

2012 - Mazda6 - Restraints

DTC U3003:16/ U3003:17

System Malfunction Location

DTC	System Malfunction Location
M-MDS display	
U3003:16	SAS control module power supply voltage decreases (less than 8 V)
U3003:17	SAS control module power supply voltage increases (16 V or more)

Detection Condition

WARNING:

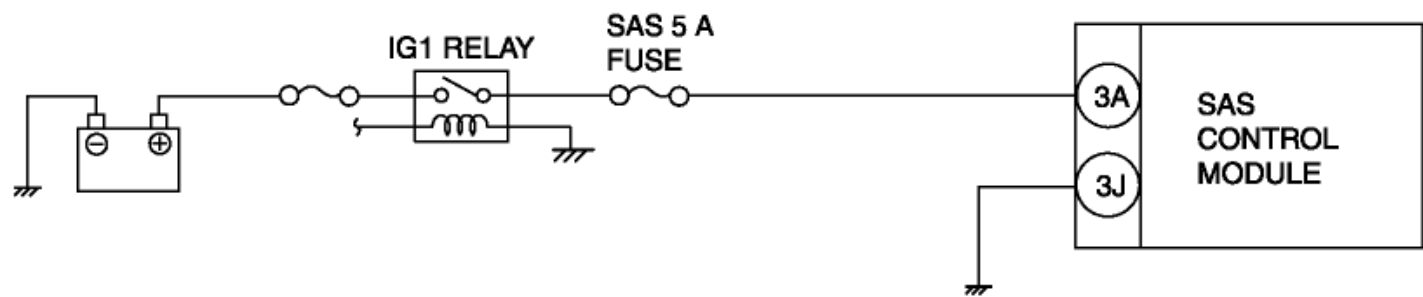
- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- SAS control module power supply voltage is other than **8–15.9 V**

Possible Causes

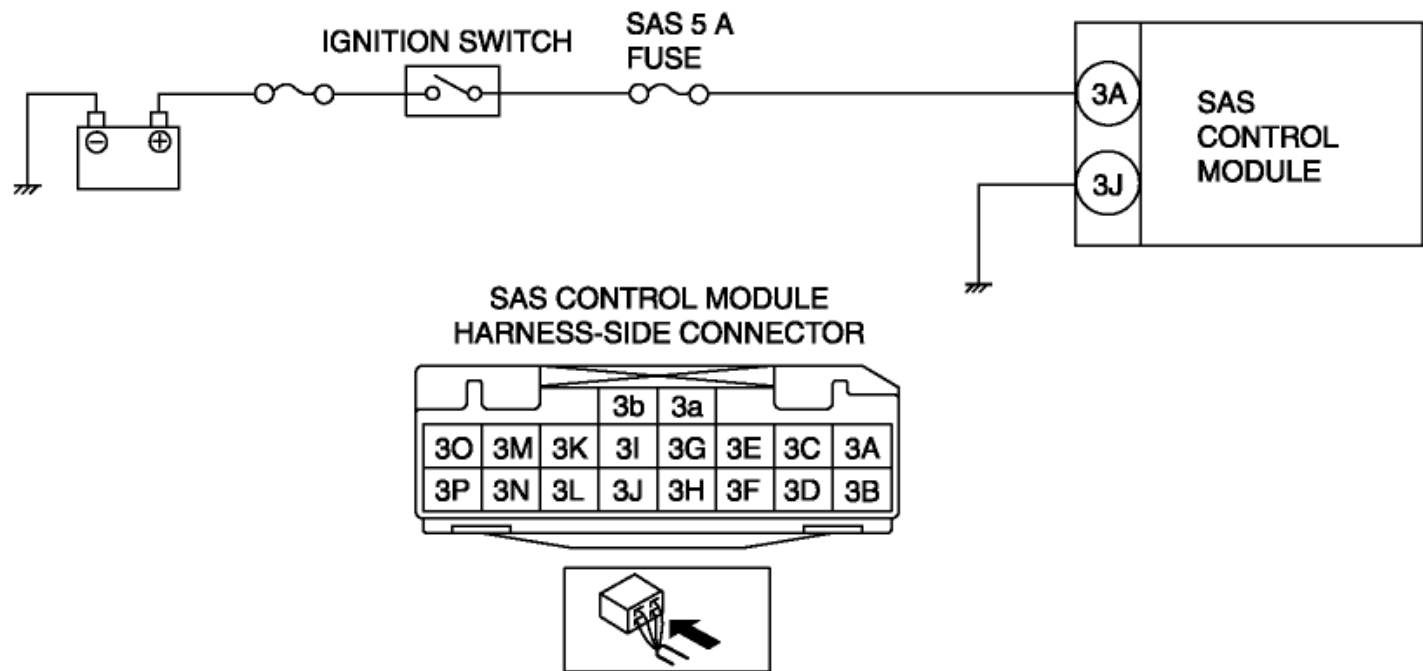
- Battery malfunction
- SAS 5 A fuse malfunction
- Open circuit or power supply short in the wiring harness between the SAS control module and body ground
- SAS control module malfunction

System Wiring Diagram

VEHICLES WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM



VEHICLES WITH KEYLESS ENTRY SYSTEM



Diagnostic Procedure

Step	Inspection	Action
1	BATTERY INSPECTION - Refer to the battery inspection and inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) - Is the battery normal?	YesGo to the next step.
		NoReplace or charge the battery. (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5] .) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
2	FUSE INSPECTION - Switch the ignition to off. - Disconnect the negative battery cable and wait 1 min or more.	YesGo to the next step.
		NoReplace the SAS 5 A fuse.

	Remove the SAS 5 A fuse. Is the fuse normal?		
3	INSPECT SAS CONTROL 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. - Disconnect the negative battery cable and wait 1 min or more. - Disconnect all SAS control module connectors. - Inspect the SAS control module connection. (Corrosion, damage, and disconnected pins) - Is there any malfunction of the SAS control module connector?	Yes Replace the SAS control module wiring harness. No Go to the next step.	
4	INSPECT WIRING HARNESS BETWEEN IGNITION SWITCH/ IG RELAY AND SAS CONTROL MODULE - Connect the negative battery cable. - Switch the ignition to ON. - Measure the voltage of SAS control module terminal 3A. - Is the voltage between 8–15.9 V?	Yes Go to the next step. No Replace the wiring harness between the IG Relay and SAS control module.	
5	INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND BODY GROUND - Switch the ignition to off. - Disconnect the negative battery cable and wait 1 min or more. - Inspect the wiring harness between SAS control module connector terminal 3J and body ground. - Short to power supply - Open circuit - Is the wiring harness normal?	Yes Go to the next step. No Replace the wiring harness between the SAS control module and body ground.	
6	PERFORM SAS CONTROL MODULE DTC INSPECTION - Connect the SAS control module connectors. - Connect the negative battery cable. - Switch the ignition to ON. - Clear DTCs using the M-MDS. (See CLEARING DTC.) - Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) - Are DTCs U3003:16, U3003:17 displayed?	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/ INSTALLATION.) No DTC troubleshooting completed.	

2012 - Mazda6 - Restraints

DTC U3003:16/ U3003:17

System Malfunction Location

DTC	System Malfunction Location
M-MDS display	
U3003:16	SAS control module power supply voltage decreases (less than 8 V)
U3003:17	SAS control module power supply voltage increases (16 V or more)

Detection Condition

WARNING:

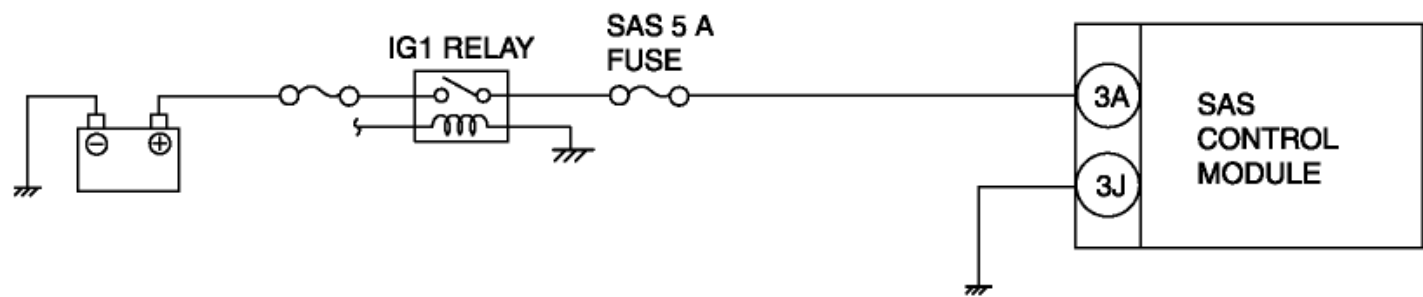
- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- SAS control module power supply voltage is other than **8–15.9 V**

Possible Causes

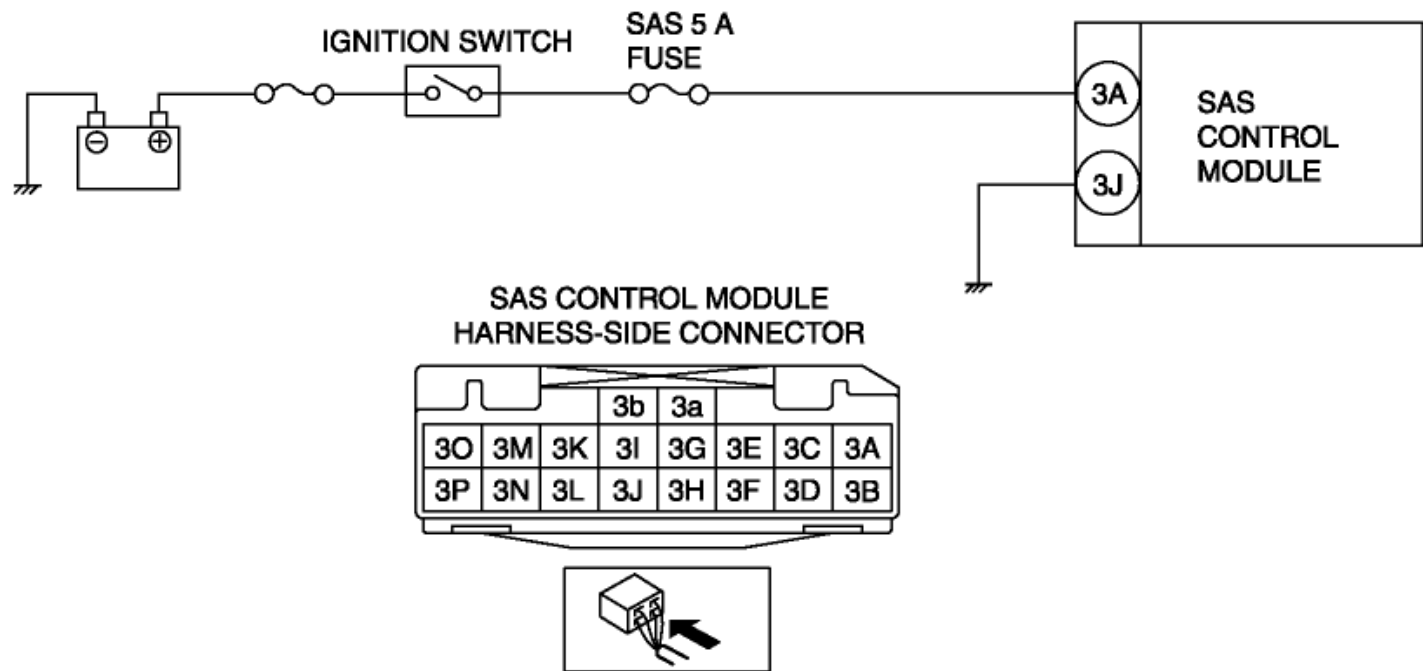
- Battery malfunction
- SAS 5 A fuse malfunction
- Open circuit or power supply short in the wiring harness between the SAS control module and body ground
- SAS control module malfunction

System Wiring Diagram

VEHICLES WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM



VEHICLES WITH KEYLESS ENTRY SYSTEM



Diagnostic Procedure

Step	Inspection	Action
1	BATTERY INSPECTION - Refer to the battery inspection and inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) - Is the battery normal?	YesGo to the next step. NoReplace or charge the battery. (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5].) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6].)
2	FUSE INSPECTION - Switch the ignition to off. - Disconnect the negative battery cable and wait 1 min or more.	YesGo to the next step. NoReplace the SAS 5 A fuse.

	Remove the SAS 5 A fuse. Is the fuse normal?		
3	INSPECT SAS CONTROL 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. - Disconnect the negative battery cable and wait 1 min or more. - Disconnect all SAS control module connectors. - Inspect the SAS control module connection. (Corrosion, damage, and disconnected pins) - Is there any malfunction of the SAS control module connector?	Yes Replace the SAS control module wiring harness. No Go to the next step.	
4	INSPECT WIRING HARNESS BETWEEN IGNITION SWITCH/ IG RELAY AND SAS CONTROL MODULE - Connect the negative battery cable. - Switch the ignition to ON. - Measure the voltage of SAS control module terminal 3A. - Is the voltage between 8–15.9 V?	Yes Go to the next step. No Replace the wiring harness between the IG Relay and SAS control module.	
5	INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND BODY GROUND - Switch the ignition to off. - Disconnect the negative battery cable and wait 1 min or more. - Inspect the wiring harness between SAS control module connector terminal 3J and body ground. - Short to power supply - Open circuit - Is the wiring harness normal?	Yes Go to the next step. No Replace the wiring harness between the SAS control module and body ground.	
6	PERFORM SAS CONTROL MODULE DTC INSPECTION - Connect the SAS control module connectors. - Connect the negative battery cable. - Switch the ignition to ON. - Clear DTCs using the M-MDS. (See CLEARING DTC.) - Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) - Are DTCs U3003:16, U3003:17 displayed?	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/ INSTALLATION.) No DTC troubleshooting completed.	

