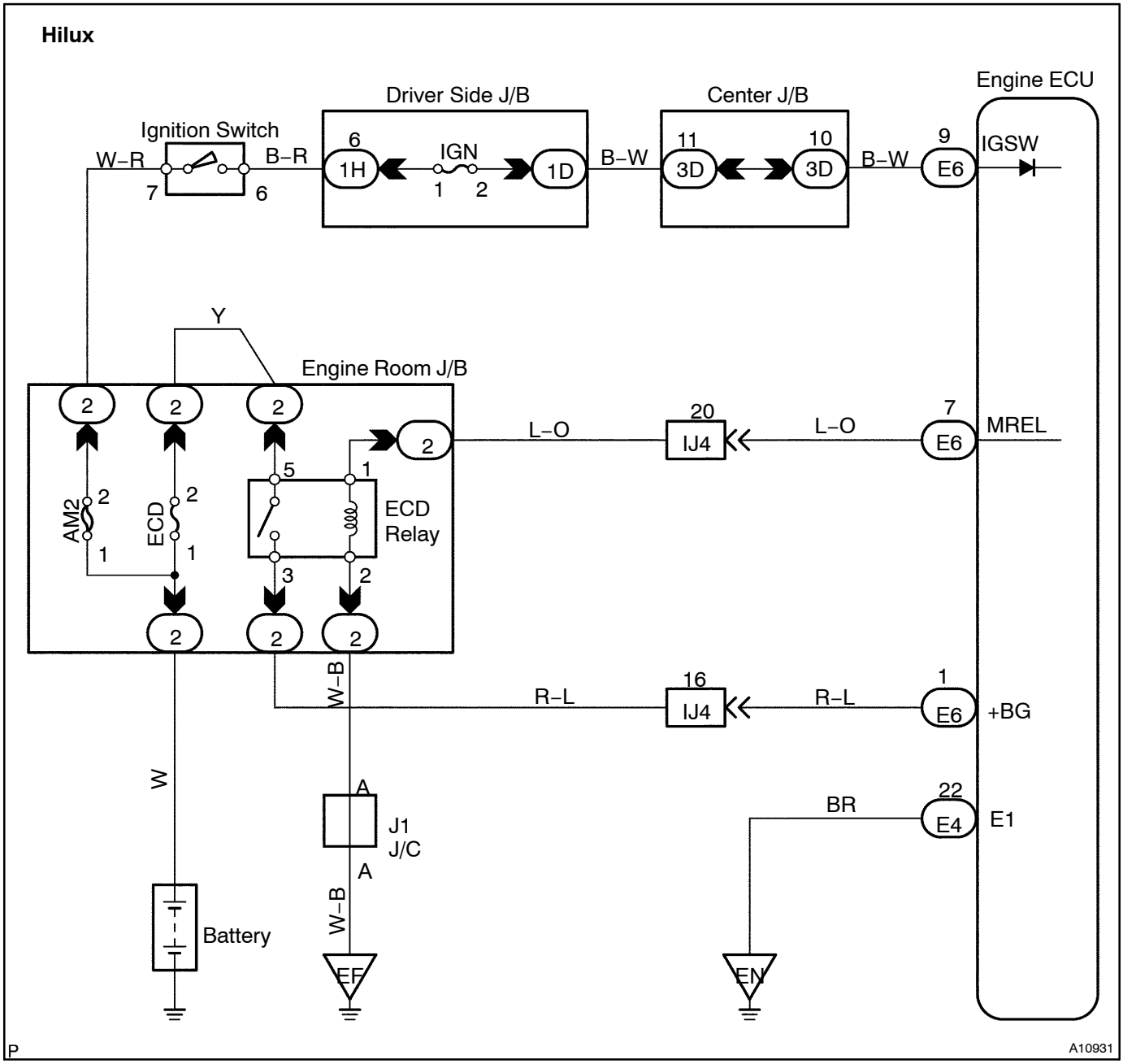
DI8FV–01

ECU Power Source Circuit

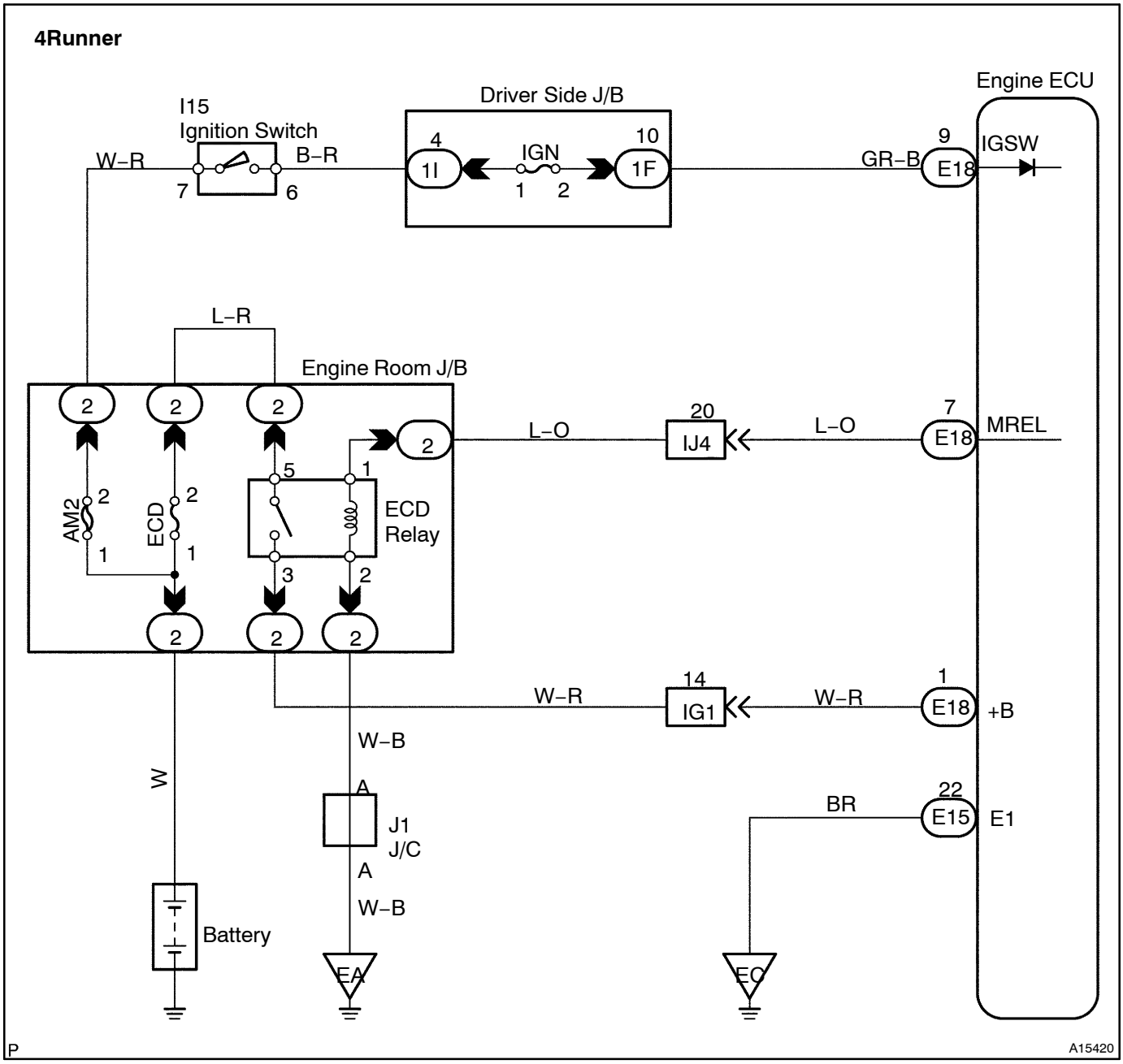
CIRCUIT DESCRIPTION

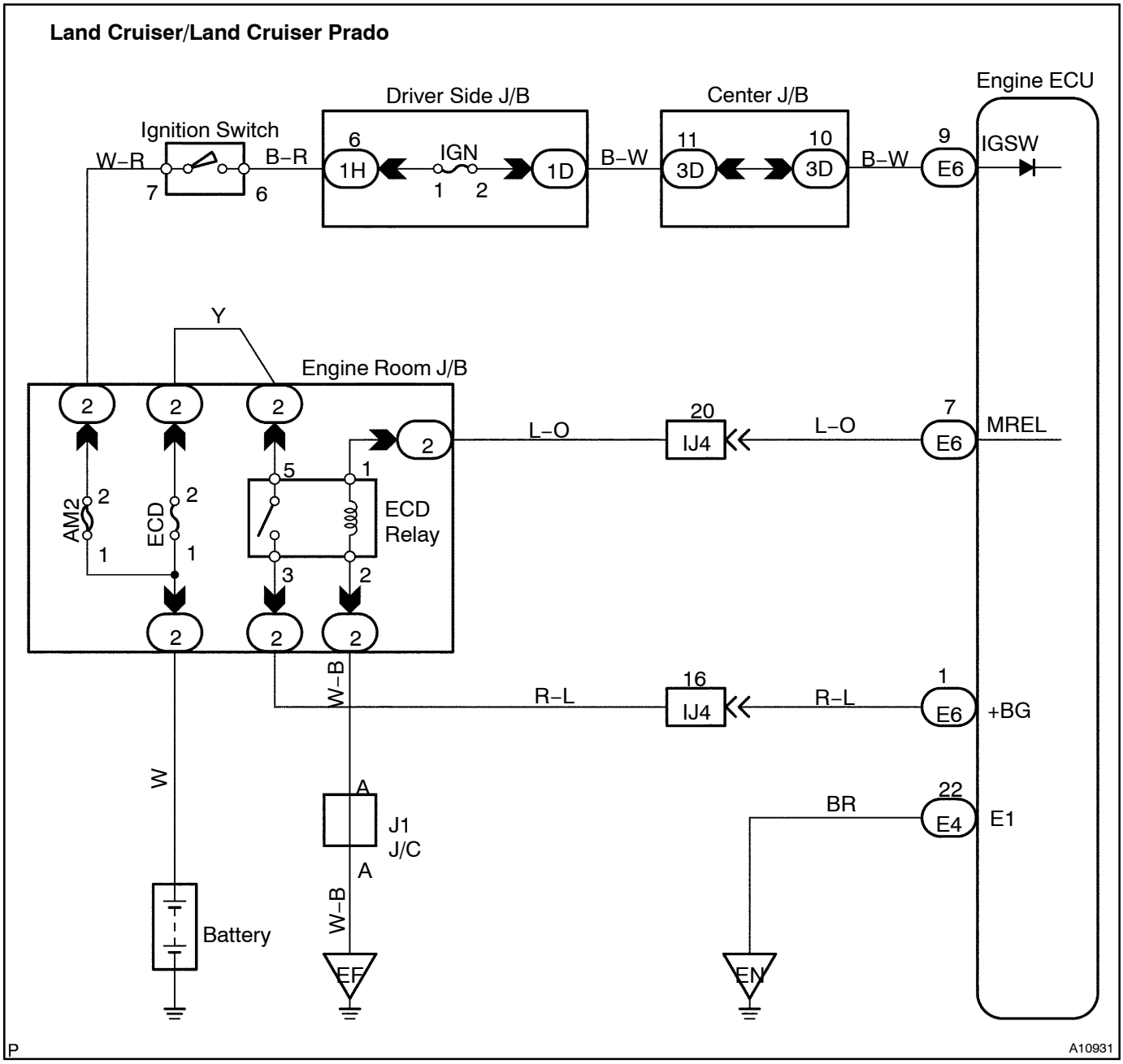
When the ignition switch is turned ON, battery positive voltage is applied to the coil, closing the contacts of the ECD main relay (Marking: ECD) and supplying power to the terminal +B of the engine ECU.

WIRING DIAGRAM



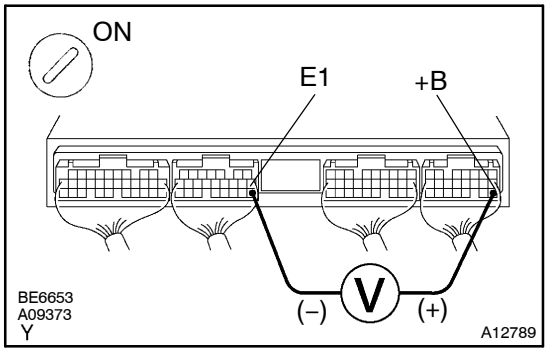
4Runner


Engine ECU
Driver Side J/B
I15
Ignition Switch
W–R
B–R
7
6
4
1I
IGN
1
2
10
1F
GR–B
9
E18
IGSW
L–R
Engine Room J/B
2
AM2
ECD
1
ECD
Relay
5
3
L–O
20
IJ4
7
MREL
W–R
14
IG1
1
+B
W–B
W
A
J1
J/C
Battery
BR
22
E15
E1
EA
EC
P
A15420



INSPECTION PROCEDURE

1	**Check voltage between terminals +B and E1 of engine ECU connector.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminals +B and E1 of the engine ECU connector.

OK:

Voltage: 9 – 14 V

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

NG

2	Check for open in harness and connector between terminal E1 of engine ECU and body ground (See page IN–20).

NG → Repair or replace harness or connector.

OK

3	Check ECD main relay (Marking: ECD) (See Pub. No. RM710E, ED section).

NG → Replace ECD main relay.

OK

4	Check ECD fuse (See page DI–89).

NG → Replace ECD fuse.

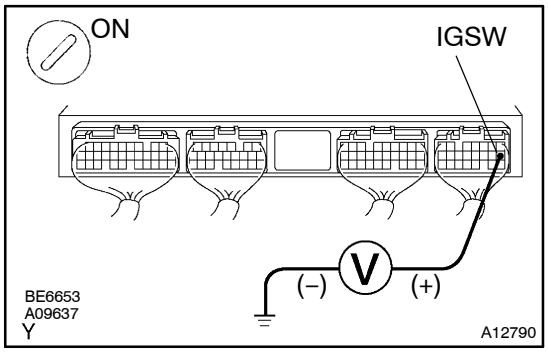
OK

5	Check for open in harness and connector between engine ECU and ECD main relay (Marking: ECD) and ECD main relay and battery (See page IN–20).

NG → Repair or replace harness or connector.

OK

6	**Check voltage between terminal IGSW of engine ECU connector and body ground.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

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

OK:

Voltage: 9 – 14 V

OK	**Go to step 9.**

NG

7	**Check ignition switch (See Pub. No. RM789E (Hilux), RM805E (Land Cruiser/Land Cruiser Prado) or RM663U (4Runner) BE section).**

NG	**Replace ignition switch.**

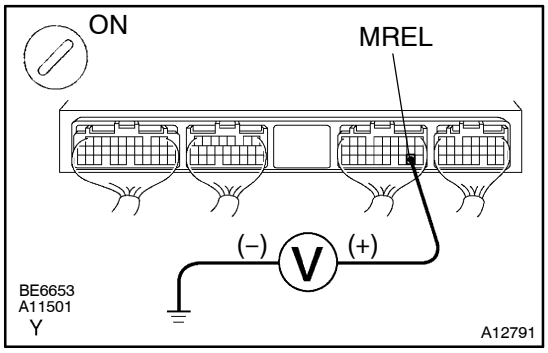
OK

8	**Check for open in harness and connector between ignition switch and engine ECU (See page IN–20).**

NG	**Repair or replace harness or connector.**

OK

9	**Check voltage between terminal MREL of engine ECU connector and body ground.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

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

OK:

Voltage: 9 – 14 V

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

NG

Check for open in harness and connector between engine ECU and ECD main relay (Marking: ECD), and ECD main relay and body ground (See page IN–20).