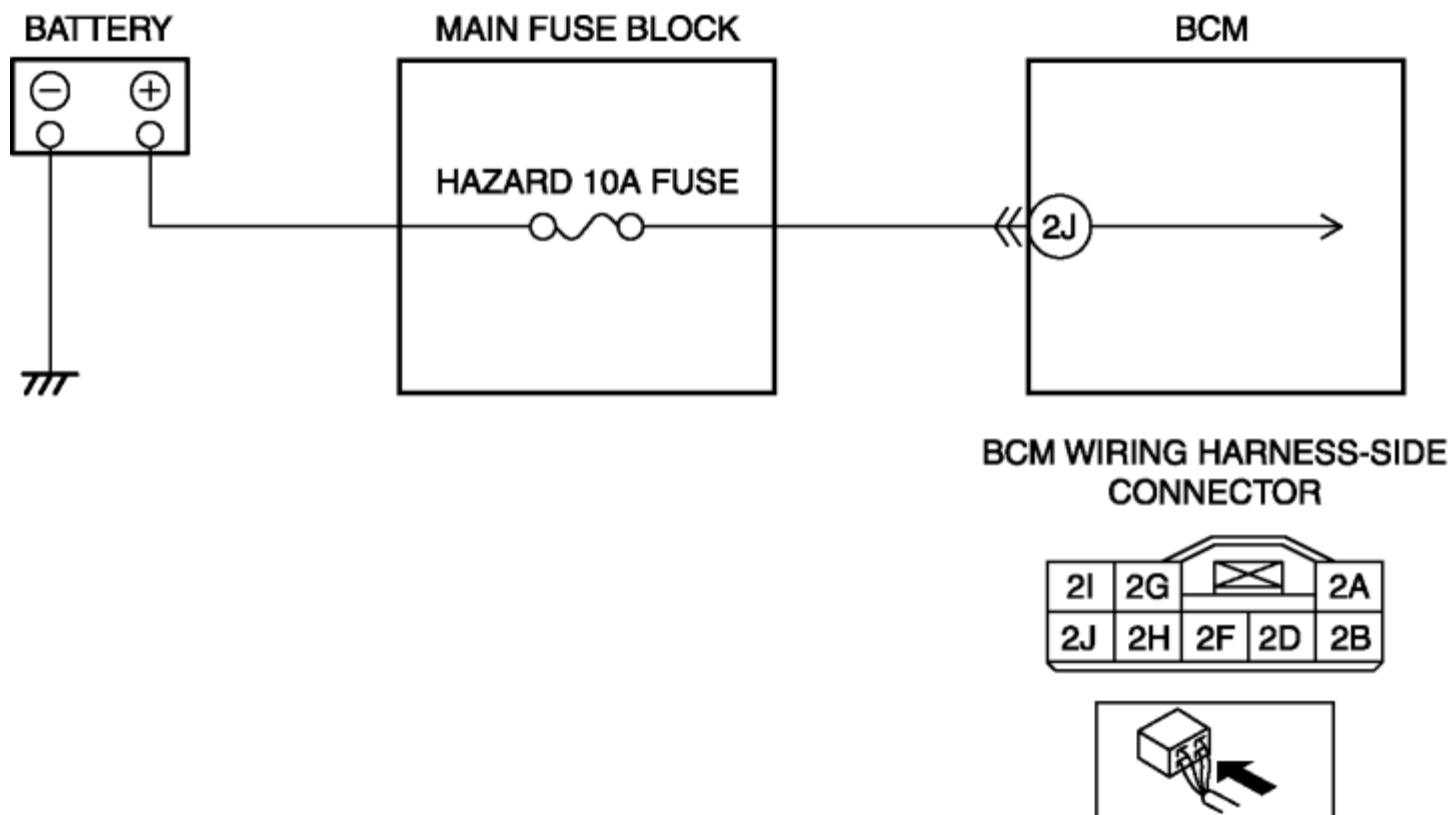


2012 - Mazda6 - Body and Accessories

DTC U3003:16/ U3003:17 [BCM]

DESCRIPTION	BCM power supply circuit malfunction	
DETECTI ON CONDI TI ON	U3003:16	BCM power supply voltage is low (less than 9 V) .
	U3003:17	BCM power supply voltage is high (more than 16 V) .
POSSI BLE CAUSE	• PCM DTC is stored • BCM connector or terminals malfunction • Battery malfunction • Short to ground or open circuit in BCM power supply circuit ▪ Short to ground in wiring harness between battery positive terminal and BCM terminal 2J ▪ HAZARD 10 A fuse malfunction ▪ Open circuit in wiring harness between battery positive terminal and BCM terminal 2J • Generator malfunction • 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 ignition switch ON. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes Go to the next step.
		No Go to Step 8.
2	PERFORM PCM DTC INSPECTION Perform the PCM DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) (See ON-BOARD DIAGNOSTIC TEST [MZI 3.7 V6].)	Yes Go to the applicable DTC inspection. (See DTC TABLE [MZR 2.5] .) (See DTC TABLE [MZI 3.7 V6] .)
		No Go to the next step.

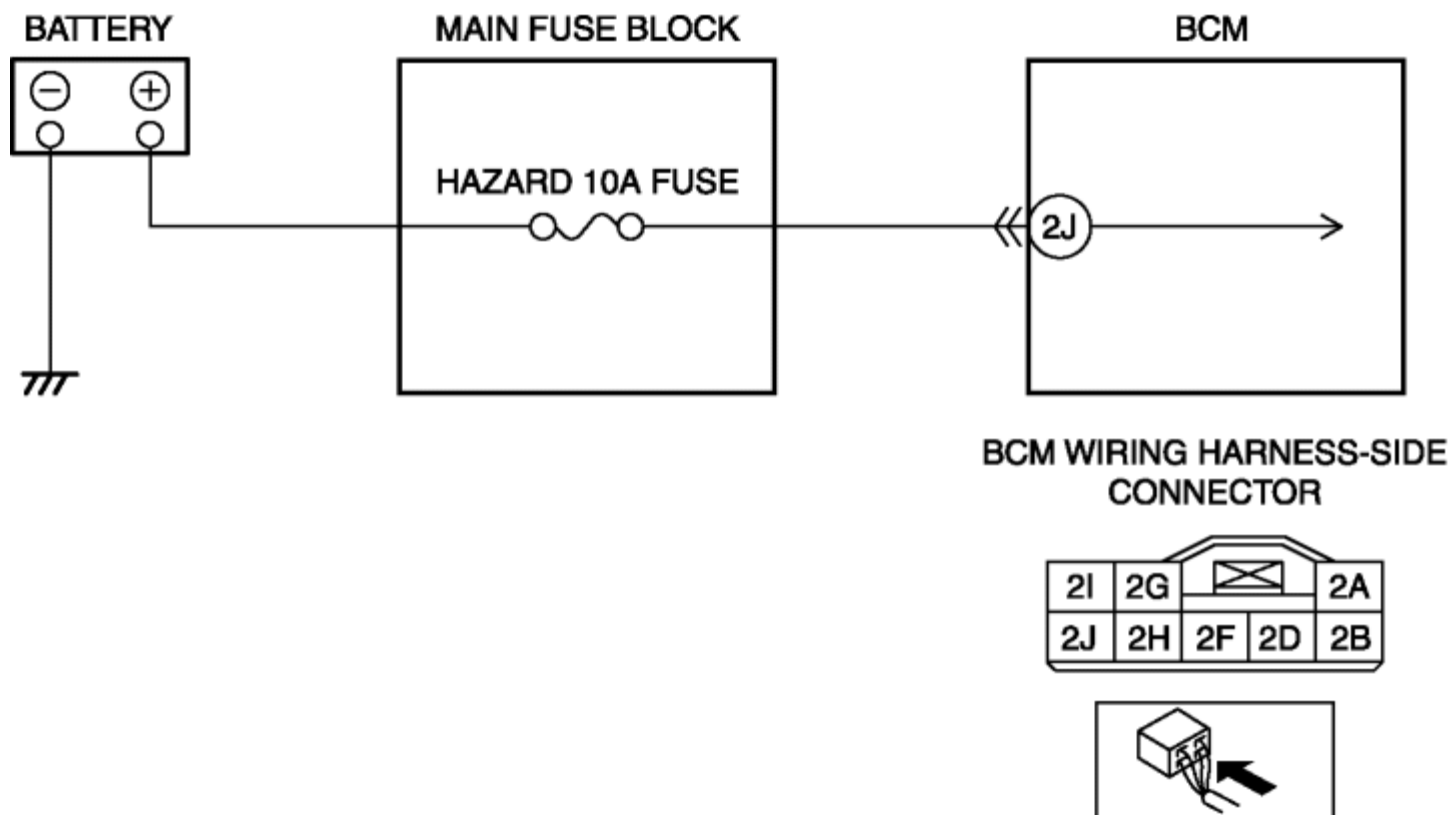
	• Are any DTCs present?		
3	INSPECT BCM CONNECTOR CONDITION • Switch the ignition to off. • Disconnect the negative battery cable. • Disconnect the BCM connector. • Inspect for poor connection (damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 7.
		No	Go to the next step.
4	INSPECT BATTERY • Inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) • Is there any malfunction?	Yes	Recharge or replace the battery, then go to Step 7. (See BATTERY RECHARGING [MZR 2.5] .) (See BATTERY RECHARGING [MZI 3.7 V6] .) (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5] .) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
5	INSPECT BCM POWER SUPPLY CIRCUIT FOR SHORT TO GROUND OR OPEN CIRCUIT • BCM connector is disconnected. • Reconnect the negative battery cable. • Measure the voltage between BCM terminal 2J (wiring harness-side) and body ground. • Is the voltage B+ ?	Yes	Go to the next step.
		No	Inspect the HAZARD 10 A fuse. • If the fuse is melt: ▪ Repair or replace the wiring harness for a possible short to ground. ▪ Replace the fuse. • If the fuse is deterioration: ▪ Replace the fuse. • If the fuse is normal: ▪ Repair or

			replace the wiring harness for a possible open circuit.
			Go to Step 7.
6	INSPECT GENERATOR Inspect the generator. (See GENERATOR INSPECTION [MZR 2.5] .) (See GENERATOR INSPECTION [MZI 3.7 V6] .)	Yes	Replace the generator, then go to the next step. (See GENERATOR REMOVAL/ INSTALLATION [MZR 2.5] .) (See GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
7	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 ignition switch ON. (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.
8	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 U3003:16/ U3003:17 [BCM]

DESCRIPTION	BCM power supply circuit malfunction	
DETECTI ON CONDITI ON	U3003:16	BCM power supply voltage is low (less than 9 V) .
	U3003:17	BCM power supply voltage is high (more than 16 V) .
POSSI BLE CAUSE	• PCM DTC is stored • BCM connector or terminals malfunction • Battery malfunction • Short to ground or open circuit in BCM power supply circuit ▪ Short to ground in wiring harness between battery positive terminal and BCM terminal 2J ▪ HAZARD 10 A fuse malfunction ▪ Open circuit in wiring harness between battery positive terminal and BCM terminal 2J • Generator malfunction • 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 ignition switch ON. (See DTC INSPECTION [BCM].) - Is the same DTC present?	Yes Go to the next step.
		No Go to Step 8.
2	PERFORM PCM DTC INSPECTION Perform the PCM DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) (See ON-BOARD DIAGNOSTIC TEST [MZI 3.7 V6].)	Yes Go to the applicable DTC inspection. (See DTC TABLE [MZR 2.5] .) (See DTC TABLE [MZI 3.7 V6] .)
		No Go to the next step.

	• Are any DTCs present?		
3	INSPECT BCM CONNECTOR CONDITION • Switch the ignition to off. • 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 7.
		No	Go to the next step.
4	INSPECT BATTERY • Inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) • Is there any malfunction?	Yes	Recharge or replace the battery, then go to Step 7. (See BATTERY RECHARGING [MZR 2.5] .) (See BATTERY RECHARGING [MZI 3.7 V6] .) (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5] .) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
5	INSPECT BCM POWER SUPPLY CIRCUIT FOR SHORT TO GROUND OR OPEN CIRCUIT • BCM connector is disconnected. • Reconnect the negative battery cable. • Measure the voltage between BCM terminal 2J (wiring harness-side) and body ground. • Is the voltage B+ ?	Yes	Go to the next step.
		No	Inspect the HAZARD 10 A fuse. • If the fuse is melt: ▪ Repair or replace the wiring harness for a possible short to ground. ▪ Replace the fuse. • If the fuse is deterioration: ▪ Replace the fuse. • If the fuse is normal: ▪ Repair or

			replace the wiring harness for a possible open circuit.
			Go to Step 7.
6	INSPECT GENERATOR Inspect the generator. (See GENERATOR INSPECTION [MZR 2.5] .) (See GENERATOR INSPECTION [MZI 3.7 V6] .)	Yes	Replace the generator, then go to the next step. (See GENERATOR REMOVAL/ INSTALLATION [MZR 2.5] .) (See GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
7	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 ignition switch ON. (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.
8	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.