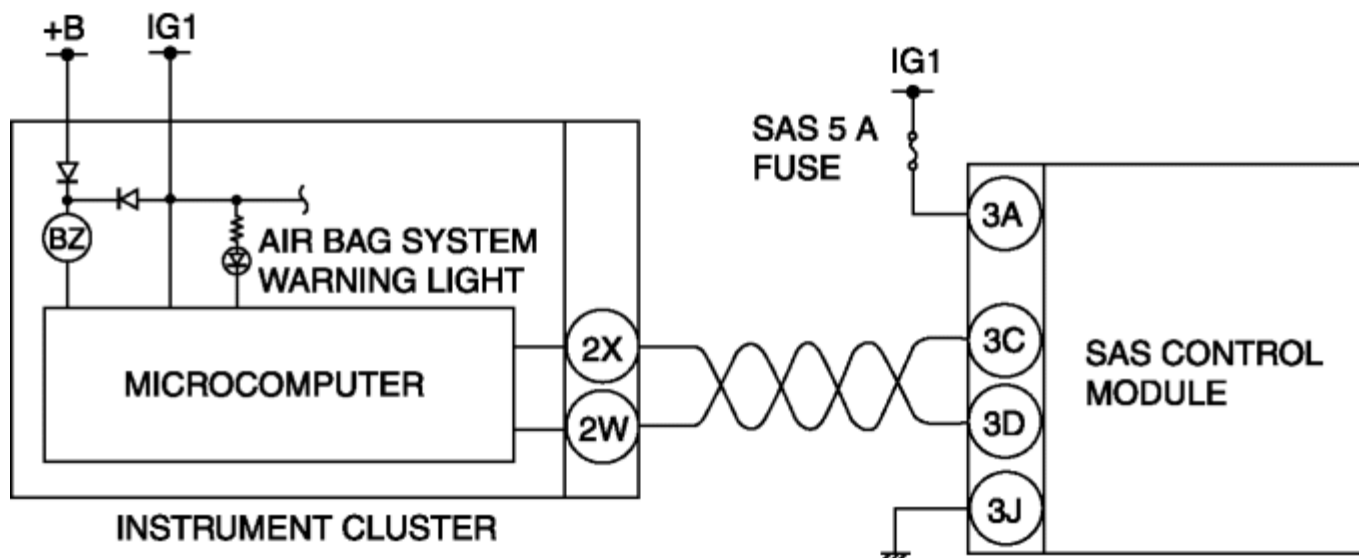


2012 - Mazda6 - Restraints

NO.2 AIR BAG SYSTEM WARNING LIGHT ILLUMINATES CONSTANTLY

2	Air bag system warning light is illuminated constantly.
DESCRIPTION	Air bag system warning light is illuminated constantly and remains illuminated after 6 s have elapsed.
POSSIBLE CAUSE	• Weak battery • SAS control module malfunction • Instrument cluster (circuit board) malfunction • No connection in SAS control module connector • Poor contact in instrument cluster connector (24-pin) • Open or short to power supply circuit in wiring harness between instrument cluster and SAS control module • Poor contact at terminals 3J and/or 3A of SAS control module connector • Poor contact in wiring harness between terminal 3J of SAS control module connector and ground • Poor contact in wiring harness between battery and terminal 3A of SAS control module

System Wiring Diagram



Diagnostic Procedure

STEP	INSPECTION	ACTION
1	INSPECT BATTERY - Measure the voltage of battery. - Is the voltage 8 V or more?	Yes Go to the next step.
		No Battery is weak. Inspect charge/discharge system, then go to Step 8. (See BATTERY INSPECTION [MZR 2.5] .) (See BATTERY INSPECTION [MZI 3.7 V6] .)
2	VERIFY THAT SAS CONTROL MODULE CONNECTOR IS CONNECTED WARNING: - Handling the air bag system components improperly can accidentally deploy the air bag modules and pretensioner seat belts, which may seriously injure you. Read the air bag system service warnings and cautions 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 Go to the next step.
		No Reconnect the connector properly, then go to Step 8.

	- Disconnect the negative battery cable and wait for 1 min or more. - Remove the console. (See REAR CONSOLE REMOVAL/ INSTALLATION.) - Are all SAS control module connectors securely connected?		
3	INSPECT DTCs IN SAS CONTROL MODULE - Clear DTCs using the M-MDS. (See CLEARING DTC.) - Inspect the DTC for the SAS control module on-board diagnostic system. - Have DTCs been recorded in memory?	Yes	Perform the applicable DTC inspection, then go to Step 8. (See DTC TABLE .)
		No	Go to the next step.
4	INSPECT DTCs IN INSTRUMENT CLUSTER - Inspect the DTC for the instrument cluster on-board diagnostic system. - Have DTCs been recorded in memory?	Yes	Perform the applicable DTC inspection, then go to Step 8. (See DTC TABLE [INSTRUMENT CLUSTER] .)
		No	Go to the next step.
5	VERIFY WHERE MALFUNCTION IS IN WARNING LIGHTS INDICATION CIRCUIT OR ELSEWHERE - Turn on all warning lights and indicator lights using the instrument cluster PID WL+IL of simulation function using the M-MDS. (See ACTIVE COMMAND MODES INSPECTION [INSTRUMENT CLUSTER].) - Do other warning and indicator lights illuminate?	Yes	Go to the next step.
		No	Repair the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION .) Then go to Step 8.
6	INSPECT POWER SUPPLY CIRCUIT OF SAS CONTROL MODULE (TERMINAL 3A) - Switch the ignition to off. - Disconnect the negative battery cable and wait for 1 min or more. - Remove the console. (See REAR CONSOLE REMOVAL/ INSTALLATION.) - Disconnect all SAS control module connectors. - Connect the negative battery cable. - Switch the ignition to ON. - Measure the voltage at SAS control module at wiring harness-side connector terminal 3A.	Yes	Go to the next step.
		No	Replace the wiring harnesses, then go to Step 8.

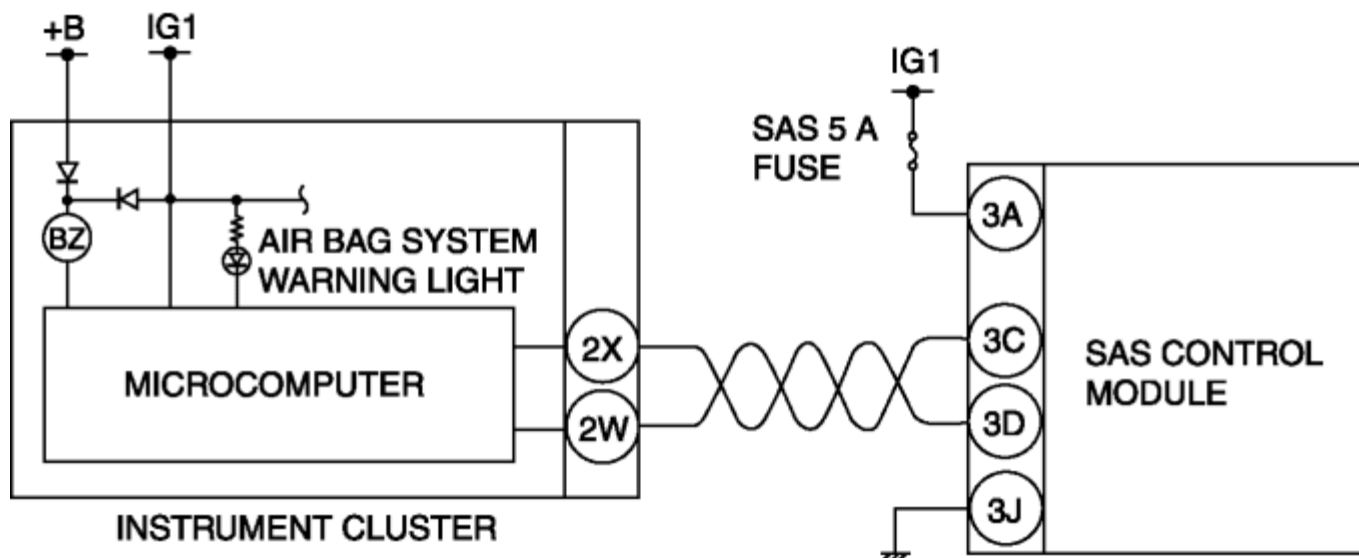
	Is the voltage 8 V—16 V?		
7	VERIFY THAT SAS CONTROL MODULE CONNECTOR TERMINAL 3J IS GROUND - SAS control module connector disconnected. - Inspect the wiring harness between SAS control module connector terminal 3J and ground for the following: - Short to power supply - Open circuit - Is the wiring harness normal?	Yes	Replace the SAS control module, then go to the next step. (See SAS CONTROL MODULE REMOVAL/ INSTALLATION .)
		No	Replace the wiring harnesses, then go to the next step.
8	CONFIRM THAT MALFUNCTION SYMPTOMS DO NOT RECUR AFTER REPAIR - Switch the ignition to off. - Disconnect the negative battery cable and wait for 1 min or more. - Connect all disconnected SAS system connectors during diagnosis. - Connect the negative battery cable. - Switch the ignition to ON. - Does the air bag system warning light illuminate for approx. 6 s and turn off?	Yes	Complete troubleshooting, then explain repairs to customer.
		No	Recheck malfunction symptoms, then repeat from Step 1 if malfunction recurs.

2012 - Mazda6 - Restraints

NO.2 AIR BAG SYSTEM WARNING LIGHT ILLUMINATES CONSTANTLY

2	Air bag system warning light is illuminated constantly.
DESCRIPTION	Air bag system warning light is illuminated constantly and remains illuminated after 6 s have elapsed.
POSSIBLE CAUSE	• Weak battery • SAS control module malfunction • Instrument cluster (circuit board) malfunction • No connection in SAS control module connector • Poor contact in instrument cluster connector (24-pin) • Open or short to power supply circuit in wiring harness between instrument cluster and SAS control module • Poor contact at terminals 3J and/or 3A of SAS control module connector • Poor contact in wiring harness between terminal 3J of SAS control module connector and ground • Poor contact in wiring harness between battery and terminal 3A of SAS control module

System Wiring Diagram



Diagnostic Procedure

STEP	INSPECTION	ACTION
1	INSPECT BATTERY - Measure the voltage of battery. - Is the voltage 8 V or more?	Yes Go to the next step.
		No Battery is weak. Inspect charge/discharge system, then go to Step 8. (See BATTERY INSPECTION [MZR 2.5] .) (See BATTERY INSPECTION [MZI 3.7 V6] .)
2	VERIFY THAT SAS CONTROL MODULE CONNECTOR IS CONNECTED WARNING: - Handling the air bag system components improperly can accidentally deploy the air bag modules and pretensioner seat belts, which may seriously injure you. Read the air bag system service warnings and cautions 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 Go to the next step.
		No Reconnect the connector properly, then go to Step 8.

	- Disconnect the negative battery cable and wait for 1 min or more. - Remove the console. (See REAR CONSOLE REMOVAL/ INSTALLATION.) - Are all SAS control module connectors securely connected?		
3	INSPECT DTCs IN SAS CONTROL MODULE - Clear DTCs using the M-MDS. (See CLEARING DTC.) - Inspect the DTC for the SAS control module on-board diagnostic system. - Have DTCs been recorded in memory?	Yes	Perform the applicable DTC inspection, then go to Step 8. (See DTC TABLE .)
		No	Go to the next step.
4	INSPECT DTCs IN INSTRUMENT CLUSTER - Inspect the DTC for the instrument cluster on-board diagnostic system. - Have DTCs been recorded in memory?	Yes	Perform the applicable DTC inspection, then go to Step 8. (See DTC TABLE [INSTRUMENT CLUSTER] .)
		No	Go to the next step.
5	VERIFY WHERE MALFUNCTION IS IN WARNING LIGHTS INDICATION CIRCUIT OR ELSEWHERE - Turn on all warning lights and indicator lights using the instrument cluster PID WL+IL of simulation function using the M-MDS. (See ACTIVE COMMAND MODES INSPECTION [INSTRUMENT CLUSTER].) - Do other warning and indicator lights illuminate?	Yes	Go to the next step.
		No	Repair the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION .) Then go to Step 8.
6	INSPECT POWER SUPPLY CIRCUIT OF SAS CONTROL MODULE (TERMINAL 3A) - Switch the ignition to off. - Disconnect the negative battery cable and wait for 1 min or more. - Remove the console. (See REAR CONSOLE REMOVAL/ INSTALLATION.) - Disconnect all SAS control module connectors. - Connect the negative battery cable. - Switch the ignition to ON. - Measure the voltage at SAS control module at wiring harness-side connector terminal 3A.	Yes	Go to the next step.
		No	Replace the wiring harnesses, then go to Step 8.

	Is the voltage 8 V—16 V?		
7	VERIFY THAT SAS CONTROL MODULE CONNECTOR TERMINAL 3J IS GROUND - SAS control module connector disconnected. - Inspect the wiring harness between SAS control module connector terminal 3J and ground for the following: - Short to power supply - Open circuit - Is the wiring harness normal?	Yes	Replace the SAS control module, then go to the next step. (See SAS CONTROL MODULE REMOVAL/ INSTALLATION .)
		No	Replace the wiring harnesses, then go to the next step.
8	CONFIRM THAT MALFUNCTION SYMPTOMS DO NOT RECUR AFTER REPAIR - Switch the ignition to off. - Disconnect the negative battery cable and wait for 1 min or more. - Connect all disconnected SAS system connectors during diagnosis. - Connect the negative battery cable. - Switch the ignition to ON. - Does the air bag system warning light illuminate for approx. 6 s and turn off?	Yes	Complete troubleshooting, then explain repairs to customer.
		No	Recheck malfunction symptoms, then repeat from Step 1 if malfunction recurs.