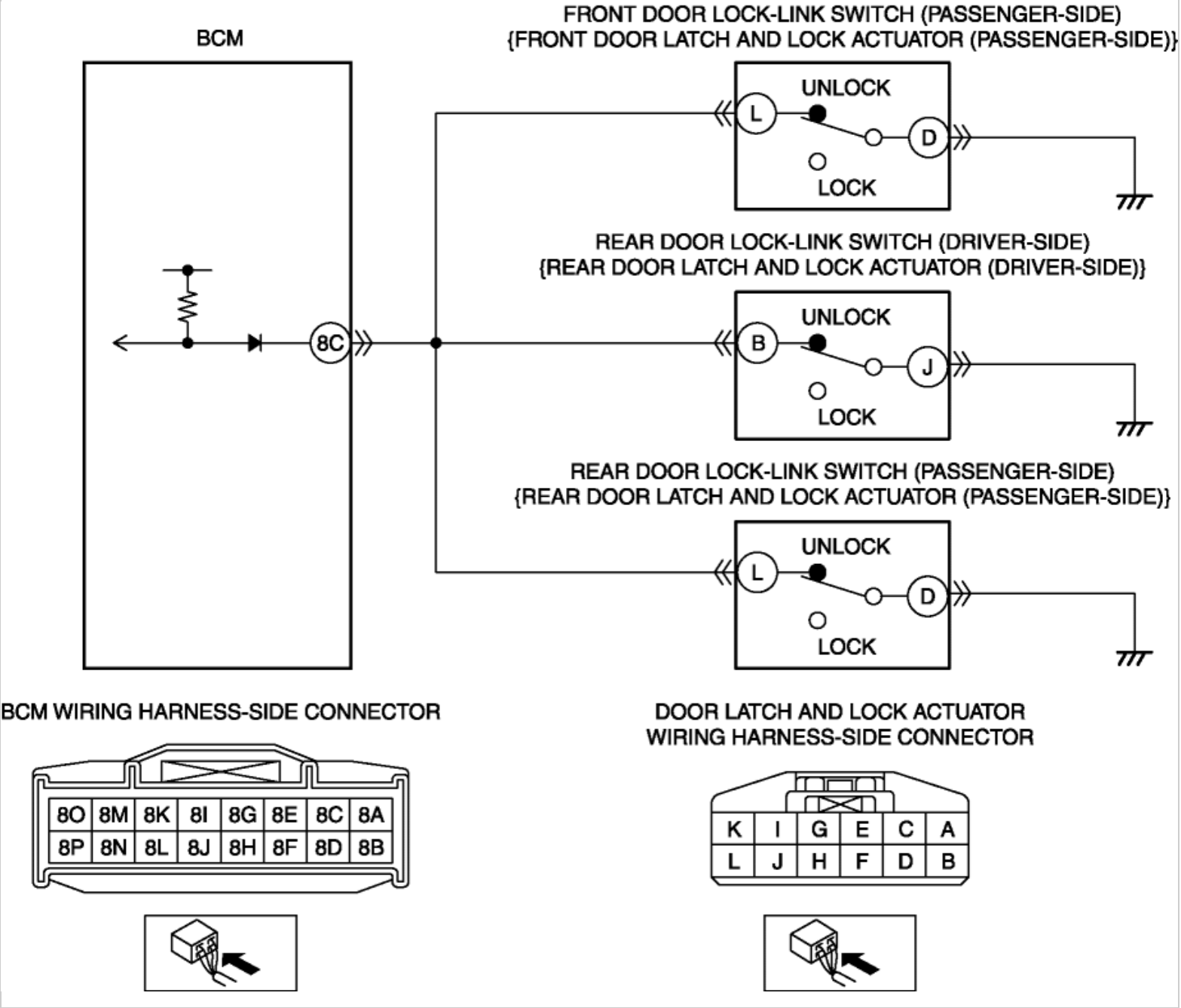


2012 - Mazda6 - Body and Accessories

DTC B1174:11 [BCM]

DESCRIPTION	Door lock-link switch circuit malfunction
DETECTION CONDITION	• Short to ground detected in door lock-link switch circuit with the door lock-link switch locked.
POSSIBLE CAUSE	• Front door latch and lock actuator (passenger-side) connector or terminals malfunction • Front door lock-link switch (passenger-side) malfunction • Rear door latch and lock actuator (driver-side) connector or terminals malfunction • Rear door lock-link switch (driver-side) malfunction • Rear door latch and lock actuator (passenger-side) connector or terminals malfunction • Rear door lock-link switch (passenger-side) malfunction • BCM connector or terminals malfunction • Short to ground in wiring harness between front door latch and lock actuator (passenger-side) terminal L and BCM terminal 8C • Short to ground in wiring harness between rear door latch and lock actuator (driver-side) terminal B and BCM terminal 8C • Short to ground in wiring harness between rear door latch and lock actuator (passenger-side) terminal L and BCM terminal 8C • 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 door lock-link switch locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	YesGo to the next step.
		NoGo to Step 11.
2	INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (PASSENGER-SIDE) CONNECTOR CONDITION	YesRepair or replace the connector or terminals, then go to Step 10.

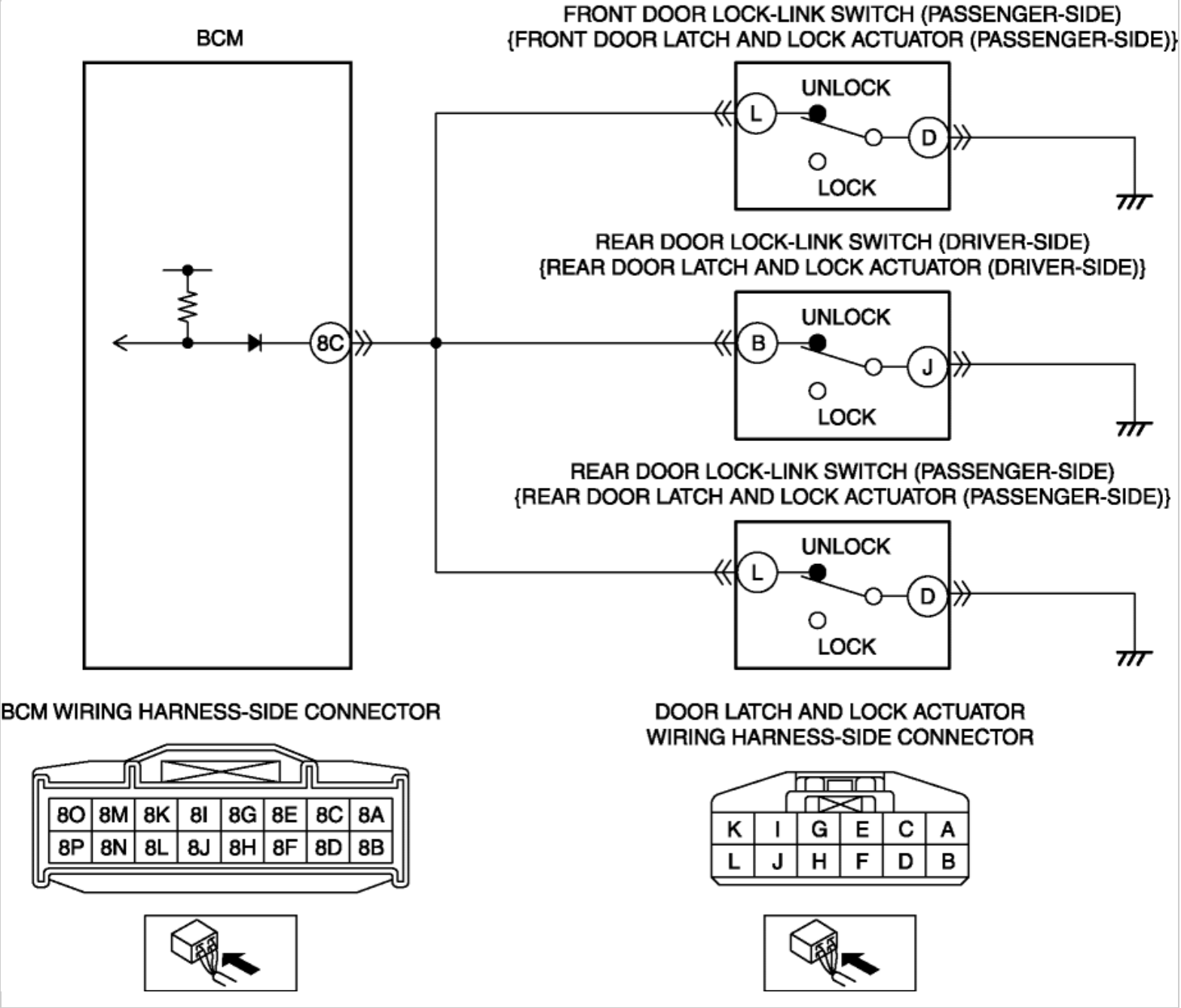
	• Switch the ignition to off. • Disconnect the negative battery cable. • Disconnect the front door latch and lock actuator (passenger-side) connector. • Inspect for poor connection (damaged/pulled-out pins, corrosion). • Is there any malfunction?		No Go to the next step.
3	INSPECT FRONT DOOR LOCK-LINK SWITCH (PASSENGER-SIDE) • Inspect the front door lock-link switch (passenger-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the front door latch and lock actuator (passenger-side), then go to Step 10.
			(See FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION.)
		No	Go to the next step.
4	INSPECT REAR DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION • Disconnect the rear 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 10.
		No	Go to the next step.
5	INSPECT REAR DOOR LOCK-LINK SWITCH (DRIVER-SIDE) • Inspect the rear door lock-link switch (driver-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the rear door latch and lock actuator (driver-side), then go to Step 10.
			(See REAR DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION.)
		No	Go to the next step.
6	INSPECT REAR DOOR LATCH AND LOCK ACTUATOR (PASSENGER-SIDE) CONNECTOR CONDITION • Disconnect the rear door latch and lock actuator (passenger-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 10.
		No	Go to the next step.
7	INSPECT REAR DOOR LOCK-LINK SWITCH (PASSENGER-SIDE) • Inspect the rear door lock-link switch (passenger-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the rear door latch and lock actuator (passenger-side), then go to Step 10.
			(See REAR DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION.)
		No	Go to the next step.
8	INSPECT BCM CONNECTOR CONDITION • Disconnect the BCM connector.	Yes	Repair or replace the connector or terminals, then go to Step 10.

	- Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	No	Go to the next step.
9	INSPECT FRONT DOOR LOCK-LINK SWITCH (PASSENGER-SIDE) AND REAR DOOR LOCK-LINK SWITCH (DRIVER-SIDE AND PASSENGER-SIDE) CIRCUIT FOR SHORT TO GROUND - Front door latch and lock actuator (passenger-side), rear door latch and lock actuator (driver-side and passenger-side) and BCM connectors are disconnected. - Inspect for continuity between front door latch and lock actuator (passenger-side) terminal L (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 the next step.
		No	Go to the next step.
10	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 door lock-link switch 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.
11	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 B1174:11 [BCM]

DESCRIPTION	Door lock-link switch circuit malfunction
DETECTION CONDITION	• Short to ground detected in door lock-link switch circuit with the door lock-link switch locked.
POSSIBLE CAUSE	• Front door latch and lock actuator (passenger-side) connector or terminals malfunction • Front door lock-link switch (passenger-side) malfunction • Rear door latch and lock actuator (driver-side) connector or terminals malfunction • Rear door lock-link switch (driver-side) malfunction • Rear door latch and lock actuator (passenger-side) connector or terminals malfunction • Rear door lock-link switch (passenger-side) malfunction • BCM connector or terminals malfunction • Short to ground in wiring harness between front door latch and lock actuator (passenger-side) terminal L and BCM terminal 8C • Short to ground in wiring harness between rear door latch and lock actuator (driver-side) terminal B and BCM terminal 8C • Short to ground in wiring harness between rear door latch and lock actuator (passenger-side) terminal L and BCM terminal 8C • 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 door lock-link switch locked. (See DTC INSPECTION [BCM].) - Is the same DTC present?	YesGo to the next step.
		NoGo to Step 11.
2	INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (PASSENGER-SIDE) CONNECTOR CONDITION	YesRepair or replace the connector or terminals, then go to Step 10.

	• Switch the ignition to off. • Disconnect the negative battery cable. • Disconnect the front door latch and lock actuator (passenger-side) connector. • Inspect for poor connection (damaged/pulled-out pins, corrosion). • Is there any malfunction?		No Go to the next step.
3	INSPECT FRONT DOOR LOCK-LINK SWITCH (PASSENGER-SIDE) • Inspect the front door lock-link switch (passenger-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the front door latch and lock actuator (passenger-side), then go to Step 10. (See FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION.)
		No	Go to the next step.
4	INSPECT REAR DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION • Disconnect the rear 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 10.
		No	Go to the next step.
5	INSPECT REAR DOOR LOCK-LINK SWITCH (DRIVER-SIDE) • Inspect the rear door lock-link switch (driver-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the rear door latch and lock actuator (driver-side), then go to Step 10. (See REAR DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION.)
		No	Go to the next step.
6	INSPECT REAR DOOR LATCH AND LOCK ACTUATOR (PASSENGER-SIDE) CONNECTOR CONDITION • Disconnect the rear door latch and lock actuator (passenger-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 10.
		No	Go to the next step.
7	INSPECT REAR DOOR LOCK-LINK SWITCH (PASSENGER-SIDE) • Inspect the rear door lock-link switch (passenger-side). (See DOOR LOCK-LINK SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the rear door latch and lock actuator (passenger-side), then go to Step 10. (See REAR DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION.)
		No	Go to the next step.
8	INSPECT BCM CONNECTOR CONDITION • Disconnect the BCM connector.	Yes	Repair or replace the connector or terminals, then go to Step 10.

	- Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	No	Go to the next step.
9	INSPECT FRONT DOOR LOCK-LINK SWITCH (PASSENGER-SIDE) AND REAR DOOR LOCK-LINK SWITCH (DRIVER-SIDE AND PASSENGER-SIDE) CIRCUIT FOR SHORT TO GROUND - Front door latch and lock actuator (passenger-side), rear door latch and lock actuator (driver-side and passenger-side) and BCM connectors are disconnected. - Inspect for continuity between front door latch and lock actuator (passenger-side) terminal L (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 the next step.
		No	Go to the next step.
10	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 door lock-link switch 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.
11	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.