DI3MD–04

CIRCUIT INSPECTION

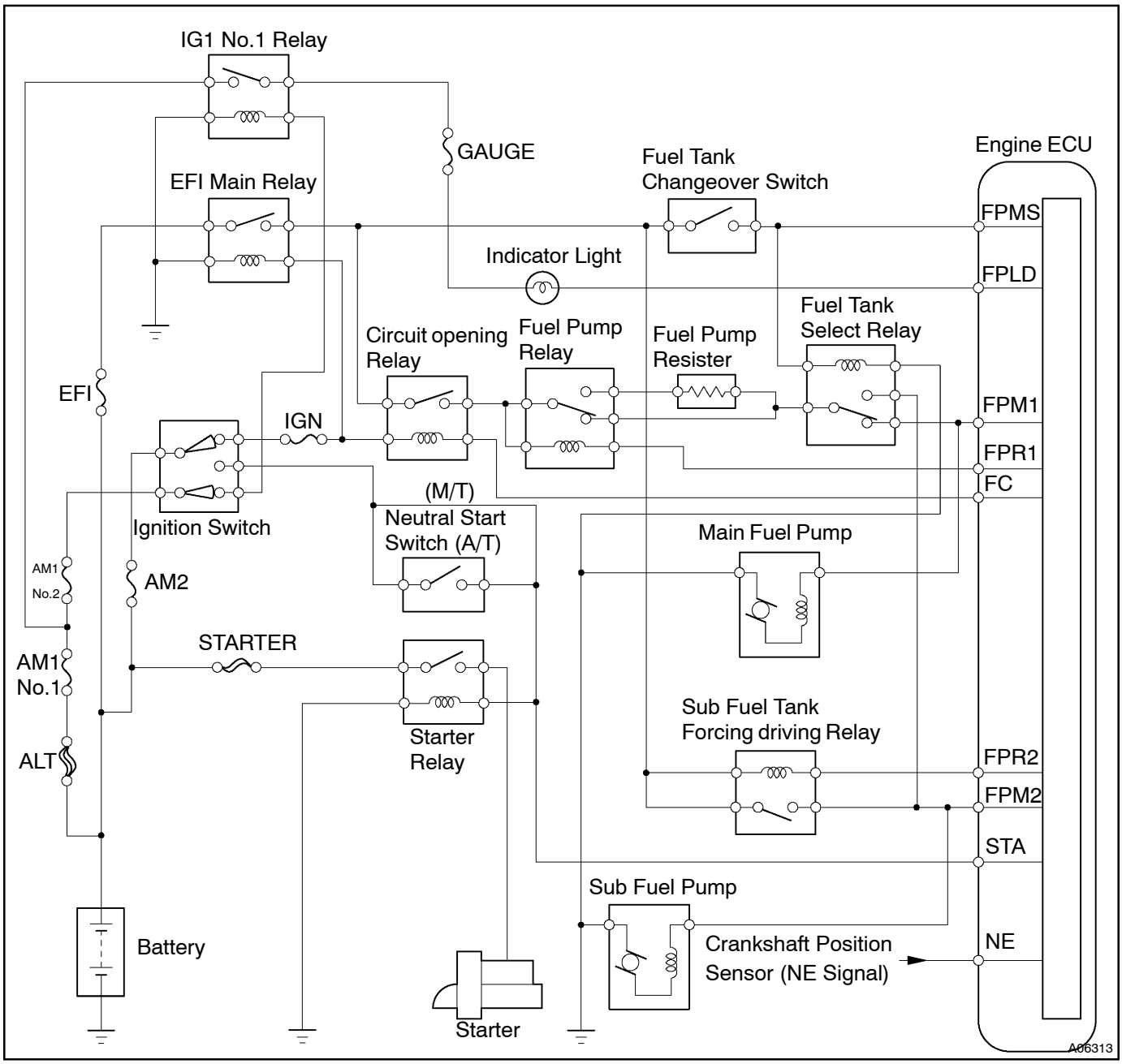
DTC	11	Main Fuel Pump Circuit Malfunction (Fuel Tank Changeover Switch OFF)

CIRCUIT DESCRIPTION

When the STA signal and NE signal are input to the engine ECU, Tr1 is turned ON, current flows to coil of the circuit opening relay, relay switches on, power is supplied to the fuel pump via a pump select relay and the fuel pump operates.

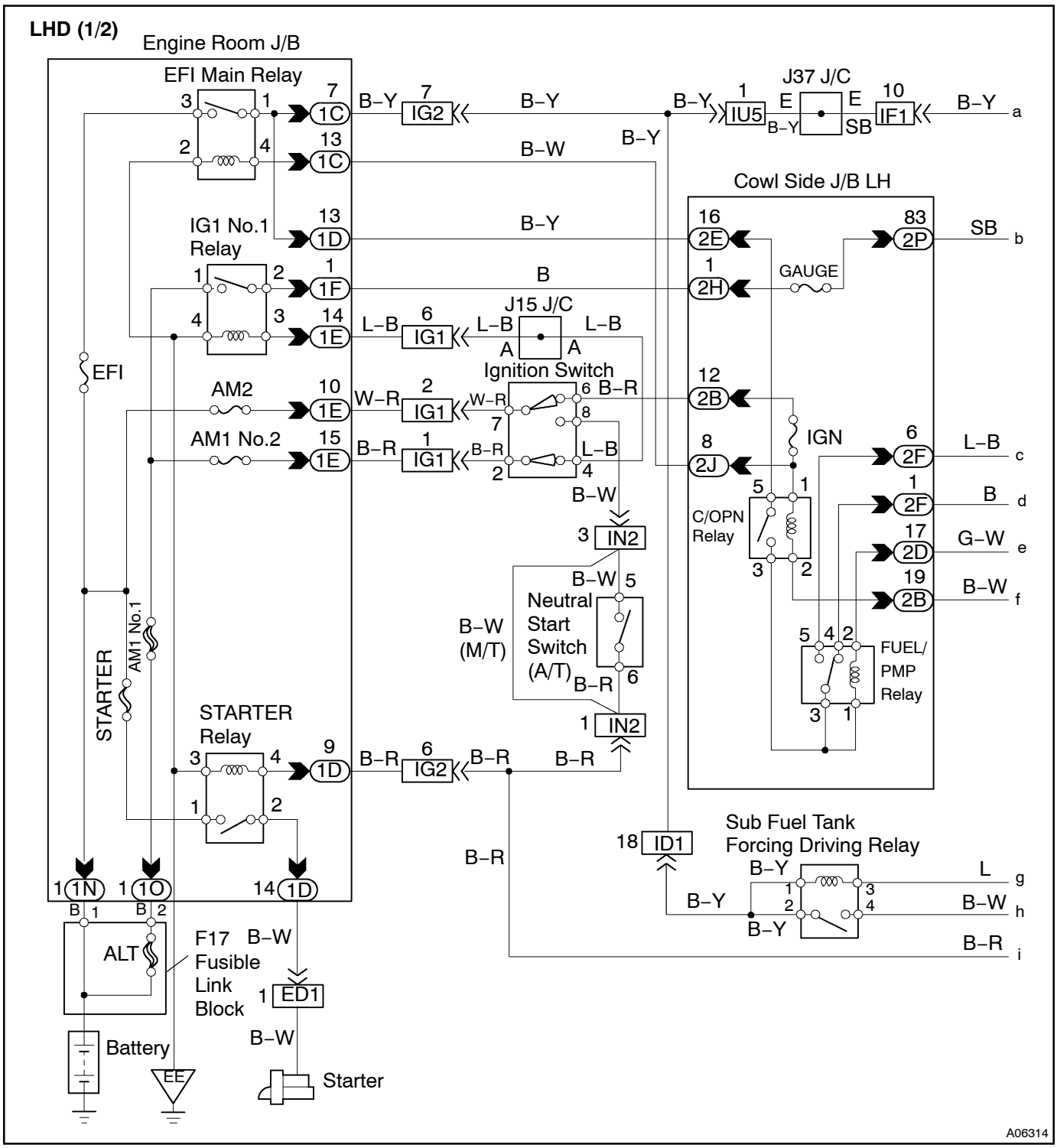
When the fuel tank changeover switch is OFF, the pump select relay point contacts with the main fuel pump side, power is supplied to the main fuel pump and the main fuel pump operates.

When the fuel tank changeover switch is ON, current flows to coil of the pump select relay, relay point contacts with the sub fuel pump side, power supplied to the sub fuel pump and the sub fuel pump operates.

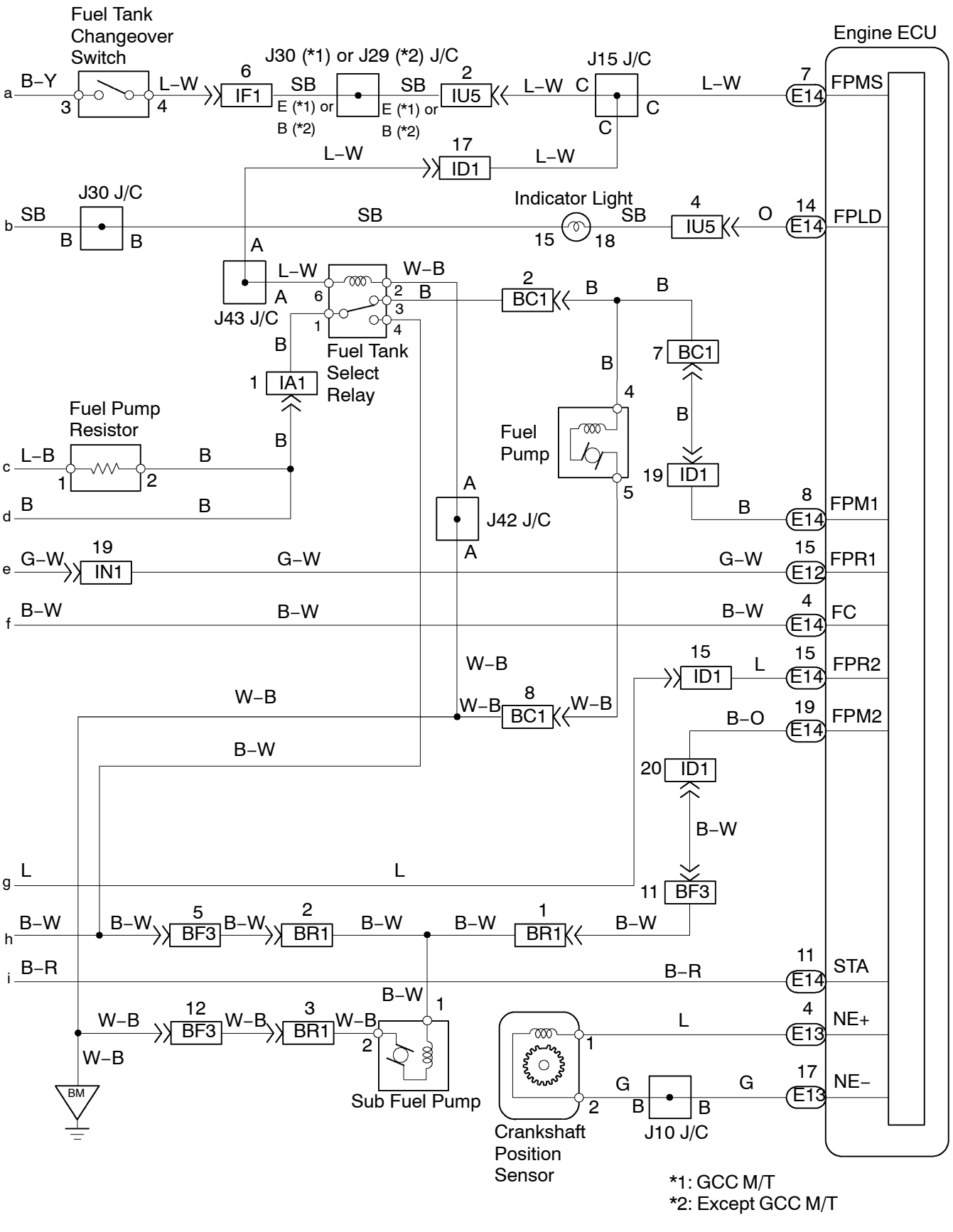


DTC No.	DTC Detecting Condition	Trouble Area
11	Conditions (a), (b) and (c) continue: (a) Fuel tank changeover switch OFF (Voltage of FPMS terminal is low) (b) Voltage of FPM1 terminal is low (c) Voltage of FPM2 terminal is low	• Open or short in main fuel pump circuit • Main fuel pump • Fuel tank select relay • Fuel pump relay • Circuit opening relay

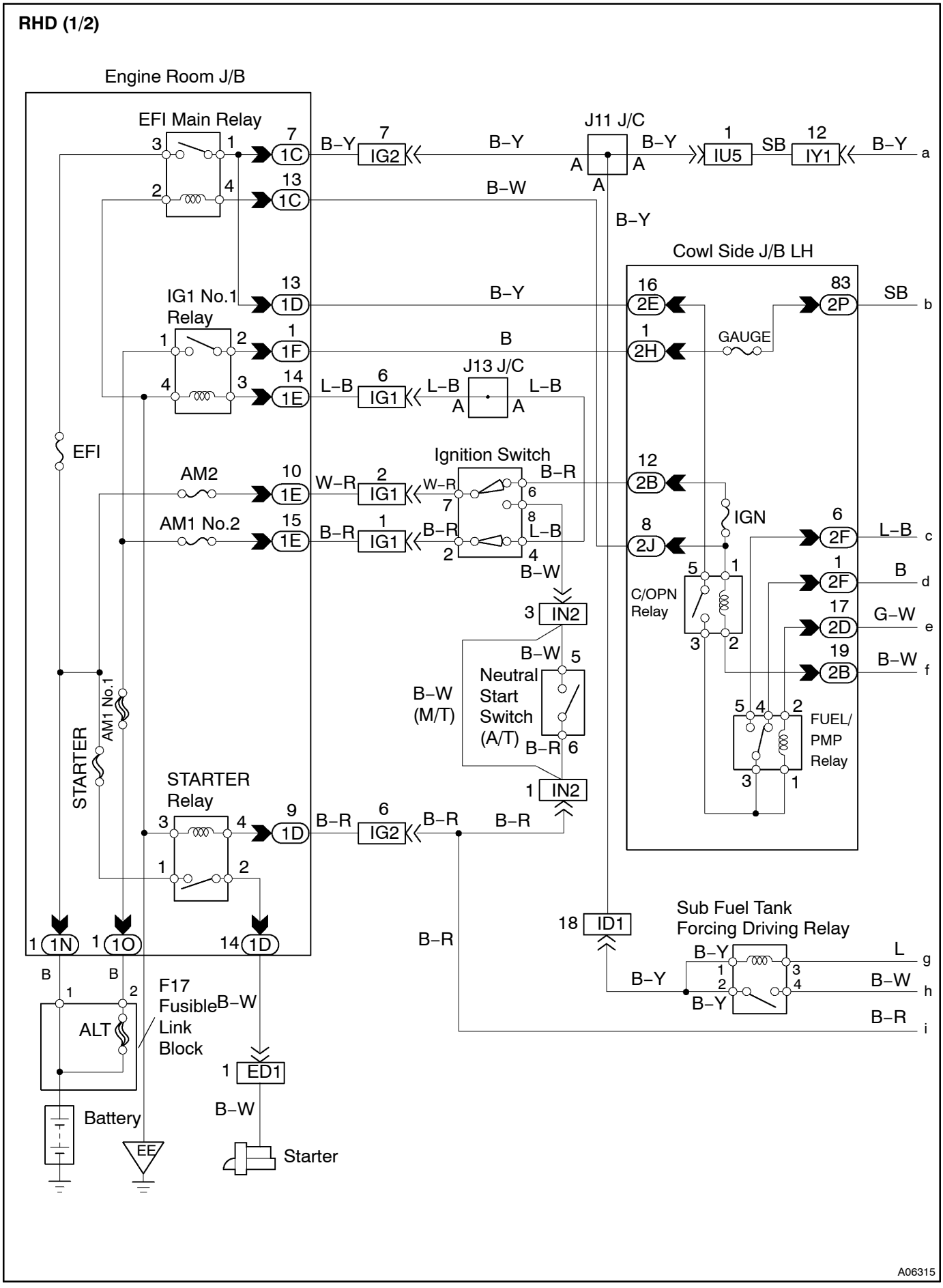
WIRING DIAGRAM



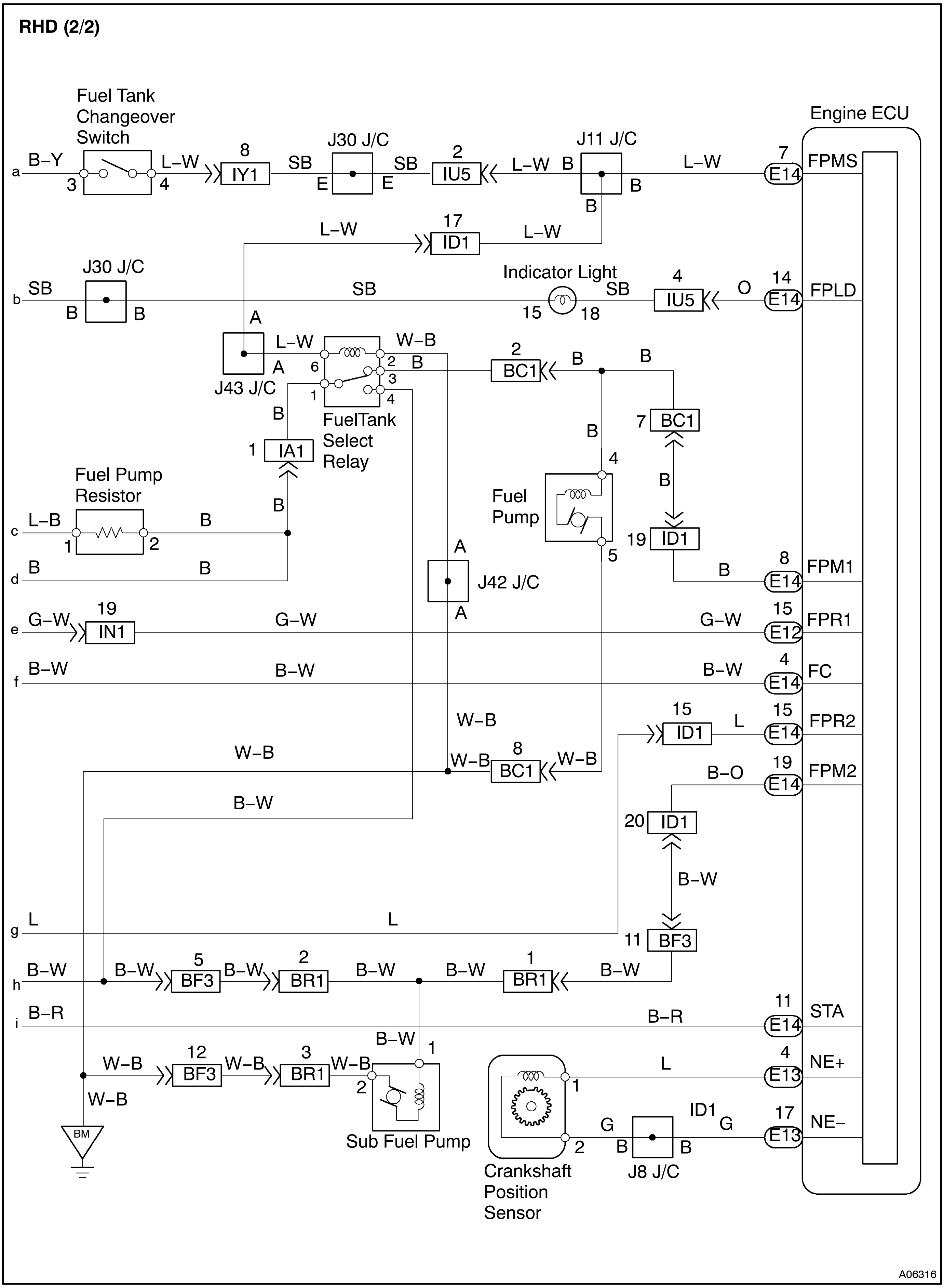
LHD (2/2)


Fuel Tank Changeover Switch
B–Y
L–W
3
4
6
IF1
J30 (*1) or J29 (*2) J/C
SB
E (*1) or B (*2)
SB
E (*1) or B (*2)
2
IU5
L–W
C
J15 J/C
L–W
C
C
7
E14
FPMS
Engine ECU
17
ID1
L–W
L–W
J30 J/C
SB
B
B
SB
Indicator Light
15
18
SB
4
IU5
O
14
E14
FPLD
A
J43 J/C
L–W
W–B
6
2
3
1
4
B
2
BC1
B
B
B
Fuel Tank Select Relay
1
IA1
B
7
BC1
B
4
Fuel Pump
5
B
19
ID1
Fuel Pump Resistor
L–B
B
1
2
B
B
B
A
J42 J/C
A
B
8
E14
FPM1
19
IN1
G–W
G–W
G–W
15
E12
FPR1
B–W
B–W
B–W
4
E14
FC
W–B
15
ID1
L
15
E14
FPR2
W–B
W–B
8
BC1
W–B
B–O
19
E14
FPM2
B–W
20
ID1
B–W
L
L
11
BF3
B–W
B–W
5
BF3
B–W
2
BR1
B–W
B–W
1
BR1
B–W
B–R
B–R
11
E14
STA
B–W
1
W–B
12
BF3
W–B
3
BR1
W–B
2
4
E13
NE+
W–B
BM
Sub Fuel Pump
1
L
G
17
E13
NE–
2
B
B
G
Crankshaft Position Sensor
J10 J/C
*1: GCC M/T
*2: Except GCC M/T
A06316

RHD (1/2)

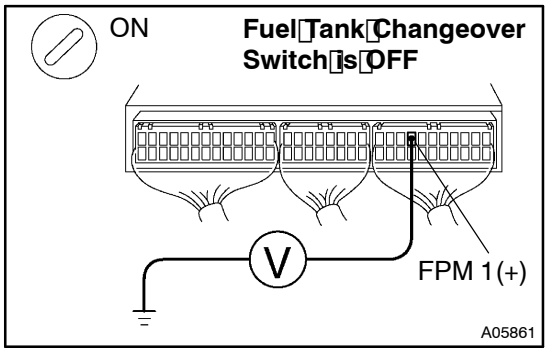

Engine Room J/B
EFI Main Relay
IG1 No.1 Relay
EFI
AM2
AM1 No.2
AM1 No.1
STARTER
STARTER Relay
F17 Fusible Link Block
ALT
Battery
EE
Starter
Ignition Switch
Neutral Start Switch (A/T)
B–W (M/T)
J11 J/C
J13 J/C
IG2
IG1
IU5
IY1
ID1
IN2
ED1
Cowl Side J/B LH
GAUGE
IGN
C/OPN Relay
FUEL/ PMP Relay
Sub Fuel Tank Forcing Driving Relay
B–Y
B–W
B–R
L–B
W–R
B
SB
L
G–W
A06315

RHD (2/2)


Fuel Tank Changeover Switch
J30 J/C
J11 J/C
Engine ECU
FPMS
IY1
IU5
ID1
E14
Indicator Light
FPLD
J43 J/C
FuelTank Select Relay
BC1
IA1
Fuel Pump Resistor
Fuel Pump
J42 J/C
FPM1
IN1
FPR1
E12
FC
FPR2
FPM2
BF3
BR1
STA
NE+
E13
NE–
BM
Sub Fuel Pump
Crankshaft Position Sensor
J8 J/C
A06316

INSPECTION PROCEDURE

1	Check voltage between terminal FPM1 of engine ECU connector and body ground.



PREPARATION:

(a) Remove the glove compartment door.
(b) Turn the ignition switch ON.
(c) Fuel tank changeover switch is OFF.

CHECK:

Measure voltage between terminal FPM1 of engine ECU connector and body ground.

OK:

Voltage: 9 – 14 V

OK	Go to step 5.

NG

2	Check fuel tank select relay (See page FI–49).

NG	Replace fuel tank select relay.

OK

3	Check fuel pump relay (Marking: FUEL/PMP) (See page FI–46).

NG	Replace fuel pump relay.

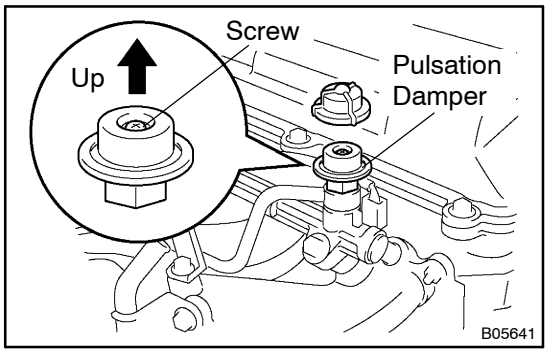
OK

4	Check circuit opening relay (Marking: C/OPN) (See page FI–45).

NG	Replace circuit opening relay.

OK

5	**Check operation of main fuel pump.**



PREPARATION:

(a) Connect the hand–held tester to the DLC3.
(b) Turn the ignition switch ON.
(c) Fuel tank changeover switch is OFF.
(d) Select the ACTIVE TEST mode.

CHECK:

Check the main fuel pump operation, when it is operated by hand–held tester.

OK:

Here a main fuel pump operation noise

HINT:

If you have no hand–held tester, and then go to step 6.

OK	**Go to step 8.**

NG

6	**Check main fuel pump (See page FI–7).**

NG	**Replace main fuel pump.**

OK

7	**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, fuel pump relay and circuit opening relay (See page IN–19).**

NG	**Repair or replace.**

OK

8	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 and connector.

OK →

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