DTC C0023:14 [REAR BODY CONTROL MODULE (RBCM)]

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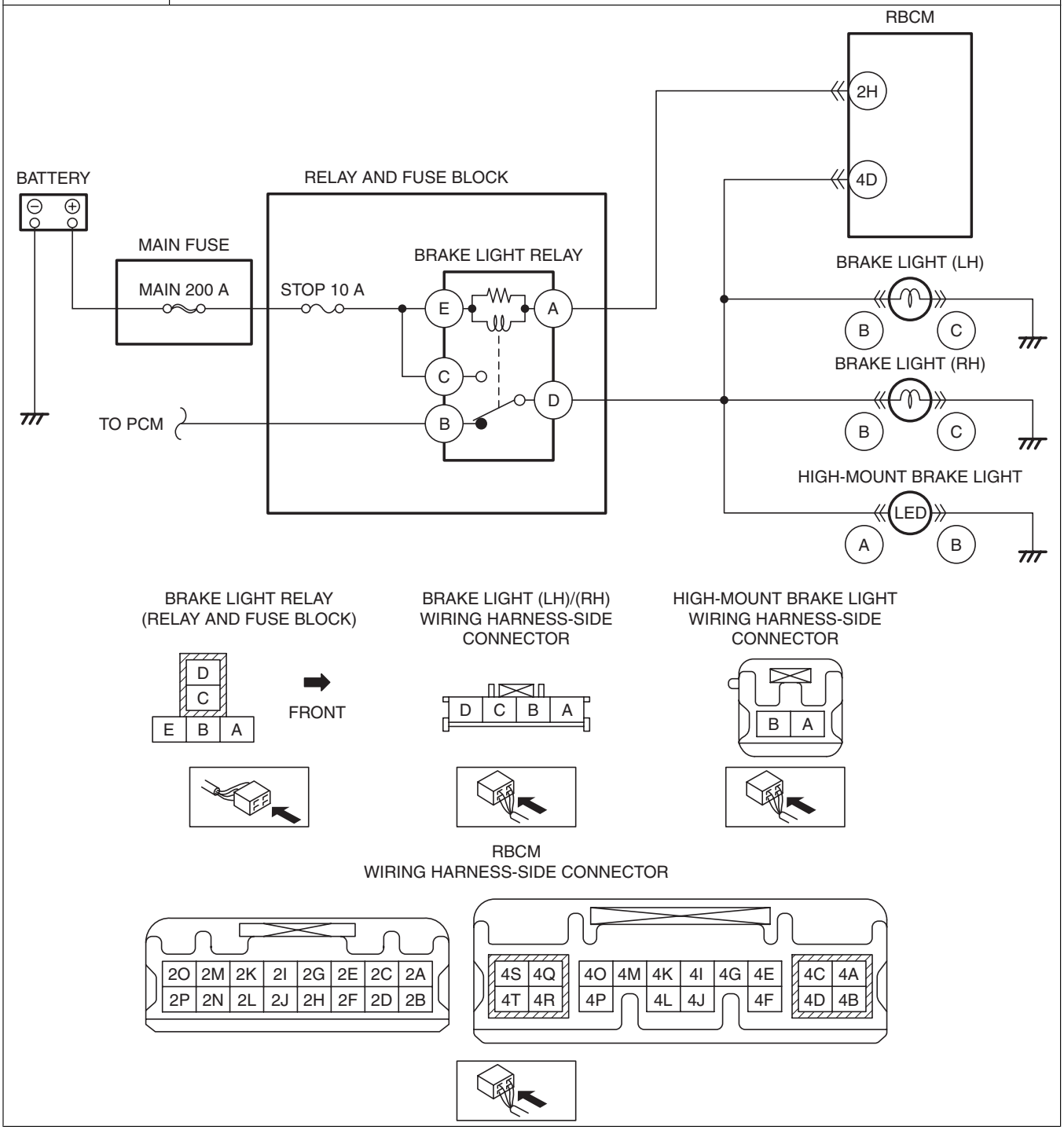
System malfunction location	**Rear body control module (RBCM) internal malfunction (brake light drive circuit)**
Detection condition	• Rear body control module (RBCM) detects open circuit in brake light circuit.
Fail-safe	—
Possible cause	• DTCs are stored in the PCM. • Laser sensor stores DTCs. • Brake light relay malfunction • Short to ground or open circuit in brake light relay power supply circuit — Short to ground in wiring harness between battery positive terminal and brake light relay terminal E — Short to ground in wiring harness between battery positive terminal and brake light relay terminal C — MAIN 200 A fuse malfunction — STOP 10 A fuse malfunction — Open circuit in wiring harness between battery positive terminal and brake light relay terminal E — Open circuit in wiring harness between battery positive terminal and brake light relay terminal C • Brake light (LH) connector or terminal malfunction • Brake light bulb (LH) malfunction • Open circuit in wiring harness between brake light (LH) terminal C and body ground • Brake light (RH) connector or terminal malfunction • Brake light bulb (RH) malfunction • Open circuit in wiring harness between brake light (RH) terminal C and body ground • High-mount brake light connector or terminal malfunction • Open circuit in wiring harness between high-mount brake light terminal B and body ground • Rear body control module (RBCM) connector or terminal malfunction • Short to ground in wiring harness between the following terminals: — Brake light relay terminal A and rear body control module (RBCM) terminal 2H — Rear body control module (RBCM) terminal 4D and brake light (LH) terminal B — Rear body control module (RBCM) terminal 4D and brake light (RH) terminal B — Rear body control module (RBCM) terminal 4D and high-mount brake light terminal A • Short to power supply in wiring harness between the following terminals: — Brake light relay terminal A and rear body control module (RBCM) terminal 2H — Rear body control module (RBCM) terminal 4D and brake light (LH) terminal B — Rear body control module (RBCM) terminal 4D and brake light (RH) terminal B — Rear body control module (RBCM) terminal 4D and high-mount brake light terminal A • Open circuit in wiring harness between the following terminals: — Brake light relay terminal A and rear body control module (RBCM) terminal 2H — Brake light relay terminal D and rear body control module (RBCM) terminal 4D — Rear body control module (RBCM) terminal 4D and brake light (LH) terminal B — Rear body control module (RBCM) terminal 4D and brake light (RH) terminal B — Rear body control module (RBCM) terminal 4D and high-mount brake light terminal A • High-mount brake light malfunction • Rear body control module (RBCM) malfunction

System malfunction location	Rear body control module (RBCM) internal malfunction (brake light drive circuit)



Diagnostic Procedure

Step	Inspection		Action
1	**VERIFY REAR BODY CONTROL MODULE (RBCM) DTCs AGAIN** • Clear rear body control module (RBCM) DTCs using the M-MDS. (See CLEARING DTC [REAR BODY CONTROL MODULE (RBCM)].) • Perform the DTC inspection for the rear body control module (RBCM) using the M-MDS. (See DTC INSPECTION [REAR BODY CONTROL MODULE (RBCM)].) • Is DTC C0023:14 displayed?	Yes	Go to the next step.
		No	Go to Step 20.
2	**VERIFY PCM DTCs** • Perform the DTC inspection for the PCM using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the DTC displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See DTC TABLE [SKYACTIV-D 2.2].)
		No	Go to the next step.
3	**VERIFY LASER SENSOR DTCs** • Perform the DTC inspection for the laser sensor using the M-MDS. (See ON-BOARD DIAGNOSIS [LASER SENSOR].) • Is the DTC displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See ON-BOARD DIAGNOSIS [LASER SENSOR].)
		No	Go to the next step.
4	**INSPECT BRAKE LIGHT RELAY FOR MALFUNCTION** • Switch the ignition to off. • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Remove the brake light relay. (See RELAY LOCATION.) • Inspect the brake light relay. (See RELAY INSPECTION.) • Is the brake light relay normal?	Yes	Go to the next step.
		No	Replace the brake light relay, then go to Step 19. (See RELAY LOCATION.)

Step	Inspection		Action
5	**INSPECT BRAKE LIGHT RELAY POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT OR SHORT TO GROUND** • Verify that the brake light relay is removed. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (vehicle wiring harness side). — Brake light relay terminal E — Brake light relay terminal C • Is the voltage **B+**?	Yes	Install the brake light relay, then go to the next step.
		No	Inspect the MAIN 200 A fuse and STOP 10 A fuse. • If a fuse is burnt out: — Repair or replace the wiring harness which is shorted to ground. — Replace the burnt out fuse. • If a fuse is damaged: — Replace the damaged fuse. • All fuses are normal: — Repair or replace the wiring harness which has an open circuit. Go to Step 19.
6	**INSPECT BRAKE LIGHT (LH) CONNECTOR** • Switch the ignition to off. • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Disconnect the brake light (LH) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 19.
7	**INSPECT BRAKE LIGHT BULB (LH)** • Inspect the brake light bulb (LH). • Is the brake light bulb (LH) normal?	Yes	Go to the next step.
		No	Replace the brake/taillight bulb (LH), then go to Step 19. (See BRAKE/TAILLIGHT BULB REMOVAL/ INSTALLATION.)
8	**INSPECT BRAKE LIGHT (LH) GROUND CIRCUIT FOR OPEN CIRCUIT** • Verify that the brake light (LH) connector is disconnected. • Inspect for continuity between brake light (LH) terminal C (vehicle wiring harness side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness and go to Step 19.
9	**INSPECT BRAKE LIGHT (RH) CONNECTOR** • Disconnect the brake light (RH) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 19.
10	**INSPECT BRAKE LIGHT BULB (RH)** • Inspect the brake light bulb (RH). • Is the brake light bulb (RH) normal?	Yes	Go to the next step.
		No	Replace the brake/taillight bulb (RH), then go to Step 19. (See BRAKE/TAILLIGHT BULB REMOVAL/ INSTALLATION.)

Step	Inspection		Action
11	**INSPECT BRAKE LIGHT (RH) GROUND CIRCUIT FOR OPEN CIRCUIT** • Verify that the brake light (RH) connector is disconnected. • Inspect for continuity between brake light (RH) terminal C (vehicle wiring harness side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness and go to Step 19.
12	**INSPECT HIGH-MOUNT BRAKE LIGHT CONNECTOR** • Disconnect the high-mount brake light connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 19.
13	**INSPECT HIGH-MOUNT BRAKE LIGHT GROUND CIRCUIT FOR OPEN CIRCUIT** • Verify that the high-mount brake light connector is disconnected. • Inspect for continuity between high-mount brake light terminal B (vehicle wiring harness side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness and go to Step 19.
14	**INSPECT REAR BODY CONTROL MODULE (RBCM) CONNECTOR CONDITION** • Disconnect the rear body control module (RBCM) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 19.
15	**INSPECT BRAKE LIGHT DRIVE CIRCUIT FOR SHORT TO GROUND** • Verify that the brake light (LH)/(RH) connector, high-mount brake light connector, and rear body control module (RBCM) connector are disconnected. • Inspect for continuity between the following terminals (vehicle wiring harness side) and body ground. — Rear body control module (RBCM) terminal 2H — Brake light (LH) terminal B — Brake light (RH) terminal B — High-mount brake light terminal A • Is there continuity?	Yes	Repair or replace the wiring harness which is shorted to ground, then go to Step 19.
		No	Go to the next step.

Step	Inspection		Action
16	**INSPECT BRAKE LIGHT DRIVE CIRCUIT FOR SHORT TO POWER SUPPLY** • Verify that the brake light (LH)/(RH) connector, high-mount brake light connector, and rear body control module (RBCM) connector are disconnected. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (vehicle wiring harness side). — Rear body control module (RBCM) terminal 2H — Brake light (LH) terminal B — Brake light (RH) terminal B — High-mount brake light terminal A • Is the voltage **0 V**?	Yes	Go to the next step.
		No	Repair or replace the wiring harness which is shorted to power supply, then go to Step 19.
17	**INSPECT BRAKE LIGHT DRIVE CIRCUIT FOR OPEN CIRCUIT** • Verify that the brake light (LH)/(RH) connector, high-mount brake light connector, and rear body control module (RBCM) connector are disconnected. • Switch the ignition to off. • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity. — Brake light relay terminal A and rear body control module (RBCM) terminal 2H — Brake light relay terminal D and rear body control module (RBCM) terminal 4D — Rear body control module (RBCM) terminal 4D and brake light (LH) terminal B — Rear body control module (RBCM) terminal 4D and brake light (RH) terminal B — Rear body control module (RBCM) terminal 4D and high-mount brake light terminal A • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness which has an open circuit, then go to Step 19.

Step	Inspection		Action
18	**PERFORM DTC INSPECTION AND VERIFY IF MALFUNCTIONING PART IS HIGH-MOUNT BRAKE LIGHT** • Reconnect all the disconnected connectors. • Reconnect the disconnected negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Clear rear body control module (RBCM) DTCs using the M-MDS. (See CLEARING DTC [REAR BODY CONTROL MODULE (RBCM)].) • Perform the DTC inspection for the rear body control module (RBCM) using the M-MDS. (See DTC INSPECTION [REAR BODY CONTROL MODULE (RBCM)].) • Is DTC C0023:14 displayed?	Yes	Replace the high-mount brake light, then go to the next step. (See HIGH-MOUNT BRAKE LIGHT REMOVAL/INSTALLATION.)
		No	Go to Step 20.
19	**VERIFY THAT REPAIRS HAVE BEEN COMPLETED** • Reconnect all the disconnected connectors. • Reconnect the disconnected negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Clear rear body control module (RBCM) DTCs using the M-MDS. (See CLEARING DTC [REAR BODY CONTROL MODULE (RBCM)].) • Perform the DTC inspection for the rear body control module (RBCM) using the M-MDS. (See DTC INSPECTION [REAR BODY CONTROL MODULE (RBCM)].) • Is DTC C0023:14 displayed?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the rear body control module (RBCM), then go to the next step. (See REAR BODY CONTROL MODULE (RBCM) REMOVAL/INSTALLATION.)
		No	Go to the next step.
20	**VERIFY IF OTHER DTCs DISPLAYED** • Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [REAR BODY CONTROL MODULE (RBCM)].)
		No	DTC troubleshooting completed.