

# Diagnostics Chart for Security Indicator Light

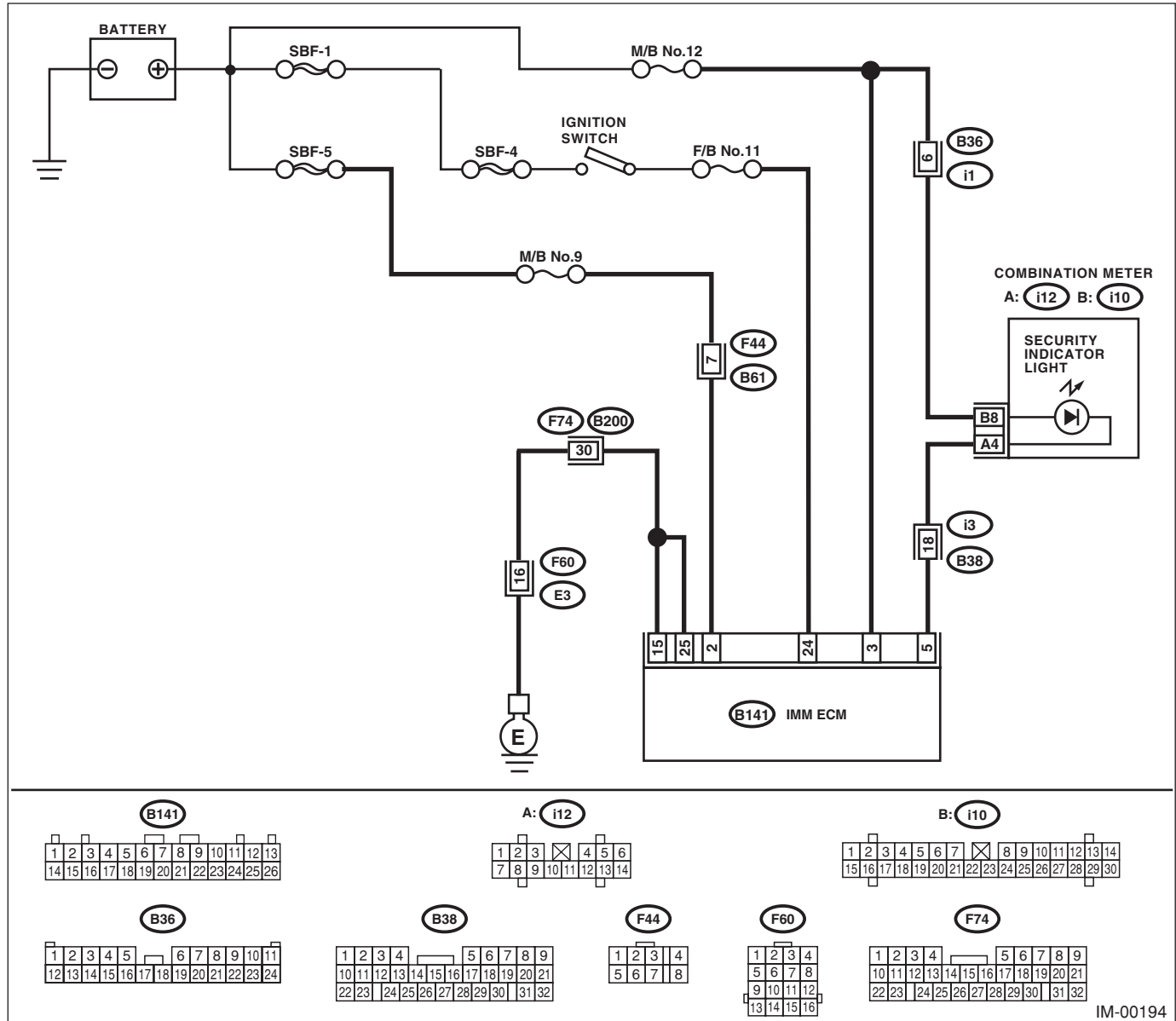
## IMMOBILIZER (DIAGNOSTICS)

### 8. Diagnostics Chart for Security Indicator Light

#### A: INSPECTION

##### 1. CHECK SECURITY INDICATOR LIGHT CIRCUIT

##### WIRING DIAGRAM:



Step	Check	Yes	No
1	<b>CHECK SECURITY INDICATOR LIGHT.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the harness connector from IMM ECM. 3) Connect a resistor (100 Ω) between IMM ECM harness connector terminal No. 5 and chassis ground.	Go to step 2.	Go to step 5.

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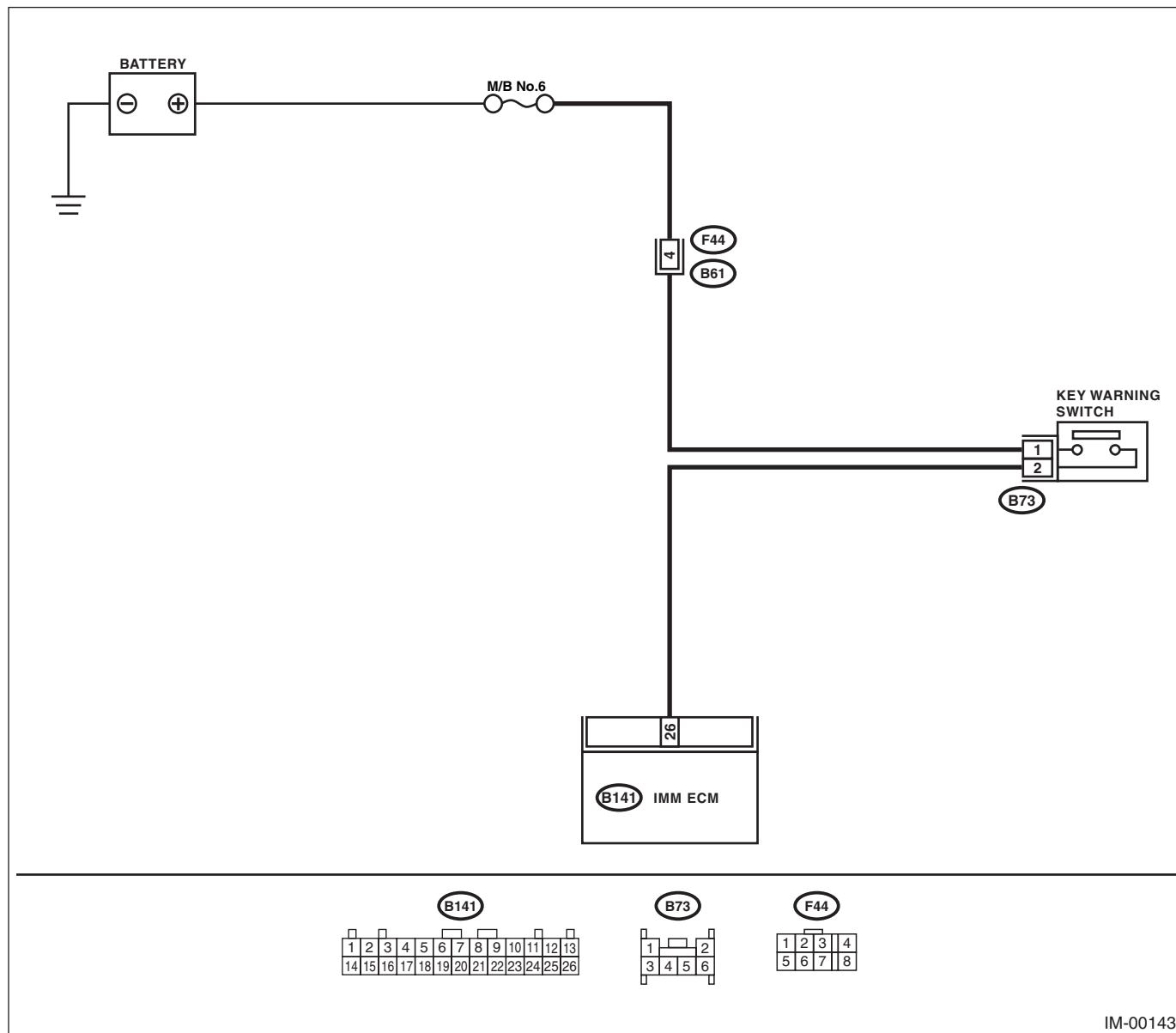
Step	Check	Yes	No
<b>2</b> <b>CHECK IMM ECM GROUND CIRCUIT.</b> Measure the resistance between IMM ECM harness connector terminal and chassis ground. <i>Connector &amp; terminal</i> <i>(B141) No. 15, No. 25 — Chassis ground:</i>	Is the resistance less than 10 $\Omega$ ?	Go to step 3.	Repair the open circuit of IMMECM ground circuit.
<b>3</b> <b>CHECK IMM ECM IGNITION CIRCUIT.</b> 1) Turn the ignition switch to ON. (Engine OFF) 2) Measure the voltage between IMM ECM harness connector terminal and chassis ground. <i>Connector &amp; terminal</i> <i>(B141) No. 24 (+) — Chassis ground (-):</i>	Is the voltage more than 10 V?	Go to step 4.	Check the harness for open or short between IMM ECM and ignition switch.
<b>4</b> <b>CHECK IMM ECM POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the voltage between IMM ECM harness connector terminal and chassis ground. <i>Connector &amp; terminal</i> <i>(B141) No. 2, No. 3 (+) — Chassis ground (-):</i>	Is the voltage more than 10 V?	Replace the IMM ECM <Ref. to SL-53, Immobilizer Control Module.> and then replace all ignition keys (including the transponder). Then perform teaching operation. Refer to teaching operation manual.	Check the harness for open or short between IMM ECM and fuse.
<b>5</b> <b>CHECK COMBINATION METER CIRCUIT.</b> 1) Remove the combination meter. <Ref. to IDI-10, Combination Meter.> 2) Measure the voltage between combination meter harness connector terminal and chassis ground. <i>Connector &amp; terminal</i> <i>(i10) No. 8 (+) — Chassis ground (-):</i>	Is the voltage more than 10 V?	Go to step 6.	Check the harness for open or short between combination meter and fuse.
<b>6</b> <b>CHECK COMBINATION METER CIRCUIT.</b> Measure the resistance between IMM ECM harness connector terminal and the combination meter harness connector terminal. <i>Connector &amp; terminal</i> <i>(B141) No. 5 — (i12) No. 4:</i>	Is the resistance less than 10 $\Omega$ ?	Faulty LED. Replace the combination meter print circuit. <Ref. to IDI-11, DISASSEMBLY, Combination Meter.>	Repair the harness or connector.

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### 2. CHECK KEY SWITCH CIRCUIT

#### WIRING DIAGRAM:



Step	Check	Yes	No
<b>1</b> <b>CHECK POWER SUPPLY CIRCUIT.</b> 1) Disconnect the harness connector from key warning switch. 2) Measure the voltage between key warning switch harness connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B73) No. 1 (+) — Chassis ground (-):</b>	Is the voltage more than 10 V?	Go to step 2.	Check the harness for open or short between key warning switch and fuse.
<b>2</b> <b>CHECK KEY WARNING SWITCH.</b> 1) Insert the ignition key to the ignition switch. (OFF or ACC position) 2) Measure the resistance between key warning switch connector terminals. <b>Terminals</b> <b>No. 1 — No. 2:</b>	Is the resistance less than 1 $\Omega$ ?	Go to step 3.	Replace the key warning switch.

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Step	Check	Yes	No
<b>3</b> <b>CHECK KEY WARNING SWITCH.</b> 1) Remove the ignition key from the ignition switch. 2) Measure the resistance between key warning switch connector terminals. <b>Terminals</b> <b>No. 1 — No. 2:</b>	Is the resistance more than 1 M $\Omega$ ?	Go to step 4.	Replace the key warning switch.
<b>4</b> <b>CHECK HARNESS BETWEEN KEY WARNING SWITCH AND IMM ECM.</b> 1) Disconnect the harness connector from key warning switch. 2) Disconnect the harness connector from IMM ECM. 3) Measure the resistance between key warning switch harness connector terminal and IMM ECM harness connector terminal. <b>Connector &amp; terminal</b> <b>(B73) No. 2 — (B141) No. 26:</b>	Is the resistance less than 10 $\Omega$ ?	Replace the IMM ECM <Ref. to SL-53, Immobilizer Control Module.> and then replace all ignition keys (including the transponder). Then perform teaching operation. Refer to teaching operation manual.	Repair the harness between key warning switch and IMM ECM.