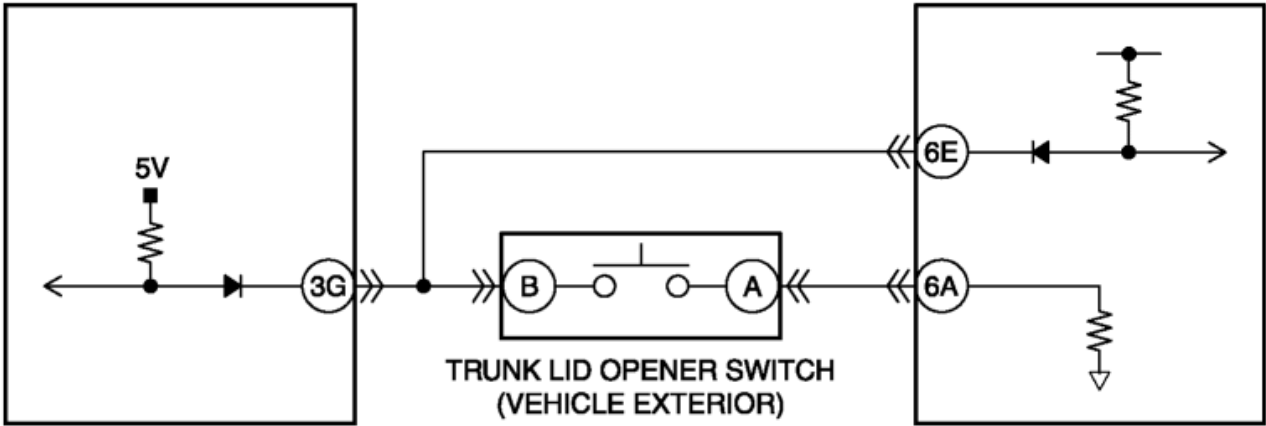


2012 - Mazda6 - Body and Accessories

DTC B113E:11 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

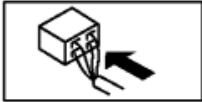
DETECTION CONDITION	Trunk lid opener switch (vehicle exterior) circuit voltage less than 1 V is detected for 1 s , while ignition switch is ON
POSSIBLE CAUSE	• Connector or terminal malfunction • Trunk lid opener switch (vehicle exterior) malfunction • Short to ground in wiring harness between trunk lid opener switch (vehicle exterior) terminal B (vehicles with rear mount camera), F (vehicles without rear mount camera) and keyless control module terminal 3G • Short to ground in wiring harness between trunk lid opener switch (vehicle exterior) terminal B (vehicles with rear mount camera), F (vehicles without rear mount camera) and BCM terminal 6E • BCM malfunction • Keyless control module malfunction

VEHICLES WITHOUT REAR MOUNT CAMERA
KEYLESS CONTROL MODULE



KEYLESS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR

3AB	3Y	3V	3S	3P	3M	3J	3G	3D	3A
3AC	3Z	3W	3T	3Q	3N	3K	3H	3E	3B
3AD	3AA	3X	3U	3R	3O	3L	3I	3F	3C



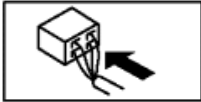
TRUNK LID OPENER SWITCH
(VEHICLE EXTERIOR)
WIRING HARNESS-SIDE
CONNECTOR

A	B
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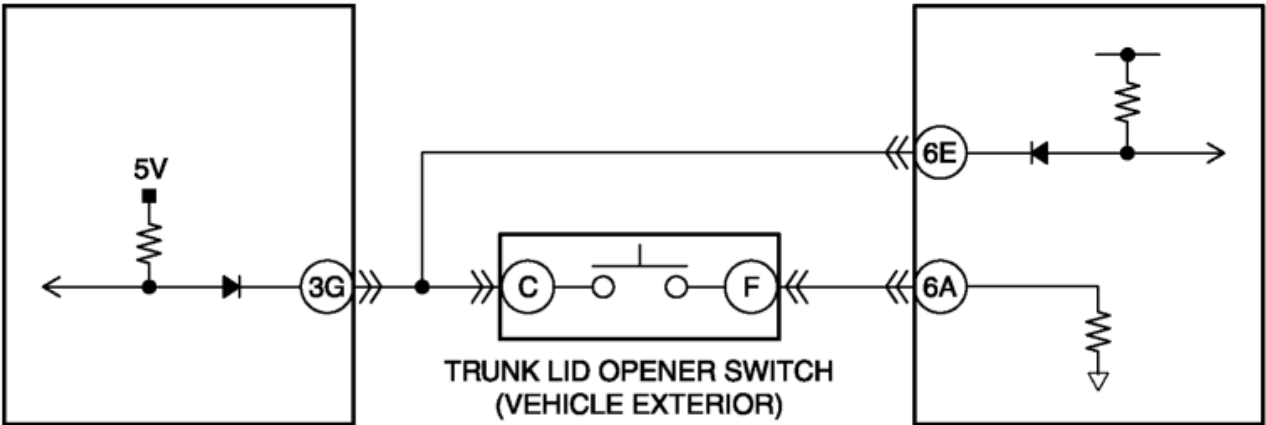


BCM WIRING HARNESS-SIDE
CONNECTOR

6O	6M	6K	6I	6G	6E	6C	6A
6P	6N	6L	6J	6H	6F	6D	6B

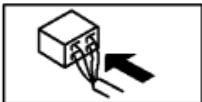


VEHICLES WITH REAR MOUNT CAMERA
KEYLESS CONTROL MODULE



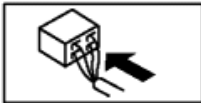
KEYLESS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR

3AB	3Y	3V	3S	3P	3M	3J	3G	3D	3A
3AC	3Z	3W	3T	3Q	3N	3K	3H	3E	3B
3AD	3AA	3X	3U	3R	3O	3L	3I	3F	3C



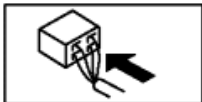
TRUNK LID OPENER SWITCH
(VEHICLE EXTERIOR)
WIRING HARNESS-SIDE
CONNECTOR

G	E	C	A
H	F	D	B



BCM WIRING HARNESS-SIDE
CONNECTOR

6O	6M	6K	6I	6G	6E	6C	6A
6P	6N	6L	6J	6H	6F	6D	6B



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT TRUNK LID OPENER SWITCH (VEHICLE EXTERIOR) CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the trunk lid opener switch (vehicle exterior) connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
2	INSPECT TRUNK LID OPENER SWITCH (VEHICLE EXTERIOR) - Inspect the trunk lid opener switch (vehicle exterior) (See TRUNK LID OPENER SWITCH INSPECTION.) - Is there any malfunction?	Yes Replace the trunk lid opener switch (vehicle exterior), then go to Step 7. (See TRUNK LID OPENER SWITCH REMOVAL/ INSTALLATION.)
		No Go to the next step.
3	INSPECT BCM CONNECTOR CONDITION - Disconnect the BCM connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
4	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION - Disconnect the keyless control module connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
5	INSPECT TRUNK LID OPENER SWITCH (VEHICLE EXTERIOR) CIRCUIT FOR SHORT TO GROUND Vehicles with rear mount camera - Inspect for continuity between trunk lid opener switch (vehicle exterior) terminal F (wiring harness-side) and body ground. Vehicles without rear mount camera - Inspect for continuity between trunk lid opener switch (vehicle exterior) terminal B (wiring harness-side) and body ground. - Is there continuity?	Yes Repair or replace the wiring harness for a possible short to ground, then go to Step 7.
		No Go to the next step.
6	INSPECT BCM	Yes Go to the next step.

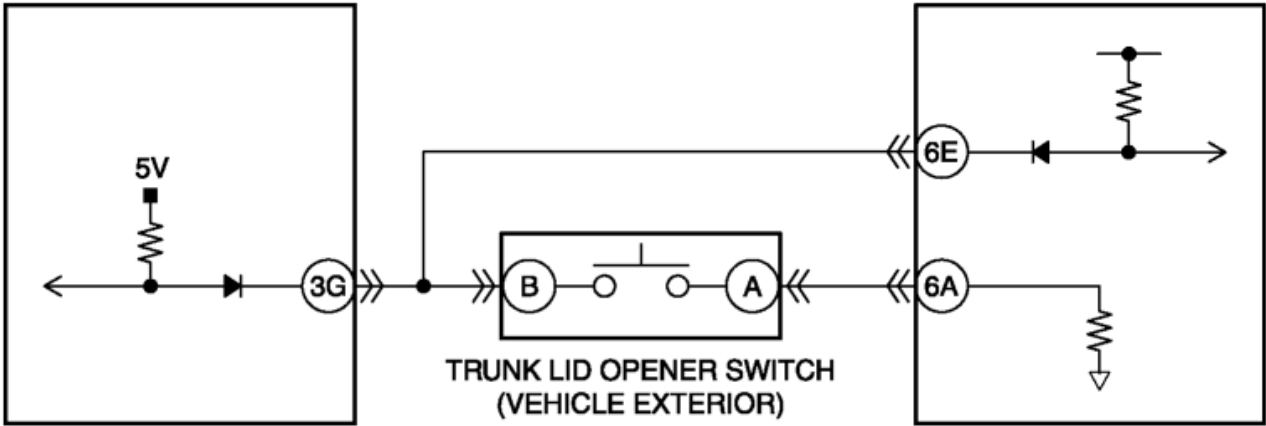
	• Reconnect the BCM connector. • Reconnect the negative battery cable. • Switch the ignition to ON. • Measure the voltage between BCM terminal 6E (wiring harness-side) and body ground. • Is the voltage normal? (See BODY CONTROL MODULE (BCM) INSPECTION.)	No Replace the BCM, then go to the next step. (See BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION.)
7	VERIFY TROUBLESHOOTING COMPLETED • Make sure to reconnect the disconnected connectors. • Reconnect the negative battery cable. • Switch the ignition to ON. • Clear the DTC from keyless control module memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • Perform the advanced keyless entry and push button start system DTC inspection using the M-MDS. (See DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • Is the same DTC present?	Yes Repeat the inspection from Step 1. If the malfunction recurs, replace the keyless control module, then go to the next step. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) No Go to the next step.
8	VERIFY THAT NO OTHER DTCs ARE PRESENT • Are any DTCs present?	Yes Go to the applicable DTC inspection. (See DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) No DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

DTC B113E:11 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

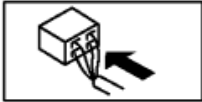
DETECTION CONDI TION	Trunk lid opener switch (vehicle exterior) circuit voltage less than 1 V is detected for 1 s , while ignition switch is ON
POSSI BLE CAUSE	• Connector or terminal malfunction • Trunk lid opener switch (vehicle exterior) malfunction • Short to ground in wiring harness between trunk lid opener switch (vehicle exterior) terminal B (vehicles with rear mount camera), F (vehicles without rear mount camera) and keyless control module terminal 3G • Short to ground in wiring harness between trunk lid opener switch (vehicle exterior) terminal B (vehicles with rear mount camera), F (vehicles without rear mount camera) and BCM terminal 6E • BCM malfunction • Keyless control module malfunction

VEHICLES WITHOUT REAR MOUNT CAMERA
KEYLESS CONTROL MODULE



KEYLESS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR

3AB	3Y	3V	3S	3P	3M	3J	3G	3D	3A
3AC	3Z	3W	3T	3Q	3N	3K	3H	3E	3B
3AD	3AA	3X	3U	3R	3O	3L	3I	3F	3C



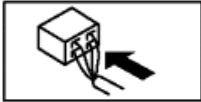
TRUNK LID OPENER SWITCH
(VEHICLE EXTERIOR)
WIRING HARNESS-SIDE
CONNECTOR

A	B
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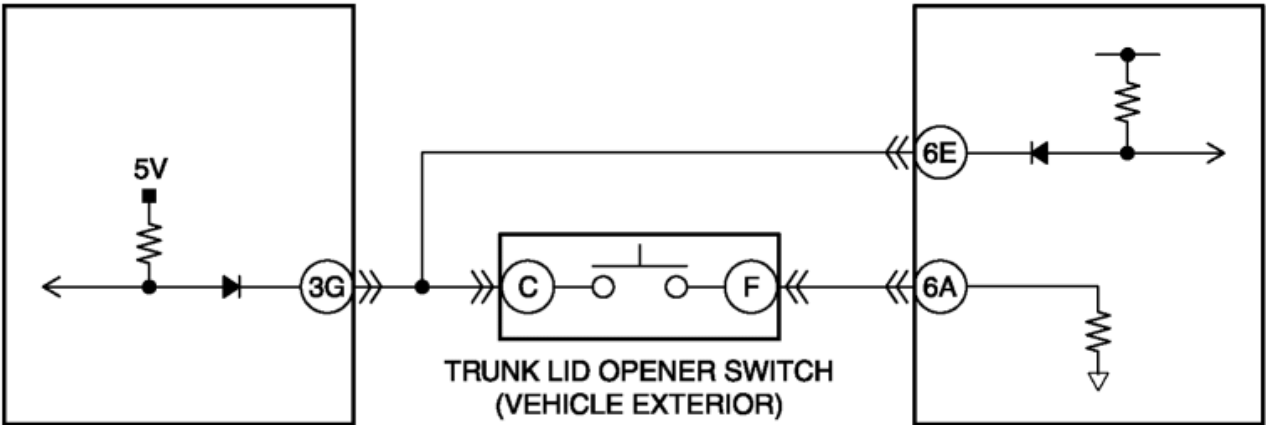


BCM WIRING HARNESS-SIDE
CONNECTOR

6O	6M	6K	6I	6G	6E	6C	6A
6P	6N	6L	6J	6H	6F	6D	6B

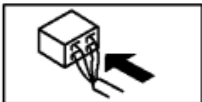


VEHICLES WITH REAR MOUNT CAMERA
KEYLESS CONTROL MODULE



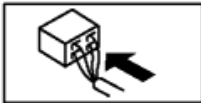
KEYLESS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR

3AB	3Y	3V	3S	3P	3M	3J	3G	3D	3A
3AC	3Z	3W	3T	3Q	3N	3K	3H	3E	3B
3AD	3AA	3X	3U	3R	3O	3L	3I	3F	3C



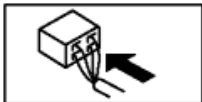
TRUNK LID OPENER SWITCH
(VEHICLE EXTERIOR)
WIRING HARNESS-SIDE
CONNECTOR

G	E	C	A
H	F	D	B



BCM WIRING HARNESS-SIDE
CONNECTOR

6O	6M	6K	6I	6G	6E	6C	6A
6P	6N	6L	6J	6H	6F	6D	6B



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT TRUNK LID OPENER SWITCH (VEHICLE EXTERIOR) CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the trunk lid opener switch (vehicle exterior) connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
2	INSPECT TRUNK LID OPENER SWITCH (VEHICLE EXTERIOR) - Inspect the trunk lid opener switch (vehicle exterior) (See TRUNK LID OPENER SWITCH INSPECTION.) - Is there any malfunction?	Yes Replace the trunk lid opener switch (vehicle exterior), then go to Step 7. (See TRUNK LID OPENER SWITCH REMOVAL/ INSTALLATION.)
		No Go to the next step.
3	INSPECT BCM CONNECTOR CONDITION - Disconnect the BCM connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
4	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION - Disconnect the keyless control module connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
5	INSPECT TRUNK LID OPENER SWITCH (VEHICLE EXTERIOR) CIRCUIT FOR SHORT TO GROUND Vehicles with rear mount camera - Inspect for continuity between trunk lid opener switch (vehicle exterior) terminal F (wiring harness-side) and body ground. Vehicles without rear mount camera - Inspect for continuity between trunk lid opener switch (vehicle exterior) terminal B (wiring harness-side) and body ground. - Is there continuity?	Yes Repair or replace the wiring harness for a possible short to ground, then go to Step 7.
		No Go to the next step.
6	INSPECT BCM	Yes Go to the next step.

	• Reconnect the BCM connector. • Reconnect the negative battery cable. • Switch the ignition to ON. • Measure the voltage between BCM terminal 6E (wiring harness-side) and body ground. • Is the voltage normal? (See BODY CONTROL MODULE (BCM) INSPECTION.)	No Replace the BCM, then go to the next step. (See BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION.)
7	VERIFY TROUBLESHOOTING COMPLETED • Make sure to reconnect the disconnected connectors. • Reconnect the negative battery cable. • Switch the ignition to ON. • Clear the DTC from keyless control module memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • Perform the advanced keyless entry and push button start system DTC inspection using the M-MDS. (See DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • Is the same DTC present?	Yes Repeat the inspection from Step 1. If the malfunction recurs, replace the keyless control module, then go to the next step. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) No Go to the next step.
8	VERIFY THAT NO OTHER DTCs ARE PRESENT • Are any DTCs present?	Yes Go to the applicable DTC inspection. (See DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) No DTC troubleshooting completed.