



Mazda 3 Workshop Manual – RESTRAINTS + DTC

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ON-BOARD DIAGNOSTIC

FOREWORD

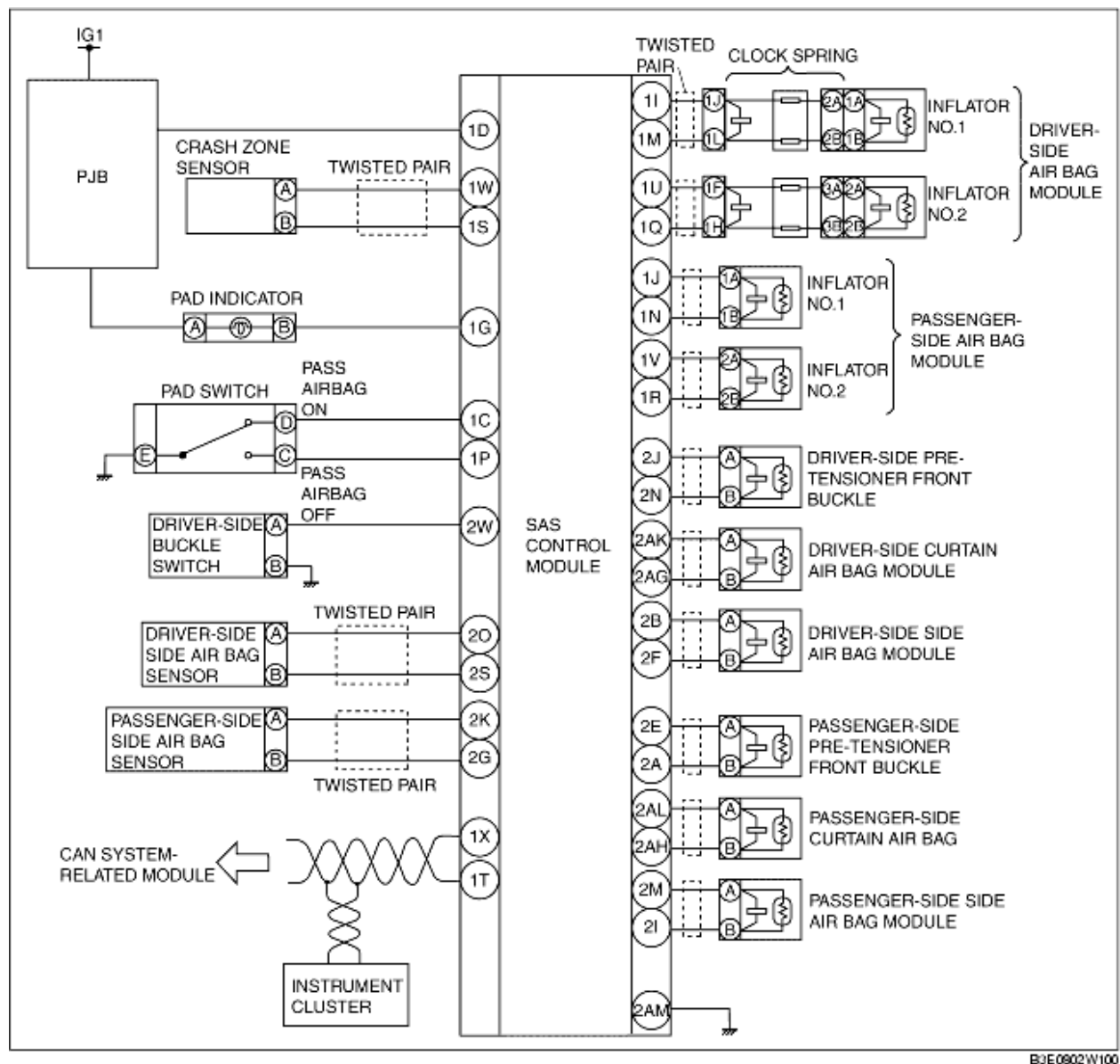
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Outline

- The OBD (on-board diagnostic) system has the following functions:
 - Malfunction detection function: Detects malfunctions in the air bag system and outputs DTCs.
 - Data monitor function: Reads out specific input/output signals and the system status.
- Diagnostic DTCs can be read/cleared using the WDS or equivalent.

AIR BAG SYSTEM WIRING DIAGRAM (ON-BOARD DIAGNOSTIC)

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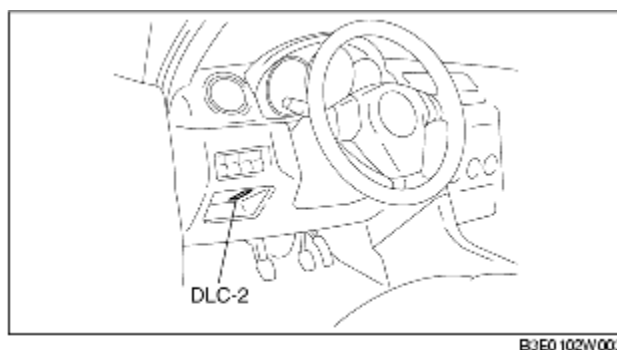


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DTC DISPLAY

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1. Connect the WDS or equivalent to the DLC-2 connector (16-pin).



B3E0102W003

2. Retrieve DTCs.

CLEARING DTC



B3E080201046W04

1. After repairs have been made, retrieve DTCs.
2. Using the WDS or equivalent, clear DTCs from the memory.
3. Perform the DTC inspection again and verify that no DTC is displayed.

DTC TABLE

B3E080201046W05

DTC	System malfunction location	Page
WDS display		
B1046	Driver-side curtain air bag module and other air bag module circuits short	(See DTC B1046, B2773, B2774, B2775, B2776.)
B1047	Driver-side side air bag module and other air bag module circuits short	(See DTC B1047, B1992, B1993, B1994, B1995.)
B1048	Passenger-side air bag module (inflator No.1) and other air bag module circuits short	(See DTC B1048, B1925, B1933, B1935, B1938.)
B1049	Passenger-side pre-tensioner front buckle and other air bag module circuits short	(See DTC B1049, B1881, B1882, B1883, B1886.)
B104B	Driver-side side air bag sensor and other sensor circuits short to power supply	(See DTC B104B, B104E, B1051, U2017.)
B104C	Passenger-side side air bag sensor and other sensor circuits short to power supply	(See DTC B104C, B104F, B1050, U2018.)
B104D	Crash zone sensor and other sensor circuits short to power supply	(See DTC B104D, B2226, B2227, B2855.)
B104E	Driver-side side air bag sensor (internal circuit abnormal)	(See DTC B104B, B104E, B1051, U2017.)
B104F	Passenger-side side air bag sensor (internal circuit abnormal)	(See DTC B104C, B104F, B1050, U2018.)
B1050	Passenger-side side air bag sensor circuit open or short	
B1051	Driver-side side air bag sensor circuit open or short	(See DTC B104B, B104E, B1051, U2017.)
B1053	Driver-side front buckle switch and other sensor circuits short to power supply	(See DTC B1053, B2432, B2433, B2434, B2435.)

B1054	Driver-side pre-tensioner front buckle and other air bag module circuits short	(See DTC B1054, B1877, B1878, B1879, B1885.)
B1055	Passenger-side side air bag module and other air bag module circuits short	(See DTC B1055, B1996, B1997, B1998, B1999.)
B1056	Passenger-side curtain air bag module and other air bag module circuits short	(See DTC B1056, B2777, B2778, B2779, B2780.)
B1057	Driver-side air bag module (inflator No.1) and other air bag module circuits short	(See DTC B1057, B1916, B1932, B1934, B1936.)
B1058	Driver-side air bag module (inflator No.2) and other air bag module circuits short	(See DTC B1058, B2228, B2230, B2232, B2234.)
B1059	Passenger-side air bag module (inflator No.2) and other air bag module circuits short	(See DTC B1059, B2229, B2231, B2233, B2235.)
B105A	SAS control module activation (deployment) control frequency error	(See DTC B105A.)
B1231	SAS control module activation (deployment) control freeze	(See DTC B1231.)
B1317	SAS control module power supply voltage increases (16.1 V or more)	(See DTC B1317, B1318.)
B1318	SAS control module power supply voltage decreases (less than 9 V)	
B1342	SAS control module	(See DTC B1342.)
B1877	Driver-side pre-tensioner front buckle circuit resistance high	(See DTC B1054, B1877, B1878, B1879, B1885.)
B1878	Driver-side pre-tensioner front buckle circuit short to power supply	
B1879	Driver-side pre-tensioner front buckle circuit short to body ground	
B1881	Passenger-side pre-tensioner front buckle circuit resistance high	(See DTC B1049, B1881, B1882, B1883, B1886.)
B1882	Passenger-side pre-tensioner front buckle circuit short to power supply	
B1883	Passenger-side pre-tensioner front buckle circuit short to body ground	
B1884	Passenger air bag deactivation (PAD) indicator circuit open or short to body ground	(See DTC B1884, B1890.)
B1885	Driver-side pre-tensioner front buckle circuit resistance low	(See DTC B1054, B1877, B1878, B1879, B1885.)

B1886	Passenger-side pre-tensioner front buckle circuit resistance low	(See DTC B1049, B1881, B1882, B1883, B1886.)
B1890	Passenger air bag deactivation (PAD) indicator circuit short to power supply	(See DTC B1884, B1890.)
B1916	Driver-side air bag module (inflator No.1) circuit short to power supply	(See DTC B1057, B1916, B1932, B1934, B1936.)
B1921	Air bag diagnostic monitor ground circuit open	(See DTC B1921.)
B1925	Passenger-side air bag module (inflator No.1) circuit short to power supply	(See DTC B1048, B1925, B1933, B1935, B1938.)
B1932	Driver-side air bag module (inflator No.1) circuit resistance high	(See DTC B1057, B1916, B1932, B1934, B1936.)
B1933	Passenger-side air bag module (inflator No.1) circuit resistance high	(See DTC B1048, B1925, B1933, B1935, B1938.)
B1934	Driver-side air bag module (inflator No.1) circuit resistance low	(See DTC B1057, B1916, B1932, B1934, B1936.)
B1935	Passenger-side air bag module (inflator No.1) circuit resistance low	(See DTC B1048, B1925, B1933, B1935, B1938.)
B1936	Driver-side air bag module (inflator No.1) circuit short to body ground	(See DTC B1057, B1916, B1932, B1934, B1936.)
B1938	Passenger-side air bag module (inflator No.1) circuit short to body ground	(See DTC B1048, B1925, B1933, B1935, B1938.)
B1992	Driver-side side air bag module circuit short to power supply	(See DTC B1047, B1992, B1993, B1994, B1995.)
B1993	Driver-side side air bag module circuit short to body ground	
B1994	Driver-side side air bag module circuit resistance high	
B1995	Driver-side side air bag module circuit resistance low	
B1996	Passenger-side side air bag module circuit short to power supply	(See DTC B1055, B1996, B1997, B1998, B1999.)
B1997	Passenger-side side air bag module circuit short to body ground	
B1998	Passenger-side side air bag module circuit resistance high	
B1999	Passenger-side side air bag module circuit resistance low	
B2226	Crash zone sensor (internal circuit abnormal)	(See DTC B104D, B2226, B2227, B2855.)
B2227	Crash zone sensor (communication error)	

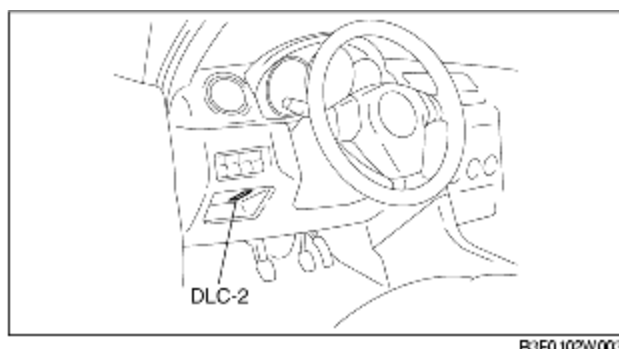
B2228	Driver-side air bag module (inflator No.2) circuit short to body ground	(See DTC B1058, B2228, B2230, B2232, B2234.)
B2229	Passenger-side air bag module (inflator No.2) circuit short to body ground	(See DTC B1059, B2229, B2231, B2233, B2235.)
B2230	Driver-side air bag module (inflator No.2) circuit short to power supply	(See DTC B1058, B2228, B2230, B2232, B2234.)
B2231	Passenger-side air bag module (inflator No.2) circuit short to power supply	(See DTC B1059, B2229, B2231, B2233, B2235.)
B2232	Driver-side air bag module (inflator No.2) circuit resistance high	(See DTC B1058, B2228, B2230, B2232, B2234.)
B2233	Passenger-side air bag module (inflator No.2) circuit resistance high	(See DTC B1059, B2229, B2231, B2233, B2235.)
B2234	Driver-side air bag module (inflator No.2) circuit resistance low	(See DTC B1058, B2228, B2230, B2232, B2234.)
B2235	Passenger-side air bag module (inflator No.2) circuit resistance low	(See DTC B1059, B2229, B2231, B2233, B2235.)
B2432	Driver-side front buckle switch circuit open	(See DTC B1053, B2432, B2433, B2434, B2435.)
B2433	Driver-side front buckle switch circuit open or short to power supply	
B2434	Driver-side front buckle switch circuit short to body ground	
B2435	Driver-side front buckle switch circuit resistance not within specification	
B2477	Configuration error	(See DTC B2477.)
B2773	Driver-side curtain air bag module circuit resistance low	(See DTC B1046, B2773, B2774, B2775, B2776.)
B2774	Driver-side curtain air bag module circuit resistance high	
B2775	Driver-side curtain air bag module circuit short to body ground	
B2776	Driver-side curtain air bag module circuit short to power supply	
B2777	Passenger-side curtain air bag module circuit resistance low	(See DTC B1056, B2777, B2778, B2779, B2780.)
B2778	Passenger-side curtain air bag module circuit resistance high	
B2779	Passenger-side curtain air bag module circuit short to body ground	

B2780	Passenger-side curtain air bag module circuit short to power supply	
B2855	Crash zone sensor circuit short	(See DTC B104D, B2226, B2227, B2855.)
B2856	Crash zone sensor ID mismatch	(See DTC B2856, B2886, B2887.)
B2886	Passenger-side side air bag sensor ID mismatch	
B2887	Driver-side side air bag sensor ID mismatch	
U2017	Driver-side side air bag sensor (communication error)	(See DTC B104B, B104E, B1051, U2017.)
U2018	Passenger-side side air bag sensor (communication error)	(See DTC B104C, B104F, B1050, U2018.)

PID/DATA MONITOR DISPLAY

B3E080201046W06

1. Connect the WDS or equivalent to the DLC-2 connector (16-pin).



2. Display the data monitor items.

PID/DATA MONITOR TABLE

B3E080201046W07

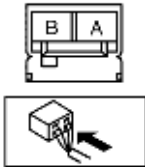
PID name (definition)	Unit/Condition	Operation Condition (Reference)	Terminal
CCNT_RCM (Number of continuous DTCs)		• DTCs detected: 1-255 • No DTCs detected: 0	
D_ABAGR2 (Driver-side air bag module (inflator No.2) resistance)	Ohms	Under any condition: 1.5-3.7 ohms	1U, 1Q

DABAGR (Driver-side air bag module (inflator No.1) resistance)	Ohms	Under any condition: 1.5-3.7 ohms	1I, 1M
DFCURTRES (Driver-side curtain air bag module resistance)	Ohms	Under any condition: 1.4-3.2 ohms	2AG, 2AK
DR_BUKL (Driver-side buckle switch status)	Buckled/Unbuckled	• Driver-side buckle switch on: Buckled • Driver-side buckle switch off: Unbuckled	2W
DR_PTENS (Driver-side pre-tensioner front buckle resistance)	Ohms	Under any condition: 1.5-3.1 ohms	2J, 2N
DS_AB (Driver-side side air bag module resistance)	Ohms	Under any condition: 1.4-3.2 ohms	2B, 2F
I_PAD_FLT (PAD switch status)	OK/Fault	• PAD switch normal: OK • PAD switch abnormal: Fault	1P
I_PAD_SW (PAD switch status)	ON/OFF	• PAD switch is at PASS AIRBAG ON position: ON • PAD switch is at PASS AIRBAG OFF position: OFF	1P
P_ABAGR2 (Passenger-side air bag module (inflator No.2) resistance)	Ohms	Under any condition: 1.4-2.9 ohms	1R, 1V
PABAGR (Passenger-side air bag module (inflator No.1) resistance)	Ohms	Under any condition: 1.4-2.9 ohms	1J, 1N
PFCURTRES (Passenger-side curtain air bag module resistance)	Ohms	Under any condition: 1.4-3.2 ohms	2AH, 2AL
PS_AB (Passenger-side side air bag module resistance)	Ohms	Under any condition: 1.4-3.2 ohms	2I, 2M
PS_PTENS (Passenger-side pre-tensioner front buckle resistance)	Ohms	Under any condition: 1.5-3.1 ohms	2A, 2E

VBATTRCM (SAS control module input voltage)	V	- Ignition switch is at ON: B+ - Other: 0	1D
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DTC B1046, B2773, B2774, B2775, B2776

B3E080201046W28

DTC	B1046	Driver-side curtain air bag module and other air bag module circuits short
	B2773	Driver-side curtain air bag module circuit resistance low
	B2774	Driver-side curtain air bag module circuit resistance high
	B2775	Driver-side curtain air bag module circuit short to body ground
	B2776	Driver-side curtain air bag module circuit short to power supply
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 1.4-3.2 ohms detected in driver-side curtain air bag module circuit - Malfunction in wiring harness between driver-side curtain air bag module and SAS control module
POSSIBLE CAUSE		- Open or short circuit in wiring harness between driver-side curtain air bag module and SAS control module - Driver-side curtain air bag module malfunction - SAS control module malfunction
DRIVER-SIDE CURTAIN AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR 		

Diagnostic procedure

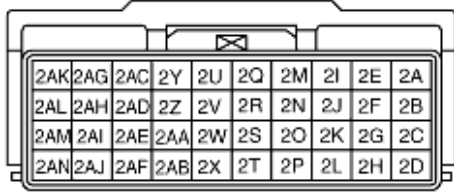
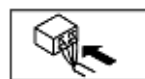
STEP	INSPECTION		ACTION
1	INSPECT DRIVER-SIDE CURTAIN AIR BAG MODULE	Yes	Replace the SAS control module.

	- Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE.) - DFCURTRES - Is the resistance of the driver-side curtain air bag module normal? - Resistance: 1.4-3.2 ohms		(See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT DRIVER-SIDE CURTAIN AIR BAG MODULE CONNECTOR Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS .) (See SERVICE CAUTIONS .) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Disconnect the driver-side curtain air bag module connector. - Is there any malfunction of the driver-side curtain air bag module connector?	Yes	Replace the air bag wiring harness.
		No	Go to the next step.
3	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE CURTAIN AIR BAG MODULE OR RELATED WIRING HARNESS - Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to driver-side curtain air bag module connector terminals A and B. - Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. - Connect the negative battery cable. - Turn the ignition switch to the ON position. - Are DTCs B1046, B2773, B2774, B2775 and/or B2776 indicated?	Yes	Replace the air bag wiring harness, then go to the next step.
		No	Replace the driver-side curtain air bag module. (See CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION .)
4	INSPECT SAS CONTROL MODULE - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more.	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	DTC troubleshooting completed.

- Connect the driver-side curtain air bag module connector.
- Are DTCs B1046, B2773, B2774, B2775 and/or B2776 indicated?

DTC B1047, B1992, B1993, B1994, B1995

B3E080201046W18

DTC	B1047	Driver-side side air bag module and other air bag module circuits short
	B1992	Driver-side side air bag module circuit short to power supply
	B1993	Driver-side side air bag module circuit short to body ground
	B1994	Driver-side side air bag module circuit resistance high
	B1995	Driver-side side air bag module 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 1.4-3.2 ohms detected in driver-side side air bag module circuit • Malfunction in wiring harness between driver-side side air bag module and SAS control module	
POSSIBLE CAUSE	• Open or short circuit in wiring harness between driver-side side air bag module and SAS control module • Driver-side side air bag module malfunction • SAS control module malfunction	
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR   DRIVER-SIDE SIDE AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR  		

Diagnostic procedure

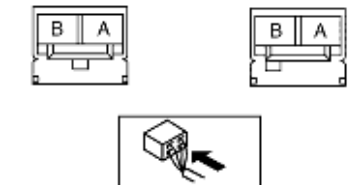
STEP	INSPECTION		ACTION
1	INSPECT DRIVER-SIDE SIDE AIR BAG MODULE - Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE .) - DS_AB - Is the resistance of the driver-side side air bag module normal? - Resistance: 1.4-3.2 ohms	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT DRIVER-SIDE SIDE AIR BAG MODULE CONNECTOR Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS .) (See SERVICE CAUTIONS .) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Disconnect the driver-side side air bag module connector. - Is there any malfunction of the driver-side side air bag module connector?	Yes	Replace the air bag wiring harness.
		No	Go to the next step.
3	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE SIDE AIR BAG MODULE OR RELATED WIRING HARNESS - Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to driver-side side air bag module connector terminals A and B. - Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. - Connect the negative battery cable. - Turn the ignition switch to the ON position. - Are DTCs B1047, B1992, B1993, B1994, and/or B1995 indicated?	Yes	Go to the next step.
		No	Replace the driver-side side air bag module. (See SIDE AIR BAG MODULE REMOVAL/INSTALLATION .)
4		Yes	Replace the SAS control module.

	INSPECT WIRING HARNESS BETWEEN DRIVER-SIDE SIDE AIR BAG MODULE AND SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the driver and passenger-side front seat connectors. • Disconnect the driver and passenger-side curtain air bag module connectors. • Remove the console. • Inspect the wiring harness between SAS control module terminal 2B and driver-side side air bag module terminal A, SAS control module terminal 2F and driver-side side air bag module terminal B for the following: - Short to ground - Short to power supply - Open circuit • Is the wiring harness normal?		(See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Replace the air bag wiring harness.

DTC B1048, B1925, B1933, B1935, B1938

B3E080201046W16

DTC	B1048	Passenger-side air bag module (inflator No.1) and other air bag module circuits short
	B1925	Passenger-side air bag module (inflator No.1) circuit short to power supply
	B1933	Passenger-side air bag module (inflator No.1) circuit resistance high
	B1935	Passenger-side air bag module (inflator No.1) circuit resistance low
	B1938	Passenger-side air bag module (inflator No.1) circuit short to body ground
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 1.4-2.9 ohms detected in passenger-side air bag module (inflator No.1) circuit

	• Malfunction in wiring harness between passenger-side air bag module (inflator No.1) and SAS control module
POSSIBLE CAUSE	• Open or short circuit in wiring harness between passenger-side air bag module (inflator No.1) and SAS control module • Passenger-side air bag module (inflator No.1) malfunction • SAS control module malfunction
PASSENGER-SIDE AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR (INFLATOR NO.1) (INFLATOR NO.2) 	

Diagnostic procedure

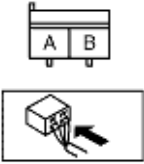
STEP	INSPECTION	ACTION	
1	INSPECT PASSENGER-SIDE AIR BAG MODULE (INFLATOR NO.1) • Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE.) - PABAGR • Is the resistance of the passenger-side air bag module normal? - Resistance: 1.4-2.9 ohms	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT PASSENGER-SIDE AIR BAG MODULE (INFLATOR NO.1) CONNECTOR Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Remove the glove compartment.	Yes	Replace the air bag wiring harness.
		No	Go to the next step.

	• Disconnect the passenger-side air bag module connector. • Is there any malfunction of the passenger-side air bag module connector?		
3	VERIFY WHETHER MALFUNCTION IS IN PASSENGER-SIDE AIR BAG MODULE (INFLATOR NO.1) OR RELATED WIRING HARNESS • Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to passenger-side air bag module (inflator No.1) connector terminals A and B, and passenger-side air bag module (inflator No.2) connector terminals A and B. • Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. • Connect the negative battery cable. • Turn the ignition switch to the ON position. • Are DTCs B1048, B1925, B1933, B1935 and/or B1938 indicated?	Yes	Replace the air bag wiring harness, then go to the next step.
		No	Replace the passenger-side air bag module. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)
4	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the passenger-side air bag module connector. • Are DTCs B1048, B1925, B1933, B1935 and/or B1938 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.

DTC B1049, B1881, B1882, B1883, B1886

B3E080201046W13

DTC	B1049	Passenger-side pre-tensioner front buckle and other air bag module circuits short
	B1881	Passenger-side pre-tensioner front buckle circuit resistance high
	B1882	Passenger-side pre-tensioner front buckle circuit short to power supply
	B1883	Passenger-side pre-tensioner front buckle circuit short to body ground
	B1886	Passenger-side pre-tensioner front buckle 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 1.5-3.1 ohms detected in passenger-side pre-tensioner front buckle circuit - Malfunction in wiring harness between passenger-side pre-tensioner front buckle and SAS control module
POSSIBLE CAUSE	- Open or short circuit in wiring harness between passenger-side pre-tensioner front buckle and SAS control module - Passenger-side pre-tensioner front buckle malfunction - SAS control module malfunction
PASSENGER-SIDE PRE-TENSIONER FRONT BUCKLE WIRING HARNESS-SIDE CONNECTOR 	

Diagnostic procedure

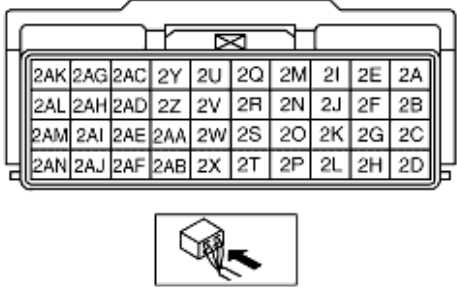
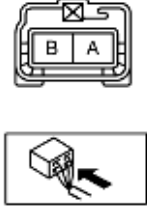
STEP	INSPECTION		ACTION
1	INSPECT PASSENGER-SIDE PRE-TENSIONER FRONT BUCKLE - Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE.) - PS_PTENS - Is the resistance of the passenger-side pre-tensioner front buckle normal? - Resistance: 1.5-3.1 ohms	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT PASSENGER-SIDE PRE-TENSIONER FRONT BUCKLE CONNECTOR Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) - Turn the ignition switch to the LOCK position.	Yes	Replace the air bag wiring harness.
		No	Go to the next step.

	• Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the passenger-side pre-tensioner front buckle connector. • Is there any malfunction of the passenger-side pre-tensioner front buckle connector?		
3	VERIFY WHETHER MALFUNCTION IS IN PASSENGER-SIDE PRE-TENSIONER FRONT BUCKLE OR RELATED WIRING HARNESS • Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to passenger-side pre-tensioner front buckle connector terminals A and B. • Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. • Connect the negative battery cable. • Turn the ignition switch to the ON position. • Are DTCs B1049, B1881, B1882, B1883, and/or B1886 indicated?	Yes	Replace the air bag wiring harness, then go to the next step.
		No	Replace the passenger-side pre-tensioner front buckle. (See FRONT SEAT BELT REMOVAL/INSTALLATION .)
4	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the passenger-side pre-tensioner front buckle connector. • Are DTCs B1049, B1881, B1882, B1883, and/or B1886 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	DTC troubleshooting completed.

DTC B104B, B104E, B1051, U2017

B3E080201046W25

DTC	B104B	Driver-side side air bag sensor and other sensor circuits short to power supply
	B104E	Driver-side side air bag sensor (internal circuit abnormal)
	B1051	Driver-side side air bag sensor circuit open or short
	U2017	Driver-side side air bag sensor (communication error)
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. • Malfunction in wiring harness between driver-side side air bag sensor and SAS control module • Malfunction in driver-side side air bag sensor circuit
POSSIBLE CAUSE	• Open or short circuit in wiring harness between driver-side side air bag sensor and SAS control module • Driver-side side air bag sensor malfunction • SAS control module malfunction
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR  DRIVER-SIDE SIDE AIR BAG SENSOR WIRING HARNESS-SIDE CONNECTOR 	

Diagnostic procedure

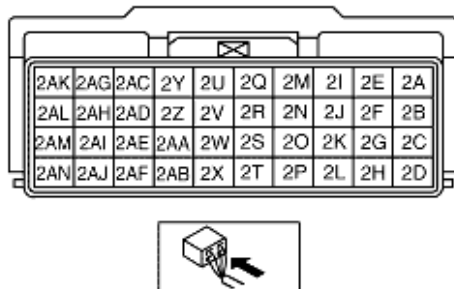
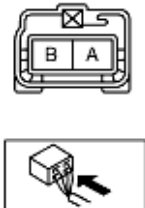
STEP	INSPECTION	ACTION
1	INSPECT DRIVER-SIDE SIDE AIR BAG SENSOR CONNECTOR	Yes Replace the air bag wiring harness.
	Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the driver-side side air bag sensor connector. • Is there any malfunction of the driver-side side air bag sensor connector?	No Go to the next step.

2	INSPECT WIRING HARNESS BETWEEN DRIVER-SIDE SIDE AIR BAG SENSOR AND SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the driver and passenger-side front seat connectors. • Disconnect the driver and passenger-side curtain air bag module connectors. • Remove the console. • Disconnect the SAS control module connector. • Disconnect the driver-side side air bag sensor connector. • Connect the negative battery cable. • Inspect the wiring harnesses between SAS control module terminal 2O and driver-side side air bag sensor terminal A, SAS control module terminal 2S and driver-side side air bag sensor terminal B for the following: - Short to ground - Short to power supply - Open circuit • Is the wiring harness normal?	Yes	Replace the driver-side side air bag sensor, then go to the next step. (See SIDE AIR BAG SENSOR REMOVAL/INSTALLATION.)
		No	Replace the air bag wiring harness.
3	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the SAS control module connector. • Connect the driver-side side air bag sensor connector. • Are DTCs B104B, B104E, B1051 and/or U2017 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.

DTC B104C, B104F, B1050, U2018

B3E080201046W26

DTC	B104C	Passenger-side side air bag sensor and other sensor circuits short to power supply
	B104F	Passenger-side side air bag sensor (internal circuit abnormal)
	B1050	Passenger-side side air bag sensor circuit open or short

	U2018	Passenger-side side air bag sensor (communication error)
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. • Malfunction in wiring harness between passenger-side side air bag sensor and SAS control module • Malfunction in passenger-side side air bag sensor circuit	
POSSIBLE CAUSE	• Open or short circuit in wiring harness between passenger-side side air bag sensor and SAS control module • Passenger-side side air bag sensor malfunction • SAS control module malfunction	
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR   PASSENGER-SIDE SIDE AIR BAG SENSOR WIRING HARNESS-SIDE CONNECTOR  		

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT PASSENGER-SIDE SIDE AIR BAG SENSOR CONNECTOR Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more.	Yes Replace the air bag wiring harness.
		No Go to the next step.

	• Disconnect the passenger-side side air bag sensor connector. • Is there any malfunction of the passenger-side side air bag sensor connector?		
2	INSPECT WIRING HARNESS BETWEEN PASSENGER-SIDE SIDE AIR BAG SENSOR AND SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the driver and passenger-side front seat connectors. • Disconnect the driver and passenger-side curtain air bag module connectors. • Remove the console. • Disconnect the SAS control module connector. • Disconnect the passenger-side side air bag sensor connector. • Connect the negative battery cable. • Inspect the wiring harnesses between SAS control module terminal 2K and passenger-side side air bag sensor terminal A, SAS control module terminal 2G and passenger-side side air bag sensor terminal B for the following: - Short to ground - Short to power supply - Open circuit • Is the wiring harness normal?	Yes	Replace the passenger-side side air bag sensor, then go to the next step. (See SIDE AIR BAG SENSOR REMOVAL/INSTALLATION.)
		No	Replace the air bag wiring harness.
3	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the SAS control module connector. • Connect the passenger-side side air bag sensor connector. • Are DTCs B104C, B104F, B1050 and/or U2018 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.

DTC B104D, B2226, B2227, B2855

DTC	B104D	Crash zone sensor and other sensor circuits short to power supply																								
	B2226	Crash zone sensor (internal circuit abnormal)																								
	B2227	Crash zone sensor (communication error)																								
	B2855	Crash zone sensor circuit short																								
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. • Malfunction in wiring harness between crash zone sensor and SAS control module • Malfunction in crash zone sensor circuit																									
POSSIBLE CAUSE	• Open or short circuit in wiring harness between crash zone sensor and SAS control module • Crash zone sensor malfunction • SAS control module malfunction																									
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR <table><tr><td>1U</td><td>1Q</td><td>1M</td><td>1I</td><td>1E</td><td>1A</td></tr><tr><td>1V</td><td>1R</td><td>1N</td><td>1J</td><td>1F</td><td>1B</td></tr><tr><td>1W</td><td>1S</td><td>1O</td><td>1K</td><td>1G</td><td>1C</td></tr><tr><td>1X</td><td>1T</td><td>1P</td><td>1L</td><td>1H</td><td>1D</td></tr></table> CRASH ZONE SENSOR WIRING HARNESS-SIDE CONNECTOR			1U	1Q	1M	1I	1E	1A	1V	1R	1N	1J	1F	1B	1W	1S	1O	1K	1G	1C	1X	1T	1P	1L	1H	1D
1U	1Q	1M	1I	1E	1A																					
1V	1R	1N	1J	1F	1B																					
1W	1S	1O	1K	1G	1C																					
1X	1T	1P	1L	1H	1D																					

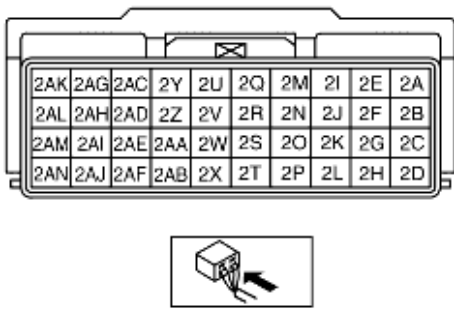
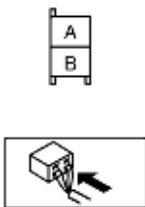
Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT CRASH ZONE SENSOR CONNECTOR Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) • Turn the ignition switch to the LOCK position.	Yes Replace the air bag wiring harness.
		No Go to the next step.

	• Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the crash zone sensor connector. • Is there any malfunction of the crash zone sensor connector?		
2	INSPECT WIRING HARNESS BETWEEN CRASH ZONE SENSOR AND SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Remove the column cover. • Disconnect the clock spring connector. • Remove the glove compartment. • Disconnect the passenger-side air bag module connector. • Disconnect the driver and passenger-side front seat connectors. • Disconnect the driver and passenger-side curtain air bag module connectors. • Remove the console. • Disconnect the SAS control module connector. • Disconnect the crash zone sensor connector. • Connect the negative battery cable. • Inspect the wiring harnesses between SAS control module terminal 1W and crash zone sensor terminal A, SAS control module terminal 1S and crash zone sensor terminal B for the following: - Short to ground - Short to power supply - Open circuit • Is the wiring harness normal?	Yes	Replace the crash zone sensor, then go to the next step. (See CRASH ZONE SENSOR REMOVAL/INSTALLATION.)
		No	Replace the air bag wiring harness.
3	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the SAS control module connector. • Connect the crash zone sensor connector. • Is DTC B104D, B2226, B2227 and/or B2855 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.

DTC B1053, B2432, B2433, B2434, B2435

B3E080201046W23

DTC	B1053	Driver-side front buckle switch and other sensor circuits short to power supply
	B2432	Driver-side front buckle switch circuit open
	B2433	Driver-side front buckle switch circuit open or short to power supply
	B2434	Driver-side front buckle switch circuit short to body ground
	B2435	Driver-side front buckle switch circuit resistance not within specification
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. - Malfunction in the wiring harness between the driver-side front buckle switch and SAS control module - Malfunction in driver-side front buckle switch circuit
POSSIBLE CAUSE		- Malfunction of connectors between driver-side front buckle switch and SAS control module - Open or short circuit in wiring harness between driver-side front buckle switch and SAS control module - Driver-side front buckle switch malfunction - SAS control module malfunction
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR  DRIVER-SIDE FRONT BUCKLE SWITCH WIRING HARNESS-SIDE CONNECTOR 		

Diagnostic procedure

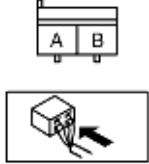
STEP	INSPECTION	ACTION
1	Yes	Replace the SAS control module.

	INSPECT DRIVER-SIDE BUCKLE SWITCH CIRCUIT - Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE.) - DR_BUKL - Is the driver-side front buckle switch normal?		(See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT WIRING HARNESS BETWEEN DRIVER-SIDE BUCKLE SWITCH AND GROUND Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Disconnect the driver-side front buckle switch connector. - Inspect the wiring harness between driver-side front buckle switch terminal B and ground for the following: - Short to power supply - Open circuit - Is the wiring harness normal?	Yes	Go to the next step.
		No	Replace the wiring harness.
3	INSPECT WIRING HARNESS BETWEEN DRIVER-SIDE BUCKLE SWITCH AND SAS CONTROL MODULE - Disconnect the driver and passenger-side front seat connectors. - Disconnect the driver and passenger-side curtain air bag module connectors. - Remove the console. - Disconnect the SAS control module connector. - Inspect the wiring harness between SAS control module terminal 2W and driver-side front buckle switch terminal A for the following: - Short to ground	Yes	Replace the driver-side front buckle. (See FRONT BUCKLE REMOVAL/INSTALLATION .) If the DTC is displayed even after the buckle switch is replaced, replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Replace the wiring harness.

	- Short to power supply - Open circuit		
	• Is the wiring harness normal?		

DTC B1054, B1877, B1878, B1879, B1885

B3E080201046W12

DTC	B1054	Driver-side pre-tensioner front buckle and other air bag module circuits short
	B1877	Driver-side pre-tensioner front buckle circuit resistance high
	B1878	Driver-side pre-tensioner front buckle circuit short to power supply
	B1879	Driver-side pre-tensioner front buckle circuit short to body ground
	B1885	Driver-side pre-tensioner front buckle 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 1.5-3.1 ohms detected in driver-side pre-tensioner front buckle circuit • Malfunction in the wiring harness between driver-side pre-tensioner front buckle and SAS control module
POSSIBLE CAUSE		• Open or short circuit in wiring harness between driver-side pre-tensioner front buckle and SAS control module • Driver-side pre-tensioner front buckle malfunction • SAS control module malfunction
DRIVER-SIDE PRE-TENSIONER FRONT BUCKLE WIRING HARNESS-SIDE CONNECTOR 		

Diagnostic procedure

STEP	INSPECTION	ACTION
1	Yes	Replace the SAS control module.

	INSPECT DRIVER-SIDE PRE-TENSIONER FRONT BUCKLE • Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE .) - DR_PTENS • Is the resistance of the driver-side pre-tensioner front buckle normal? - Resistance: 1.5-3.1 ohms		(See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT DRIVER-SIDE PRE-TENSIONER FRONT BUCKLE CONNECTOR Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS .) (See SERVICE CAUTIONS .) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more . • Disconnect the driver-side pre-tensioner front buckle connector. • Is there any malfunction of the driver-side pre-tensioner front buckle connector?	Yes	Replace the air bag wiring harness.
		No	Go to the next step.
3	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE PRE-TENSIONER FRONT BUCKLE OR RELATED WIRING HARNESS • Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to driver-side pre-tensioner front buckle connector terminals A and B. • Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. • Connect the negative battery cable. • Turn the ignition switch to the ON position. • Are DTCs B1054, B1877, B1878, B1879, and/or B1885 indicated?	Yes	Replace the air bag wiring harness, then go to the next step.
		No	Replace the driver-side pre-tensioner front buckle. (See FRONT SEAT BELT REMOVAL/INSTALLATION .)
4	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position.	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)

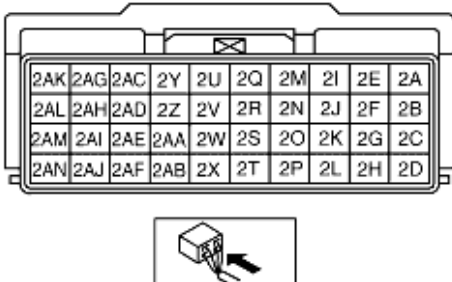
• Disconnect the negative battery cable and wait for 1 min or more. • Connect the driver-side pre-tensioner front buckle connector. • Are DTCs B1054, B1877, B1878, B1879, and/or B1885 indicated?	No	DTC troubleshooting completed.
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DTC B1055, B1996, B1997, B1998, B1999

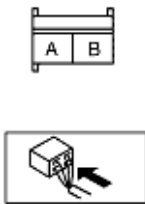
B3E080201046W19

DTC	B1055	Passenger-side side air bag module and other air bag module circuits short
	B1996	Passenger-side side air bag module circuit short to power supply
	B1997	Passenger-side side air bag module circuit short to body ground
	B1998	Passenger-side side air bag module circuit resistance high
	B1999	Passenger-side side air bag module 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 1.4-3.2 ohms detected in passenger-side side air bag module circuit • Malfunction in wiring harness between passenger-side side air bag module and SAS control module	
POSSIBLE CAUSE	• Open or short circuit in wiring harness between passenger-side side air bag module and SAS control module • Passenger-side side air bag module malfunction • SAS control module malfunction	

SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



PASSENGER-SIDE SIDE AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR



Diagnostic procedure

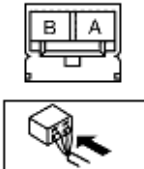
STEP	INSPECTION	ACTION
1	INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE - Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE .) - PS_AB - Is the resistance of the passenger-side side air bag module normal? - Resistance: 1.4-3.2 ohms	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No Go to the next step.
2	INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE CONNECTOR Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS .) (See SERVICE CAUTIONS .) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Disconnect the passenger-side side air bag module connector. - Is there any malfunction of the passenger-side side air bag module connector?	Yes Replace the air bag wiring harness.
		No Go to the next step.
3	VERIFY WHETHER MALFUNCTION IS IN PASSENGER-SIDE SIDE AIR BAG MODULE OR RELATED WIRING HARNESS - Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to passenger-side side air bag module connector terminals A and B. - Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. - Connect the negative battery cable. - Turn the ignition switch to the ON position. - Are DTCs B1055, B1996, B1997, B1998 and/or B1999 indicated?	Yes Go to the next step.
		No Replace the passenger-side side air bag module. (See SIDE AIR BAG MODULE REMOVAL/INSTALLATION .)

4	INSPECT WIRING HARNESS BETWEEN PASSENGER-SIDE SIDE AIR BAG MODULE AND SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the driver and passenger-side front seat connectors. • Disconnect the driver and passenger-side curtain air bag module connectors. • Remove the console. • Inspect the wiring harness between SAS control module terminal 2M and passenger-side side air bag module terminal A, SAS control module terminal 2I and passenger-side side air bag module terminal B for the following: - Short to ground - Short to power supply - Open circuit • Is the wiring harness normal?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Replace the air bag wiring harness.

DTC B1056, B2777, B2778, B2779, B2780

B3E080201046W29

DTC	B1056	Passenger-side curtain air bag module and other air bag module circuits short
	B2777	Passenger-side curtain air bag module circuit resistance low
	B2778	Passenger-side curtain air bag module circuit resistance high
	B2779	Passenger-side curtain air bag module circuit short to body ground
	B2780	Passenger-side curtain air bag module circuit short to power supply
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 1.4-3.2 ohms detected in passenger-side curtain air bag module circuit • Malfunction in wiring harness between passenger-side curtain air bag module and SAS control module

POSSIBLE CAUSE	• Open or short circuit in wiring harness between passenger-side curtain air bag module and SAS control module • Passenger-side curtain air bag module malfunction • SAS control module malfunction
PASSENGER-SIDE CURTAIN AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR 	

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	INSPECT PASSENGER-SIDE CURTAIN AIR BAG MODULE • Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE .) - PFCURTRES • Is the resistance of the passenger-side curtain air bag module normal? - Resistance: 1.4-3.2 ohms	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT PASSENGER-SIDE CURTAIN AIR BAG MODULE CONNECTOR Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS .) (See SERVICE CAUTIONS .) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Disconnect the passenger-side curtain air bag module connector. • Is there any malfunction of the passenger-side curtain air bag module connector?	Yes	Replace the air bag wiring harness.
		No	Go to the next step.

3	VERIFY WHETHER MALFUNCTION IS IN PASSENGER-SIDE CURTAIN AIR BAG MODULE OR RELATED WIRING HARNESS • Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to passenger-side curtain air bag module connector terminals A and B. • Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. • Connect the negative battery cable. • Turn the ignition switch to the ON position. • Are DTCs B1056, B2777, B2778, B2779 and/or B2780 indicated?	Yes	Replace the air bag wiring harness, then go to the next step.
		No	Replace the passenger-side curtain air bag module. (See CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.)
4	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the passenger-side curtain air bag module connector. • Are DTCs B1056, B2777, B2778, B2779 and/or B2780 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.

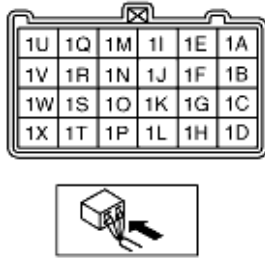
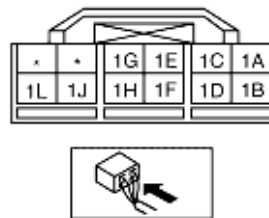
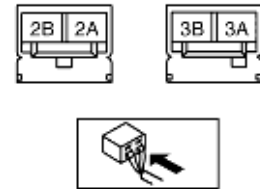
DTC B1057, B1916, B1932, B1934, B1936

B3E080201046W15

DTC	B1057	Driver-side air bag module (inflator No.1) and other air bag module circuits short
	B1916	Driver-side air bag module (inflator No.1) circuit short to power supply
	B1932	Driver-side air bag module (inflator No.1) circuit resistance high
	B1934	Driver-side air bag module (inflator No.1) circuit resistance low
	B1936	Driver-side air bag module (inflator No.1) circuit short to body ground
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 1.5-3.7 ohms detected in driver-side air bag module (inflator No.1) circuit • Malfunction in wiring harness between driver-side air bag module (inflator No.1) and SAS control module

POSSIBLE CAUSE

- Open or short circuit in wiring harness between clock spring and SAS control module
- Clock spring malfunction
- Driver-side air bag module (inflator No.1) malfunction
- SAS control module malfunction

SAS CONTROL MODULE WIRING
HARNESS-SIDE CONNECTORCLOCK SPRING WIRING
HARNESS-SIDE CONNECTORDRIVER-SIDE AIR BAG MODULE
WIRING HARNESS-SIDE CONNECTOR
(CLOCK SPRING)
(INFLATOR NO.1) (INFLATOR NO.2)**Diagnostic procedure**

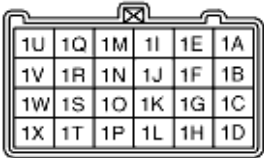
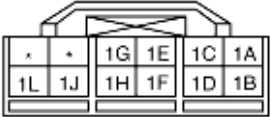
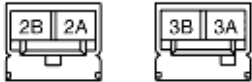
STEP	INSPECTION	ACTION
1	INSPECT DRIVER-SIDE AIR BAG MODULE (INFLATOR NO.1) • Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE.) - DABAGR • Is the resistance of the driver-side air bag module normal? - Resistance: 1.5-3.7 ohms	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No Go to the next step.
2	INSPECT DRIVER-SIDE AIR BAG MODULE CONNECTOR (CLOCK SPRING) Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Remove the driver-side air bag module.	Yes Replace the air bag wiring harness and /or clock spring.
		No Go to the next step.

	Is there any malfunction of the driver-side air bag module connector?		
3	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE AIR BAG MODULE (INFLATOR NO.1) OR RELATED WIRING HARNESS - Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to driver-side air bag module (inflator No.1) connector terminals 2A and 2B, and driver-side air bag module (inflator No.2) connector terminals 3A and 3B. - Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. - Connect the negative battery cable. - Turn the ignition switch to the ON position. - Are DTCs B1057, B1916, B1932, B1934 and/or B1936?	Yes	Go to the next step.
		No	Replace the driver-side air bag module. (See DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)
4	INSPECT CLOCK SPRING - Inspect the clock spring. (See CLOCK SPRING INSPECTION.) - Is the clock spring normal?	Yes	Go to the next step.
		No	Replace the clock spring. (See CLOCK SPRING REMOVAL/INSTALLATION.)
5	INSPECT WIRING HARNESS BETWEEN CLOCK SPRING AND SAS CONTROL MODULE - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Remove the column cover. - Disconnect the clock spring connector. - Remove the glove compartment. - Disconnect the passenger-side air bag module connector. - Disconnect the driver and passenger-side front seat connectors. - Disconnect the driver and passenger-side curtain air bag module connectors. - Remove the console. - Inspect the wiring harness between SAS control module terminal 1M and clock spring terminal 1L, SAS control module terminal 1I and clock spring terminal 1J for the following: - Short to ground - Short to power supply	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	Replace the air bag wiring harness.

- Open circuit
- Is the wiring harness normal?

DTC B1058, B2228, B2230, B2232, B2234

B3E080201046W20

DTC	B1058	Driver-side air bag module (inflator No.2) and other air bag module circuits short
	B2228	Driver-side air bag module (inflator No.2) circuit short to body ground
	B2230	Driver-side air bag module (inflator No.2) circuit short to power supply
	B2232	Driver-side air bag module (inflator No.2) circuit resistance high
	B2234	Driver-side air bag module (inflator No.2) 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 1.5-3.7 ohms detected in driver-side air bag module (inflator No.2) circuit • Malfunction in wiring harness between driver-side air bag module (inflator No.2) and SAS control module
POSSIBLE CAUSE		• Open or short circuit in wiring harness between clock spring and SAS control module • Clock spring malfunction • Driver-side air bag module (inflator No.2) malfunction • SAS control module malfunction
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR   CLOCK SPRING WIRING HARNESS-SIDE CONNECTOR   DRIVER-SIDE AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR (CLOCK SPRING) (INFLATOR NO.1) (INFLATOR NO.2)  		

Diagnostic procedure

STEP	INSPECTION	ACTION
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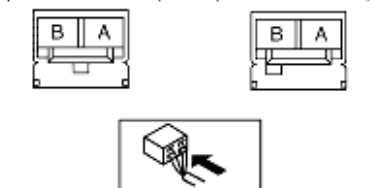
1	INSPECT DRIVER-SIDE AIR BAG MODULE (INFLATOR NO.2) - Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE .) - D_ABAGR2 - Is the resistance of the driver-side air bag module normal? - Resistance: 1.5-3.7 ohms	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Go to the next step.
2	INSPECT DRIVER-SIDE AIR BAG MODULE CONNECTOR (CLOCK SPRING) Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS .) (See SERVICE CAUTIONS .) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Disconnect the driver-side air bag module connector. - Is there any malfunction of the driver-side air bag module connector?	Yes	Replace the air bag wiring harness and /or clock spring.
		No	Go to the next step.
3	VERIFY WHETHER MALFUNCTION IS IN DRIVER-SIDE AIR BAG MODULE (INFLATOR NO.2) OR RELATED WIRING HARNESS - Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to driver-side air bag module (inflator No.1) connector terminals 2A and 2B, and driver-side air bag module (inflator No.2) connector terminals 3A and 3B. - Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. - Connect the negative battery cable. - Turn the ignition switch to the ON position. - Are DTCs B1058, B2228, B2230, B2232 and/or B2234 indicated?	Yes	Go to the next step.
		No	Replace the driver-side air bag module. (See DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION .)
4	INSPECT CLOCK SPRING	Yes	Go to the next step.

	- Inspect the clock spring. (See CLOCK SPRING INSPECTION .) - Is the clock spring normal?	No	Replace the clock spring. (See CLOCK SPRING REMOVAL/INSTALLATION .)
5	INSPECT WIRING HARNESS BETWEEN CLOCK SPRING AND SAS CONTROL MODULE - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Remove the column cover. - Disconnect the clock spring connector. - Remove the glove compartment. - Disconnect the passenger-side air bag module connector. - Disconnect the driver and passenger-side front seat connectors. - Disconnect the driver and passenger-side curtain air bag module connectors. - Remove the console. - Disconnect the SAS control module connector. - Inspect the wiring harness between SAS control module terminal 1Q and clock spring terminal 1H, SAS control module terminal 1U and clock spring terminal 1F for the following: - Short to ground - Short to power supply - Open circuit - Is the wiring harness normal?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Replace the air bag wiring harness.

DTC B1059, B2229, B2231, B2233, B2235

B3E080201046W21

DTC	B1059	Passenger-side air bag module (inflator No.2) and other air bag module circuits short
	B2229	Passenger-side air bag module (inflator No.2) circuit short to body ground
	B2231	Passenger-side air bag module (inflator No.2) circuit short to power supply
	B2233	Passenger-side air bag module (inflator No.2) circuit resistance high

	B2235	Passenger-side air bag module (inflator No.2) 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 1.4-2.9 ohms detected in passenger-side side air bag module circuit • Malfunction in wiring harness between passenger-side air bag module (inflator No.2) and SAS control module	
POSSIBLE CAUSE	• Open or short circuit in wiring harness between passenger-side air bag module (inflator No.2) and SAS control module • Passenger-side air bag module (inflator No.2) malfunction • SAS control module malfunction	
PASSENGER-SIDE AIR BAG MODULE WIRING HARNESS-SIDE CONNECTOR (INFLATOR NO.1) (INFLATOR NO.2) 		

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT PASSENGER-SIDE AIR BAG MODULE (INFLATOR NO.2) • Using the WDS or equivalent, verify the following PID/DATA monitor. (See PID/DATA MONITOR TABLE.) - P_ABAGR2 • Is the resistance of the passenger-side air bag module normal? - Resistance: 1.4-2.9 ohms	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No Go to the next step.
2	INSPECT PASSENGER-SIDE AIR BAG MODULE (INFLATOR NO.2) CONNECTOR Warning • Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service	Yes Replace the air bag wiring harness.
		No Go to the next step.

	warnings and cautions before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Remove the glove compartment. • Disconnect the passenger-side air bag module connector. • Is there any malfunction of the passenger-side air bag module connector?		
3	VERIFY WHETHER MALFUNCTION IS IN PASSENGER-SIDE AIR BAG MODULE (INFLATOR NO.2) OR RELATED WIRING HARNESS • Connect the leads of the SST (Fuel and thermometer checker) or apply 2-ohm resistance to passenger-side air bag module (inflator No.1) connector terminals A and B, and passenger-side air bag module (inflator No.2) connector terminals A and B. • Set the resistance of the SST (Fuel and thermometer checker) to the 2-ohm position. • Connect the negative battery cable. • Turn the ignition switch to the ON position. • Are DTCs B1059, B2229, B2231, B2233 and/or B2235 indicated?	Yes	Replace the air bag wiring harness, then go to the next step.
		No	Replace the passenger-side air bag module. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)
4	INSPECT SAS CONTROL MODULE • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Connect the passenger-side air bag module connector. • Are DTCs B1059, B2229, B2231, B2233 and/or B2235 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.

DTC B105A

B3E080201046W30

DTC B105A	SAS control module activation (deployment) control frequency error
DETECTION CONDITION	Warning

	• Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection with only detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure. • The SAS control module has enabled the air bag module or pre-tensioner front buckle to operate (deploy) five times or more.
POSSIBLE CAUSE	• SAS control module malfunction

Diagnostic procedure

ACTION
• Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)

DTC B1231

B3E080201046W08

DTC B1231	SAS control module activation (deployment) control freeze
DETECTION CONDITION	Warning • Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection with only 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 determined collision

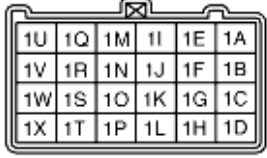
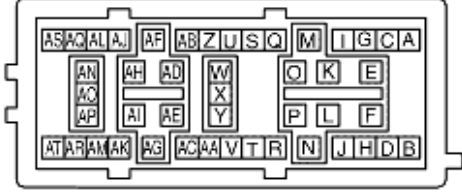
Diagnostic procedure

ACTION
Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)

DTC B1317, B1318

B3E080201046W31

DTC	B1317	SAS control module power supply voltage increases (16.1 V or more)
	B1318	SAS control module power supply voltage decreases (less than 9 V)
DETECTION CONDITION	Warning	

	• Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection with only detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure. • When the SAS control module power supply voltage is not within 916 V.
POSSIBLE CAUSE	• Open or short circuit in wiring harness between battery and SAS control module • SAS 10 A fuse malfunction • Battery malfunction • SAS control module malfunction
SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR   PJB WIRING HARNESS-SIDE CONNECTOR (J-03)  	

Diagnostic procedure

Step	Inspection	Action
1	INSPECT FUSE • Remove the SAS 10 A fuse. • Is the fuse normal?	Yes Go to the next step.
		No Replace the fuse.
2	INSPECT BATTERY • Measure the battery positive voltage. • Is the voltage 9 V16 V?	Yes Go to the next step.
		No The battery has a malfunction. Inspect the charge/discharge system.
3	INSPECT WIRING HARNESS BETWEEN BATTERY AND PJB • Turn the ignition switch to the ON position. • Measure the PJB terminal J-03 AP voltage. • Is the voltage 9 V16 V?	Yes Install the fuse, then go to the next step.
		No Repair the wiring harness between the PJB and battery.
4	INSPECT PJB Warning • Handling the air bag system components improperly can accidentally deploy the air bag	Yes Go to the next step.
		No Replace the PJB. (See PASSENGER JUNCTION BOX (PJB) REMOVAL/INSTALLATION.)

	modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) • Turn the ignition switch to the LOCK position. • Disconnect the negative battery cable and wait for 1 min or more. • Remove the column cover. • Disconnect the clock spring connector. • Disconnect the passenger-side air bag module connector. • Disconnect the driver and passenger-side curtain air bag module connector. • Disconnect the front seat connector. • Remove the console. • Disconnect the SAS control module connector. • Measure the voltage at the PJB terminal J-03 AM. • Is the voltage 9 V16 V?		
5	INSPECT WIRING HARNESS BETWEEN PJB AND SAS CONTROL MODULE • Turn the ignition switch to the ON position. • Measure the SAS control module terminal 1D voltage. • Is the voltage 9 V16 V?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Repair the wiring harness between the PJB and SAS control module.

DTC B1342

B3E080201046W09

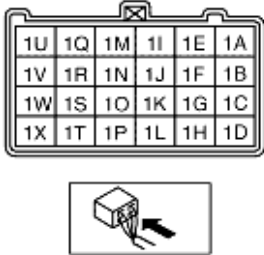
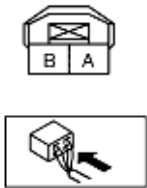
DTC B1342	SAS control module
DETECTION CONDITION	Warning • Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection with only detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure. • Malfunction in the SAS control module internal circuit
POSSIBLE CAUSE	• SAS control module malfunction

Diagnostic procedure

ACTION	
• Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)	

DTC B1884, B1890

B3E080201046W14

DTC	B1884	Passenger air bag deactivation (PAD) indicator circuit open or short to body ground
	B1890	Passenger air bag deactivation (PAD) indicator circuit short to power supply
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. • Malfunction in PAD indicator circuit
POSSIBLE CAUSE		• Open or short circuit in wiring harness between PAD indicator and SAS control module • Open circuit in wiring harness between battery and PAD indicator • PAD indicator malfunction • SAS control module malfunction
		SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR  PAD INDICATOR WIRING HARNESS-SIDE CONNECTOR 

Diagnostic procedure

STEP	INSPECTION		ACTION
1	INSPECT OPERATION OF PAD INDICATOR		
	• Turn the ignition switch to the ON position. • Does the PAD indicator illuminate?	Yes No	Go to the next step. Go to Step 6.

2	INSPECT FUSE - Remove the SAS 10 A fuse. - Is the fuse normal?	Yes	Install the fuse, then go to the next step.
		No	Replace the fuse.
3	INSPECT BATTERY - Measure the battery positive voltage. - Is the voltage 9 V16 V?	Yes	Go to the next step.
		No	Battery is malfunctioning Inspect the charge/discharge system.
4	INSPECT WIRING HARNESS BETWEEN BATTERY AND PAD INDICATOR - Turn the ignition switch to the ON position. - Measure the PAD indicator terminal A voltage. - Is the voltage 9 V or more?	Yes	Go to the next step.
		No	Repair the wiring harness between the battery and PAD indicator.
5	INSPECT PAD INDICATOR - Ground PAD indicator connector terminal B using a jumper wire. - Turn the ignition switch to the ON position. - Does the PAD indicator illuminate?	Yes	Go to the next step.
		No	Replace the air bag wiring harness.
6	INSPECT WIRING HARNESS BETWEEN PAD INDICATOR AND SAS CONTROL MODULE Warning - Handling the air bag system components improperly can accidentally deploy the air bag modules and pre-tensioner front buckles, which may seriously injure you. Read the service warnings before handling the air bag system components. (See SERVICE WARNINGS.) (See SERVICE CAUTIONS.) - Turn the ignition switch to the LOCK position. - Disconnect the negative battery cable and wait for 1 min or more. - Remove the column cover. - Disconnect the clock spring connector. - Disconnect the passenger-side air bag module connector. - Disconnect the driver and passenger-side curtain air bag module connector. - Disconnect the front seat connector.	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	Replace the air bag wiring harness.

	• Remove the console. • Disconnect the SAS control module connector. • Inspect the wiring harness between PAD indicator terminal B and SAS control module terminal 1G for the following: - Short to ground - Short to power supply - Open circuit • Is the wiring harness normal?		
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DTC B1921

B3E080201046W17

DTC B1921	Air bag diagnostic monitor ground circuit open
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 configuration has not been performed.
POSSIBLE CAUSE	• No SAS control module configuration • SAS control module malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT SAS CONTROL MODULE	Replace the SAS control module.
	• Using the WDS or equivalent, perform SAS control module configuration. • Is DTC B1921 indicated?	Yes (See SAS CONTROL MODULE REMOVAL/INSTALLATION.) No DTC troubleshooting completed.

DTC B2477

B3E080201046W27

DTC B2477	Configuration error
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 configuration has not been performed correctly.
POSSIBLE CAUSE	• SAS control module configuration error • SAS control module malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT SAS CONTROL MODULE • Using the WDS or equivalent, perform SAS control module configuration. • Is DTC B2477 indicated?	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No DTC troubleshooting completed.

DTC B2856, B2886, B2887

B3E080201046W39

DTC	B2856	Crash zone sensor ID mismatch
	B2886	Passenger-side side air bag sensor ID mismatch
	B2887	Driver-side side air bag sensor ID mismatch
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. • The SAS control module detects an error of impact magnitude set in the sensor, which occurs due to installation mismatch of the crash zone sensor or side air bag sensors.	
POSSIBLE CAUSE	• Crash zone sensor misinstalled with wrong sensor • Driver-side side air bag sensor misinstalled with wrong sensor • Passenger-side side air bag sensor misinstalled with wrong sensor	

Diagnostic procedure

STEP	INSPECTION	ACTION
1		Yes Go to the next step.

	INSPECT EACH SENSOR FOR INSTALLATION POSITION • Verify that the crash zone sensor or side air bag sensor is installed in the correct position. • Is each sensor installed correctly?	No	Install the each sensor correctly, then go to the next step.
2	INSPECT SAS CONTROL MODULE • Are DTCs B2856, B2886 and/or B2887 indicated?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)
		No	DTC troubleshooting completed.

SYMPTOM TROUBLESHOOTING

AIR BAG SYSTEM

B3E080301046W01

Troubleshooting Index

- Use the chart below to verify the symptoms of the trouble in order to diagnose the appropriate area.

No.	Troubleshooting item	Description	Page
1	Air bag system warning light does not illuminate.	Malfunction in air bag system warning light circuit	(See NO.1 AIR BAG SYSTEM WARNING LIGHT DOES NOT ILLUMINATE .)
2	Air bag system warning light illuminates constantly.	Malfunction in air bag system warning light circuit	(See NO.2 AIR BAG SYSTEM WARNING LIGHT ILLUMINATES CONSTANTLY .)

NO.1 AIR BAG SYSTEM WARNING LIGHT DOES NOT ILLUMINATE

B3E080301046W02

1	Air bag system warning light does not illuminate.
DETECTION CONDITION	Malfunction in air bag system warning light circuit
POSSIBLE CAUSE	• SAS control module malfunction • Instrument cluster malfunction

- CAN communication network malfunction

Diagnostic Procedure

STEP	INSPECTION	ACTION
1	CONFIRM DTC U0151 USING WDS OR EQUIVALENT • Retrieve DTC from the SAS control module and instrument cluster. • Is DTC U0151 retrieved?	Yes Network communication for related systems has a malfunction. Repair or replace if necessary.
		No Inspect the instrument cluster. If the instrument cluster is normal, go to the next step. If the instrument cluster has a malfunction, replace the instrument cluster.
2	CONFIRM DTC B2477 FOR INSTRUMENT CLUSTER USING WDS OR EQUIVALENT • Is DTC B2477 retrieved?	Yes Re-configure the instrument cluster.
		No Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION .)

NO.2 AIR BAG SYSTEM WARNING LIGHT ILLUMINATES CONSTANTLY

B3E080301046W03

2	Air bag system warning light illuminates constantly.
DETECTION CONDITION	Malfunction in air bag system warning light circuit
POSSIBLE CAUSE	• SAS control module malfunction • Instrument cluster (circuit board) malfunction • CAN communication network malfunction

Diagnostic Procedure

• When performing an asterisked (*) troubleshooting inspection, slightly shake the wiring harness and connectors while performing the inspection to discover whether poor contact points are the cause of any intermittent malfunction. If there is a problem, verify that the connectors, terminals and wiring harness are connected correctly and undamaged.

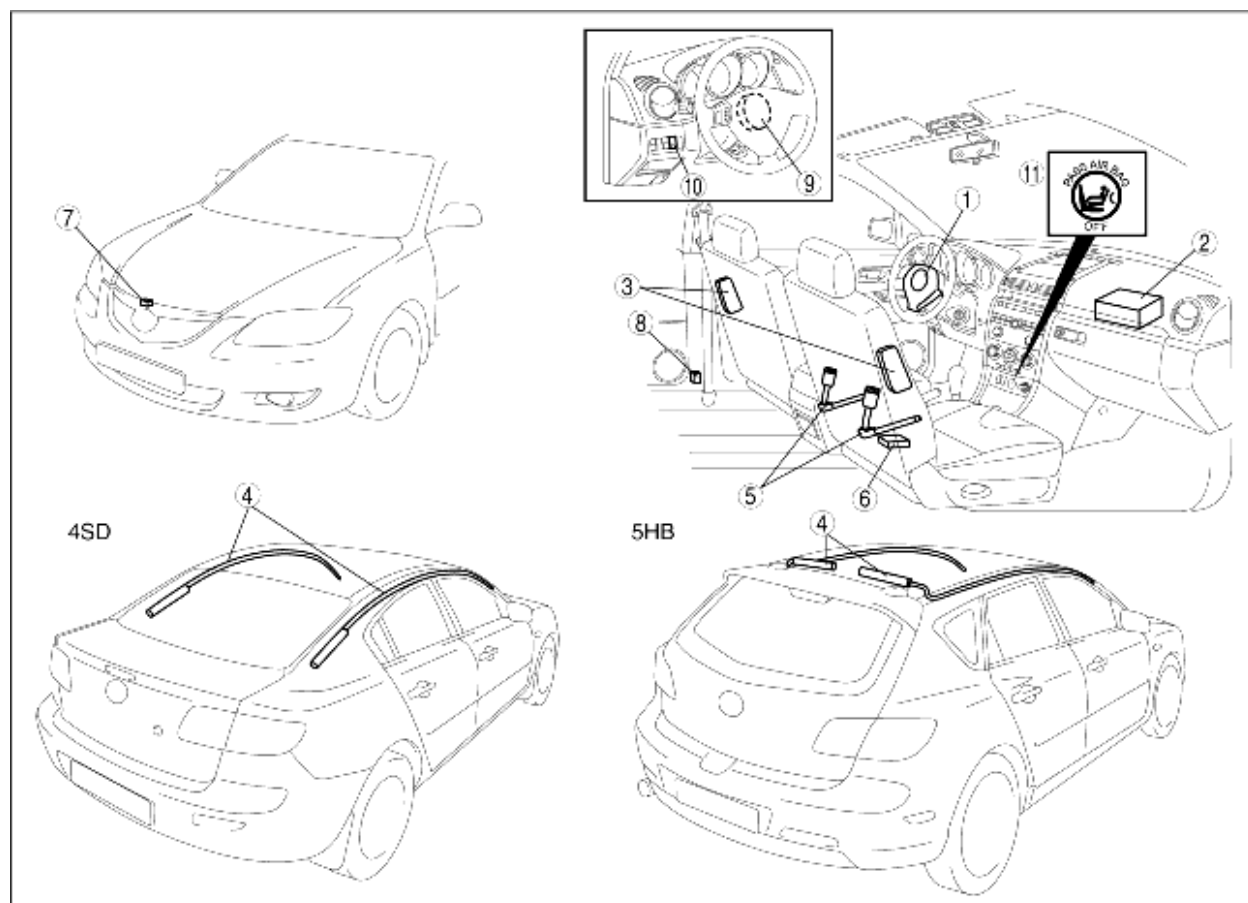
STEP	INSPECTION	ACTION
1	VERIFY DTC IN SAS CONTROL MODULE MEMORY • Have DTCs been record in the memory?	Yes Perform inspection using appropriate DTC.
		No Inspect the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/INSTALLATION)

			If the instrument cluster is normal, go to the next step. If the instrument cluster has a malfunction, replace the instrument cluster.
2	INSPECT AIR BAG SYSTEM WARNING LIGHT CIRCUIT IN INSTRUMENT CLUSTER • Turn the ignition switch to the ON position. • Does air bag system warning light go out?	Yes Inspect the connectors and terminals of the SAS control module. Repair or replace if necessary.	
		No	Go to the next step.
* 3	INSPECT SAS CONTROL MODULE • Disconnect the SAS control module connector. • Turn the ignition switch to the ON position. • Verify the voltage at terminal 1D. • Is the voltage B+?	Yes Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)	
		No	Inspect the battery power supply circuit and ground circuit.

AIR BAG SYSTEM

LOCATION INDEX

B3E081001046W01



B3E0810W001

1	Driver-side air bag module (See DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) (See AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES.)
2	Passenger-side air bag module (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) (See AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES.)
3	Side air bag module (See SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) (See AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES.)
4	Curtain air bag module (See CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.) (See AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES.)
5	Pre-tensioner front buckle

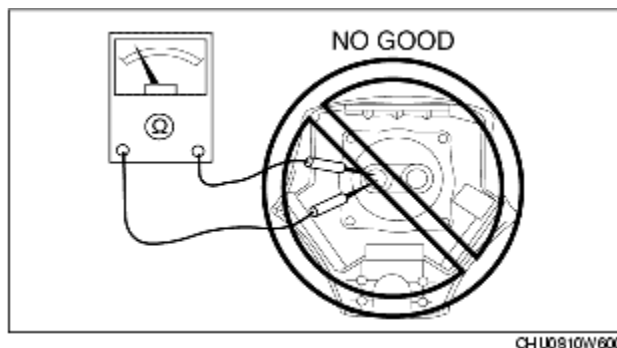
	(See AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES.)
6	SAS control module (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
7	Crash zone sensor (See CRASH ZONE SENSOR REMOVAL/INSTALLATION.)
8	Side air bag sensor (See SIDE AIR BAG SENSOR REMOVAL/INSTALLATION.)
9	Clock spring (See CLOCK SPRING REMOVAL/INSTALLATION.) (See CLOCK SPRING INSPECTION.) (See CLOCK SPRING ADJUSTMENT.)
10	Passenger air bag deactivation (PAD) switch (See PASSENGER AIR BAG DEACTIVATION (PAD) SWITCH REMOVAL/INSTALLATION.) (See PASSENGER AIR BAG DEACTIVATION (PAD) SWITCH INSPECTION.)
11	Passenger air bag deactivation (PAD) indicator

SERVICE WARNINGS

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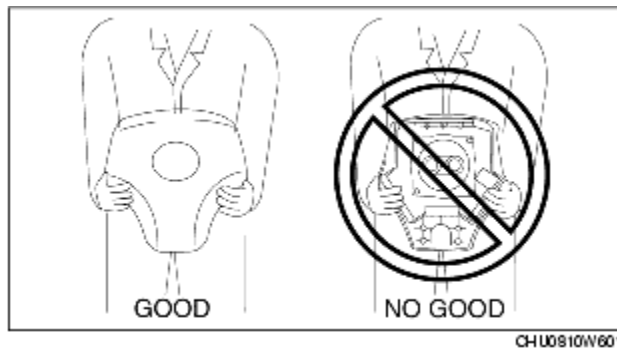
Air Bag Module Inspection

- Inspecting an air bag module using a tester can operate (deploy) the air bag module, which may cause serious injury. Do not use a tester to inspect an air bag module. Always use the on-board diagnostic function to diagnose the air bag module for malfunctions.

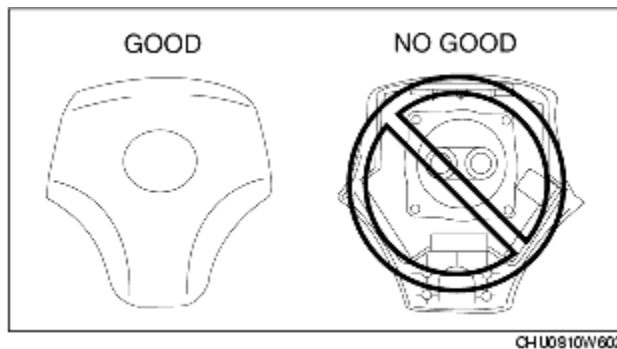


Air Bag Module Handling

- Handling a live (undeployed) air bag module that is pointed toward your body could result in serious injury if the air bag module were to accidentally operate (deploy). When carrying a live (undeployed) air bag module, point the deployment surface away from your body to lessen the chance of injury in case it operates (deploys).



- A live (undeployed) air bag module placed with its deployment surface to ground is dangerous. If the air bag module were to accidentally operate (deploy), it could cause serious injury. Always place a live (undeployed) air bag module with its deployment surface up.



Side Air Bag Module Handling

- When a side air bag module operates (deploys) due to a collision, the interior of the seat back (pad, frame, trim) may become damaged. If a side air bag does not operate (deploy) normally from a seat back that has been reused, a serious accident may result. After a side air bag has operated (deployed), always replace both the side air bag module and the seat back (pad, frame, trim) with new parts. After servicing, verify that the seat operates normally and that the wiring harness is not caught.

SAS Control Module Handling

- Removing the SAS control module or disconnecting the SAS control module connector with the ignition switch at the ON position can activate the sensor in the SAS control module and operate (deploy) the air bags and pre-tensioner front buckles, which may cause serious injury. Before removing the SAS control module or disconnecting the SAS control module connector, always turn the ignition switch to the LOCK position, disconnect the negative battery cable, and then wait for 1 min or more to allow the backup power supply of the SAS control module to deplete its stored power.
- Connecting the SAS control module connector with the SAS control module not securely fixed to the vehicle is dangerous. The sensor in the SAS control module could send an electrical signal to the air bag modules and pre-tensioner front buckles. This will operate (deploy) the air bags and pre-tensioner front buckles, which may result in serious injury. Therefore, before connecting the connector, securely fix the SAS control module to the vehicle.
- Because a sensor is built into the SAS control module, once the air bags and pre-tensioner front buckles have operated (deployed) due to a collision or other causes, the SAS control module must be replaced with a new one even if the used one does not have any visible external damage or deformation. The used SAS control module may have been damaged internally, which may cause improper operation. If the SAS control module is reused, the air bags and pre-tensioner front buckles may not operate (deploy) normally, which could result in a serious accident. Always replace the SAS control module with a new one. The SAS control module cannot be bench-checked or self-checked.

Crash Zone Sensor Handling

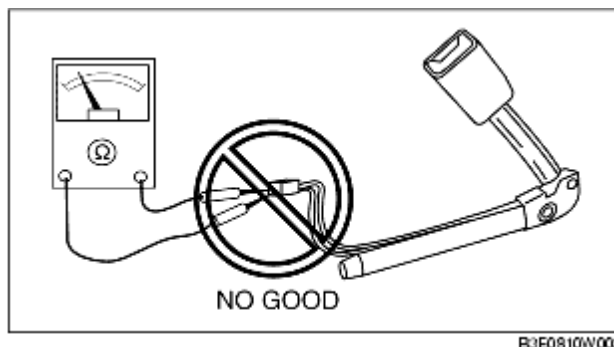
- Removing the crash zone sensor or disconnecting the crash zone sensor connector with the ignition switch at the ON position can activate the crash zone sensor and operate (deploy) the air bags and pre-tensioner front buckles, which may cause serious injury. Before removing the crash zone sensor or disconnecting the crash zone sensor connector, always turn the ignition switch to the LOCK position, disconnect the negative battery cable, and then wait for 1 min or more to allow the backup power supply of the SAS control module to deplete its stored power.
- If the crash zone sensor is subjected to shock or the sensor is disassembled, the air bags and pre-tensioner front buckles may accidentally operate (deploy) and cause injury, or the system may fail to operate normally and cause a serious accident. Do not subject the crash zone sensor to shock or disassemble the sensor.
- Because a sensor is built into the crash zone sensor, once the air bags and pre-tensioner front buckles have operated (deployed) due to a collision or other causes, the crash zone sensor must be replaced with a new one even if the used one does not have any visible external damage or deformation. If the crash zone sensor is reused, the air bags and pre-tensioner front buckles may not operate (deploy) normally, which could result in a serious accident. Always replace the crash zone sensor with a new one. The crash zone sensor cannot be bench-checked or self-checked.

Side Air Bag Sensor Handling

- Removing the side air bag sensor or disconnecting the side air bag sensor connector with the ignition switch at the ON position can activate the side air bag sensor and operate (deploy) the side air bag, which may cause serious injury. Before removing the side air bag sensor or disconnecting the side air bag sensor connector, always turn the ignition switch to the LOCK position, disconnect the negative battery cable, and then wait for 1 min or more to allow the backup power supply of the SAS control module to deplete its stored power.
- If the side air bag sensor is subjected to shock or the sensor is disassembled, the side air bag may accidentally operate (deploy) and cause injury, or the system may fail to operate normally and cause a serious accident. Do not subject the side air bag sensor to shock or disassemble the sensor.
- Because a sensor is built into the side air bag sensor, once the air bag has operated (deployed) due to a collision or other causes, the side air bag sensor must be replaced with a new one even if the used one does not have any visible external damage or deformation. If the side air bag sensor is reused, the side air bag may not operate (deploy) normally, which could result in a serious accident. Always replace the side air bag sensor with a new one. The side air bag sensor cannot be bench-checked or self-checked.

Pre-tensioner Front Buckle Inspection

- Inspecting a pre-tensioner front buckle using a tester can operate (deploy) the pre-tensioner front buckle, which may cause serious injury. Do not use a tester to inspect a pre-tensioner front buckle. Always use the on-board diagnostic function to diagnose the pre-tensioner front buckle for malfunctions.



SERVICE CAUTIONS

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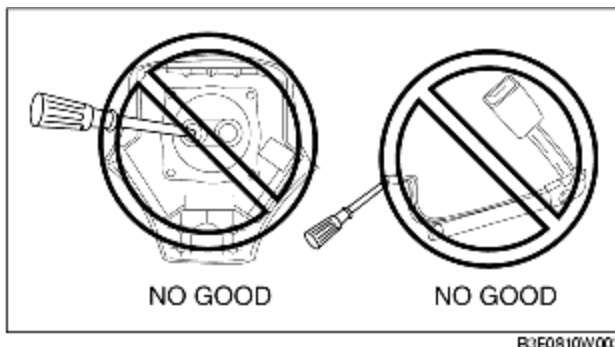
Air Bag System Component Disassembly

- Disassembling the air bag system components could cause it to not operate (deploy) normally. Never disassemble any air bag system components.



Air Bag Module, Pre-tensioner Front Buckle Handling

- Oil, grease, or water on the air bag modules may cause the air bags and pre-tensioner front buckles to fail to operate (deploy) in an accident. Never allow oil, grease, or water to get on the air bag modules or pre-tensioner front buckles.
- Inserting a screwdriver or similar object into the connector of an air bag module or a pre-tensioner front buckle may damage the connector and cause the air bag module or the pre-tensioner front buckle to operate (deploy) improperly, which may cause serious injury. Never insert any foreign objects into the air bag module or seat belt connectors.



Air Bag Module, Pre-tensioner Front Buckle Reuse

- Even if an air bag module or a pre-tensioner front buckle does not operate (deploy) in a collision and does not have any external signs of damage, it may have been damaged internally, which may cause improper operation. Before reusing a live (undeployed) air bag module and the pre-tensioner front buckles, always use the on-board diagnostic to diagnose the air bag module and the pre-tensioner front buckles to verify that they have no malfunction.

Air Bag Wiring Harness Repair

- Incorrectly repairing an air bag wiring harness can accidentally operate (deploy) the air bag module and pre-tensioner front buckles. If a problem is found in the air bag wiring harness, always replace the wiring harness with a new one.



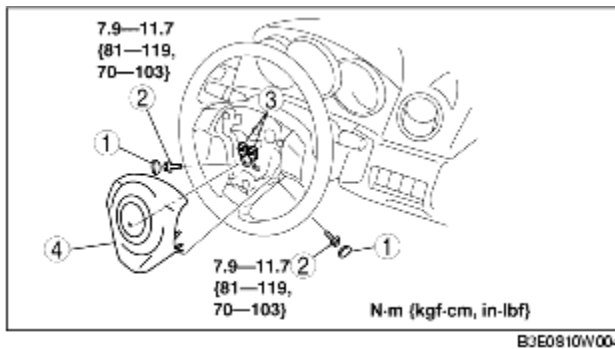
DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION

B3E081057010W01

Warning

- Handling the air bag module improperly can accidentally deploy the air bag module, which may seriously injure you. Read the service warnings and cautions before handling the air bag module. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Remove in the order indicated in the table.



1	Cover
2	Bolt
3	Connector (See Connector Removal Note .)
4	Driver-side air bag module

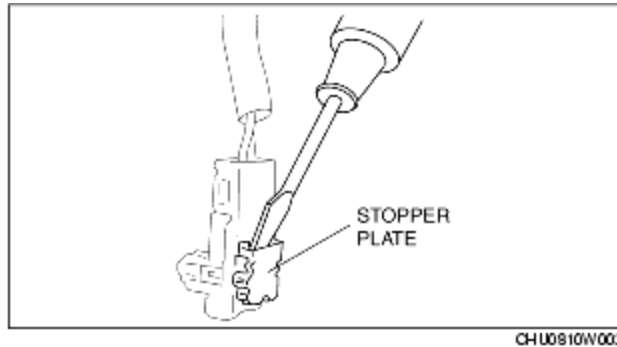
4. Install in the reverse order of removal.
5. Turn the ignition switch to the ON position.

6. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

Connector Removal Note

1. Using a flathead screwdriver, pry out the connector stopper plate.



2. Disconnect the connector.

PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION

B3E081057050W01

Warning

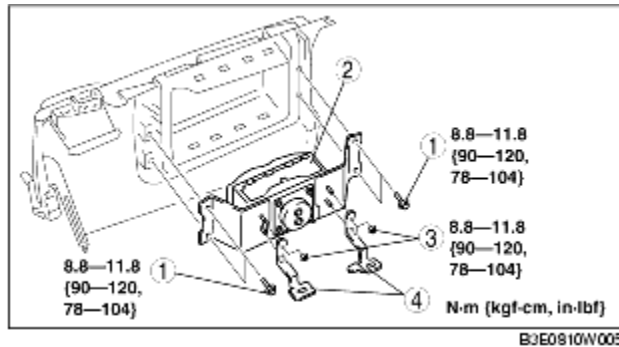
- Handling the air bag module improperly can accidentally deploy the air bag module, which may seriously injure you. Read the service warnings and cautions before handling the air bag module. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)
- Due to the adoption of 2-step deployment control in the passenger-side air bag module, depending on the impact force, it is possible that inflator No.2 might not deploy. In such cases, before disposing of the air bag module, make sure to follow the inflator deployment procedures and verify complete deployment of inflators No.1 and 2.

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Remove the following parts:
 - (1) A-pillar trim (See [A-PILLAR TRIM REMOVAL/INSTALLATION](#).)
 - (2) Front scuff plate (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION](#).)
 - (3) Front side trim (See [FRONT SIDE TRIM REMOVAL/INSTALLATION](#).)
 - (4) Decoration panel (See [DECORATION PANEL REMOVAL/INSTALLATION](#).)
 - (5) Glove compartment (See [GLOVE COMPARTMENT REMOVAL/INSTALLATION](#).)
 - (6) Dashboard center panel (without car-navigation system) (See [DASHBOARD CENTER PANEL REMOVAL/INSTALLATION](#).)

(7) LCD unit (with car-navigation system) (See [LCD UNIT REMOVAL/INSTALLATION.](#))

(8) Dashboard garnish (See [DASHBOARD GARNISH REMOVAL/INSTALLATION.](#))

4. Remove in the order indicated in the table.



1	Bolt
2	Passenger-side air bag module
3	Nut
4	Bracket

5. Install in the reverse order of removal.

6. Turn the ignition switch to the ON position.

7. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

SIDE AIR BAG MODULE REMOVAL/INSTALLATION

B3E081000147W01

Warning

- Handling the air bag module improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings and cautions before handling the air bag module. (See [SERVICE WARNINGS.](#)) (See [SERVICE CAUTIONS.](#))
- If the side air bag module is installed with debris in the seat back, the foreign material may be scattered when the side air bag module operates (deploys), causing injury. Verify that there is no foreign material in the seat back before installing the side air bag module.

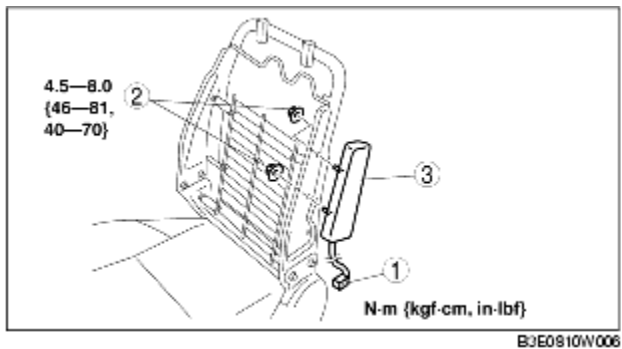
1. Turn the ignition switch to the LOCK position.

2. Disconnect the negative battery cable and wait for **1 min or more**.

3. Remove the front seat. (See [FRONT SEAT REMOVAL/INSTALLATION.](#))

4. Remove the seat cushion frame. (See [FRONT SEAT DISASSEMBLY/ASSEMBLY.](#))

5. Partially peel back the seat back trim.
6. Partially peel back the seat back pad.
7. Remove in the order indicated in the table.



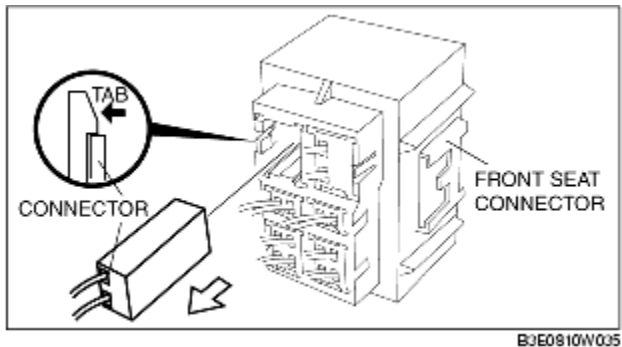
1	Connector (See Connector Removal Note.)
2	Nut
3	Side air bag module

8. Install in the reverse order of removal.
9. Turn the ignition switch to the ON position.
10. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

Connector Removal Note

1. Detach the tab as shown in the figure and remove the connector from the front seat connector.



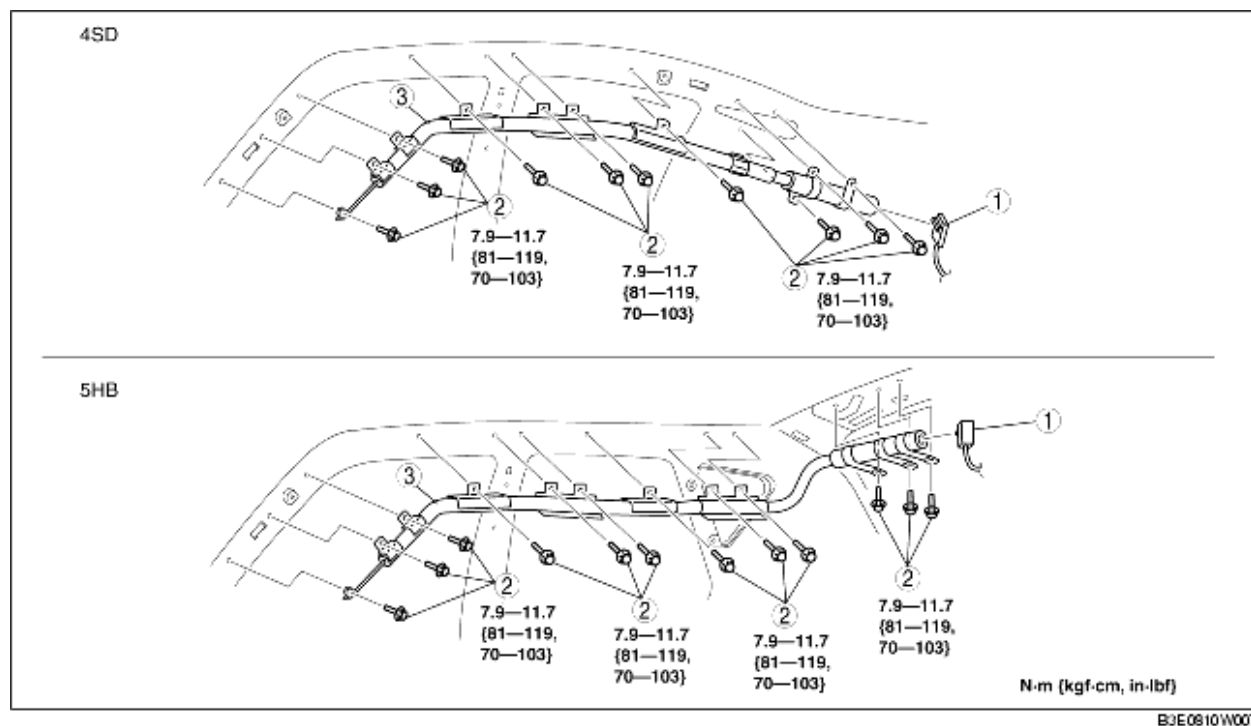
CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION

B3E081000171W01

Warning

• Handling the air bag module improperly can accidentally deploy the air bag module, which may seriously injure you. Read the service warnings and cautions before handling the air bag module. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Remove the following parts:
 - (1) Console (4SD) (See [CONSOLE REMOVAL/INSTALLATION](#).)
 - (2) A-pillar trim (See [A-PILLAR TRIM REMOVAL/INSTALLATION](#).)
 - (3) Front scuff plate (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION](#).)
 - (4) Rear scuff plate (See [REAR SCUFF PLATE REMOVAL/INSTALLATION](#).)
 - (5) B-pillar lower trim (See [B-PILLAR LOWER TRIM REMOVAL/INSTALLATION](#).)
 - (6) Upper anchor of the front seat belt (See [FRONT SEAT BELT REMOVAL/INSTALLATION](#).)
 - (7) B-pillar upper trim (See [B-PILLAR UPPER TRIM REMOVAL/INSTALLATION](#).)
 - (8) Rear seat (See [REAR SEAT REMOVAL/INSTALLATION](#).)
 - (9) Tire house trim (See [TIRE HOUSE TRIM REMOVAL/INSTALLATION](#).)
 - (10) Trunk side upper trim (5HB) (See [TRUNK SIDE TRIM REMOVAL/INSTALLATION](#).)
 - (11) C-pillar trim (See [C-PILLAR TRIM REMOVAL/INSTALLATION](#).)
 - (12) Map light (See [MAP LIGHT REMOVAL/INSTALLATION](#).)
 - (13) Interior light (See [INTERIOR LIGHT REMOVAL/INSTALLATION](#).)
 - (14) Sunvisor (See [SUNVISOR REMOVAL/INSTALLATION](#).)
 - (15) Assist handle (See [ASSIST HANDLE REMOVAL/INSTALLATION](#).)
 - (16) Headliner (See [HEADLINER REMOVAL/INSTALLATION](#).)
 - (17) Head Impact pad (See [HEAD IMPACT PAD REMOVAL/INSTALLATION](#).)
4. Remove in the order indicated in the table.



1	Connector
2	Bolt
3	Curtain air bag module

5. Install in the reverse order of removal.

6. When the ignition switch is turned to the ON position verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

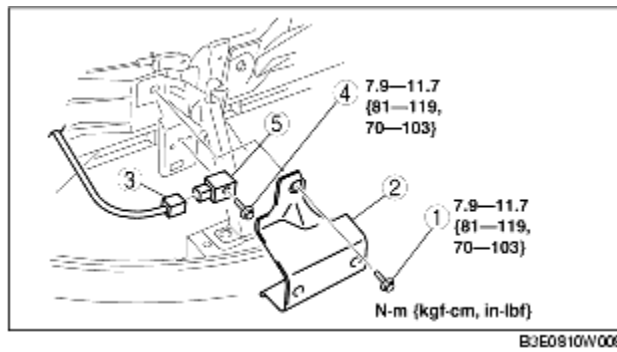
CRASH ZONE SENSOR REMOVAL/INSTALLATION

B3E081000145W01

Warning

- Handling the crash zone sensor improperly can accidentally deploy the air bags and pre-tensioner seat belts, which may seriously injure you. Read the service warnings and cautions before handling the crash zone sensor. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Remove in the order indicated in the table.



1	Bolt A
2	Cover
3	Bolt B
4	Connector
5	Crash zone sensor

4. Install in the reverse order of removal.
5. Turn the ignition switch to the ON position.
6. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

SAS CONTROL MODULE REMOVAL/INSTALLATION

B3E081057030W01

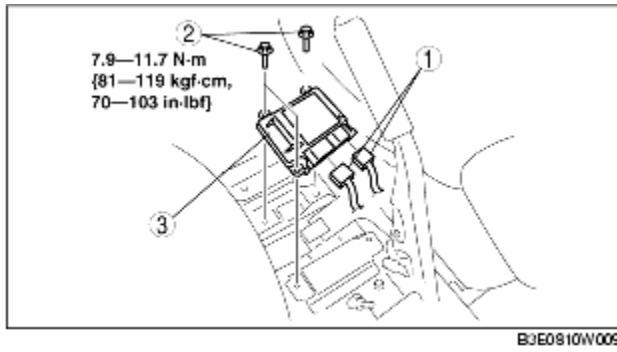
Warning

- Handling the SAS control module improperly can accidentally deploy the air bag modules and pre-tensioner seat belt, which may seriously injure you. Read the service warnings and cautions before handling the air bag module. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)

Caution

- Handling the SAS control module improperly can accidentally deploy the air bag modules and pre-tensioner seat belt, which may seriously injure you. If configuration is not completed before removing the SAS control module, DTC B2477 will be displayed.

1. Perform SAS control module configuration when replacing it. (See [SAS CONTROL MODULE CONFIGURATIONS](#).)
2. Turn the ignition switch to the LOCK position.
3. Disconnect the negative battery cable and wait for **1 min or more**.
4. Remove the console. (See [CONSOLE REMOVAL/INSTALLATION](#).)
5. Remove in the order indicated in the table.



1	Connector
2	Bolt
3	SAS control module

6. Install in the reverse order of removal.

7. Turn the ignition switch to the ON position.

- If the SAS control module is replaced, turn the ignition switch to the ON position for **20 s or more** after completing the configuration.

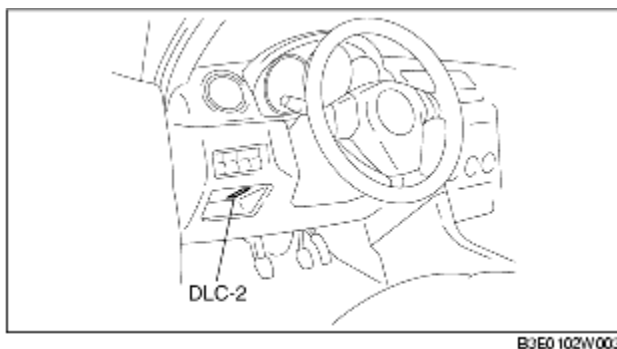
8. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

SAS CONTROL MODULE CONFIGURATION

B3E081057030W02

1. Connect the WDS or equivalent to the DLC-2 (16-pin).



2. Select "Module programming" from the menu.

3. Select "Programmable Module Installation".

4. Select the following items and perform procedure according to the directions on the WDS or equivalent screen.

Item

"RCM"

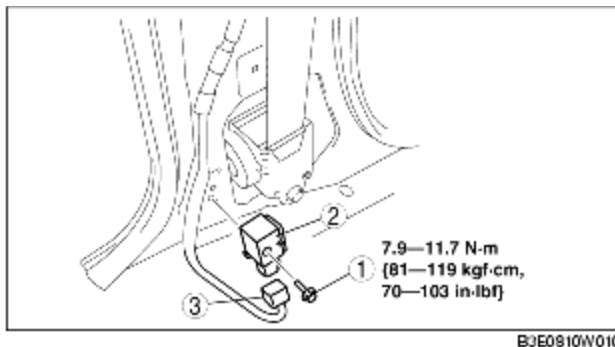
SIDE AIR BAG SENSOR REMOVAL/INSTALLATION

B3E081000146W01

Warning

• Handling the side air bag sensor improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings and cautions before handling the side air bag sensor. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Remove the front scuff plate. (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION](#).)
4. Remove the rear scuff plate. (See [REAR SCUFF PLATE REMOVAL/INSTALLATION](#).)
5. Remove the B-pillar lower trim. (See [B-PILLAR LOWER TRIM REMOVAL/INSTALLATION](#).)
6. Remove in the order indicated in the table.



1	Bolt
2	Side air bag sensor
3	Connector

7. Install in the reverse order of removal.
8. Turn the ignition switch to the ON position and hold for **5 s or more**.

Caution

• When replacing the side air bag sensor, performing the following operations while turning the ignition switch to the ON position will cancel the sensor code over-write, which could cause the air bags to fail to operate (deploy).

- The ignition switch is not held in the LOCK position for 5 s or more.
- The engine is started.

• If the above operations are performed and the sensor code over-write is canceled, it will be necessary to replace the sensor again.

9. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

CLOCK SPRING REMOVAL/INSTALLATION

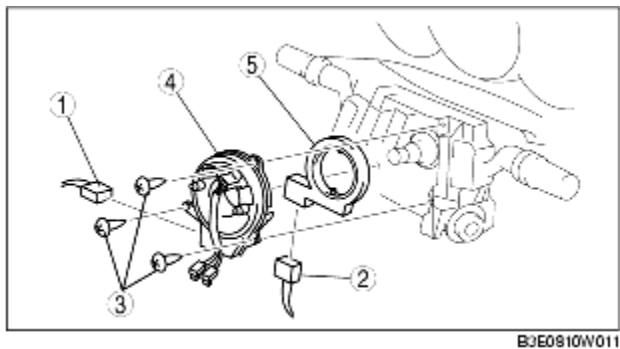
B3E081066123W01

1. Disconnect the negative battery cable.

2. Remove the following parts:

- (1) Driver-side air bag module (See [DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION](#).)
- (2) Steering wheel (See [STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION](#).)
- (3) Front scuff plate (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION](#).)
- (4) Front side trim (See [FRONT SIDE TRIM REMOVAL/INSTALLATION](#).)
- (5) Lower panel (See [LOWER PANEL REMOVAL/INSTALLATION](#).)
- (6) Column cover (See [COLUMN COVER REMOVAL/INSTALLATION](#).)

3. Remove in the order indicated in the table.



1	Clock spring connector
2	Steering angle sensor connector (with DSC)
3	Screw
4	Clock spring (See Clock Spring Installation Note .)
5	Steering angle sensor (with DSC) (See Steering Angle Sensor Installation Note .)

4. Install in the reverse order of removal.

5. Turn the ignition switch to the ON position.

6. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.

- If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

Clock Spring Installation Note

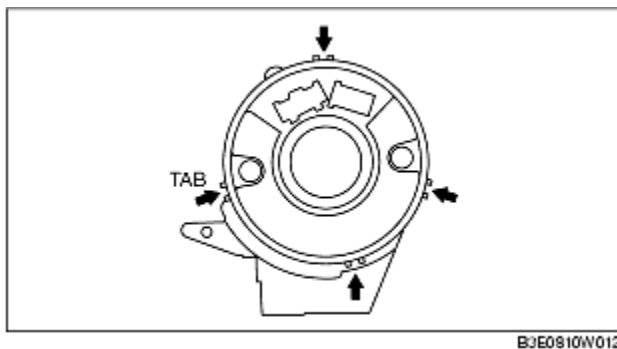
Caution

- If the clock spring is not adjusted, the spring wire in the clock spring could over-wind and break when the steering wheel is turned. Always adjust the clock spring after installing it.

1. Adjust the clock spring after installing it. (See [CLOCK SPRING ADJUSTMENT](#).)

Steering Angle Sensor Installation Note

1. Detach the tabs at the four locations shown in the figure and remove the steering angle sensor.



CLOCK SPRING ADJUSTMENT

B3E081066123W02

Note

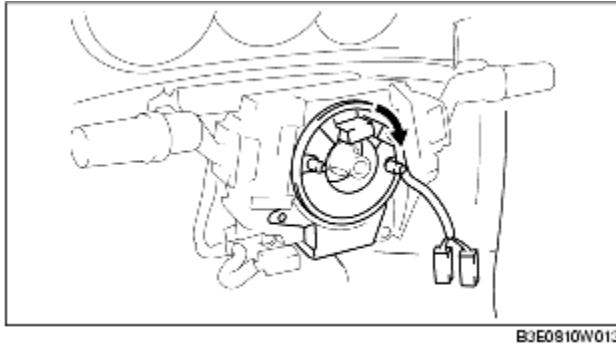
- The adjustment procedure is also specified on the caution label of the clock spring.

1. Set the front tires straight-ahead.

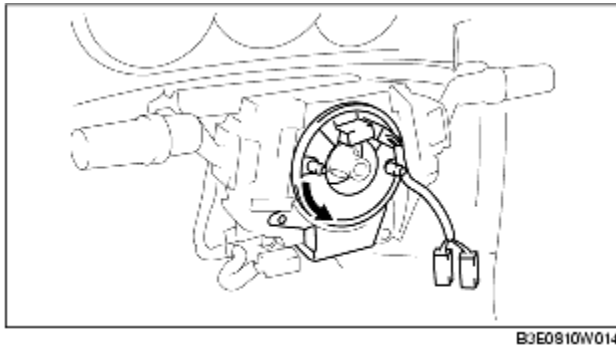
Caution

- The clock spring will break if over-wound. Do not forcibly turn the clock spring.

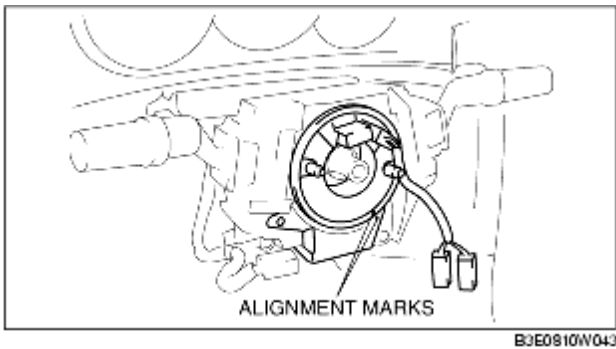
2. Turn the clock spring clockwise until it stops.



3. From the stopped position, turn the clock spring counterclockwise **2 3/4 turns**.



4. Align the marks.



CLOCK SPRING INSPECTION

B3E081066123W03

1. Remove the clock spring. (See [CLOCK SPRING REMOVAL/INSTALLATION](#).)
2. Verify that the continuity is as indicated in the table.

- If not as indicated in the table, replace the clock spring.

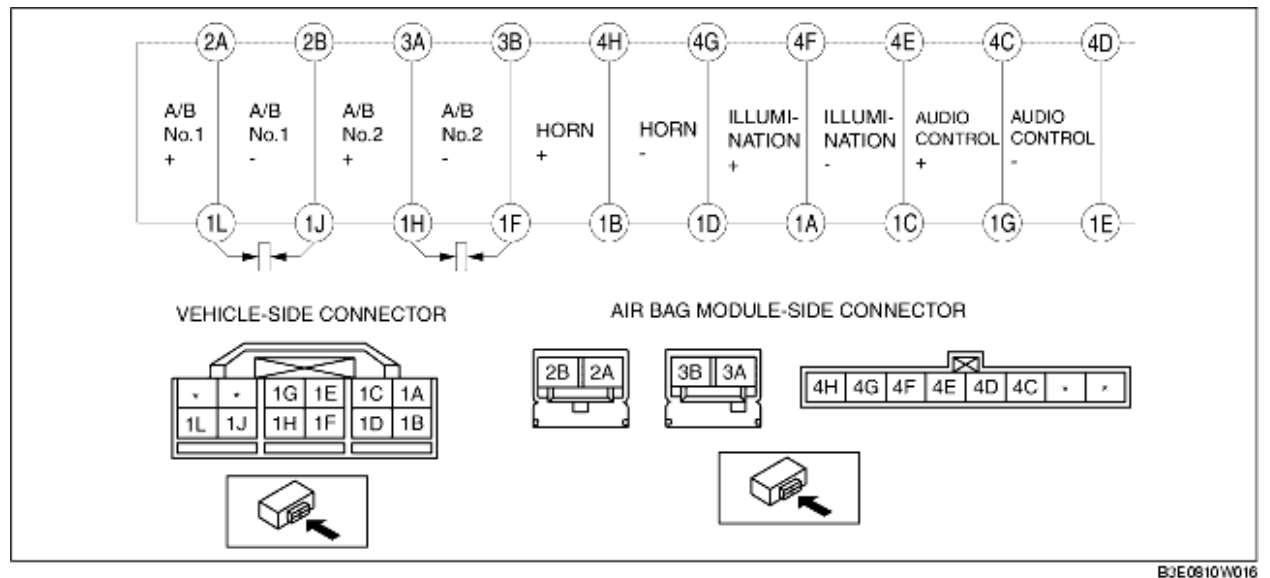
Note

- When the vehicle-side connector for the clock spring is disconnected, terminals 1F, 1H, 1J and 1L are shorted to prevent unexpected operation (deployment) of the air bag module.

○—○ : Continuity

Test condition	Terminal																			
	1A	1B	1C	1D	1E	1F	1G	1H	1J	1L	2A	2B	3A	3B	4C	4D	4E	4F	4G	4H
Under any condition									○	○	○	○								
						○		○					○	○						
		○																		○
				○															○	
	○																	○		
			○																	
																	○			
					○											○				

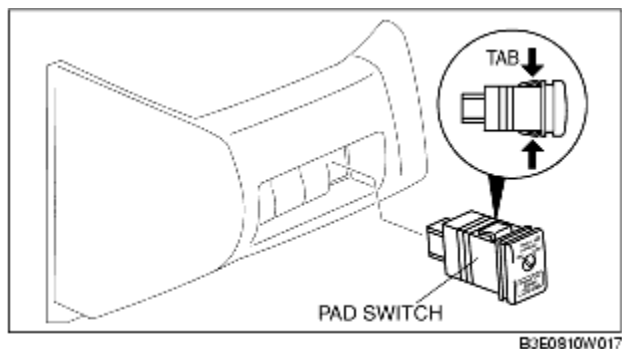
B3E0810W015



PASSENGER AIR BAG DEACTIVATION (PAD) SWITCH REMOVAL/INSTALLATION

B3E081066123W04

1. Detach the bonnet release lever from the lower panel. (See [BONNET LATCH AND RELEASE LEVER REMOVAL/INSTALLATION](#).)
2. Remove the front scuff plate. (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION](#).)
3. Remove the front side trim. (See [FRONT SIDE TRIM REMOVAL/INSTALLATION](#).)
4. Remove the lower panel. (See [LOWER PANEL REMOVAL/INSTALLATION](#).)
5. Remove the PAD switch.

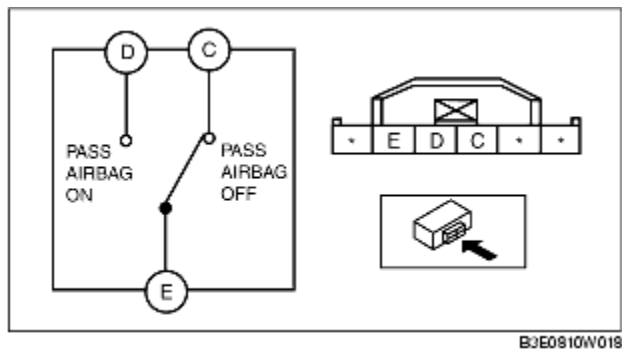


- 6. Install in the reverse order of removal.
- 7. Turn the ignition switch to the ON position.
- 8. Verify that the air bag system warning light illuminates for **approx. 6 s** and goes out.
 - If the air bag system warning light does not operate normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

PASSENGER AIR BAG DEACTIVATION (PAD) SWITCH INSPECTION

B3E081066123W05

- 1. Remove the PAD switch. (See [PASSENGER AIR BAG DEACTIVATION \(PAD\) SWITCH REMOVAL/INSTALLATION](#).)
- 2. Verify that the continuity between the PAD switch terminals is as indicated in the table.



- If not as indicated in the table, replace the PAD switch.

Switch position	Terminal		
	C	D	E
PASS AIRBAG OFF	○	○	○
PASS AIRBAG ON		○	○

AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES

B3E081057000W01

Warning

- A live (undeployed) air bag module or pre-tensioner front buckle may accidentally operate (deploy) when it is disposed of and cause serious injury. Do not dispose of a live (undeployed) air bag module and pre-tensioner front buckle. If the SSTs (Deployment tool and Adapter harness) are not available, consult the nearest Mazda representative for assistance.

Caution

- Deploying the air bag modules and pre-tensioner front buckles inside the vehicle may cause damage to the vehicle interior. When the vehicle is not to be scrapped, always deploy the air bag modules and pre-tensioner front buckles outside the vehicle.
- If the vehicle is to be scrapped, or when disposing of any air bag modules or pre-tensioner front buckles, operate (deploy) them inside the vehicle by following the deployment procedure below and using the **SST** (Deployment tool).
- When disposing of a operated (deployed) air bag module and pre-tensioner front buckle, refer to "AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DISPOSAL PROCEDURES".

Deployment Procedure for Inside of Vehicle

1. Inspect the **SST** (Deployment tool). (See [INSPECTION OF SST \(DEPLOYMENT TOOL\)](#).)
2. Move the vehicle to an open space, away from strong winds, and close all of the vehicle doors and windows.
3. Turn the ignition switch to the LOCK position.
4. Disconnect the negative battery cable and wait for **1 min or more**.
5. Follow the procedure below for operating (deploying) the applicable air bag module or pre-tensioner front buckle.

Driver-side air bag module

Warning

- The driver-side air bag module is a dual inflator type. If one inflator is forced to operate (deploy), the other may operate (deploy) accidentally. To prevent injury while disposing of the air bag module, make sure to operate (deploy) both driver-side air bag module inflators simultaneously, following the procedure below.

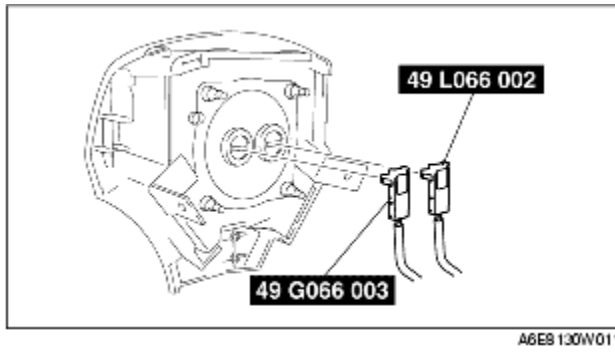
Note

- The **SSTs**, two types of adapter harnesses (for inflators No.1 and No.2) and two deployment tools are to be used to operate (deploy) the driver-side air bag module.

1. Remove the driver-side air bag module.

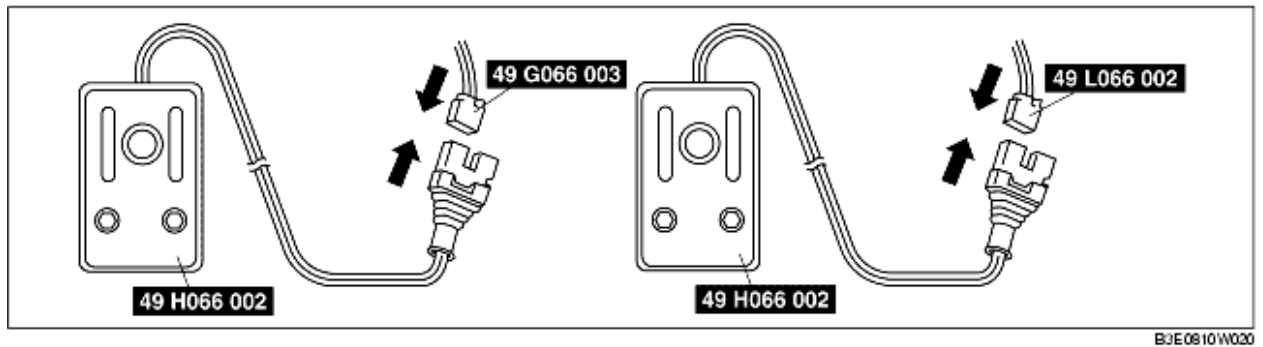
(See [DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION](#).)

2. Connect the **SSTs** (Adapter harness) to the driver-side air bag module as shown in the figure.



3. Install the driver-side air bag module. (See [DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION](#).)

4. Connect the **SSTs** (Deployment tool) to the **SSTs** (Adapter harness).

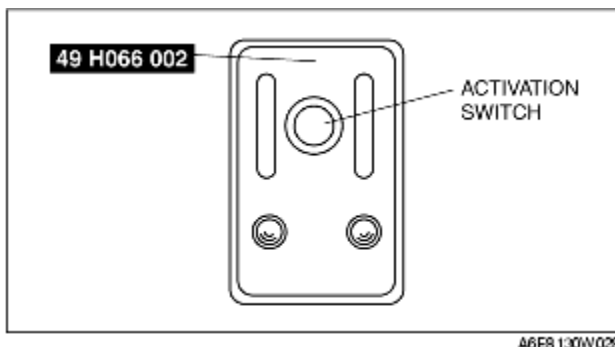


5. Connect both **SSTs** (Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.

6. Verify that the red lamp on both **SSTs** (Deployment tool) is illuminated.

7. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

8. Press the activation switch on the **SST** (Deployment tool) connected with 49 L066 002 (a yellow connector) of the **SST** (Adapter harness), and **after 3 s**, press the activation switch on the other **SST** (Deployment tool) to operate (deploy) the air bag module (both inflators).



Warning

- Verify that air bag module operation (explosive) sound occurs twice. If no operation (explosive) sound was heard or a single operation (explosive) sound was heard, both inflators would not have operated (deployed) properly. This may cause serious injury because the air bag module may operate (deploy) accidentally. If the two operation (explosive) sounds are not heard, perform Step 8 again. In case that the two operation (explosive) sounds in total are not verified even

though Step 8 is performed again, leave the air bag module alone for 30 min or more before getting near it again.

- The air bag module is very hot immediately after it is operated (deployed). You can get burned. Do not touch the air bag module for at least 15 min after deployment.

9. Disconnect the **SSTs** (Deployment tool) from the **SSTs** (Adapter harness).

Passenger-side air bag module

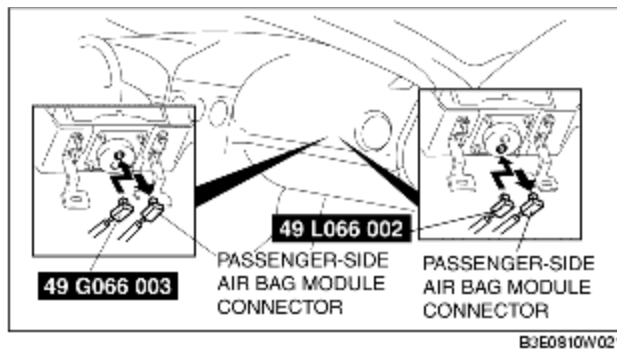
Warning

- The passenger-side air bag module is a dual inflator type. If one inflator is forced to operate (deploy), the other may operate (deploy) accidentally. To prevent injury while disposing of the air bag module, make sure to operate (deploy) both passenger-side air bag module inflators simultaneously, following the procedure below.

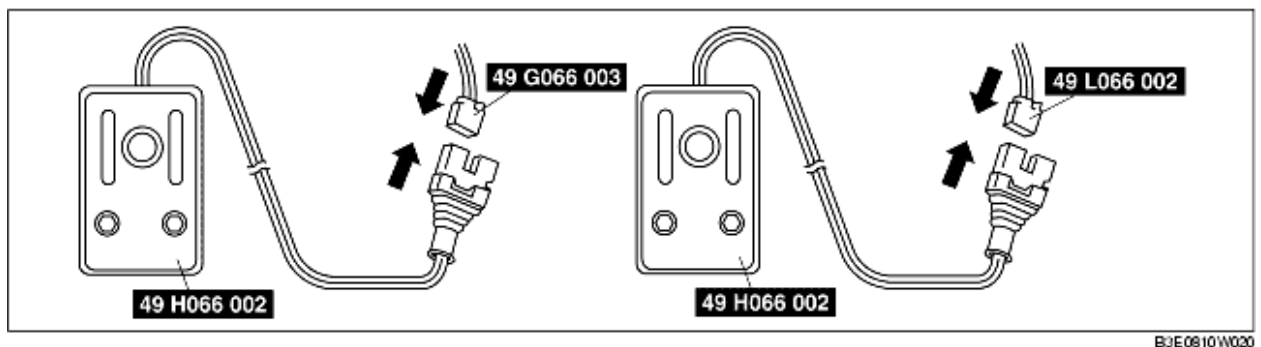
Note

- The **SSTs**, two types of adapter harnesses (for inflators No.1 and No.2) and two deployment tools are to be used to operate (deploy) the passenger-side air bag module.

1. Remove the glove compartment. (See [GLOVE COMPARTMENT REMOVAL/INSTALLATION.](#))
2. Disconnect the passenger-side air bag module connector.
3. Connect the **SSTs** (Adapter harness) to the passenger-side air bag module as shown in the figure.

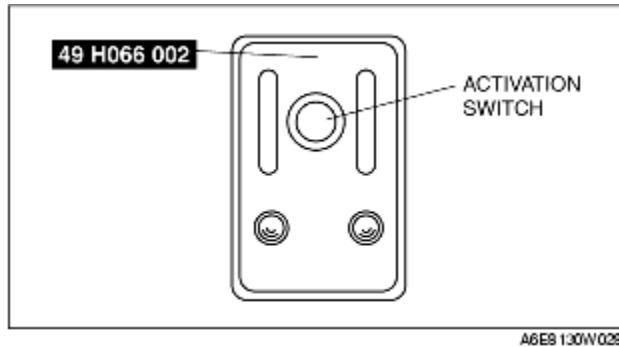


4. Connect the **SSTs** (Deployment tool) to the **SSTs** (Adapter harness).



5. Connect both **SSTs** (Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
6. Verify that the red lamp on both **SSTs** (Deployment tool) is illuminated.

7. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.
8. Press the activation switch on the **SST** (Deployment tool) connected with 49 L066 002 (a yellow connector) of the **SST** (Adapter harness), and **after 3 s**, press the activation switch on the other **SST** (Deployment tool) to operate (deploy) the air bag module (both inflators).



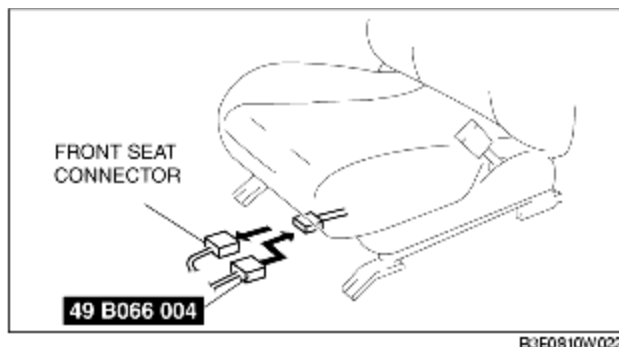
Warning

- Verify that air bag module operation (explosive) sound occurs twice. If no operation (explosive) sound was heard or a single operation (explosive) sound was heard, both inflators would not have operated (deployed) properly. This may cause serious injury because the air bag module may operate (deploy) accidentally. If the two operation (explosive) sounds are not heard, perform Step 8 again. In case that the two operation (explosive) sounds in total are not verified even though Step 8 is performed again, leave the air bag module alone for 30 min or more before getting near it again.
- The air bag module is very hot immediately after it is operated (deployed). You can be burned. Do not touch the air bag module for at least 15 min after deployment.

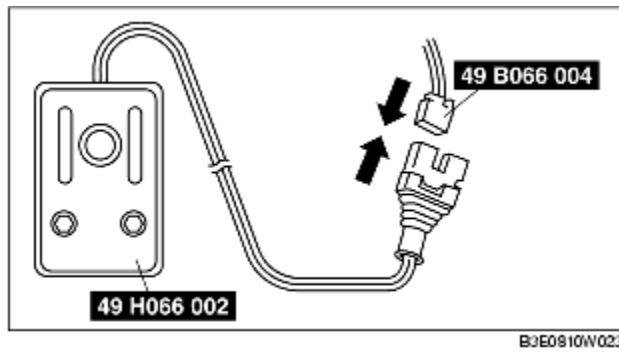
9. Disconnect the **SSTs** (Deployment tool) from the **SSTs** (Adapter harness).

Side air bag module and pre-tensioner front buckle

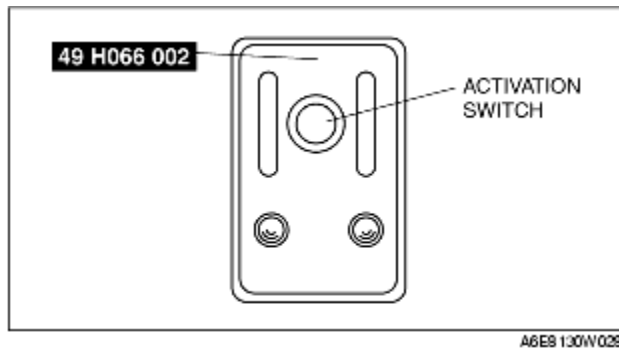
1. Disconnect the front seat connector.
2. Connect the **SST** (Adapter harness) to the side air bag module and pre-tensioner front buckle as shown in the figure.



3. Connect the **SST** (Deployment tool) to the **SST** (Adapter harness).

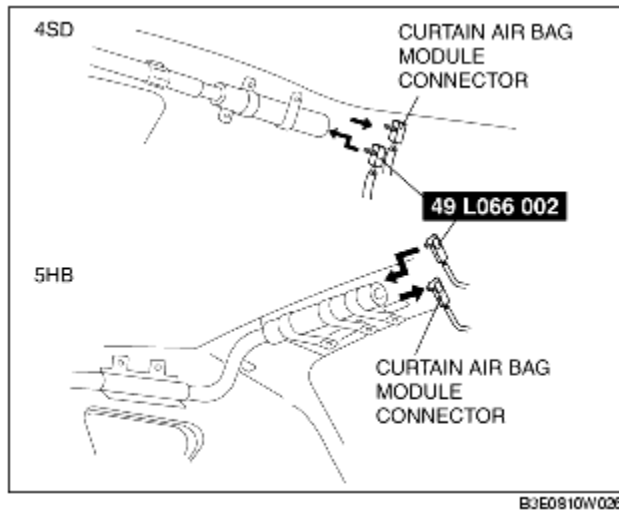


4. Connect the **SST** (Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
5. Verify that the red lamp on the **SST** (Deployment tool) is illuminated.
6. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.
7. Press the activation switch on the **SST** (Deployment tool) to operate (deploy) the side air bag module and pre-tensioner front buckle.

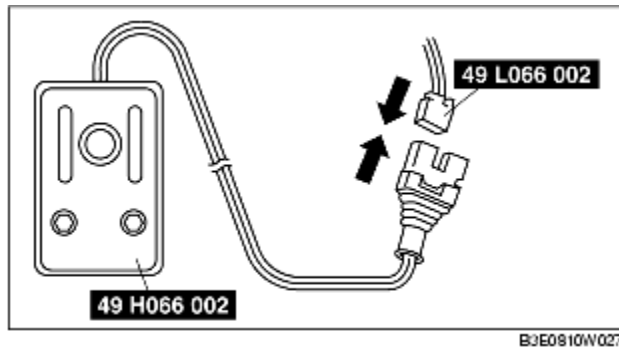


Curtain air bag module

1. Remove the C-pillar trim. (4SD)
- (See [C-PILLAR TRIM REMOVAL/INSTALLATION.](#))
2. Partially peel back the headliner. (5HB)
 3. Disconnect the curtain air bag module connector.
 4. Connect the **SST** (Adapter harness) to the curtain air bag module as shown in the figure.



5. Connect the **SST** (Deployment tool) to the **SST** (Adapter harness).

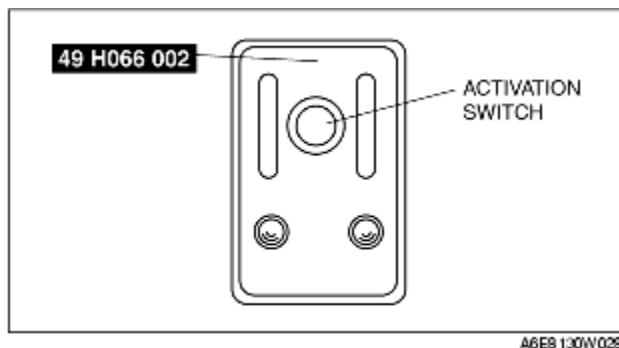


6. Connect the **SST** (Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.

7. Verify that the red lamp on the **SST** (Deployment tool) is illuminated.

8. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

9. Press the activation switch on the **SST** (Deployment tool) to operate (deploy) the curtain air bag module.



Deployment Procedure for Outside of Vehicle

1. Inspect the **SST** (Deployment tool).

(See [INSPECTION OF SST \(DEPLOYMENT TOOL\)](#).)

2. Turn the ignition switch to the LOCK position.
3. Disconnect the negative battery cable and wait for **1 min or more**.
4. Follow the procedure below for operating (deploying) the applicable air bag module or pre-tensioner front buckle.

Driver-side air bag module

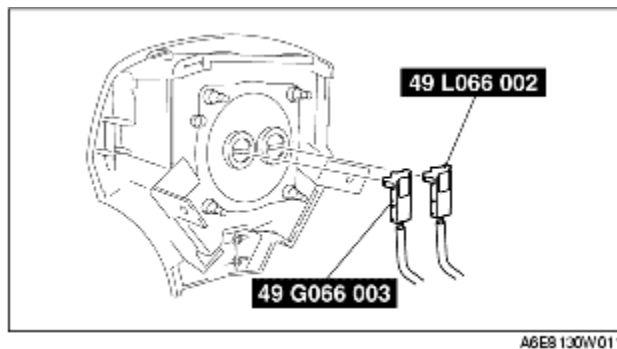
Warning

- The driver-side air bag module is a dual inflator type. If one inflator is forced to operate (deploy), the other may operate (deploy) accidentally. To prevent injury while disposing of the air bag module, make sure to operate (deploy) both driver-side air bag module inflators simultaneously, following the procedure below.

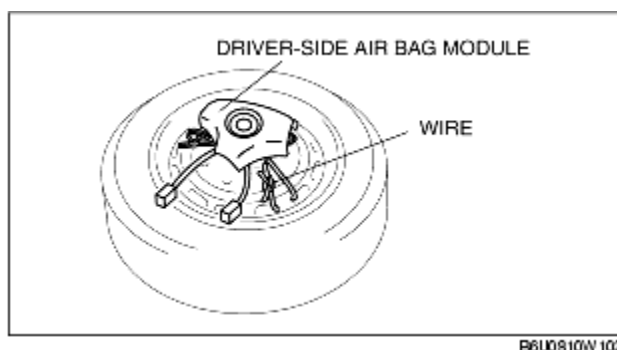
1. Remove the driver-side air bag module.

(See [DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION](#).)

2. Connect the **SSTs** (Adapter harness) to the driver-side air bag module as shown in the figure.



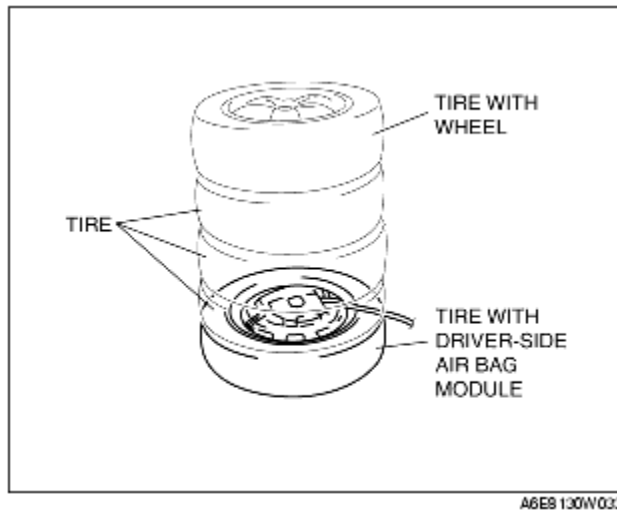
3. Place the driver-side air bag module on the center of the tire wheel with the padded surface facing up. To secure the air bag module to the tire wheel, wrap a wire (cross section **1.25 mm² {0.002 in²} or more**) through the wheel and the bolt installation holes of the air bag module **at least 4 times**.



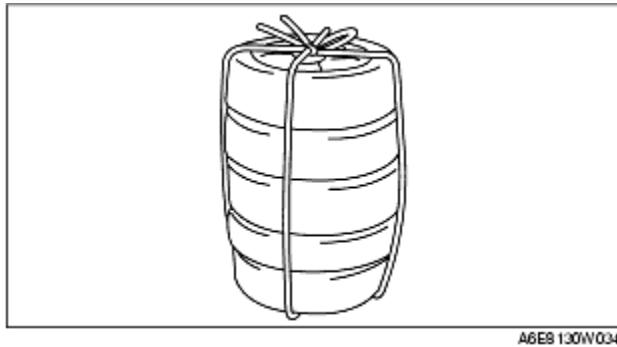
Warning

- If the air bag module is not properly installed to the tire wheel, serious injury may occur when the module is operated (deployed). When installing the air bag module to the tire wheel, make sure the padded surface is facing up.

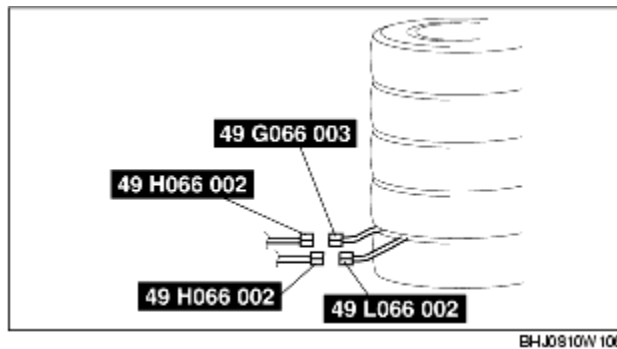
4. Stack three tires without wheels on top of the tire with the driver-side air bag module, and then stack another tire with a wheel on the very top.



5. Secure the tires with wire.



6. Connect the **SSTs**(Deployment tool) to the **SSTs** (Adapter harness).

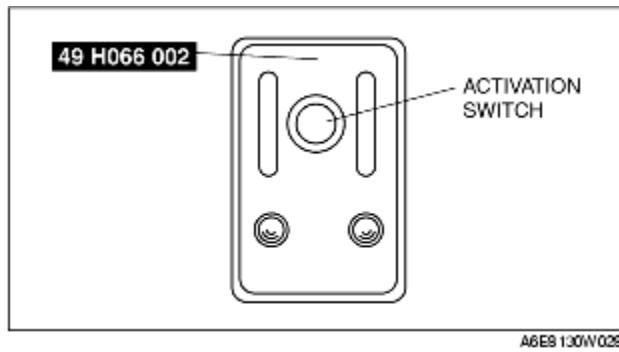


7. Connect both **SSTs**(Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.

8. Verify that the red lamp on both **SSTs** (Deployment tool) is illuminated.

9. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

10. Press the activation switch on the **SST**(Deployment tool) connected with 49 L066 002 (a yellow connector) of the **SST** (Adapter harness), and **after 3 s**, press the activation switch on the other **SST** (Deployment tool) to operate (deploy) the air bag module (both inflators).



Warning

- Verify that air bag module operation (explosive) sound occurs twice. If no operation (explosive) sound was heard or a single operation (explosive) sound was heard, both inflators would not have operated (deployed) properly. This may cause serious injury because the air bag module may operate (deploy) accidentally. If the two operation (explosive) sounds are not heard, perform Step 10 again. In case that the two operation (explosive) sounds in total are not verified even though Step 10 is performed again, leave the air bag module alone for 30 min or more before getting near it again.
- The air bag module is very hot immediately after it is operated (deployed). You can be burned. Do not touch the air bag module for at least 15 min after deployment.

11. Disconnect the **SSTs** (Deployment tool) from the **SSTs** (Adapter harness).

Passenger-side air bag module

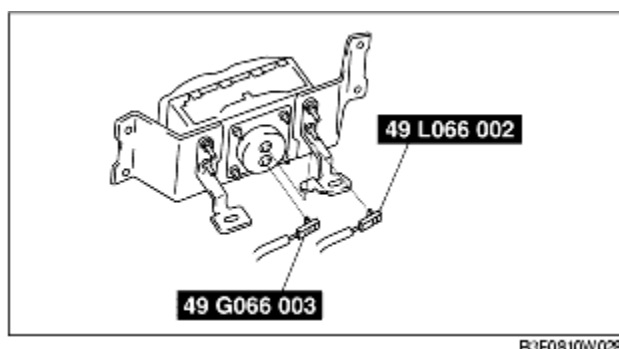
Warning

- The passenger-side air bag module is a dual inflator type. If one inflator is forced to operate (deploy), the other may operate (deploy) accidentally. To prevent injury while disposing of the air bag module, make sure to operate (deploy) both passenger-side air bag module inflators simultaneously, following the procedure below.

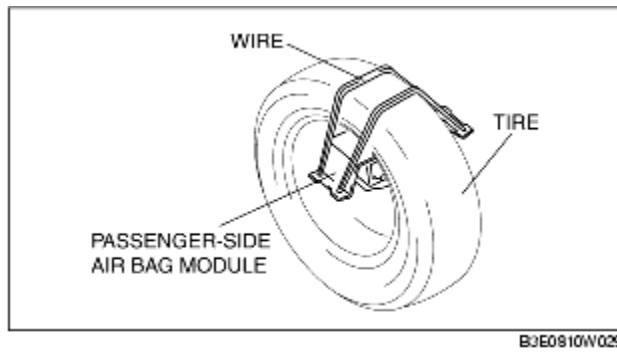
1. Remove the passenger-side air bag module.

(See [PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.](#))

2. Connect the **SSTs** (Adapter harness) to the passenger-side air bag module as shown in the figure.



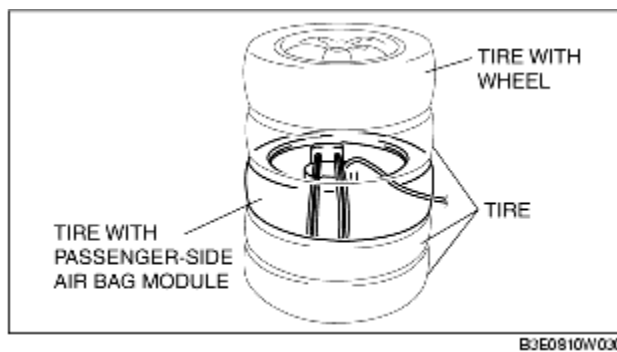
3. Place the padded surface of the passenger-side air bag module facing the center of the tire as shown in the figure. To secure the air bag module to the tire wheel, wrap a wire (cross section **1.25 mm²{0.002 in²}** or more) through the tire and the bolt installation holes **at least 4 times** as shown in the figure.



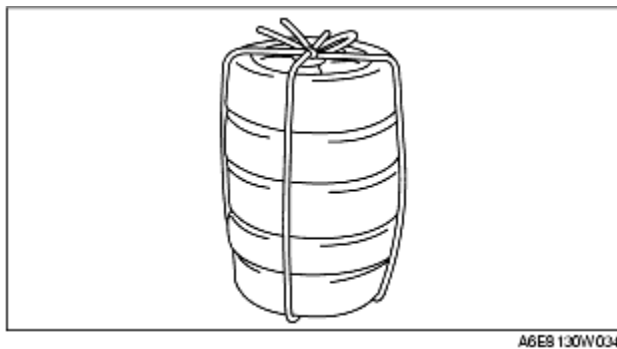
Warning

- If the air bag module is not properly installed to the tire, serious injury may occur when the module is operated (deployed). When installing the air bag module to the tire, make sure the padded surface is facing the center of the tire.

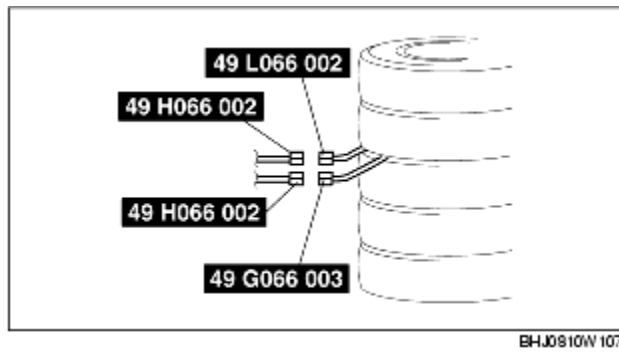
4. Stack the tire with the passenger-side air bag module on top of two tires without wheels. Stack a tire without a wheel on top of the tire with the passenger-side air bag module, and then stack another tire with a wheel on the very top.



5. Secure the tires with wire.



6. Connect the **SSTs**(Deployment tool) to the **SSTs** (Adapter harness).

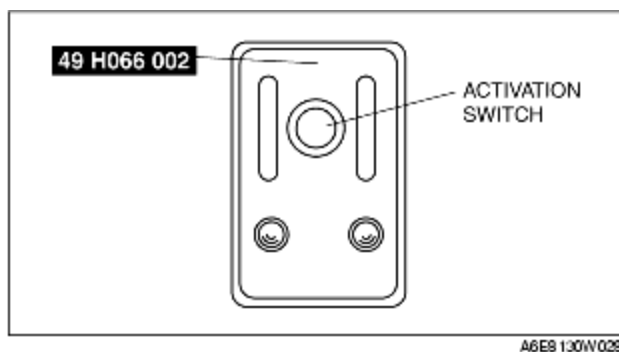


7. Connect both **SSTs**(Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.

8. Verify that the red lamp on both **SSTs** (Deployment tool) is illuminated.

9. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

10. Press the activation switch on the **SST** (Deployment tool) connected with 49 L066 002 (a yellow connector) of the **SST** (Adapter harness), and **after 3 s**, press the activation switch on the other **SST**(Deployment tool) to operate (deploy) the air bag module (both inflators).



Warning

- Verify that air bag module operation (explosive) sound occurs twice. If no operation (explosive) sound was heard or a single operation (explosive) sound was heard, both inflators would not have operated (deployed) properly. This may cause serious injury because the air bag module may operate (deploy) accidentally. If the two operation (explosive) sounds are not heard, perform Step 11 again. In case that the two operation (explosive) sounds in total are not verified even though Step 11 is performed again, leave the air bag module alone for 30 min or more before getting near it again.
- The air bag module is very hot immediately after it is operated (deployed). You can be burned. Do not touch the air bag module for at least 15 min after deployment.

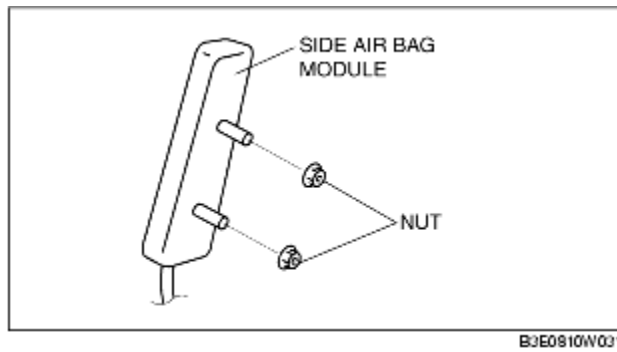
11. Disconnect the **SSTs** (Deployment tool) from the **SSTs** (Adapter harness).

Side air bag module

1. Remove the side air bag module.

(See [SIDE AIR BAG MODULE REMOVAL/INSTALLATION](#).)

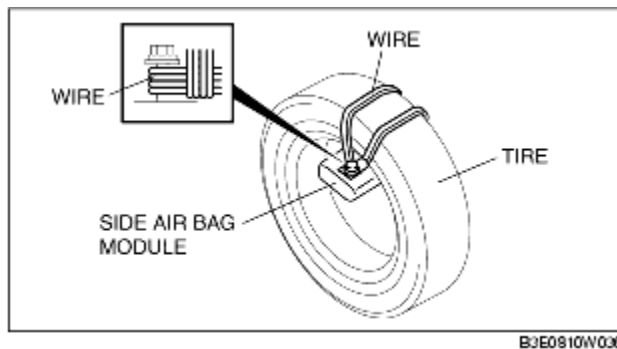
2. Install the nuts to the side air bag module.



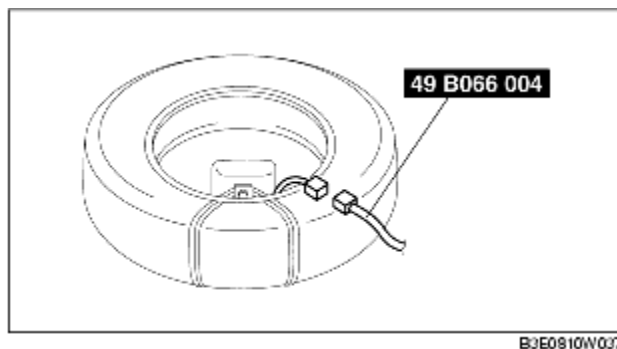
3. Place the padded surface of the side air bag module facing the center of the tire as shown in the figure. To secure the air bag module to the tire wheel, wrap a wire (cross section **1.25 mm² {0.002 in²}** or more) through the tire and around the bolts **at least 4 times**.

Warning

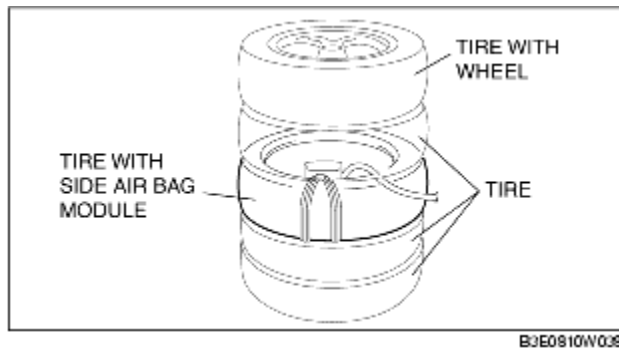
- If the air bag module is not properly installed to the tire, serious injury may occur when the module is operated (deployed). When installing the air bag module to the tire, make sure the padded surface is facing the center of the tire.



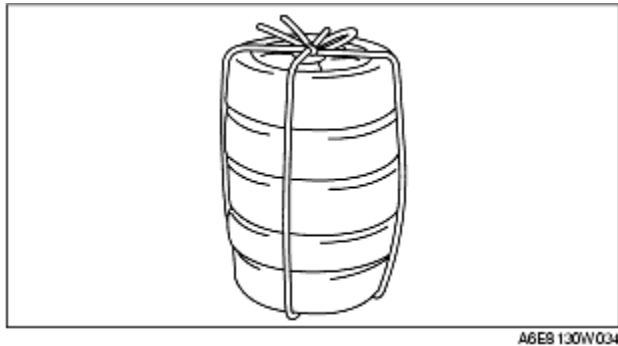
4. Connect the **SST** (Adapter harness) to the side air bag module as shown in the figure.



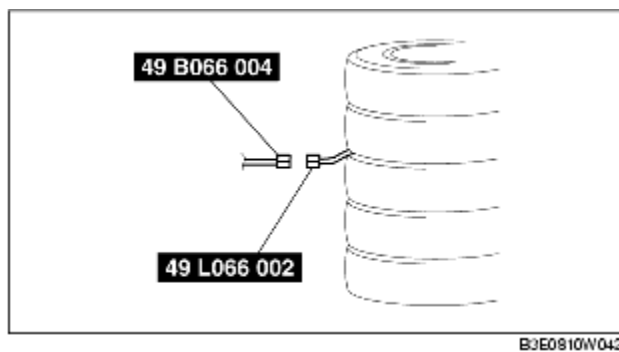
5. Stack the tire with the side air bag module on top of two tires without wheels. Stack a tire without a wheel on top of the tire with the side air bag module, and then stack another tire with a wheel on the very top.



6. Secure the tires with wire.



7. Connect the **SST**(Deployment tool) to the **SST** (Adapter harness).

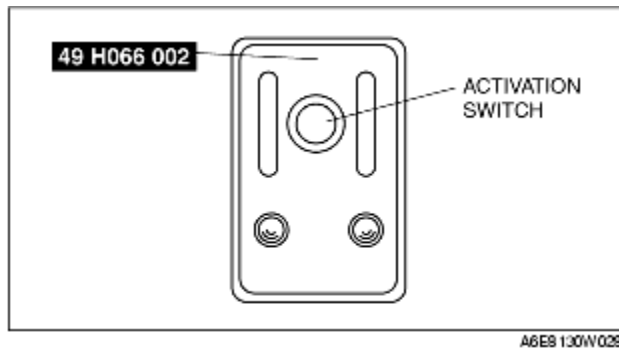


8. Connect the **SST**(Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.

9. Verify that the red lamp on the **SST** (Deployment tool) is illuminated.

10. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

11. Press the activation switch on the **SST** (Deployment tool) to operate (deploy) the side air bag module.

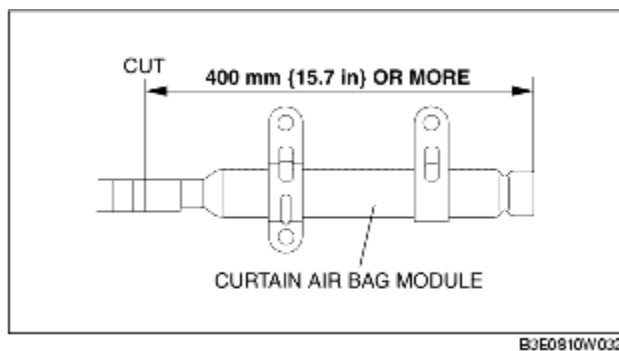


Curtain air bag module

1. Remove the curtain air bag module.

(See [CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION](#).)

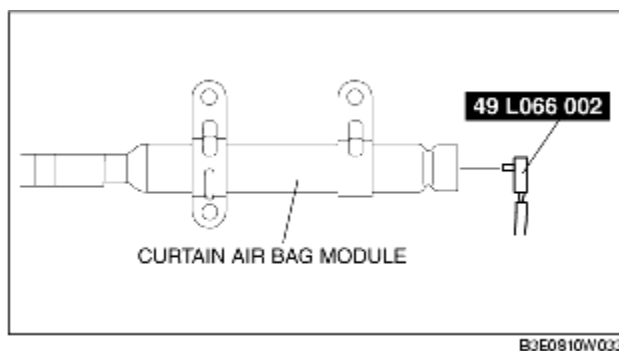
2. Secure the curtain air bag module in a vise, and cut off the deployment section, as shown in the figure.



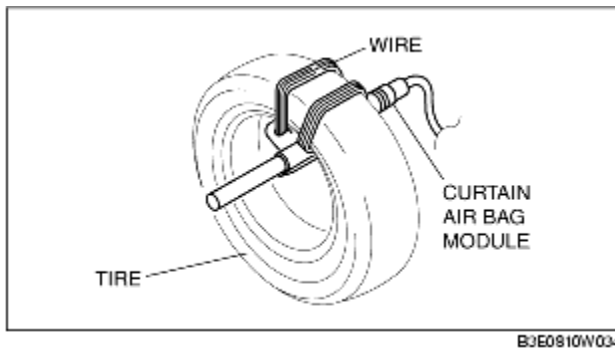
Warning

- Be sure not to crush the pipe on the side where it is cut. If it is crushed completely, the interior pressure of the pipe will build up and can cause it to explode during air bag module operation (deployment).

3. Connect the **SST** (Adapter harness) to the curtain air bag module as shown in the figure.



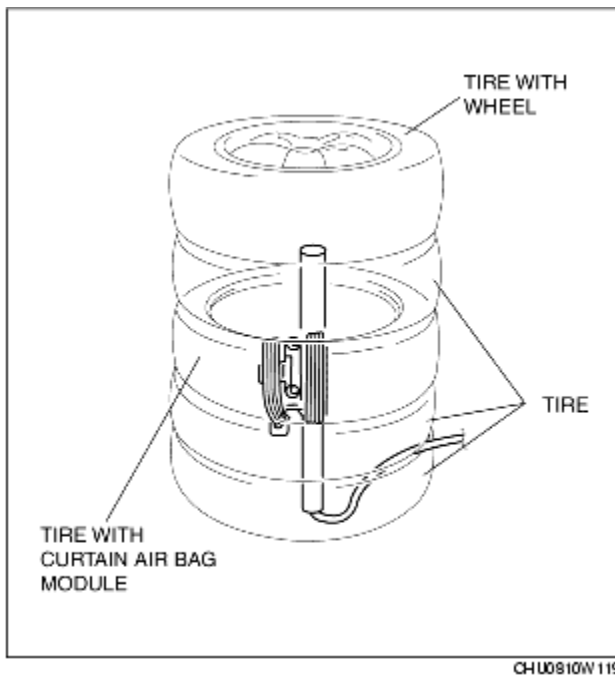
4. Secure the curtain air bag module to the tire, by wrapping a wire (cross section **1.25 mm² {0.002 in²}** or more) through the tire and the bolt installation holes **at least 4 times** as shown in the figure.



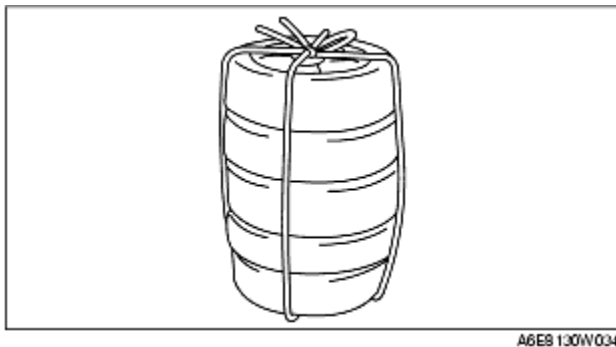
Warning

- If the air bag module is not properly installed to the tire, serious injury may occur when the module is operated (deployed). Make sure to install the air bag module securely.

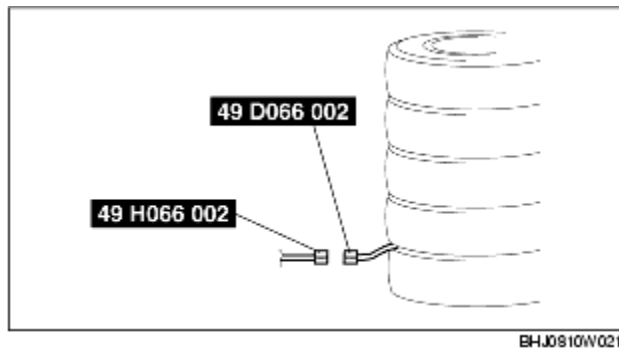
5. Stack the tire with the curtain air bag module on top of two tires without wheels. Stack a tire without a wheel on top of the tire with the curtain air bag module, and then stack another tire with a wheel on the very top.



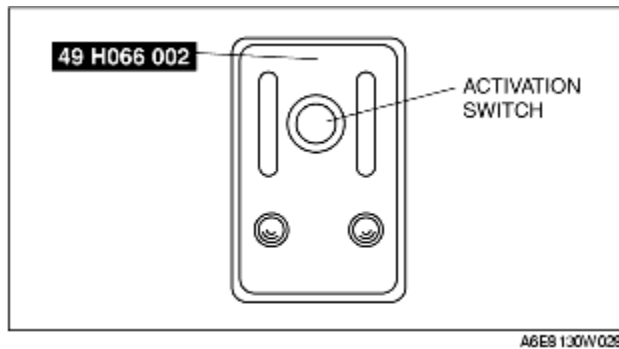
6. Secure the tires with wire.



7. Connect the **SST**(Deployment tool) to the **SST** (Adapter harness).



8. Connect the **SST**(Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
9. Verify that the red lamp on the **SST** (Deployment tool) is illuminated.
10. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.
11. Press the activation switch on the **SST** (Deployment tool) to operate (deploy) the curtain air bag module.

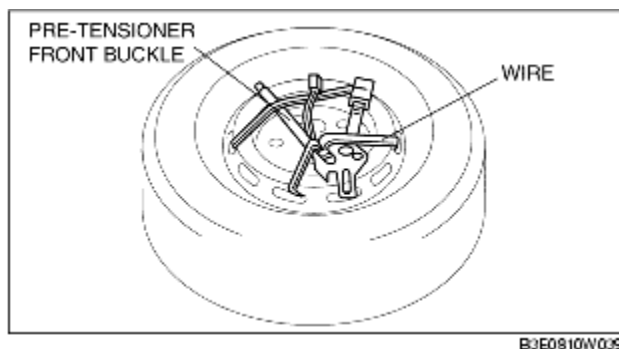


Pre-tensioner front buckle

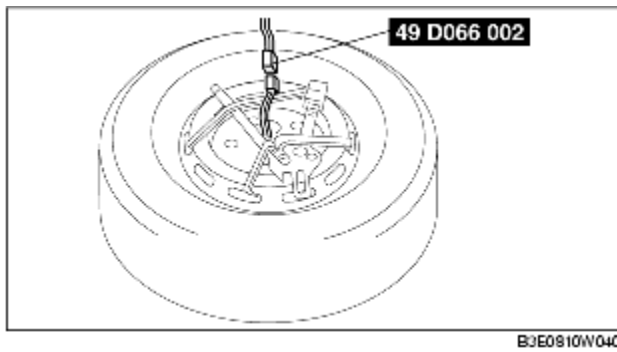
1. Remove the pre-tensioner front buckle.

(See [FRONT SEAT BELT REMOVAL/INSTALLATION.](#))

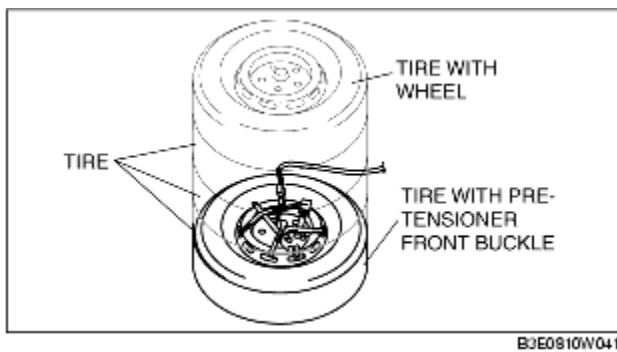
2. Place the pre-tensioner front buckle on the center of the tire wheel. To secure the buckle to the tire wheel, wrap a wire (cross section of **1.25mm² {0.002in²}** or more) through the wheel and the bolt installation hole and through the wheel and the tube, **at least 4 times**.



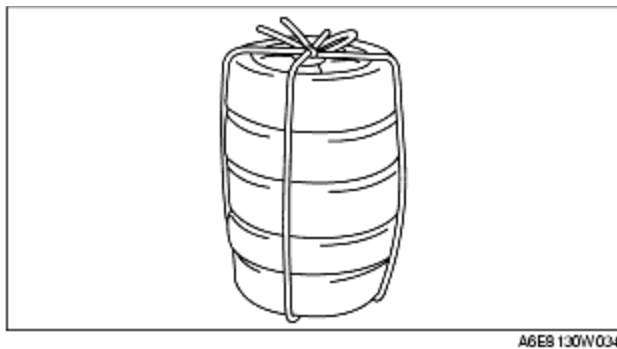
3. Connect the **SST** (Adapter harness) to the pre-tensioner front buckle as shown in the figure.



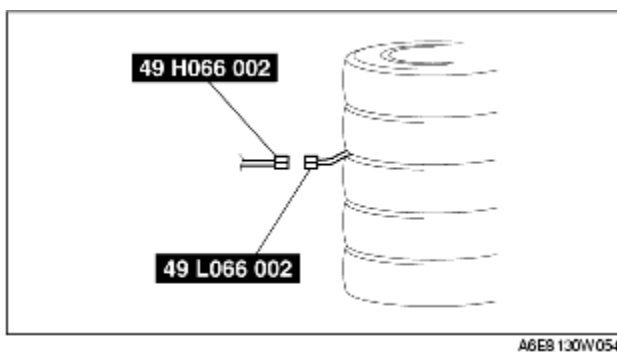
4. Stack three tires without wheels on top of the tire with the pre-tensioner front buckle, and then stack another tire with a wheel on the very top.



5. Secure the tires with wire.

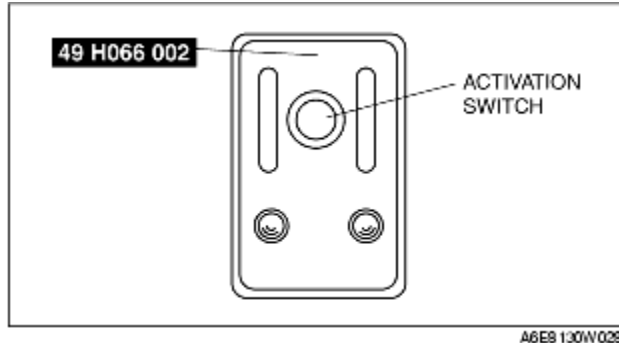


6. Connect the **SST**(Deployment tool) to the **SST** (Adapter harness).



7. Connect the **SST**(Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.

8. Verify that the red lamp on the **SST** (Deployment tool) is illuminated.
9. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.
10. Press the activation switch on the **SST** (Deployment tool) to operate (deploy) the pre-tensioner front buckle.



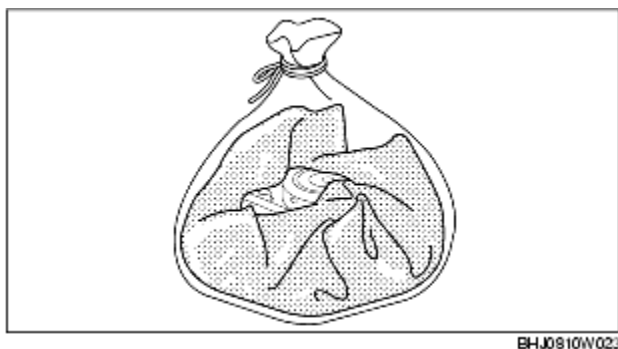
AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DISPOSAL PROCEDURES

B3E081057000W02

Warning

- A live (undeployed) air bag module or pre-tensioner front buckle may accidentally operate (deploy) when it is disposed of and cause serious injury. Always refer to the "AIR BAG MODULE AND PRE-TENSIONER FRONT BUCKLE DEPLOYMENT PROCEDURES" and dispose of air bag modules and pre-tensioner front buckles in a deployed condition.
- The air bag modules and the pre-tensioner front buckles are very hot immediately after they are deployed. You can be burned. Do not touch an air bag module and pre-tensioner front buckle for at least 15 min after deployment.
- Pouring water on the deployed air bag module and pre-tensioner front buckle is dangerous. The water will mix with the residual gases to form a gas that can make breathing difficult. Do not pour water on the deployed air bag module and pre-tensioner front buckle.
- The deployed air bag module or pre-tensioner front buckle may contain deposits of sodium hydroxide, a caustic byproduct of the gas-generated combustion. If this substance gets into your eyes or on your hands, it can cause irritation and itching. When handling the deployed air bag module and pre-tensioner front buckle, wear gloves and safety glasses.
- Due to the adoption of 2-step deployment control in both the driver and passenger-side air bag modules, depending on the impact force, it is possible that inflator No.2 might not operate (deploy). Before disposing of the air bag module, always follow the inflator deployment procedures and verify the complete operation (deployment) of inflators No.1 and 2.

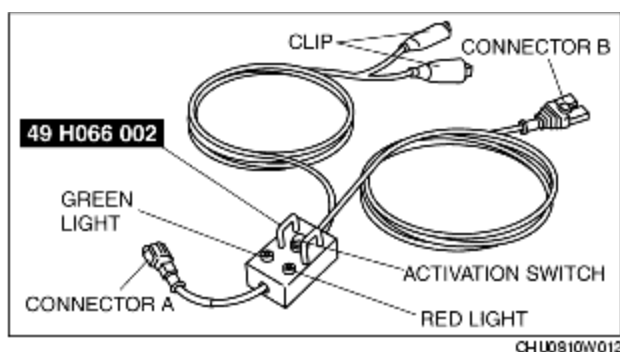
1. Remove the deployed air bag module or pre-tensioner front buckle.
2. Put the air bag module or pre-tensioner front buckle in a plastic bag, seal the bag, and then dispose of it.



INSPECTION OF SST (DEPLOYMENT TOOL)

B3E081001046W04

1. Before using the **SST** (49 H066 002), inspect its operation.



Inspection Procedure

1. Follow the steps below to inspect the **SST** (49 H066 002).

- If not as indicated in the table, replace the **SST** (49 H066 002) because it has a malfunction.

Warning

- Do not use a malfunctioning SST (49 H066 002), otherwise it could cause the air bag module or pre-tensioner front buckle to accidentally operate (deploy).

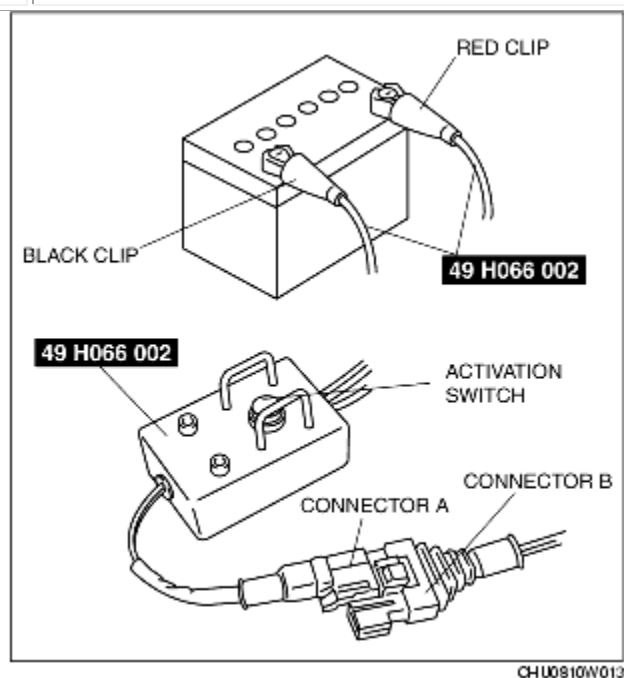
Caution

- Because the permissible voltage for the SST (49 H066 002) is 12 V, do not connect a 24 V power source because it will damage the SST. Always connect only a 12 V power source.

Step	Inspection procedure	Light condition	
		Green	Red
1	Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.	On	Off
2	Connect connectors A and B.	Off	On

3	Press the activation switch.	On	Off
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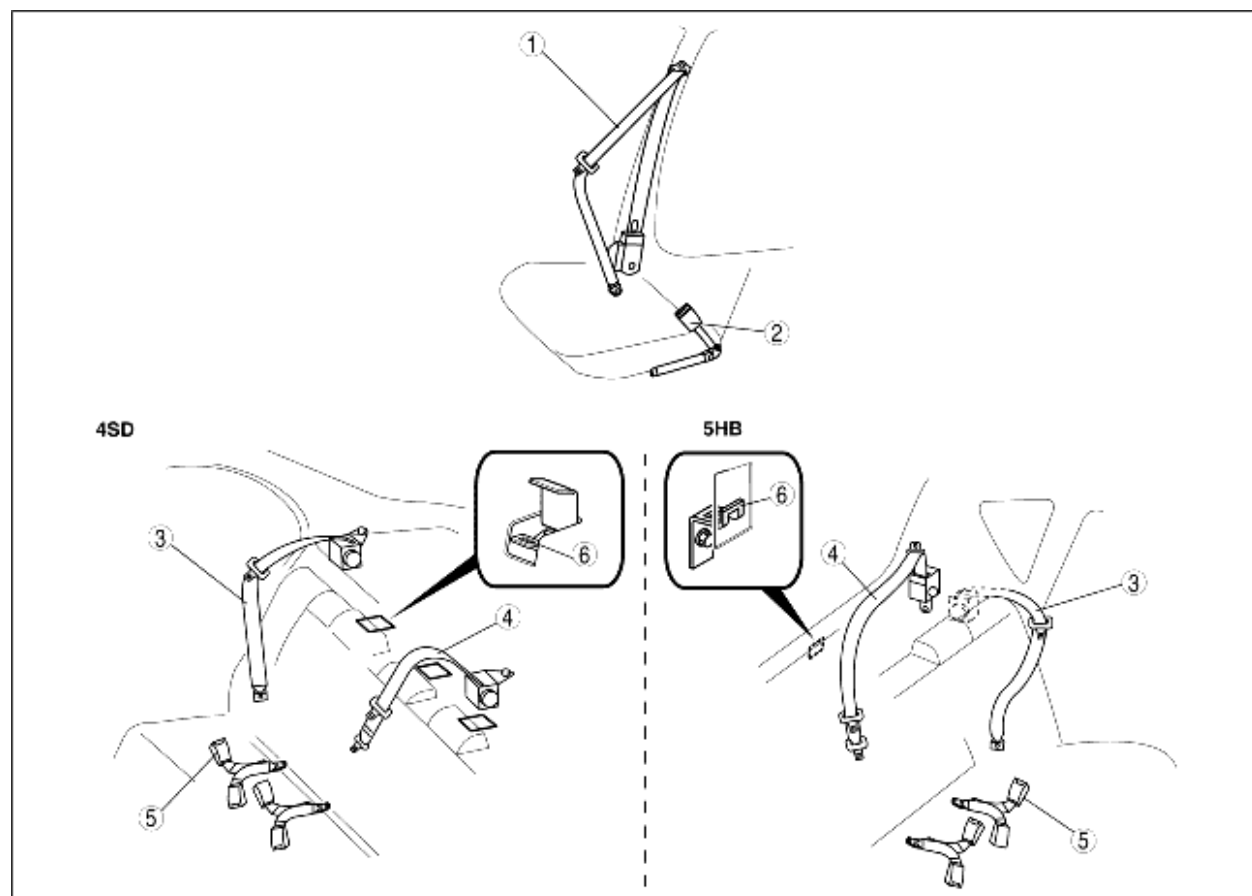
92



SEAT BELT

LOCATION INDEX

B3E081157630W01



B3E0811W505

Front seat belt
1 (See FRONT SEAT BELT REMOVAL/INSTALLATION.) (See SEAT BELT INSPECTION.)
Front buckle
2 (See FRONT BUCKLE REMOVAL/INSTALLATION.)
Rear seat belt
3 (See REAR SEAT BELT REMOVAL/INSTALLATION.) (See SEAT BELT INSPECTION.)
Rear center seat belt
4 (See REAR CENTER SEAT BELT REMOVAL/INSTALLATION.) (See SEAT BELT INSPECTION.)
Rear buckle
5 (See REAR BUCKLE REMOVAL/INSTALLATION.)
Child-restraint seat anchor
6 (See CHILD-RESTRAINT SEAT ANCHOR REMOVAL/INSTALLATION.)

FRONT SEAT BELT REMOVAL/INSTALLATION

B3E081157630W02

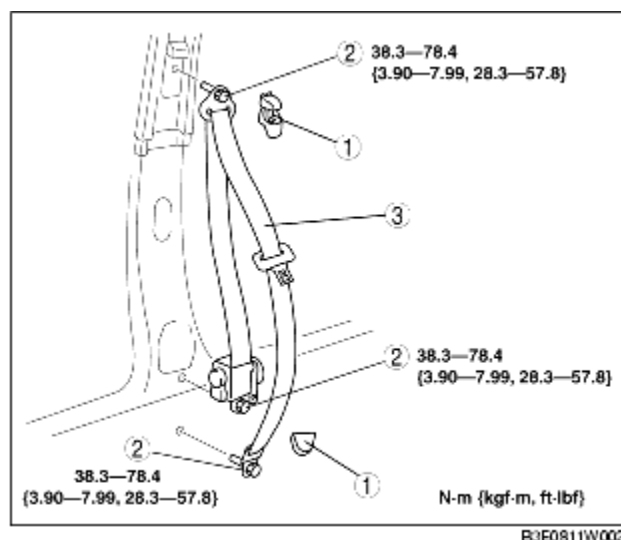
Warning

- The side air bag sensor is attached to the lower part of the B-pillar. When working around the B-pillar, disconnect the negative battery cable or work carefully, avoiding excessive impact to the lower part of the B-pillar.

Caution

- The ELR (emergency locking retractor) has a spring that will unwind if the retractor cover is removed. The spring cannot be rewound by hand. If this occurs, the ELR will not work properly. Therefore, do not disassemble the retractor.

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable.
3. Remove the front scuff plate. (See [FRONT SCUFF PLATE REMOVAL/INSTALLATION](#).)
4. Remove the rear scuff plate. (See [REAR SCUFF PLATE REMOVAL/INSTALLATION](#).)
5. Remove the B-pillar lower trim. (See [B-PILLAR LOWER TRIM REMOVAL/INSTALLATION](#).)
6. Remove in the order indicated in the table.



1	Cover
2	Bolt
3	Front seat belt

7. Install in the reverse order of removal.

REAR SEAT BELT REMOVAL/INSTALLATION

Caution

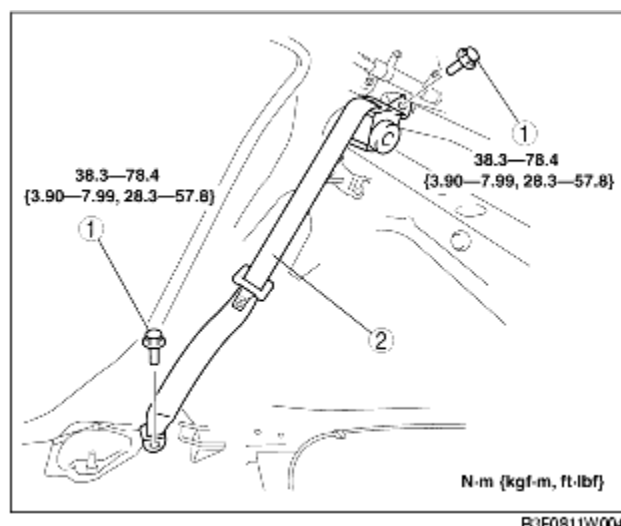
- The ELR (emergency locking retractor) has a spring that will unwind if the retractor cover is removed. The spring cannot be rewound by hand. If this occurs, the ELR will not work properly. Therefore, do not disassemble the retractor.

4SD

1. Remove the following parts:

- (1) Rear seat (See [REAR SEAT REMOVAL/INSTALLATION.](#))
- (2) Rear scuff plate (See [REAR SCUFF PLATE REMOVAL/INSTALLATION.](#))
- (3) Tire house trim (See [TIRE HOUSE TRIM REMOVAL/INSTALLATION.](#))
- (4) C-pillar trim (See [C-PILLAR TRIM REMOVAL/INSTALLATION.](#))
- (5) Rear package trim (See [REAR PACKAGE TRIM REMOVAL/INSTALLATION.](#))

2. Remove in the order indicated in the table.



1	Bolt
2	Rear seat belt

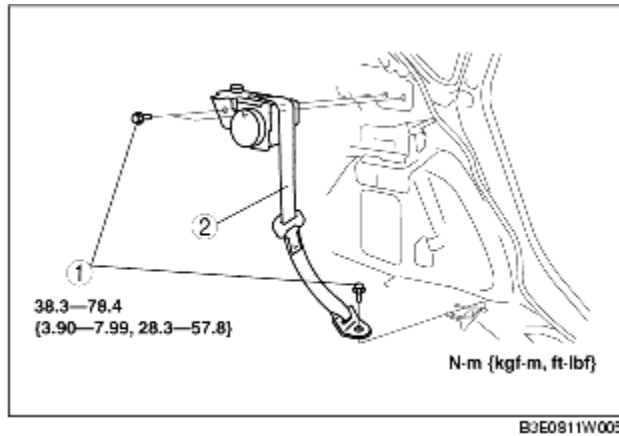
3. Install in the reverse order of removal.

5HB

1. Remove the following parts:

- (1) Rear seat (See [REAR SEAT REMOVAL/INSTALLATION.](#))
- (2) Rear scuff plate (See [REAR SCUFF PLATE REMOVAL/INSTALLATION.](#))
- (3) Tire house trim (See [TIRE HOUSE TRIM REMOVAL/INSTALLATION.](#))
- (4) Trunk side upper trim (See [TRUNK SIDE UPPER TRIM REMOVAL/INSTALLATION.](#))
- (5) C-pillar trim (See [C-PILLAR TRIM REMOVAL/INSTALLATION.](#))

2. Remove in the order indicated in the table.



1	Bolt
2	Rear seat belt

3. Install in the reverse order of removal.

REAR CENTER SEAT BELT REMOVAL/INSTALLATION

B3E081157630W06

Caution

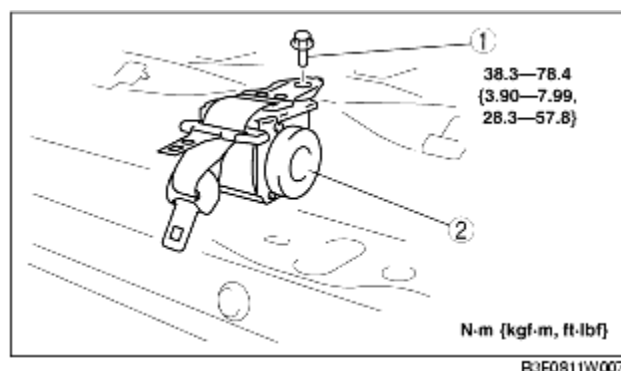
- The ELR (emergency locking retractor) has a spring that will unwind if the retractor cover is removed. The spring cannot be rewound by hand. If this occurs, the ELR will not work properly. Therefore, do not disassemble the retractor.

4SD

1. Remove the following parts:

- (1) Rear seat (See [REAR SEAT REMOVAL/INSTALLATION.](#))
- (2) Rear scuff plate (See [REAR SCUFF PLATE REMOVAL/INSTALLATION.](#))
- (3) Tire house trim (See [TIRE HOUSE TRIM REMOVAL/INSTALLATION.](#))
- (4) C-pillar trim (See [C-PILLAR TRIM REMOVAL/INSTALLATION.](#))
- (5) Rear package trim (See [REAR PACKAGE TRIM REMOVAL/INSTALLATION.](#))

2. Remove in the order indicated in the table.



1	Bolt
2	Rear center seat belt

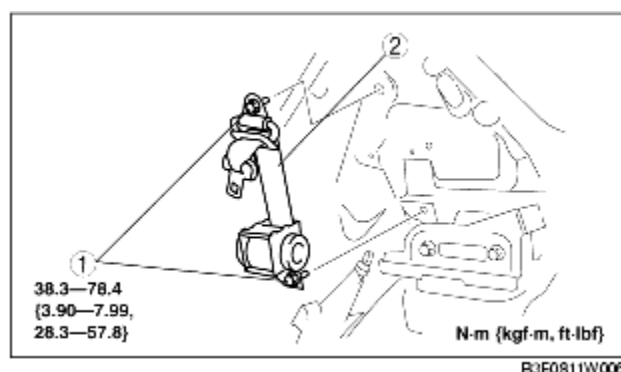
3. Install in the reverse order of removal.

5HB

1. Remove the following parts:

- (1) Rear seat (See [REAR SEAT REMOVAL/INSTALLATION.](#))
- (2) Rear scuff plate (See [REAR SCUFF PLATE REMOVAL/INSTALLATION.](#))
- (3) Tire house trim (See [TIRE HOUSE TRIM REMOVAL/INSTALLATION.](#))
- (4) Trunk side upper trim (See [TRUNK SIDE UPPER TRIM REMOVAL/INSTALLATION.](#))
- (5) C-pillar trim (See [C-PILLAR TRIM REMOVAL/INSTALLATION.](#))

2. Remove in the order indicated in the table.



1	Bolt
2	Rear center seat belt

3. Install in the reverse order of removal.

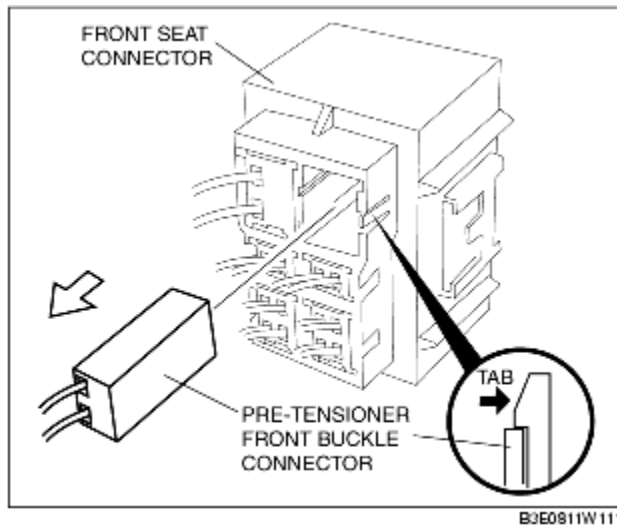
FRONT BUCKLE REMOVAL/INSTALLATION

B3E081157620W01

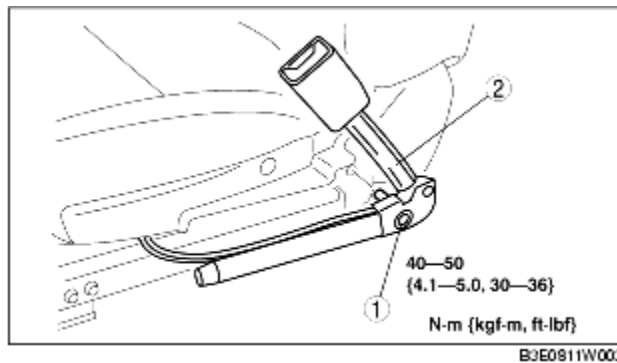
Warning

- Handling the front buckle (pre-tensioner front buckle) improperly can accidentally deploy the pre-tensioner, which may seriously injure you. Read the service warnings and cautions before handling the front buckle. (See [SERVICE WARNINGS](#).) (See [SERVICE CAUTIONS](#).)

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Remove the front seat. (See [FRONT SEAT REMOVAL/INSTALLATION](#).)
4. Detach the tab as shown in the figure and remove the connector from the front seat connector.



5. Remove in the order indicated in the table.



1	Screw
2	Front buckle

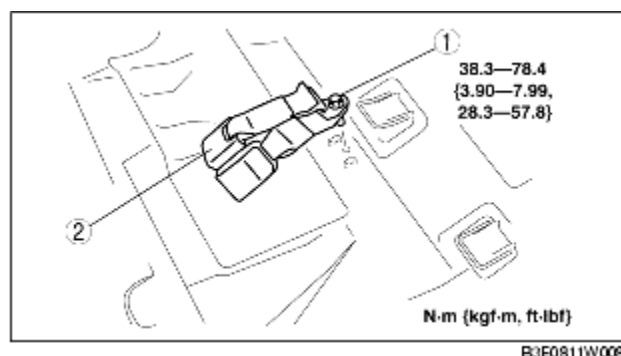
6. Install in the reverse order of removal.
7. Verify that the air bag system warning light illuminates for **approx. 6 s** and then goes out when the ignition switch is turned to the ON position.

- If the air bag system warning light does not operate, refer to the on-board diagnostic system (air bag system) and perform inspection of the system.

REAR BUCKLE REMOVAL/INSTALLATION

B3E081157620W03

1. Remove the rear seat cushion. (See [REAR SEAT REMOVAL/INSTALLATION](#).)
2. Remove in the order indicated in the table.



1	Bolt
2	Rear buckle

3. Install in the reverse order of removal.

SEAT BELT INSPECTION

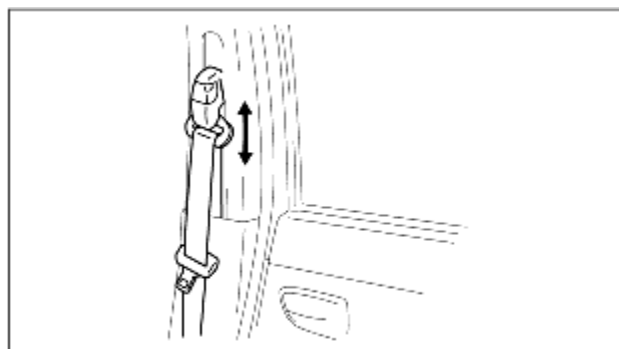
B3E081157630W05

Belt

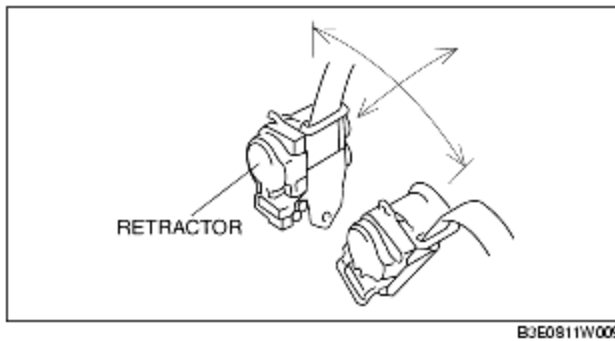
1. Verify that the belt is installed properly with no twists or kinks.
2. Verify that there is no damage to the seat belt and no deformation of the metal fittings.
 - If there is any malfunction, replace the seat belt.

ELR

1. Verify that the belt can be pulled out smoothly, and that it retracts smoothly.



- If there is any malfunction, replace the seat belt.
2. Verify that the retractor locks when the belt is pulled quickly.
 - If there is any malfunction, replace the seat belt.
 3. Remove the retractor.
 4. While pulling the seat belt out, make sure that the seat belt does not lock when the retractor is tilted slowly **up to 15°** from the mounted position and locks when the retractor is tilted **40° or more**.



- If there is any malfunction, replace the seat belt.

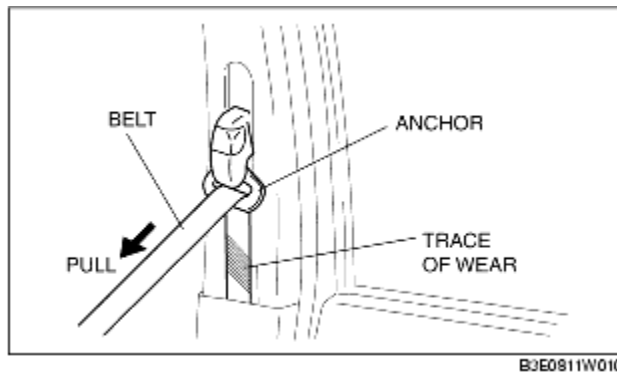
ALR

1. Pull the belt out fully to change the lock mode from ELR to ALR.
2. Verify that the retractor makes a clicking sound as the belt slowly retracts. If no sound is heard, the lock mode has not changed to ALR. If necessary, repeat Step 1.
 - If there is any malfunction, replace the seat belt.
3. Verify that the retractor locks when pulled.
 - If there is any malfunction, replace the seat belt.
4. Verify that the lock mode changes to ELR when the belt is fully pulled out.
 - If there is any malfunction, replace the seat belt.

Load Limiter Retractor

Warning

- When the load limiter operates, the belt and anchor rub against each other strongly leaving wear tracks. If the seat belt is used in this state, the seat belt will not function at its full capability and there is the possibility of serious injury to passengers. Be sure to replace the seat belt once the load limiter operates.
1. If the vehicle has been subjected to a shock in an accident, pull the belt from the retractor and confirm that there are no wear tracks (the load limiter has not operated) by visually inspecting and feeling the belt.



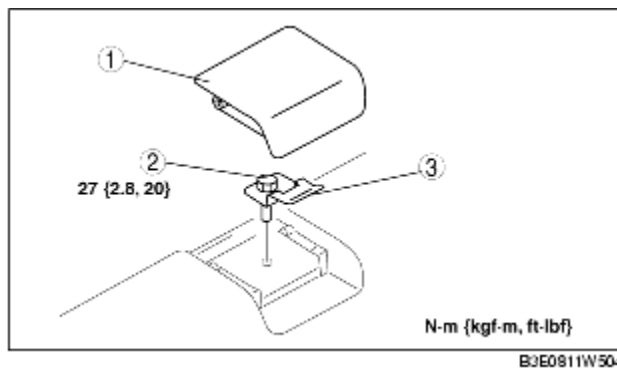
- If there is any malfunction, replace the seat belt.

CHILD-RESTRAINT SEAT ANCHOR REMOVAL/INSTALLATION

B3E081100117W01

4SD

1. Remove in the order indicated in the table.

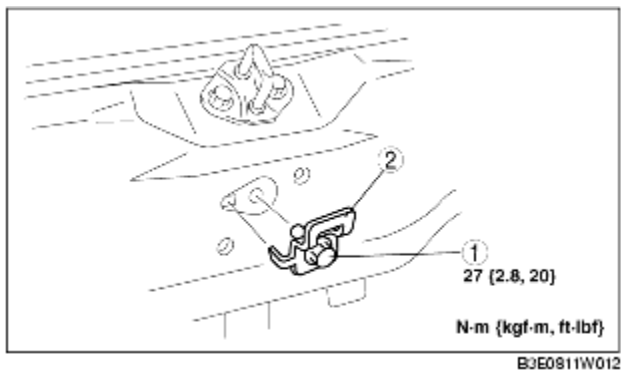


1	Cover
2	Bolt
3	Child-restraint seat anchor

2. Install in the reverse order of removal.

5HB

1. Remove the trunk end trim. (See [TRUNK END TRIM REMOVAL/INSTALLATION.](#))
2. Remove in the order indicated in the table.

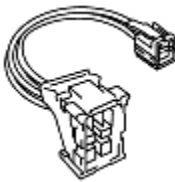
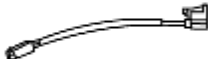
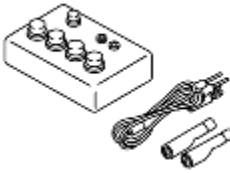


1	Bolt
2	Child-restraint seat anchor

3. Install in the reverse order of removal.

RESTRAINTS SST

B3E086001045W01

49 H066 002 Deployment tool		49 B066 004 Adapter harness		49 L066 002 Adapter harness	
49 G066 003 Adapter harness		49 N088 0A0 Fuel and Thermometer checker		WDS	