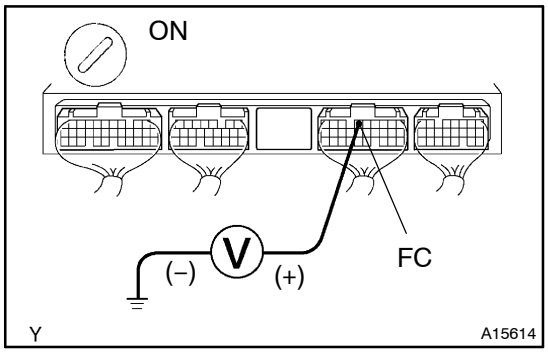
OK:

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 the glove compartment.

(b) Turn the ignition switch ON.

CHECK:

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

OK:

Voltage: 9 – 14 V

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

OK

5	Check fuel pump (See page FI–1 of Pub. No. RM652E).

NG → Repair or replace fuel pump.

OK

6	Check for open in harness and connector between circuit opening relay and fuel pump, and fuel pump and body ground (See page IN–19).

NG → Repair or replace harness or connector.

OK

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