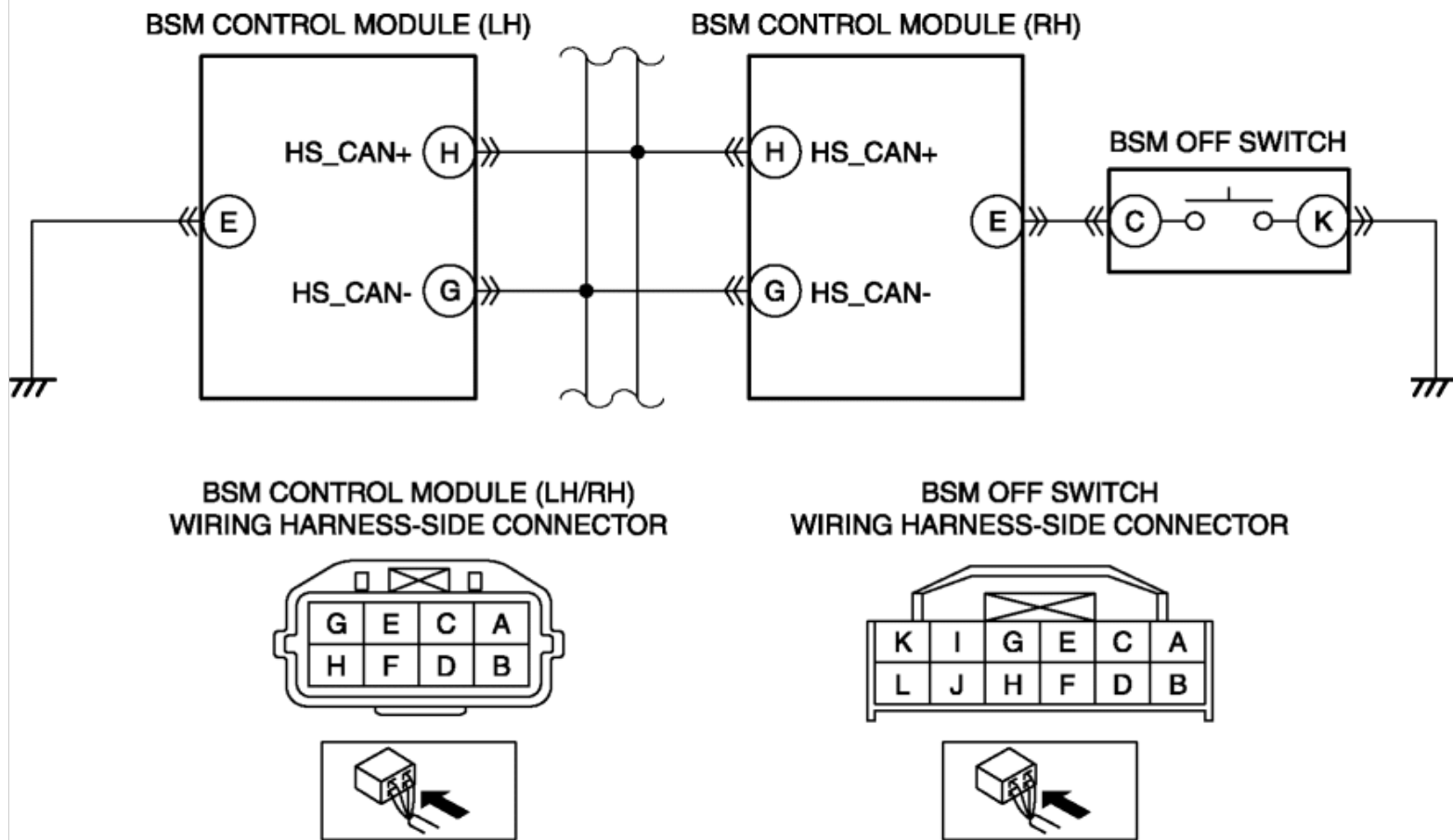


2012 - Mazda6 - Body and Accessories

DTC U3000:4A [BLIND SPOT MONITORING (BSM)]

DESCRIPTION	BSM control module assembly abnormality
DETECTION CONDITION	• A logic is provided to monitor for incorrect installation in order to prevent the left and right BSM control modules from being installed in reverse of each other. Terminal E of the BSM control module (LH) monitors the body ground condition, and terminal E of the BSM control module (RH) monitors the BSM OFF switch condition. The circuit is open during non-operation of the BSM OFF switch. It can be determined that the left and right BSM control modules have been installed in reverse if the following conditions occur: ▪ A short to ground condition of BSM control module (RH) terminal E continues for 180 s or more ▪ An open circuit condition of BSM control module (LH) terminal E continues for 0.9 s or more
POSSIBLE CAUSE	• BSM control module (LH) and BSM control module (RH) have been installed such that their left and right positions are reversed • Connector or terminal malfunction • BSM OFF switch malfunction • Short to ground in wiring harness between BSM control module (RH) terminal E and BSM OFF switch terminal C • Open circuit in wiring harness between BSM control module (LH) terminal E and body ground • BSM control module (LH) malfunction • BSM control module (RH) malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY BSM CONTROL MODULES NOT INSTALLED IN REVERSE - Verify the left/right indicator labels adhered to the BSM control modules. - Have the left and right BSM control modules been installed in reverse?	Yes Install the BSM control modules in their correct positions, then go to Step 8.
		No Go to the next step.
2	INSPECT BSM OFF SWITCH CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the BSM OFF switch connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the connector or terminal, then go to Step 8.
		No Go to the next step.
3	INSPECT BSM OFF SWITCH Inspect the BSM OFF switch. (See BLIND SPOT MONITORING (BSM) OFF SWITCH	Yes Replace the BSM OFF switch, then go to Step 8. (See BLIND SPOT MONITORING (BSM) OFF SWITCH REMOVAL/ INSTALLATION.)

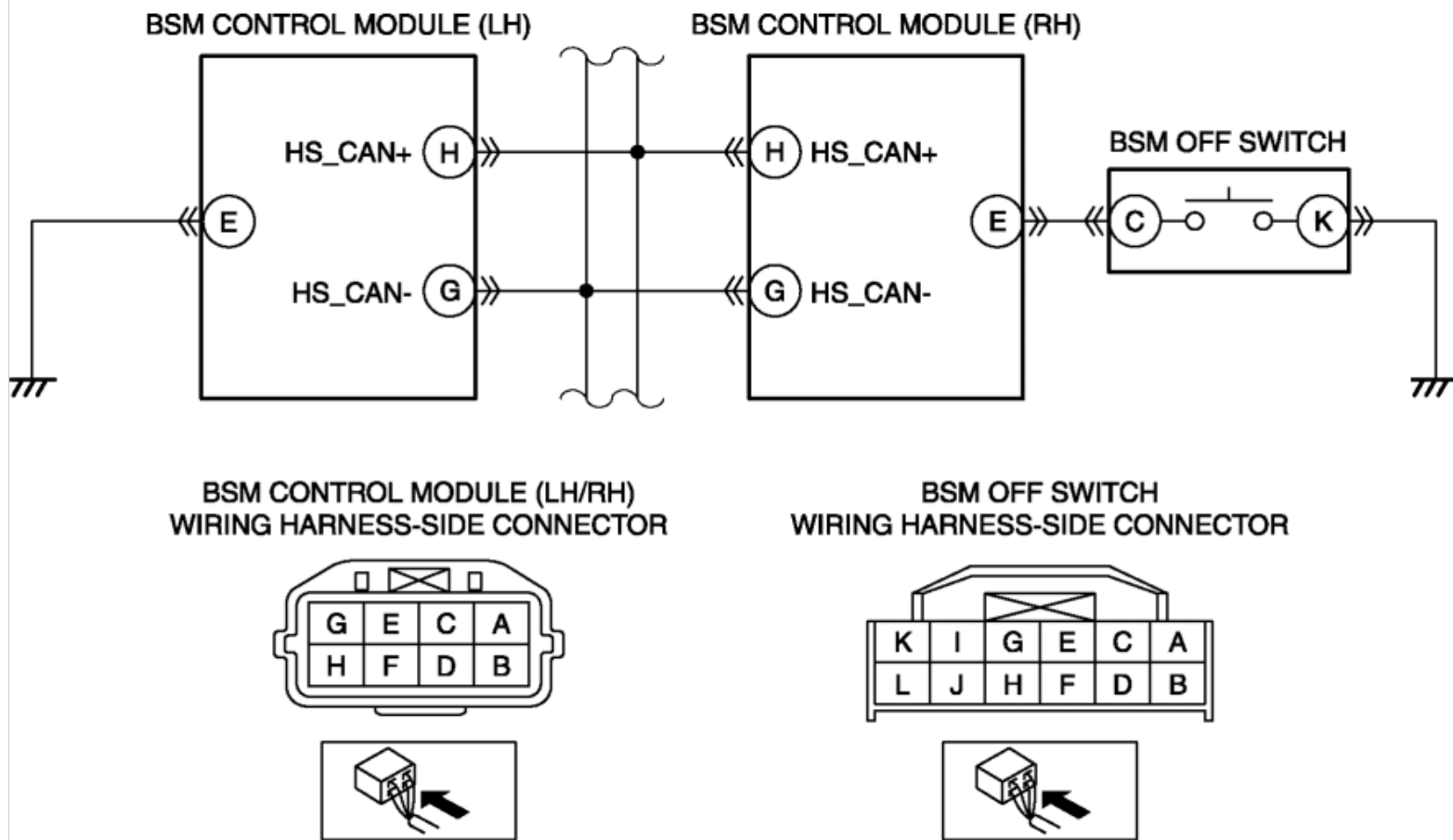
	INSPECTION.) Is there any malfunction?	No	Go to the next step.
4	INSPECT BSM CONTROL MODULE (RH) CONNECTOR FOR POOR CONNECTION - Disconnect the BSM control module (RH) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminal, then go to Step 8.
		No	Go to the next step.
5	INSPECT BSM OFF SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between BSM OFF switch terminal E (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 8.
		No	Go to the next step.
6	INSPECT BSM CONTROL MODULE (LH) CONNECTOR FOR POOR CONNECTION - Disconnect the BSM control module (LH) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminal, then go to Step 8.
		No	Go to the next step.
7	INSPECT BSM CONTROL MODULE (LH) GROUND CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between BSM control module (LH) terminal E (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 the next step.
8	VERIFY TROUBLESHOOTING COMPLETED - Switch the ignition to off. - Make sure to reconnect the disconnected connectors. - Connect the M-MDS to the DLC-2. - Switch the ignition to ON. - Clear the DTC from the BSM control module memory using the M-MDS. (See CLEARING DTC [BLIND SPOT MONITORING (BSM)].) - Perform the self-test with M-MDS. (See DTC INSPECTION [BLIND SPOT MONITORING (BSM)].)	Yes	Replace the BSM control module, then go to the next step. (See BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION .)
		No	Go to the next step.

	Is the same DTC present?		
9	VERIFY THAT NO OTHER DTCs ARE RECORDED Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [BLIND SPOT MONITORING (BSM)] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

DTC U3000:4A [BLIND SPOT MONITORING (BSM)]

DESCRIPTION	BSM control module assembly abnormality
DETECTION CONDITION	• A logic is provided to monitor for incorrect installation in order to prevent the left and right BSM control modules from being installed in reverse of each other. Terminal E of the BSM control module (LH) monitors the body ground condition, and terminal E of the BSM control module (RH) monitors the BSM OFF switch condition. The circuit is open during non-operation of the BSM OFF switch. It can be determined that the left and right BSM control modules have been installed in reverse if the following conditions occur: ▪ A short to ground condition of BSM control module (RH) terminal E continues for 180 s or more ▪ An open circuit condition of BSM control module (LH) terminal E continues for 0.9 s or more
POSSIBLE CAUSE	• BSM control module (LH) and BSM control module (RH) have been installed such that their left and right positions are reversed • Connector or terminal malfunction • BSM OFF switch malfunction • Short to ground in wiring harness between BSM control module (RH) terminal E and BSM OFF switch terminal C • Open circuit in wiring harness between BSM control module (LH) terminal E and body ground • BSM control module (LH) malfunction • BSM control module (RH) malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY BSM CONTROL MODULES NOT INSTALLED IN REVERSE - Verify the left/right indicator labels adhered to the BSM control modules. - Have the left and right BSM control modules been installed in reverse?	Yes Install the BSM control modules in their correct positions, then go to Step 8.
		No Go to the next step.
2	INSPECT BSM OFF SWITCH CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the BSM OFF switch connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the connector or terminal, then go to Step 8.
		No Go to the next step.
3	INSPECT BSM OFF SWITCH Inspect the BSM OFF switch. (See BLIND SPOT MONITORING (BSM) OFF SWITCH	Yes Replace the BSM OFF switch, then go to Step 8. (See BLIND SPOT MONITORING (BSM) OFF SWITCH REMOVAL/ INSTALLATION.)

	INSPECTION.) Is there any malfunction?	No	Go to the next step.
4	INSPECT BSM CONTROL MODULE (RH) CONNECTOR FOR POOR CONNECTION - Disconnect the BSM control module (RH) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminal, then go to Step 8.
		No	Go to the next step.
5	INSPECT BSM OFF SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between BSM OFF switch terminal E (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 8.
		No	Go to the next step.
6	INSPECT BSM CONTROL MODULE (LH) CONNECTOR FOR POOR CONNECTION - Disconnect the BSM control module (LH) connector. - Inspect for poor connection (damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes	Repair or replace the connector or terminal, then go to Step 8.
		No	Go to the next step.
7	INSPECT BSM CONTROL MODULE (LH) GROUND CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between BSM control module (LH) terminal E (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 the next step.
8	VERIFY TROUBLESHOOTING COMPLETED - Switch the ignition to off. - Make sure to reconnect the disconnected connectors. - Connect the M-MDS to the DLC-2. - Switch the ignition to ON. - Clear the DTC from the BSM control module memory using the M-MDS. (See CLEARING DTC [BLIND SPOT MONITORING (BSM)].) - Perform the self-test with M-MDS. (See DTC INSPECTION [BLIND SPOT MONITORING (BSM)].)	Yes	Replace the BSM control module, then go to the next step. (See BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION .)
		No	Go to the next step.

	Is the same DTC present?		
9	VERIFY THAT NO OTHER DTCs ARE RECORDED Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [BLIND SPOT MONITORING (BSM)] .)
		No	DTC troubleshooting completed.