

2012 - Mazda6 - Restraints

DTC B0010:11/ B0010:12/ B0010:13/ B0010:19/ B0010:1A

System Malfunction Location

DTC	System Malfunction Location
M-MDS display	
B0010:11	Passenger-side air bag module (inflator No.1) circuit short to body ground
B0010:12	Passenger-side air bag module (inflator No.1) circuit short to power supply
B0010:13	Passenger-side air bag module (inflator No.1) circuit resistance high
B0010:19	Short to the passenger-side air bag module (inflator No.1) circuit and other air bag module circuits
B0010:1A	Passenger-side air bag module (inflator No.1) circuit resistance low

Detection Condition

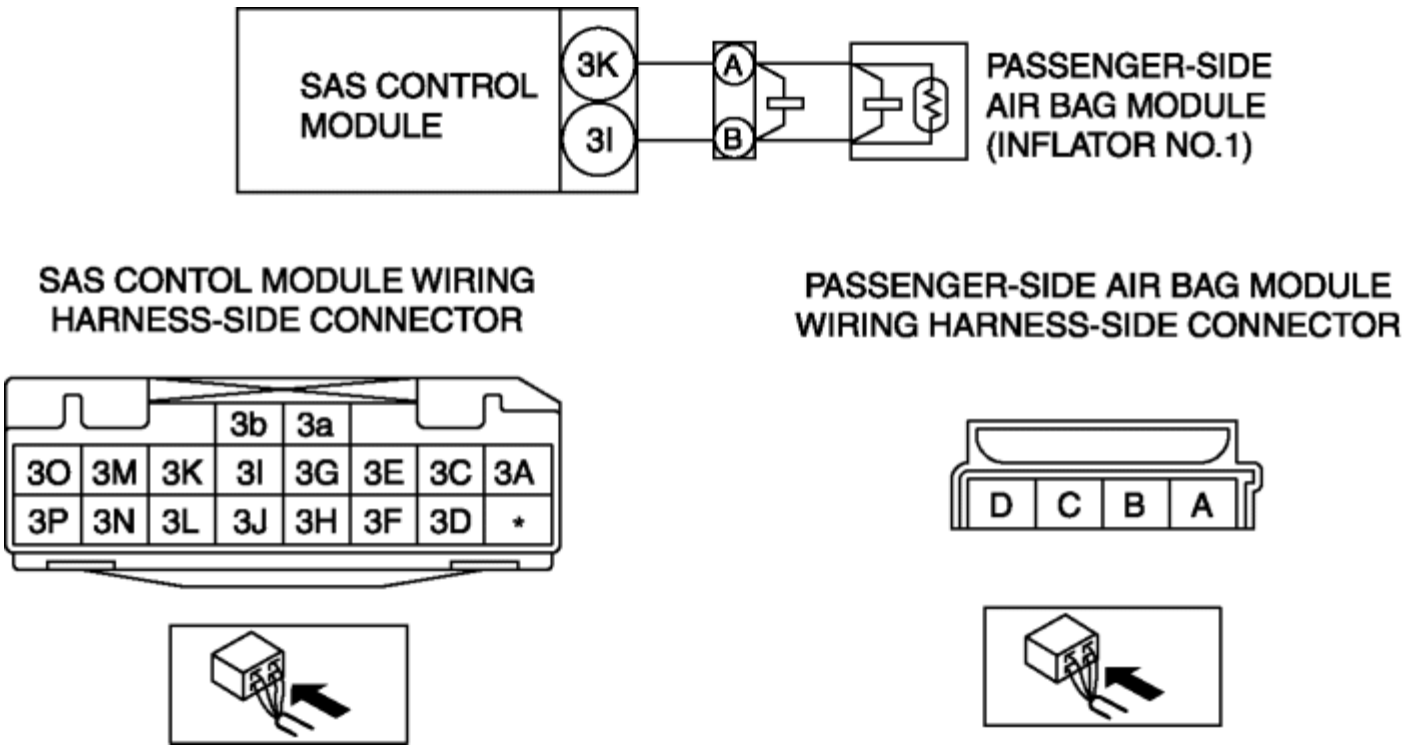
WARNING:

- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- Resistance other than **1.54—5.06 ohms** detected in passenger-side air bag module (inflator No.1) circuit
- Wiring harness between passenger-side air bag module (inflator No.1) and SAS control module has malfunction

Possible Causes

- Passenger-side air bag module connector malfunction
- Open or short circuit the wiring harness between the passenger-side air bag module (inflator No.1) and the SAS control module
- Passenger-side air bag module (inflator No.1) malfunction
- SAS control module malfunction

System Wiring Diagram



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT PASSENGER-SIDE AIR BAG MODULE CONNECTOR WARNING: • Handling the component parts improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings/cautions and the workshop manual before handling the air bag system components. (See AIR BAG SYSTEM SERVICE WARNINGS.)(See AIR BAG SYSTEM SERVICE CAUTIONS.) • Switch the ignition to off.	Yes Replace the passenger-side air bag module wiring harness.
		No Go to the next step.

	• Disconnect the negative battery cable and wait for 1 min or more. • Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/ INSTALLATION.) • Disconnect the passenger-side air bag module connector. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/ INSTALLATION.) • Inspect the passenger-side air bag module connector. (Corrosion, damage, and disconnected pins) • Is there any malfunction of the passenger-side air bag module connector?		
2	INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND PASSENGER-SIDE AIR BAG MODULE • Remove the column cover. (See COLUMN COVER REMOVAL/ INSTALLATION.) • Disconnect the clock spring connector. • Disconnect the driver and passenger-side side air bag module connectors. • Remove the C-pillar trim. (See C-PILLAR TRIM REMOVAL/ INSTALLATION.) • Disconnect the driver and passenger-side curtain air bag module connectors. • Remove the B-pillar lower trim. (See B-PILLAR LOWER TRIM REMOVAL/ INSTALLATION.) • Disconnect the driver and passenger-side pre-tensioner seat belt connectors. • Remove the rear console. (See REAR CONSOLE REMOVAL/ INSTALLATION.) • Disconnect the SAS control module connectors. • Inspect the wiring harnesses between SAS control module connector terminal 3K and passenger-side air bag module connector terminal A, and SAS control module connector terminal 3I and passenger-side air bag module connector terminal B for the following: ▪ Short circuit between terminals ▪ Short to body ground ▪ Open circuit	Yes	Go to the next step.
		No	Replace the wiring harness between the SAS control module and the passenger-side air bag module.
	NOTE: • Inspect for continuity while shaking the wiring harness between the SAS control module and passenger-side air		

	bag module. • Is the wiring harness normal?		
3	INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND PASSENGER-SIDE AIR BAG MODULE FOR SHORT TO POWER SUPPLY • Connect the negative battery cable. • Switch the ignition to ON with SAS control module connector and passenger-side air bag module connector disconnected. • Measure the voltage SAS control module connector terminal 3K and 3I. NOTE: • Measure the voltage while shaking the wiring harness between the SAS control module and passenger-side air bag module. • Is the voltage measured?	Yes	Replace the wiring harness between the SAS control module and the passenger-side air bag module.
		No	Go to the next step.
4	INSPECT PASSENGER-SIDE AIR BAG MODULE • Switch the ignition to off. • Disconnect the negative battery cable and wait for 1 min or more . • Connect the SST (Fuel and thermometer checker) or apply 2 ohms resistance to the passenger-side air bag module connector terminals A and B. • Set the SST (Fuel and thermometer checker) to 2 ohms . • Except for the passenger-side air bag module connector, reconnect all disconnected connectors. • Connect the negative battery cable. • Switch the ignition to ON. • Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC .) • Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION .) • Are the same DTCs present?	Yes	Go to the next step.
		No	Replace the passenger-side air bag module. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/ INSTALLATION .)
5	PERFORM SAS CONTROL MODULE DTC INSPECTION • Switch the ignition to off.	Yes	Replace the SAS control module. (See SAS CONTROL MODULE)

	Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the SST (Fuel and thermometer checker) or the 2 ohms resistance. • Connect the passenger-side air bag module connector. • Connect the negative battery cable. • Switch the ignition to ON. • Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.) • Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) • Are the same DTCs present?	REMOVAL/ INSTALLATION.)
		No DTC troubleshooting completed.

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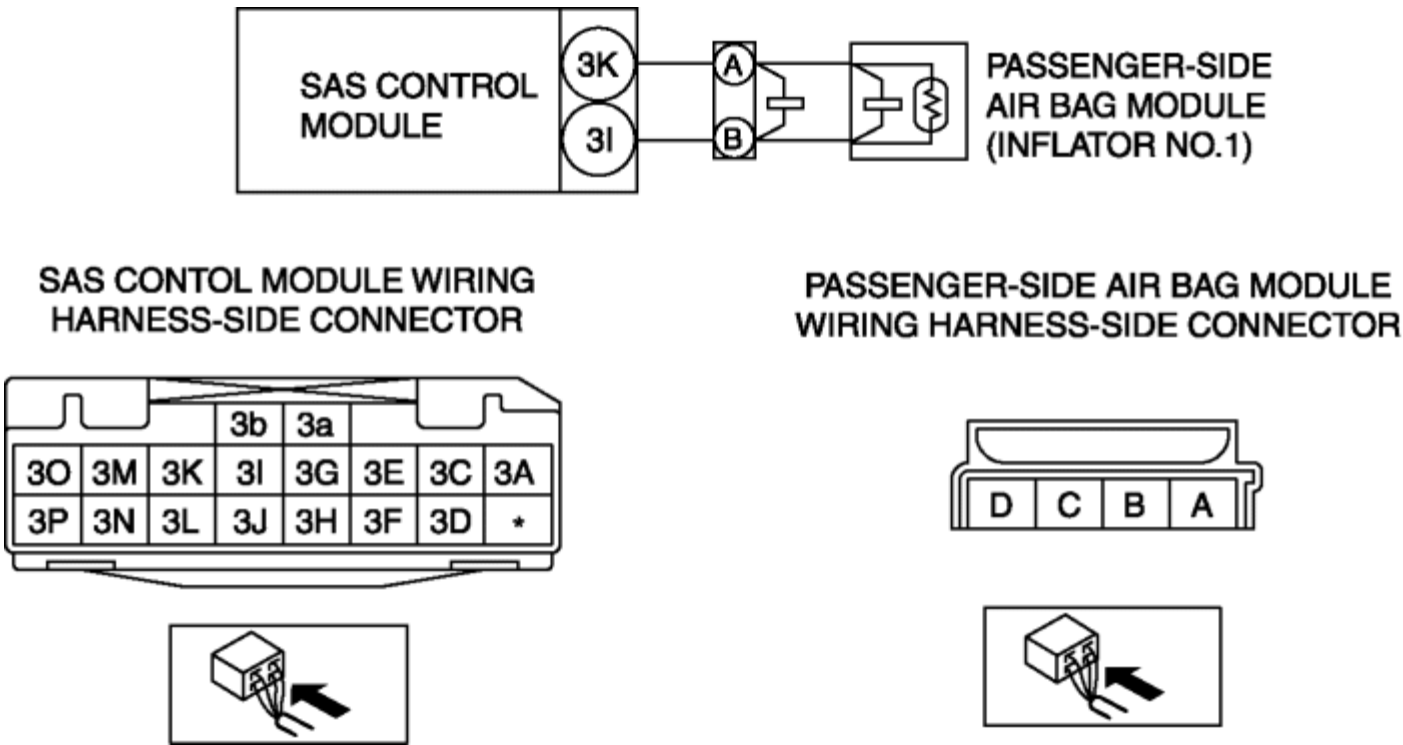
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		No Go to the next step.

	• Disconnect the negative battery cable and wait for 1 min or more. • Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/ INSTALLATION.) • Disconnect the passenger-side air bag module connector. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/ INSTALLATION.) • Inspect the passenger-side air bag module connector. (Corrosion, damage, and disconnected pins) • Is there any malfunction of the passenger-side air bag module connector?		
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		No	Replace the passenger-side air bag module. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/ INSTALLATION .)
5	PERFORM SAS CONTROL MODULE DTC INSPECTION Switch the ignition to off.	Yes	Replace the SAS control module. (See SAS CONTROL MODULE)

	Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the SST (Fuel and thermometer checker) or the 2 ohms resistance. • Connect the passenger-side air bag module connector. • Connect the negative battery cable. • Switch the ignition to ON. • Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.) • Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) • Are the same DTCs present?	REMOVAL/ INSTALLATION.)
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