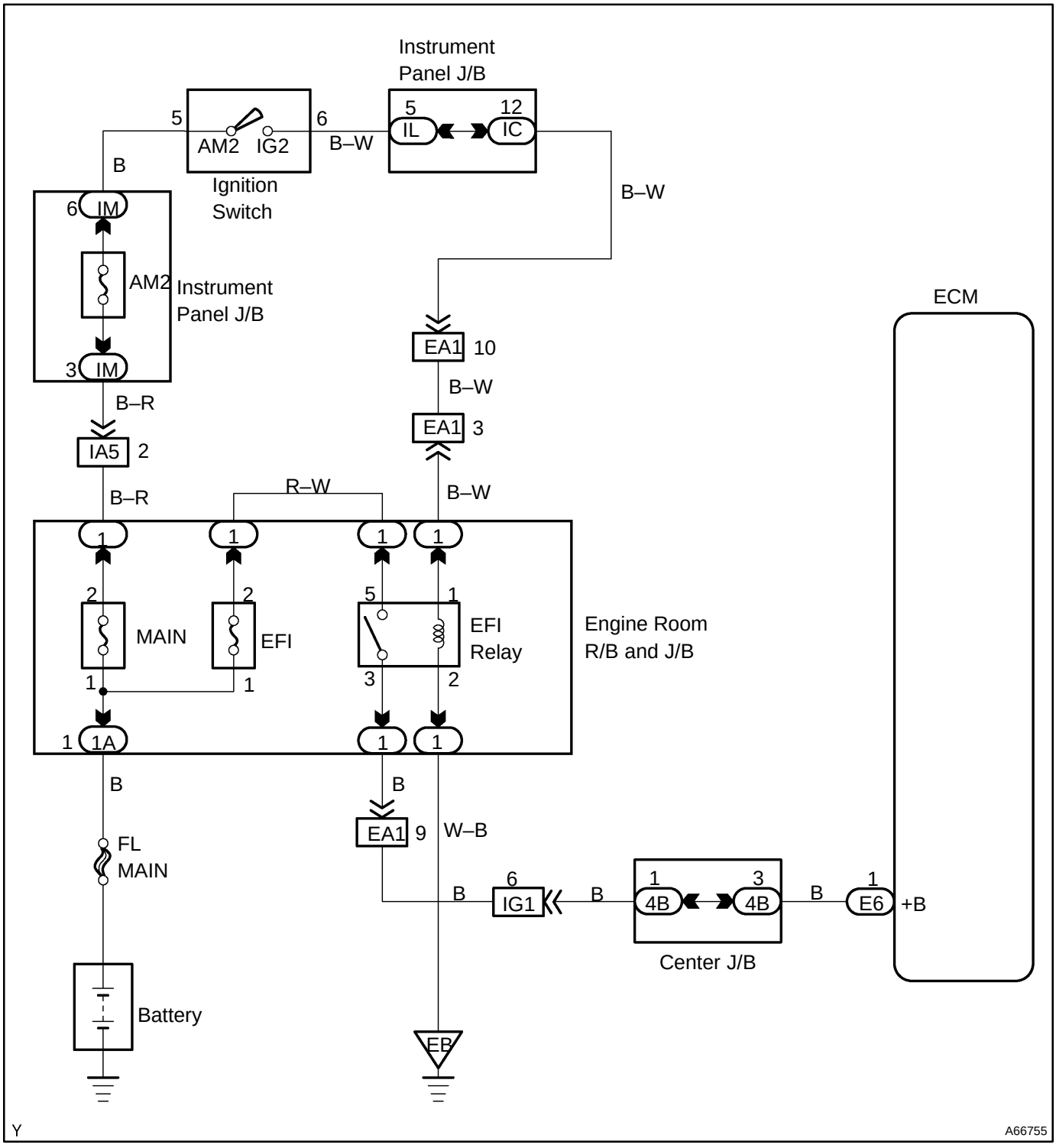
ECM POWER SOURCE CIRCUIT

CIRCUIT DESCRIPTION

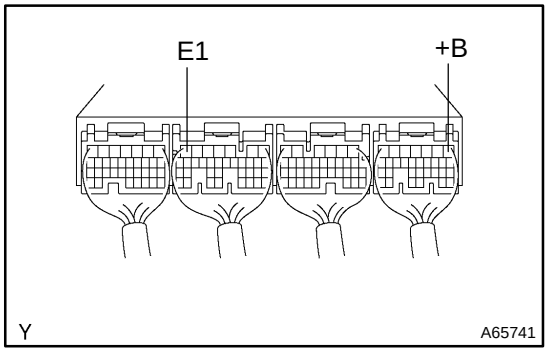
When the ignition switch is turned ON, battery positive voltage is applied to the coil which closes the contacts of the E.F.I. relay (Marking: E.F.I.) and supplies power to the terminal +B of the ECM.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT ECM

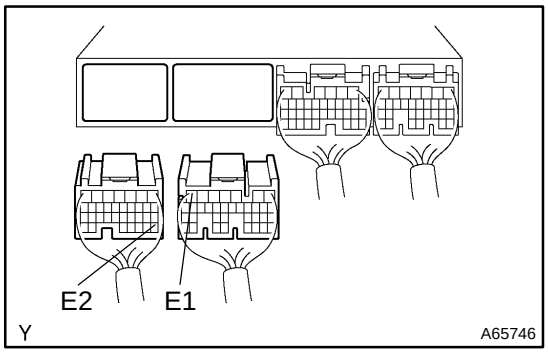


(a) Turn the ignition switch ON.
(b) Measure voltage between the terminals +B of the ECM connector and E1 of the ECM connector.
Voltage: 9 – 14 V

OK → **CHECK AND REPLACE ECM**

NG

2 CHECK HARNESS AND CONNECTOR(ECM GROUND)

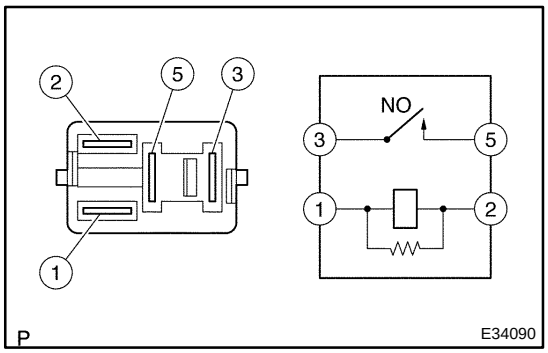


(a) Disconnect the battery negative (–) terminal.
(b) Disconnect the ECM E3 and E4 connector.
(c) Check continuity between the terminal E1 of the ECM connector and body ground.
Resistance: 1 Ω or less
(d) Check continuity between the terminal E2 of the ECM connector and body ground.
Resistance: 1 Ω or less

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

3 CHECK RELAY(E.F.I. RELAY)



(a) Remove the E.F.I. relay.
(b) Check continuity between the terminals shown below.
Resistance:

TERMINAL NO.	RESISTANCE
1 – 2	1 Ω or less
3 – 5	1 MΩ or more

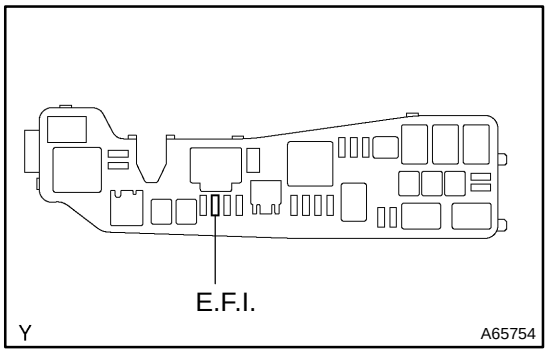
(c) Check continuity between the terminals 3 and 5 of the connector when the battery voltage is applied to the terminals between 1 and 2.
Resistance:

TERMINAL NO.	RESISTANCE
3 – 5	1 Ω or less

NG → **REPLACE RELAY**

OK

4	CHECK FUSE(E.F.I. FUSE)

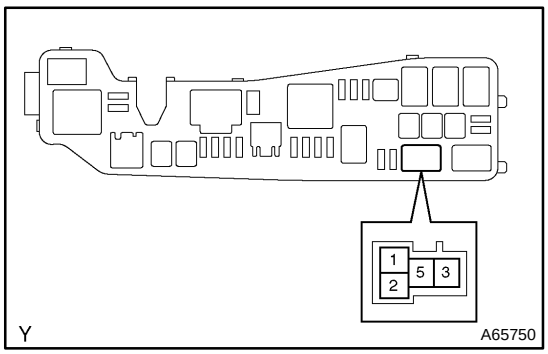


(a) Remove the E.F.I. fuse.
(b) Check continuity of E.F.I. fuse.
Resistance: 1 Ω or less

NG → **REPLACE FUSE**

OK

5	CHECK RELAY OPERATION(E.F.I. RELAY)

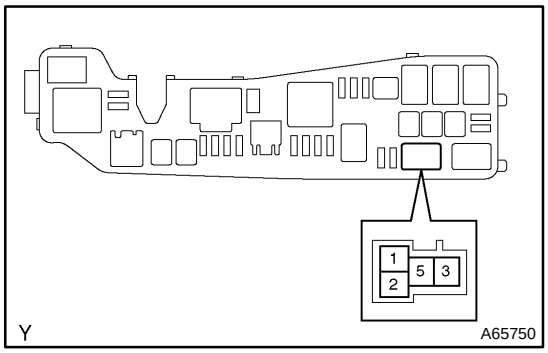


(a) Remove the E.F.I. relay.
(b) Confirm that the E.F.I. relay operates normally when turning the ignition switch ON.
Result:
E.F.I. relay operation sound is heard successively when turning the ignition switch ON.

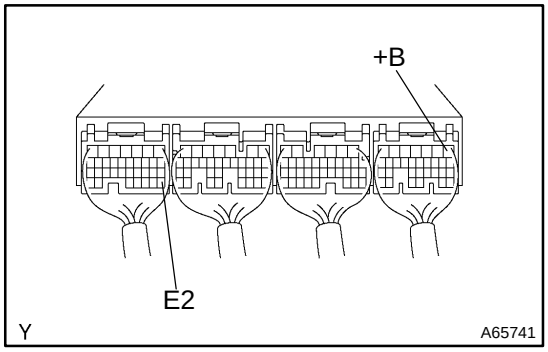
NG → **Go to step 9**

OK

6 CHECK HARNESS AND CONNECTOR(ECM–E.F.I.RELAY)



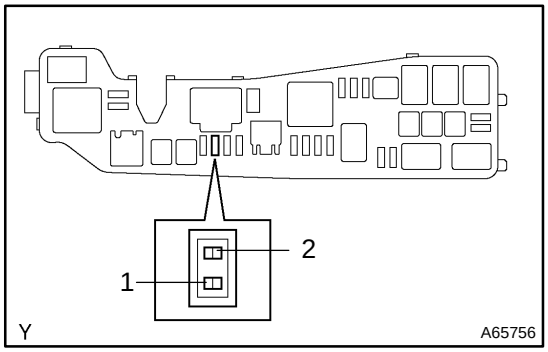
(a) Disconnect the battery negative (–) terminal.
(b) Remove the E.F.I. relay.
(c) Check continuity between the terminals 1 of the E.F.I. relay in the engine room R/B and +B of the ECM connector.
Resistance: 1 Ω or less
(d) Check short between the terminals 1 of the E.F.I. relay in the engine room R/B and E2 of the ECM.
Resistance: 1 MΩ or more



NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

7 CHECK HARNESS AND CONNECTOR(E.F.I. FUSE–BATTERY)



(a) Disconnect the battery negative (–) connector.
(b) Remove the E.F.I. fuse.
(c) Check continuity between the terminals 1 of the E.F.I. fuse holder in the engine room R/B and negative (–) of the battery.

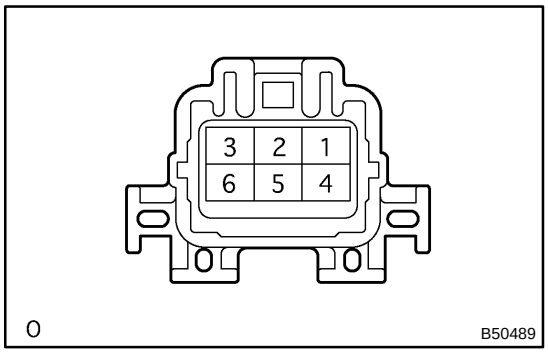
NOTICE:
Do not insert the tester leads hard in the procedure (c), or the holder may be damaged.

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ECM

8 INSPECT IGNITION OR STARTER SWITCH ASSY



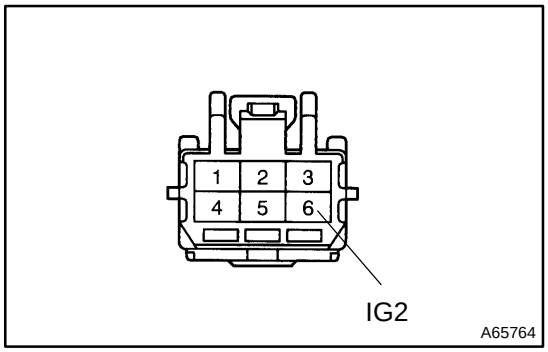
(a) Check continuity between the connector terminals shown in the chart below.

Switch	Terminal No.	Resisitance
LOCK	All Terminals	1MΩ or more
ACC	1–3	1Ω or less
ON	1–2–3 5–6	1Ω or less
START	4–5–6 1–2	1Ω or less

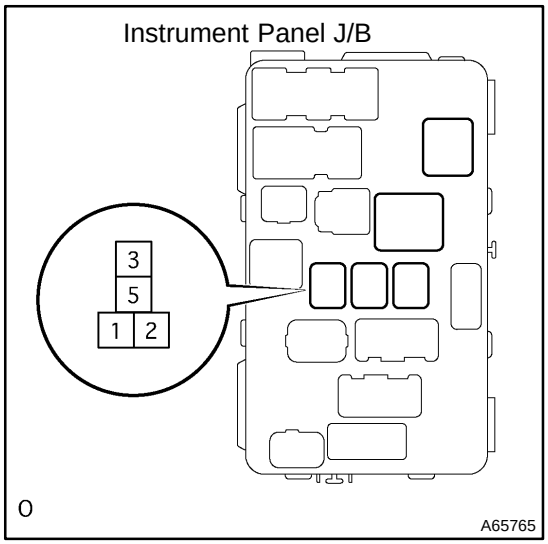
NG → **REPLACE IGNITION OR STARTER SWITCH ASSY**

OK

9 CHECK HARNESS AND CONNECTOR(IGNITION SWITCH–E.F.I. CIRCUIT OPENING RELAY)



(a) Disconnect the battery negative (–) terminal.
(b) Remove the E.F.I. circuit opening relay.
(c) Disconnect the ignition switch connector.
(d) Check continuity between the terminals IG2 of the ignition switch connector and 5 of the E.F.I. circuit opening relay in the R/B.
Resistance: 1 Ω or less
(e) Check for short between the terminal IG2 of the ignition switch and body ground.
Resistance: 1 MΩ or more



NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ECM