

2012 - Mazda6 - Restraints

DTC B0072:11/ B0072:12/ B0072:13/ B0072:19/ B0072:1A

System Malfunction Location

DTC	System Malfunction Location
M-MDS display	
B0072:11	Passenger-side pre-tensioner seat belt circuit short to body ground
B0072:12	Passenger-side pre-tensioner seat belt circuit short to power supply
B0072:13	Passenger-side pre-tensioner seat belt circuit resistance high
B0072:19	Short to the passenger-side pre-tensioner seat belt circuit and other air bag module circuits
B0072:1A	Passenger-side pre-tensioner seat belt circuit resistance low

Detection Condition

WARNING:

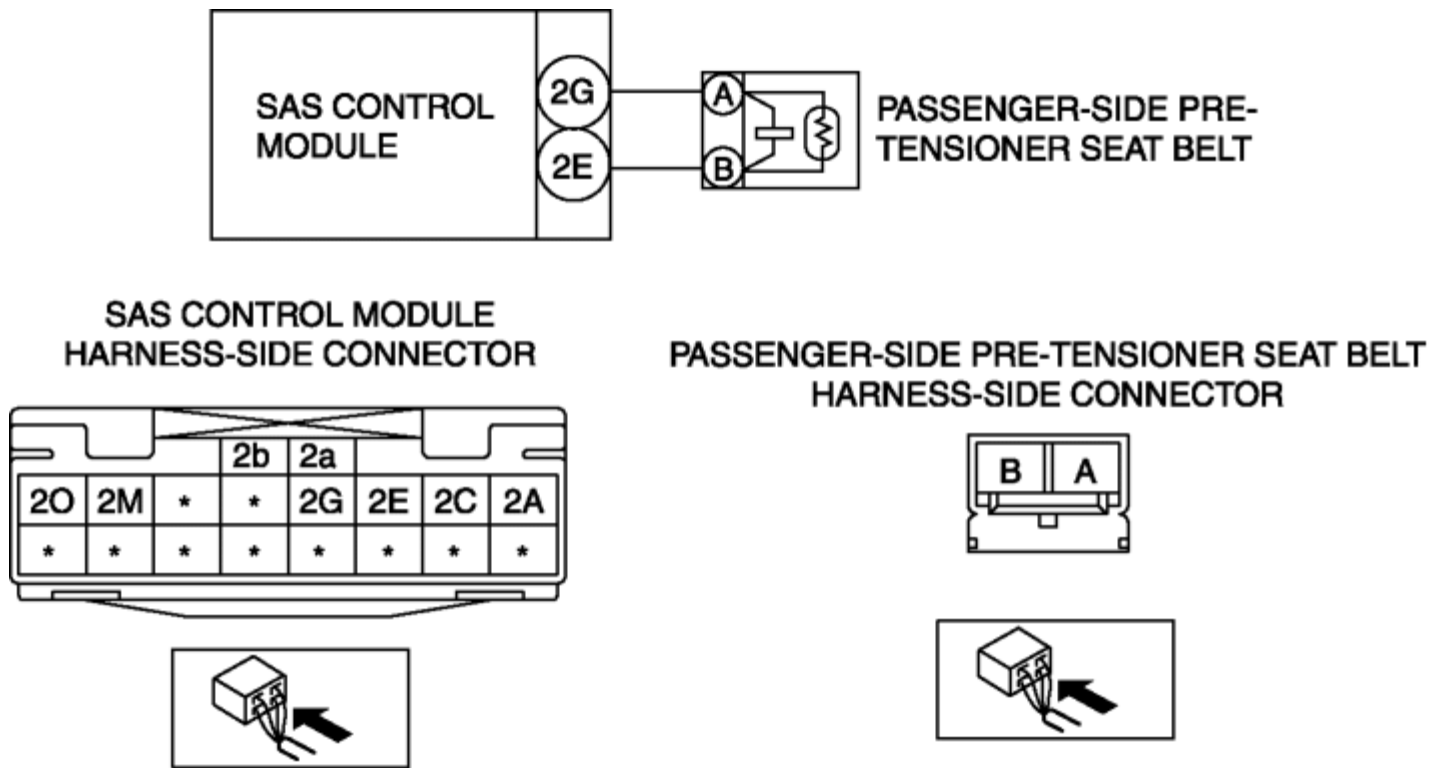
- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- Resistance other than **1.54—5.06 ohms** detected in passenger-side pre-tensioner seat belt circuit
- Wiring harness between the passenger-side pre-tensioner seat belt and SAS control module has a malfunction

Possible Causes

- Passenger-side pre-tensioner seat belt connector malfunction

- Open or short circuit in the wiring harness between the passenger-side pre-tensioner seat belt and SAS control module
- Passenger-side pre-tensioner seat belt malfunction
- SAS control module malfunction

System Wiring Diagram



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT PASSENGER SIDE PRE-TENSIONER SEAT BELT 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 pre-tensioner seat belt wiring harness.
		No Go to the next step.

	Disconnect the negative battery cable and wait for 1 min or more. • Remove the B-pillar lower trim (passenger's side). (See B-PILLAR LOWER TRIM REMOVAL/ INSTALLATION.) • Remove the front seat belt (passenger's side). (See FRONT SEAT BELT REMOVAL/ INSTALLATION.) • Disconnect the passenger-side pre-tensioner seat belt connector. (See FRONT SEAT BELT REMOVAL/ INSTALLATION.) • Inspect the passenger-side pre-tensioner seat belt connector. (Corrosion, damage, and disconnected pins) • Is there any malfunction of the passenger-side pre-tensioner seat belt connector?		
2	INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND PASSENGER-SIDE PRE-TENSIONER SEAT BELT • Remove the column cover. (See COLUMN COVER REMOVAL/ INSTALLATION.) • Disconnect the clock spring connector. • Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/ INSTALLATION.) • Disconnect the passenger-side air bag module 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-side pre-tensioner seat belt connector. • 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 2G and passenger-side pre-tensioner seat belt connector terminal A, and SAS control module connector terminal 2E and passenger-side pre-tensioner seat belt connector terminal B for the following:	Yes	Go to the next step.
		No	Replace the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt.

	▪ Short circuit between terminals ▪ Short to body ground ▪ Open circuit NOTE: • Inspect for continuity while shaking the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt. • Is the wiring harness normal?		
3	INSPECT THE WIRING HARNESS BETWEEN THE SAS CONTROL MODULE AND PASSENGER-SIDE PRE-TENSIONER SEAT BELT FOR A SHORT CIRCUIT TO THE POWER SUPPLY • Connect the negative battery cable. • Switch the ignition to ON with SAS control module connector and passenger-side pre-tensioner seat belt connector disconnected. • Measure the voltage of SAS control module connector terminals 2G and 2E. NOTE: • Measure the voltage while shaking the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt. • Is the voltage measured?	Yes	Replace the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt.
		No	Go to the next step.
4	INSPECT PASSENGER-SIDE PRE-TENSIONER SEAT BELT • 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 pre-tensioner seat belt connector terminals A and B. • Set the SST (Fuel and thermometer checker) to 2 ohms. • Except for the passenger-side pre-tensioner seat belt 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.)	Yes	Go to the next step.
		No	Replace the passenger-side pre-tensioner seat belt. (See FRONT SEAT BELT REMOVAL/ INSTALLATION .)

	• Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) • Are the same DTCs present?		
5	PERFORM SAS CONTROL MODULE DTC INSPECTION • Switch the ignition to off. • 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 pre-tensioner seat belt 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?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/ INSTALLATION .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Restraints

DTC B0072:11/ B0072:12/ B0072:13/ B0072:19/ B0072:1A

System Malfunction Location

DTC	System Malfunction Location
M-MDS display	
B0072:11	Passenger-side pre-tensioner seat belt circuit short to body ground
B0072:12	Passenger-side pre-tensioner seat belt circuit short to power supply
B0072:13	Passenger-side pre-tensioner seat belt circuit resistance high
B0072:19	Short to the passenger-side pre-tensioner seat belt circuit and other air bag module circuits
B0072:1A	Passenger-side pre-tensioner seat belt circuit resistance low

Detection Condition

WARNING:

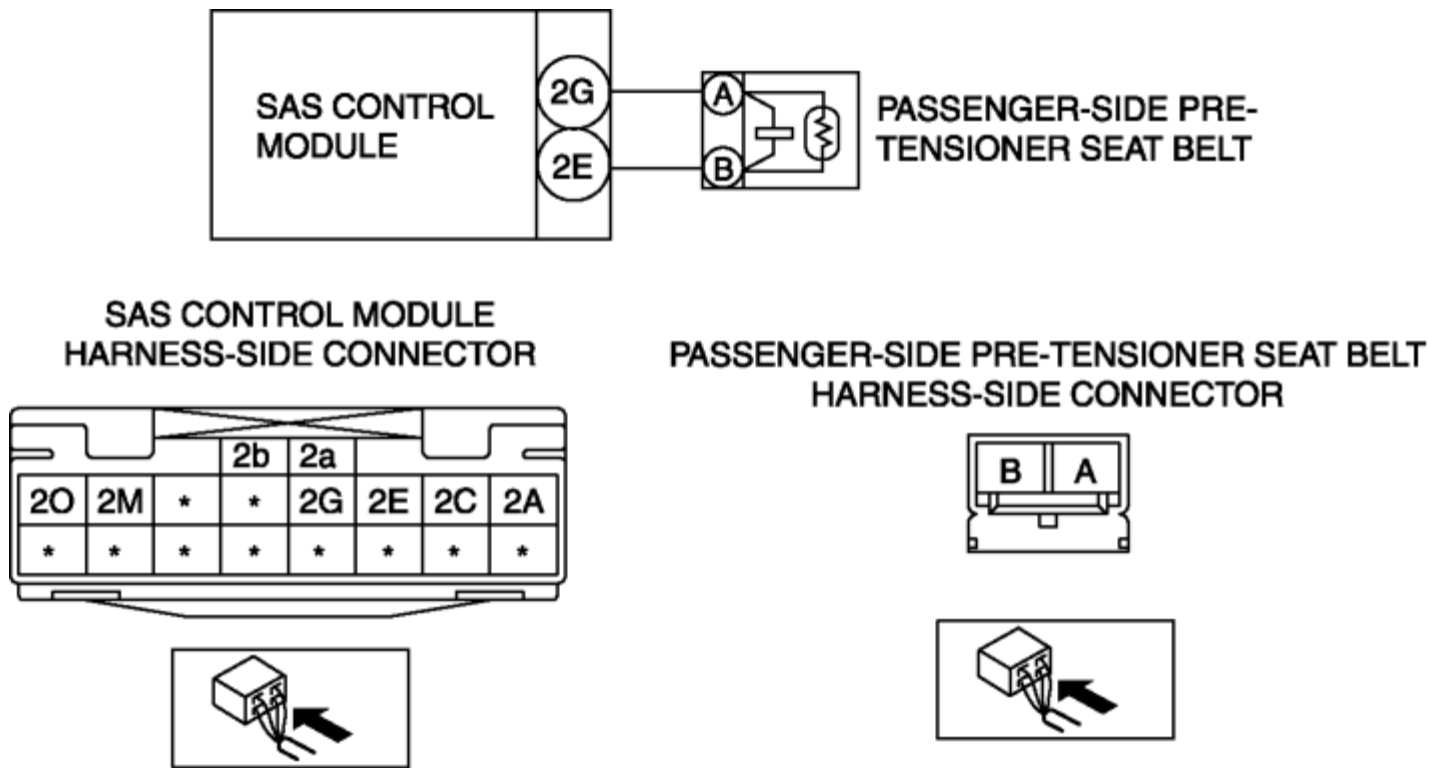
- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- Resistance other than **1.54—5.06 ohms** detected in passenger-side pre-tensioner seat belt circuit
- Wiring harness between the passenger-side pre-tensioner seat belt and SAS control module has a malfunction

Possible Causes

- Passenger-side pre-tensioner seat belt connector malfunction

- Open or short circuit in the wiring harness between the passenger-side pre-tensioner seat belt and SAS control module
- Passenger-side pre-tensioner seat belt malfunction
- SAS control module malfunction

System Wiring Diagram



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT PASSENGER SIDE PRE-TENSIONER SEAT BELT 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 pre-tensioner seat belt wiring harness. No Go to the next step.

	Disconnect the negative battery cable and wait for 1 min or more. • Remove the B-pillar lower trim (passenger's side). (See B-PILLAR LOWER TRIM REMOVAL/ INSTALLATION.) • Remove the front seat belt (passenger's side). (See FRONT SEAT BELT REMOVAL/ INSTALLATION.) • Disconnect the passenger-side pre-tensioner seat belt connector. (See FRONT SEAT BELT REMOVAL/ INSTALLATION.) • Inspect the passenger-side pre-tensioner seat belt connector. (Corrosion, damage, and disconnected pins) • Is there any malfunction of the passenger-side pre-tensioner seat belt connector?		
2	INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND PASSENGER-SIDE PRE-TENSIONER SEAT BELT • Remove the column cover. (See COLUMN COVER REMOVAL/ INSTALLATION.) • Disconnect the clock spring connector. • Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/ INSTALLATION.) • Disconnect the passenger-side air bag module 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-side pre-tensioner seat belt connector. • 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 2G and passenger-side pre-tensioner seat belt connector terminal A, and SAS control module connector terminal 2E and passenger-side pre-tensioner seat belt connector terminal B for the following:	Yes	Go to the next step.
		No	Replace the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt.

	▪ Short circuit between terminals ▪ Short to body ground ▪ Open circuit NOTE: • Inspect for continuity while shaking the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt. • Is the wiring harness normal?		
3	INSPECT THE WIRING HARNESS BETWEEN THE SAS CONTROL MODULE AND PASSENGER-SIDE PRE-TENSIONER SEAT BELT FOR A SHORT CIRCUIT TO THE POWER SUPPLY • Connect the negative battery cable. • Switch the ignition to ON with SAS control module connector and passenger-side pre-tensioner seat belt connector disconnected. • Measure the voltage of SAS control module connector terminals 2G and 2E. NOTE: • Measure the voltage while shaking the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt. • Is the voltage measured?	Yes	Replace the wiring harness between the SAS control module and the passenger-side pre-tensioner seat belt.
		No	Go to the next step.
4	INSPECT PASSENGER-SIDE PRE-TENSIONER SEAT BELT • 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 pre-tensioner seat belt connector terminals A and B. • Set the SST (Fuel and thermometer checker) to 2 ohms. • Except for the passenger-side pre-tensioner seat belt 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.)	Yes	Go to the next step.
		No	Replace the passenger-side pre-tensioner seat belt. (See FRONT SEAT BELT REMOVAL/ INSTALLATION .)

	- Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) - Are the same DTCs present?		
5	PERFORM SAS CONTROL MODULE DTC INSPECTION - Switch the ignition to off. - 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 pre-tensioner seat belt 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?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/ INSTALLATION .)
		No	DTC troubleshooting completed.