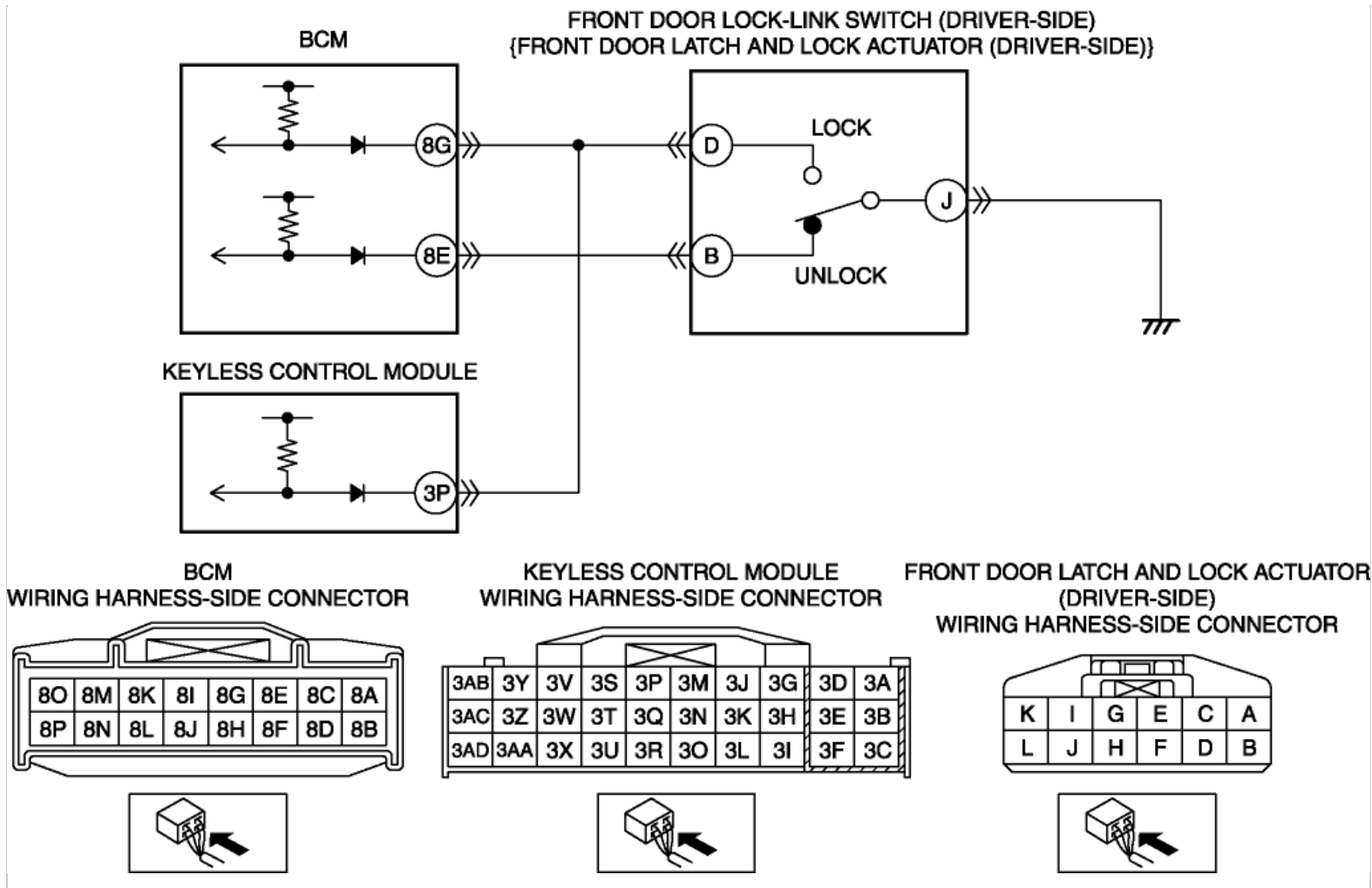


2012 - Mazda6 - Body and Accessories

DTC B126A:13 [BCM]

Vehicles With Advanced Keyless Entry And Push Button Start System

DESCRIPTION	Front door lock-link switch (driver-side) circuit malfunction
DETECTION CONDITION	• Open circuit detected in front door lock-link switch (driver-side) lock-side circuit with the front door lock-link switch (driver-side) locked.
POSSIBLE CAUSE	• Front door latch and lock actuator (driver-side) connector or terminals malfunction • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal J and body ground • Front door lock-link switch (driver-side) malfunction • Keyless control module connector or terminals malfunction • Keyless control module malfunction • BCM connector or terminals malfunction • Open circuit in wiring harness between BCM terminal 8G and keyless control module terminal 3P • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal D and BCM terminal 8G • BCM malfunction



Diagnostic Procedure

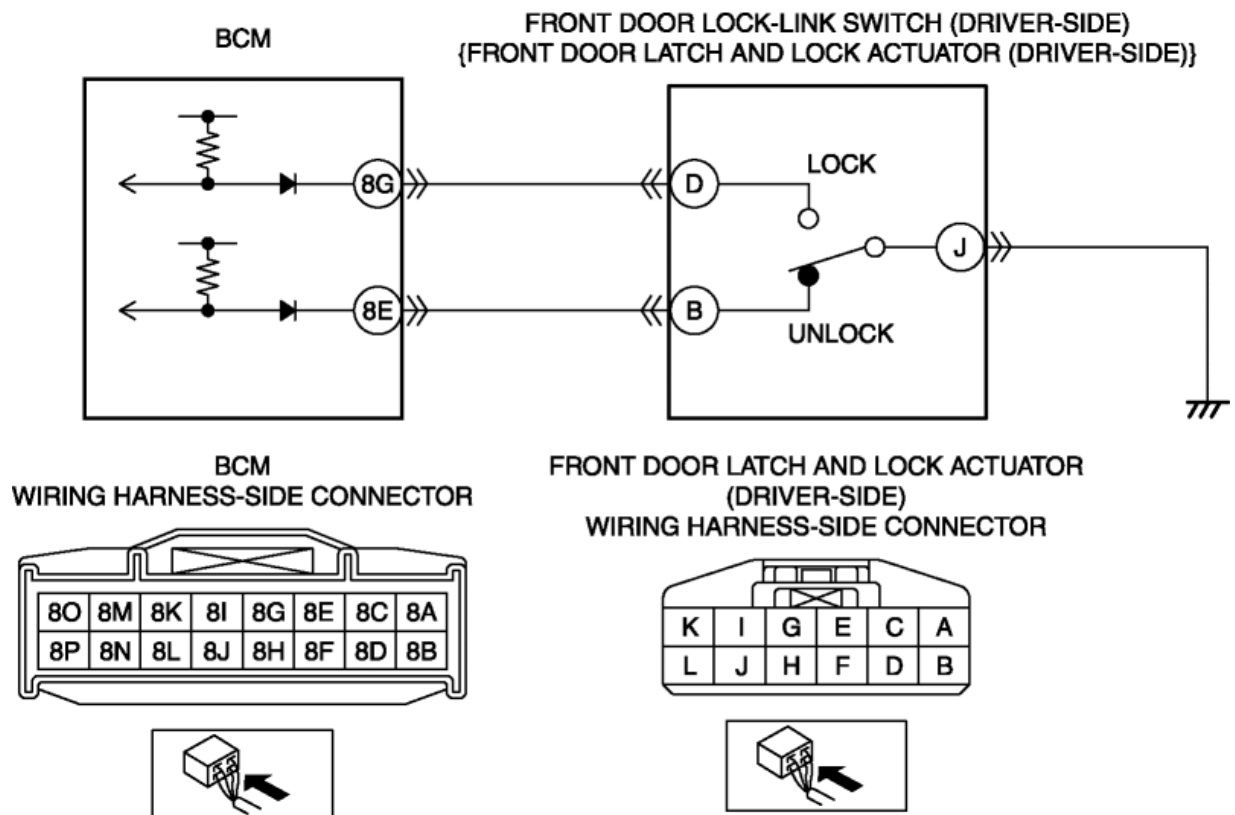
Step	Inspection	Action
1	PERFORM DTC INSPECTION - Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM].) - Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes Go to the next step. No Go to Step 10.
2	INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the front door latch and lock actuator (driver-side) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 9. No Go to the next step.
3	INSPECT FRONT DOOR LOCK-LINK SWITCH	Yes Go to the next step.

	(DRIVER-SIDE) GROUND CIRCUIT FOR OPEN CIRCUIT - Front door latch and lock actuator (driver-side) connector is disconnected. - Inspect for continuity between front door latch and lock actuator (driver-side) terminal J (wiring harness-side) and body ground. - Is there continuity?		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 9.
4	INSPECT FRONT DOOR LOCK-LINK SWITCH (DRIVER-SIDE) - Inspect the front door lock-link switch (driver-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) - Is there any malfunction?	Yes	Replace the front door latch and lock actuator (driver-side), then go to Step 9. (See FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION .)	
		No	Go to the next step.	
5	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION - Disconnect the keyless control module connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 9.	
		No	Go to the next step.	
6	INSPECT KEYLESS CONTROL MODULE - Front door latch and lock actuator (driver-side) and keyless control module connectors are disconnected. - Reconnect all disconnected connectors. - Reconnect the negative battery cable. - Measure the voltage between keyless control module terminal 3P (wiring harness-side) and body ground. - Is the voltage normal? (See KEYLESS CONTROL MODULE INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].)	Yes	Go to the next step.	
		No	Replace the keyless control module, then go to Step 9. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)	
7	INSPECT BCM CONNECTOR CONDITION - Disconnect the negative battery cable. - Disconnect the BCM connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 9.	
		No	Go to the next step.	
8	CONCLUDE THE MALFUNCTION LOCATION - BCM connector is disconnected. - Reconnect all disconnected connectors. - Reconnect the negative battery cable. - Measure the voltage between BCM terminal 8G (wiring harness-side) and body ground. - Is there any voltage?	Yes	Repair or replace the wiring harness for a possible open circuit, then go to the next step.	
		No	Go to the next step.	
9	VERIFY TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Reconnect the negative battery cable.	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the BCM, then go to the next step.	

	• Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM] .) • Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM] .) • Is the same DTC present?	(See BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION .)
		No Go to the next step.
10	VERIFY THAT NO OTHER DTCs ARE PRESENT • Are any DTCs present?	YesGo to the applicable DTC inspection. (See DTC TABLE [BCM] .)
		No DTC troubleshooting completed.

Vehicles Without Advanced Keyless Entry And Push Button Start System

DESCRIPTION	Front door lock-link switch (driver-side) circuit malfunction
DETECTION CONDITION	• Open circuit detected in front door lock-link switch (driver-side) lock-side circuit with the front door lock-link switch (driver-side) locked.
POSSIBLE CAUSE	• Front door latch and lock actuator (driver-side) connector or terminals malfunction • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal J and body ground • Front door lock-link switch (driver-side) malfunction • BCM connector or terminals malfunction • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal D and BCM terminal 8G • BCM malfunction



Diagnostic Procedure

Step	Inspection	Action
1	PERFORM DTC INSPECTION - Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM].) - Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes Go to the next step.
		No Go to Step 9.
2	INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the front door latch and lock actuator (driver-side) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 8.
		No Go to the next step.
3	DETERMINE THE MALFUNCTION LOCATION - Front door latch and lock actuator (driver-side) connector is disconnected. - Reconnect the negative battery cable. - Measure the voltage between front door latch and lock actuator (driver-side) terminal D (wiring harness-side) and body ground. - Is there any voltage?	Yes Go to the next step.
		No Go to Step 6

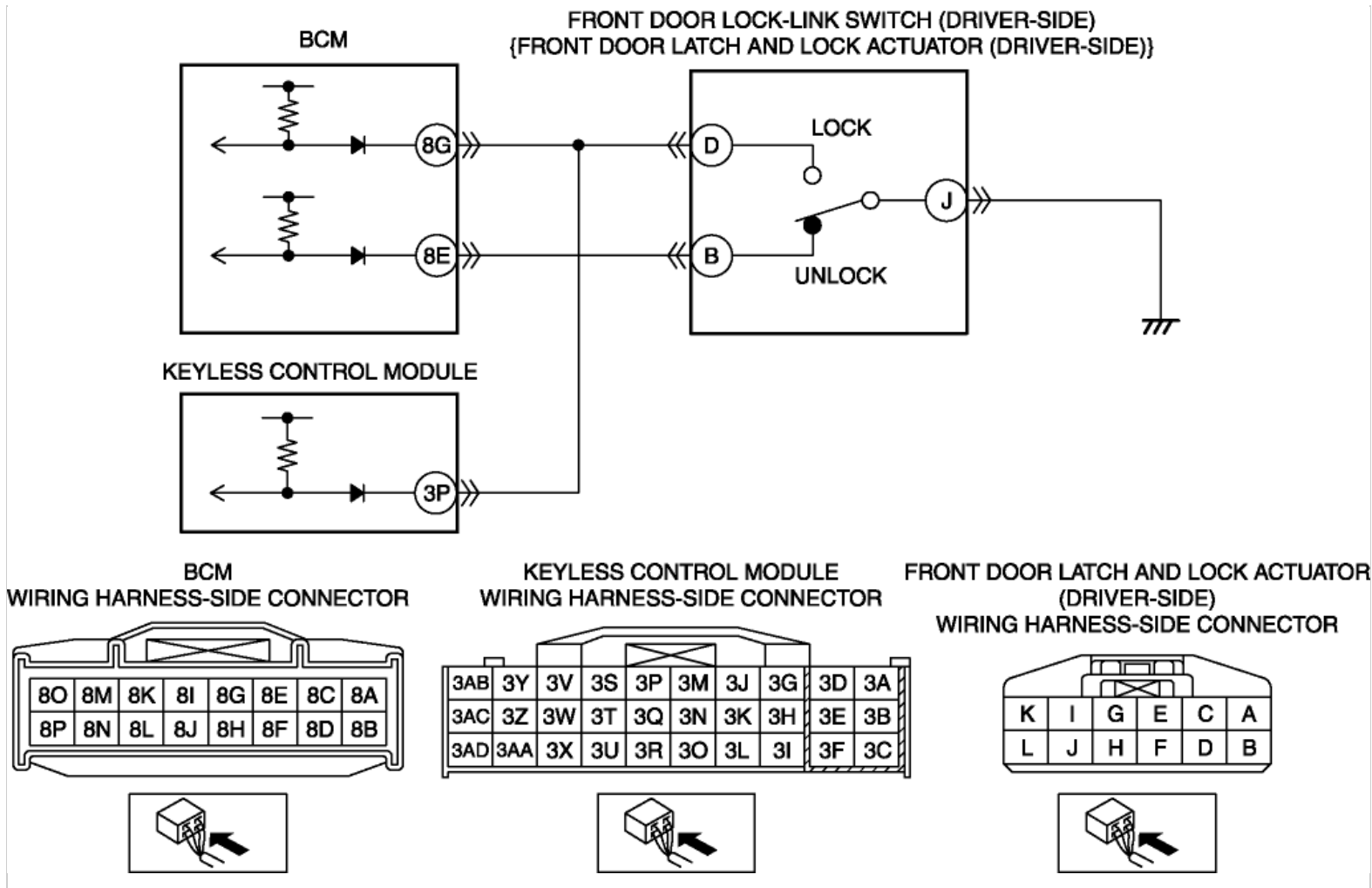
4	INSPECT FRONT DOOR LOCK-LINK SWITCH (DRIVER-SIDE) GROUND CIRCUIT FOR OPEN CIRCUIT - Front door latch and lock actuator (driver-side) connector is disconnected. - Disconnect the negative battery cable. - Inspect for continuity between front door latch and lock actuator (driver-side) terminal J (wiring harness-side) and body ground. - Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 8.
5	INSPECT FRONT DOOR LOCK-LINK SWITCH (DRIVER-SIDE) - Inspect the front door lock-link switch (driver-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) - Is there any malfunction?	Yes	Replace the front door latch and lock actuator (driver-side), then go to Step 8. (See FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION .)
		No	Go to Step 8.
6	INSPECT BCM CONNECTOR CONDITION - Disconnect the negative battery cable. - Disconnect the BCM connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 8.
		No	Go to the next step.
7	CONCLUDE THE MALFUNCTION LOCATION - Front door latch and lock actuator (driver-side) and BCM connectors are disconnected. - Reconnect all disconnected connectors. - Reconnect the negative battery cable. - Measure the voltage between BCM terminal 8G (wiring harness-side) and body ground. - Is there any voltage?	Yes	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
		No	Go to the next step.
8	VERIFY TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Reconnect the negative battery cable. - Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM].) - Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the BCM, then go to the next step. (See BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION .)
		No	Go to the next step.
9	VERIFY THAT NO OTHER DTCs ARE PRESENT Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [BCM] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

DTC B126A:13 [BCM]

Vehicles With Advanced Keyless Entry And Push Button Start System

DESCRIPTION	Front door lock-link switch (driver-side) circuit malfunction
DETECTION CONDITION	• Open circuit detected in front door lock-link switch (driver-side) lock-side circuit with the front door lock-link switch (driver-side) locked.
POSSIBLE CAUSE	• Front door latch and lock actuator (driver-side) connector or terminals malfunction • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal J and body ground • Front door lock-link switch (driver-side) malfunction • Keyless control module connector or terminals malfunction • Keyless control module malfunction • BCM connector or terminals malfunction • Open circuit in wiring harness between BCM terminal 8G and keyless control module terminal 3P • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal D and BCM terminal 8G • BCM malfunction



Diagnostic Procedure

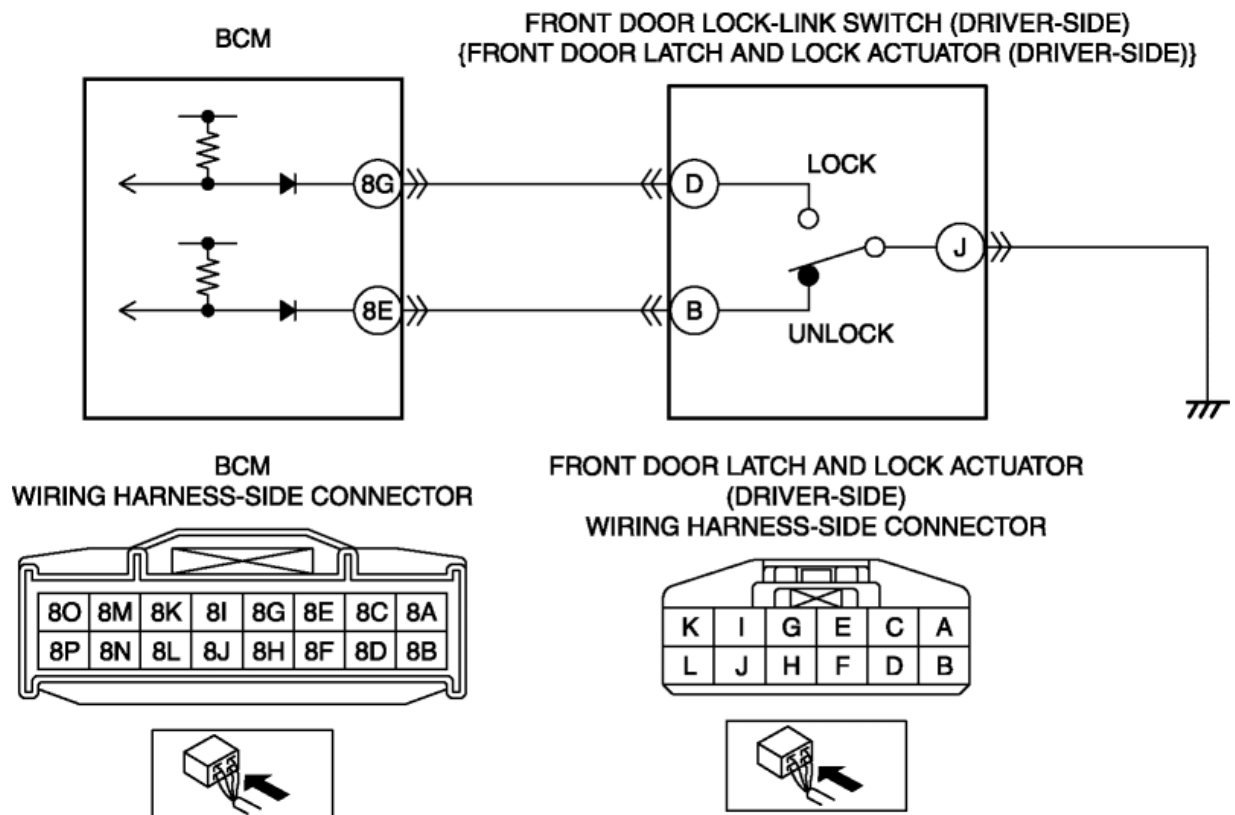
Step	Inspection	Action
1	PERFORM DTC INSPECTION - Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM].) - Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes Go to the next step. No Go to Step 10.
2	INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the front door latch and lock actuator (driver-side) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 9. No Go to the next step.
3	INSPECT FRONT DOOR LOCK-LINK SWITCH	Yes Go to the next step.

	(DRIVER-SIDE) GROUND CIRCUIT FOR OPEN CIRCUIT - Front door latch and lock actuator (driver-side) connector is disconnected. - Inspect for continuity between front door latch and lock actuator (driver-side) terminal J (wiring harness-side) and body ground. - Is there continuity?		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 9.
4	INSPECT FRONT DOOR LOCK-LINK SWITCH (DRIVER-SIDE) - Inspect the front door lock-link switch (driver-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) - Is there any malfunction?	Yes	Yes	Replace the front door latch and lock actuator (driver-side), then go to Step 9. (See FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION .)
			No	Go to the next step.
5	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION - Disconnect the keyless control module connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Yes	Repair or replace the connector or terminals, then go to Step 9.
			No	Go to the next step.
6	INSPECT KEYLESS CONTROL MODULE - Front door latch and lock actuator (driver-side) and keyless control module connectors are disconnected. - Reconnect all disconnected connectors. - Reconnect the negative battery cable. - Measure the voltage between keyless control module terminal 3P (wiring harness-side) and body ground. - Is the voltage normal? (See KEYLESS CONTROL MODULE INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].)	Yes	Yes	Go to the next step.
			No	Replace the keyless control module, then go to Step 9. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
7	INSPECT BCM CONNECTOR CONDITION - Disconnect the negative battery cable. - Disconnect the BCM connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Yes	Repair or replace the connector or terminals, then go to Step 9.
			No	Go to the next step.
8	CONCLUDE THE MALFUNCTION LOCATION - BCM connector is disconnected. - Reconnect all disconnected connectors. - Reconnect the negative battery cable. - Measure the voltage between BCM terminal 8G (wiring harness-side) and body ground. - Is there any voltage?	Yes	Yes	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
			No	Go to the next step.
9	VERIFY TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Reconnect the negative battery cable.	Yes	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the BCM, then go to the next step.

	• Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM] .) • Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM] .) • Is the same DTC present?	(See BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION .)
		No Go to the next step.
10	VERIFY THAT NO OTHER DTCs ARE PRESENT • Are any DTCs present?	YesGo to the applicable DTC inspection. (See DTC TABLE [BCM] .)
		No DTC troubleshooting completed.

Vehicles Without Advanced Keyless Entry And Push Button Start System

DESCRIPTION	Front door lock-link switch (driver-side) circuit malfunction
DETECTION CONDITION	• Open circuit detected in front door lock-link switch (driver-side) lock-side circuit with the front door lock-link switch (driver-side) locked.
POSSIBLE CAUSE	• Front door latch and lock actuator (driver-side) connector or terminals malfunction • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal J and body ground • Front door lock-link switch (driver-side) malfunction • BCM connector or terminals malfunction • Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal D and BCM terminal 8G • BCM malfunction



Diagnostic Procedure

Step	Inspection	Action
1	PERFORM DTC INSPECTION - Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM].) - Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes Go to the next step.
		No Go to Step 9.
2	INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the front door latch and lock actuator (driver-side) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 8.
		No Go to the next step.
3	DETERMINE THE MALFUNCTION LOCATION - Front door latch and lock actuator (driver-side) connector is disconnected. - Reconnect the negative battery cable. - Measure the voltage between front door latch and lock actuator (driver-side) terminal D (wiring harness-side) and body ground. - Is there any voltage?	Yes Go to the next step.
		No Go to Step 6

4	INSPECT FRONT DOOR LOCK-LINK SWITCH (DRIVER-SIDE) GROUND CIRCUIT FOR OPEN CIRCUIT - Front door latch and lock actuator (driver-side) connector is disconnected. - Disconnect the negative battery cable. - Inspect for continuity between front door latch and lock actuator (driver-side) terminal J (wiring harness-side) and body ground. - Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 8.
5	INSPECT FRONT DOOR LOCK-LINK SWITCH (DRIVER-SIDE) - Inspect the front door lock-link switch (driver-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) - Is there any malfunction?	Yes	Replace the front door latch and lock actuator (driver-side), then go to Step 8. (See FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION .)
		No	Go to Step 8.
6	INSPECT BCM CONNECTOR CONDITION - Disconnect the negative battery cable. - Disconnect the BCM connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 8.
		No	Go to the next step.
7	CONCLUDE THE MALFUNCTION LOCATION - Front door latch and lock actuator (driver-side) and BCM connectors are disconnected. - Reconnect all disconnected connectors. - Reconnect the negative battery cable. - Measure the voltage between BCM terminal 8G (wiring harness-side) and body ground. - Is there any voltage?	Yes	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
		No	Go to the next step.
8	VERIFY TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Reconnect the negative battery cable. - Clear the DTC from the BCM memory using the M-MDS. (See CLEARING DTC [BCM].) - Perform the BCM DTC inspection using the M-MDS with the front door lock-link switch (driver-side) locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the BCM, then go to the next step. (See BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION .)
		No	Go to the next step.
9	VERIFY THAT NO OTHER DTCs ARE PRESENT Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [BCM] .)
		No	DTC troubleshooting completed.