

2008 Mazda CX-9 Grand Touring

2008 RESTRAINTS Air Bag System - Mazda CX-9

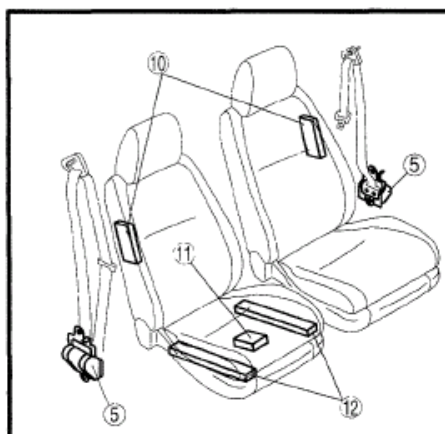
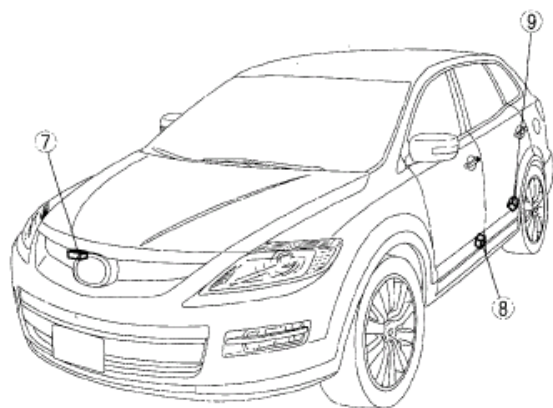
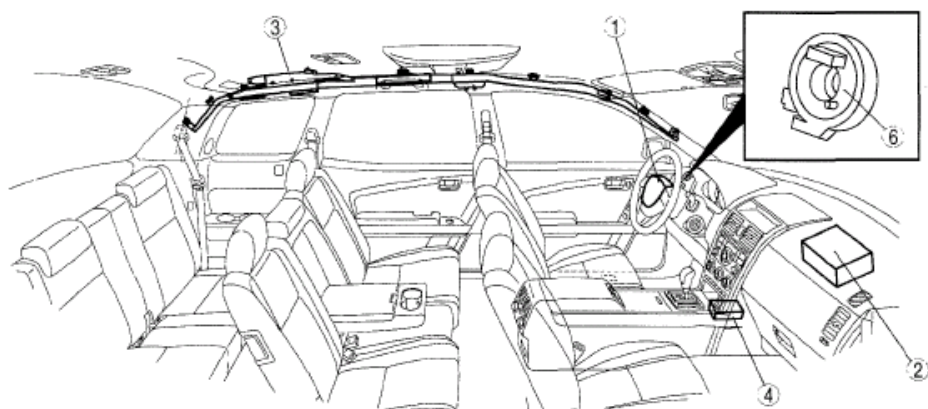
2008 RESTRAINTS

Air Bag System - Mazda CX-9

AIR BAG SYSTEM LOCATION INDEX

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2	Passenger-side air bag module (See 08-10-7 PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) (See 08-10-17 AIR BAG MODULE AND PRE-TENSIONER SEAT BELT DEPLOYMENT PROCEDURES.)
3	Curtain air bag module (See 08-10-9 CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.) (See 08-10-17 AIR BAG MODULE AND PRE-TENSIONER SEAT BELT DEPLOYMENT PROCEDURES.)
4	SAS control module (See 08-10-11 SAS CONTROL MODULE REMOVAL/INSTALLATION.)
5	Pre-tensioner seat belt (See 08-10-17 AIR BAG MODULE AND PRE-TENSIONER SEAT BELT DEPLOYMENT PROCEDURES.)

6	Clock spring (See 08-10-15 CLOCK SPRING REMOVAL/INSTALLATION.) (See 08-10-16 CLOCK SPRING INSPECTION.) (See 08-10-15 CLOCK SPRING ADJUSTMENT.)
7	Crash zone sensor (See 08-10-11 CRASH ZONE SENSOR REMOVAL/INSTALLATION.)
8	Side air bag sensor No. 1 (See 08-10-14 SIDE AIR BAG SENSOR NO. 1 REMOVAL/INSTALLATION.)
9	Side air bag sensor No. 2 (See 08-10-14 SIDE AIR BAG SENSOR NO. 2 REMOVAL/INSTALLATION.)
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11	Seat weight sensor control module (See 08-10-12 SEAT WEIGHT SENSOR CONTROL MODULE REMOVAL/INSTALLATION.)
12	Seat weight sensor (See 09-13-3 FRONT SEAT DISASSEMBLY/ASSEMBLY.) (See 08-10-13 SEAT WEIGHT SENSOR CALIBRATION.) (See 08-10-13 SEAT WEIGHT SENSOR INSPECTION.)

Fig. 1: Identifying Air Bag System Location

Courtesy of MAZDA MOTORS CORP.

AIR BAG SYSTEM SERVICE WARNINGS

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.

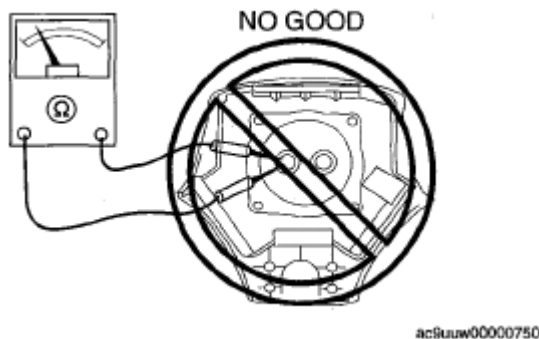


Fig. 2: Precaution For Air Bag Module Inspection
Courtesy of MAZDA MOTORS CORP.

AIR BAG MODULE HANDLING

- Before removing the air bag module or disconnecting the air bag 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.
- 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).

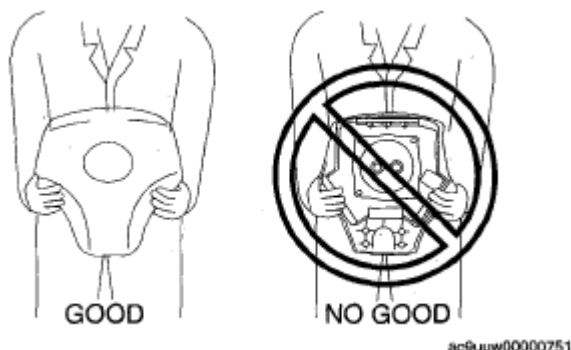


Fig. 3: Precaution For Air Bag Module Handling

Courtesy of MAZDA MOTORS CORP.

- 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.

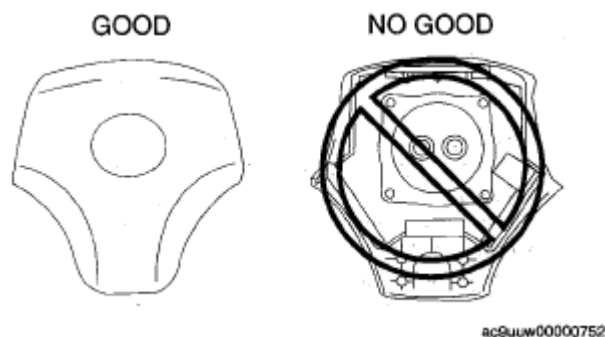


Fig. 4: Precaution For Air Bag Module Handling
Courtesy of MAZDA MOTORS CORP.

SIDE AIR BAG MODULE HANDLING

- Before removing the side air bag module or disconnecting the side air bag 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.
- 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.

SEAT WEIGHT SENSOR HANDLING

- The front passenger-side seat and the seat weight sensor may become deformed or otherwise damaged due to operation (deployment) of the front or side air bag in an accident. This may cause the passenger sensing function to operate improperly and result in a serious accident. Always replace the front passenger seat and seat weight sensor with new ones after the front or side air bags have operated (deployed). After servicing, verify that the seat operates normally and that the wiring harness is not caught. If the collision is not hard enough to cause the front or side air bags to operate (deploy), inspect the seat weight sensor and replace it if there is any malfunction.

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 seat belts, 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 seat belts. This will operate (deploy) the air bags and pre-tensioner seat belts, 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 seat belts 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 seat belts 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 seat belts, 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 seat belts 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 seat belts 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 seat belts 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

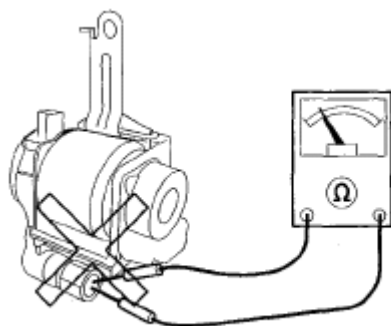
- Removing the side air bag sensor or disconnecting the side air bag sensor connector with the ignition switch at the ON position can activate the side air bag sensor and operate (deploy) the side air bag, which may cause serious injury. Before removing the side air bag sensor or disconnecting the side 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 SEAT BELT INSPECTION

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



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Fig. 5: Precaution For Pre-Tensioner Seat Belt Inspection
Courtesy of MAZDA MOTORS CORP.

AIR BAG SYSTEM SERVICE CAUTIONS

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.



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Fig. 6: Precaution For Air Bag System Component Disassembly

Courtesy of MAZDA MOTORS CORP.

AIR BAG MODULE, PRE-TENSIONER SEAT BELT HANDLING

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

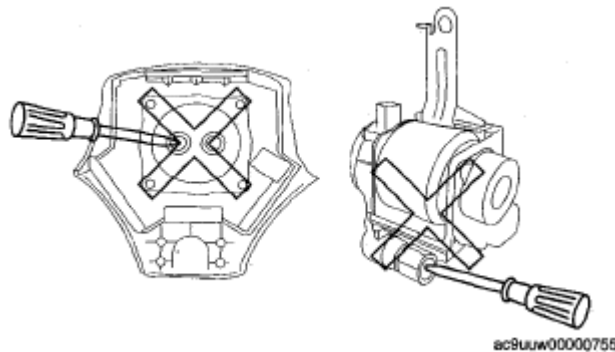


Fig. 7: Precaution For Air Bag Module, Pre-Tensioner Seat Belt Handling
Courtesy of MAZDA MOTORS CORP.

SEAT WEIGHT SENSOR HANDLING

- The seat weight sensor has a built-in strain gauge which may operate improperly if the sensor is dropped by itself or when installed to the seat. If it is dropped, replace the seat weight sensor with a new one.
- Oil, grease, or water on the seat weight sensor may cause the system to operate (deploy) improperly. Never allow oil, grease, or water to get on the seat weight sensor.
- Foreign material in the seat weight sensor components may cause the system to operate (deploy) improperly. Always make sure that no foreign material can get into the seat weight sensor.
- Disassembling the seat weight sensor, or tightening any of the nuts and bolts installed to the sensor body may cause it to operate (deploy) improperly. Never disassemble the seat weight sensor or tighten any of the nuts or bolts installed to the body of the sensor.

AIR BAG MODULE, PRE-TENSIONER SEAT BELT REUSE

- Even if an air bag module or a pre-tensioner seat belt 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 seat belts, always use the on-board diagnostic to diagnose the air bag module and the pre-tensioner seat belts 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 seat belts. If a problem is found in the air bag wiring harness, always replace the wiring harness with a new one.



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Fig. 8: Precaution For Air Bag Wiring Harness Repair
Courtesy of MAZDA MOTORS CORP.

DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION

WARNING:

- Handling the air bag module improperly can accidentally deploy the air bag module, which may seriously injure you. Read the air bag system service warnings and cautions before handling the air bag module. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM 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 A (See 08-10-6 Connector A Removal Note.)
4	Connector B
5	Driver-side air bag module

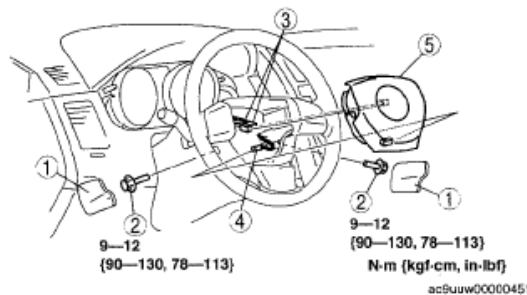


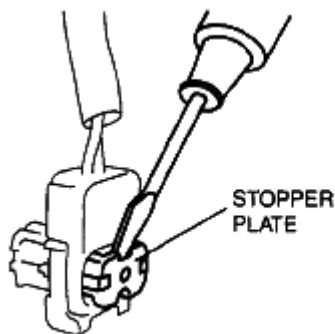
Fig. 9: Identifying Driver-Side Air Bag Module Components & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

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. (See **FLOWCHART** .)

CONNECTOR A REMOVAL NOTE

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



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Fig. 10: Prying Out Connector Stopper Plate Using Screwdriver
 Courtesy of MAZDA MOTORS CORP.

PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION

WARNING:

- Handling the air bag module improperly can accidentally deploy the air bag module, which may seriously injure you. Read the air bag system service warnings and cautions before handling the air bag module. (See **AIR BAG SYSTEM SERVICE WARNINGS.**) (See **AIR BAG SYSTEM 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. Decoration panel (See **DECORATION PANEL REMOVAL/INSTALLATION** .)
 2. Front console box mat (See **FRONT CONSOLE BOX MAT REMOVAL/INSTALLATION** .)
 3. Indicator panel (See **INDICATOR PANEL REMOVAL/INSTALLATION** .)

4. Front console box (See **FRONT CONSOLE BOX REMOVAL/INSTALLATION** .)
5. Center panel (See **CENTER PANEL REMOVAL/INSTALLATION** .)
6. Front scuff plate inner (RH) (See **FRONT SCUFF PLATE REMOVAL/INSTALLATION** .)
7. Front side trim (RH) (See **FRONT SIDE TRIM REMOVAL/INSTALLATION** .)
8. Dashboard under cover (Passenger side) (See **DASHBOARD UNDER COVER REMOVAL/INSTALLATION** .)
9. Glove compartment (See **GLOVE COMPARTMENT REMOVAL/INSTALLATION** .)
10. Side panel (See **SIDE PANEL REMOVAL/INSTALLATION** .)
11. Dashboard garnish (See **DASHBOARD GARNISH REMOVAL/INSTALLATION** .)
12. HF/TEL unit (See **HANDS-FREE TELEPHONE (HF/TEL) UNIT REMOVAL/INSTALLATION** .) (vehicles with HF/TEL system)

4. Remove the bolts.
5. Remove the screws.
6. Remove the clips.
7. Remove the connector.
8. Remove the passenger-side air bag module in the direction of the arrow
9. Install in the reverse order of removal.
10. Turn the ignition switch to the ON position.
11. 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. (See **FLOWCHART** .)

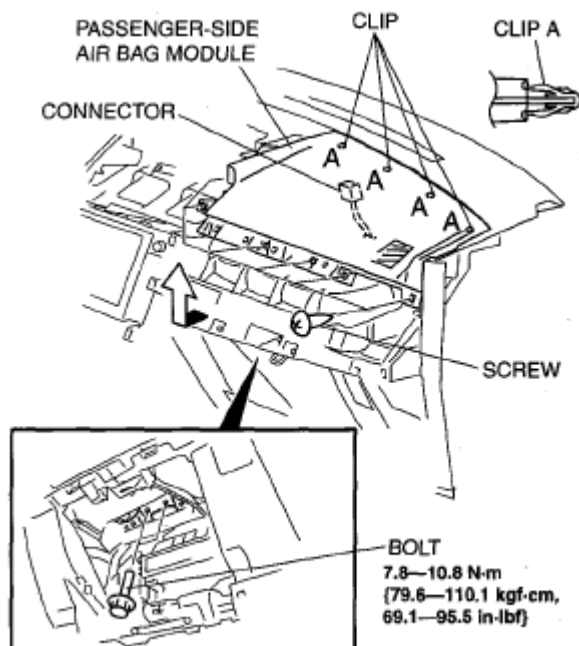


Fig. 11: Identifying Passenger-Side Air Bag Module, Connector & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

SIDE AIR BAG MODULE REMOVAL/INSTALLATION

WARNING:

- Handling the air bag module improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the air bag system service warnings and cautions before handling the air bag module. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM 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. Slide hook A upward and remove it from hook B.
4. Open the fastener.

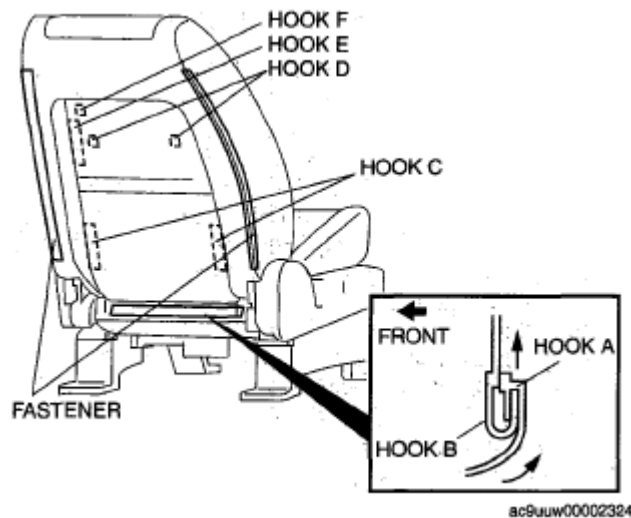
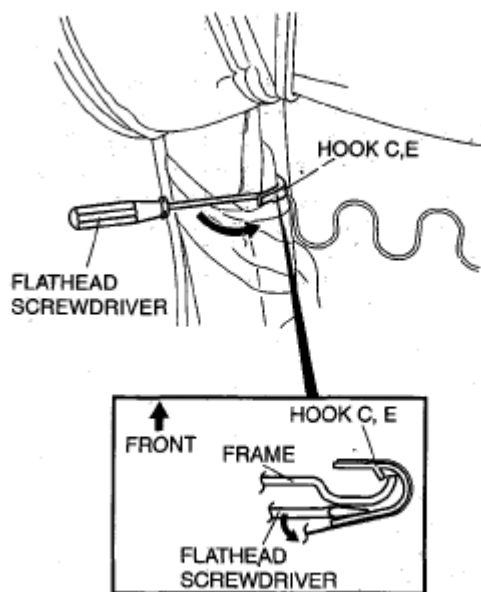


Fig. 12: Identifying Hooks
 Courtesy of MAZDA MOTORS CORP.

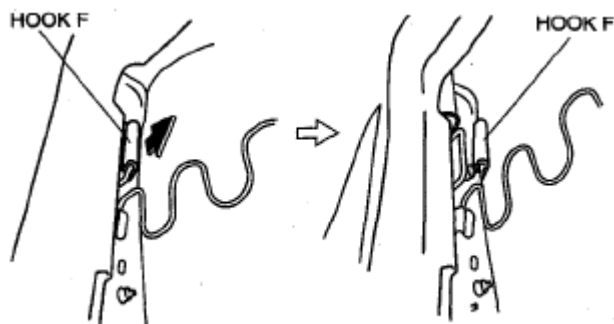
5. Insert a flathead screwdriver between hook C and the frame.
6. Pull the flathead screwdriver in the direction of the arrow as shown in the figure.
7. Remove the hook C.
8. Remove the hook D.
9. Remove the hook E.



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Fig. 13: Inserting Flathead Screwdriver Between Hook C & Frame
Courtesy of MAZDA MOTORS CORP.

10. Remove the hook F.
11. Partially peel back the seat back trim.



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Fig. 14: Identifying Hook F
Courtesy of MAZDA MOTORS CORP.

12. Remove in the nuts.
13. Partially peel back the seat back pad.
14. Remove the side air bag module.

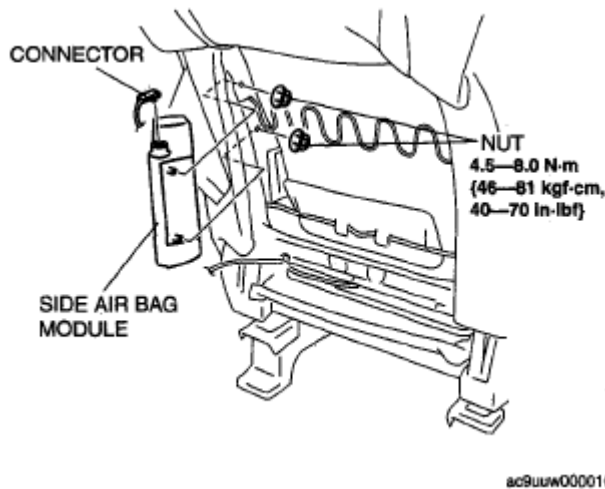


Fig. 15: Identifying Side Air Bag Module, Connector & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

15. Using a flathead screwdriver, pry out the connector stopper plate.
16. Disconnect the connector.
17. Install in the reverse order of removal.
18. Turn the ignition switch to the ON position.
19. 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. (See **FLOWCHART** .)

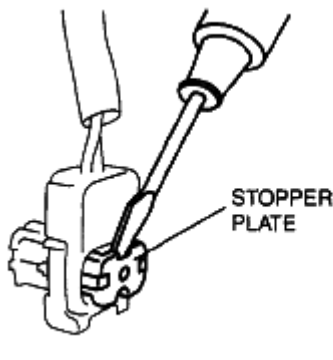


Fig. 16: Prying Out Connector Stopper Plate Using Screwdriver
 Courtesy of MAZDA MOTORS CORP.

CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION

WARNING:

- Handling the air bag module improperly can accidentally deploy the air bag module, which may seriously injure you. Read the air bag system service warnings and cautions before handling the air bag

module. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM 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. A-pillar trim (See A-PILLAR TRIM REMOVAL/INSTALLATION .)
 2. Front scuff plate inner (See FRONT SCUFF PLATE REMOVAL/INSTALLATION .)
 3. Rear scuff plate inner (See REAR SCUFF PLATE REMOVAL/INSTALLATION .)
 4. Front seat belt lower anchor installation bolt (Driver side) (See FRONT SEAT BELT REMOVAL/INSTALLATION .)
 5. B-pillar lower trim (See B-PILLAR LOWER TRIM REMOVAL/INSTALLATION .)
 6. Front seat belt upper anchor installation bolt (See FRONT SEAT BELT REMOVAL/INSTALLATION .)
 7. B-pillar upper trim (See B-PILLAR UPPER TRIM REMOVAL/INSTALLATION .)
 8. Trunk box (See TRUNK BOX REMOVAL/INSTALLATION .)
 9. Seat side box (See SEAT SIDE BOX REMOVAL/INSTALLATION .)
 10. Trunk end trim (See TRUNK END TRIM REMOVAL/INSTALLATION .)
 11. Third-row seat (See THIRD-ROW SEAT REMOVAL/INSTALLATION .)
 12. Third-row seat belt lower anchor installation bolt (See THIRD-ROW SEAT BELT REMOVAL/INSTALLATION .)
 13. Trunk side trim (See TRUNK SIDE TRIM REMOVAL/INSTALLATION .)
 14. Roof side trim (See ROOF SIDE TRIM REMOVAL/INSTALLATION .)
 15. Second-row seat belt upper anchor installation bolt (See SECOND-ROW SEAT BELT REMOVAL/INSTALLATION .)
 16. C-pillar trim (See C-PILLAR TRIM REMOVAL/INSTALLATION .)
 17. Third-row seat belt upper anchor installation bolt (See THIRD-ROW SEAT BELT REMOVAL/INSTALLATION .)
 18. D-pillar trim (See D-PILLAR TRIM REMOVAL/INSTALLATION .)
 19. Front map light (See FRONT MAP LIGHT REMOVAL/INSTALLATION .)
 20. Sunvisor (See SUNVISOR REMOVAL/INSTALLATION .)
 21. Assist handle (See ASSIST HANDLE REMOVAL/INSTALLATION .)
 22. RES unit cover (Vehicles with RES) (See RES UNIT REMOVAL/INSTALLATION .)
 23. Headliner (See HEADLINER REMOVAL/INSTALLATION .)
 24. Rear speaker (See REAR SPEAKER REMOVAL/INSTALLATION .)
4. Remove in the order indicated in the table.

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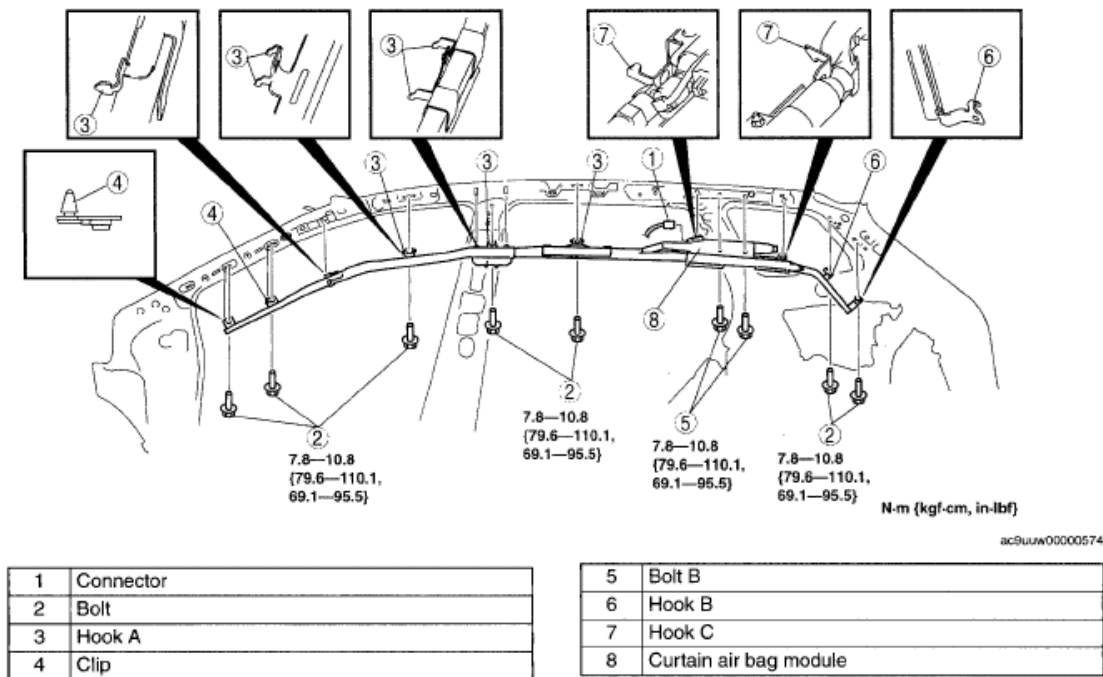


Fig. 17: Identifying Curtain Air Bag Module & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

5. Install in the reverse order of removal.

CAUTION:

- After installing the curtain air bags, verify that the connector and wiring harness are not caught.

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. (See **FLOWCHART** .)

CRASH ZONE SENSOR REMOVAL/INSTALLATION

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 air bag system service warnings and cautions before handling the crash zone sensor. (See **AIR BAG SYSTEM SERVICE WARNINGS**.) (See **AIR BAG SYSTEM 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 bumper. (See **FRONT BUMPER REMOVAL/INSTALLATION** .)
4. Remove in the order indicated in the table.

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

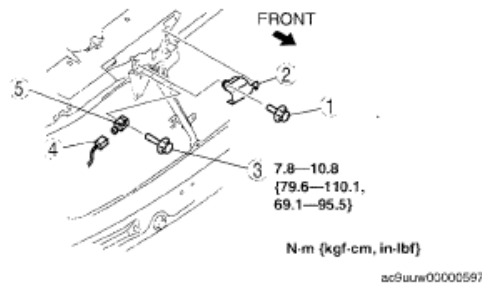


Fig. 18: Identifying Bolt, Connector & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

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 normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system. (See **FLOWCHART** .

SAS CONTROL MODULE REMOVAL/INSTALLATION

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 **AIR BAG SYSTEM SERVICE WARNINGS.**) (See **AIR BAG SYSTEM SERVICE CAUTIONS.**)
- Connecting the SAS control module with the SAS control module not securely fixed to the vehicle is dangerous. When the ignition switch is turned to the ON position, the SAS control module could tilt causing the SAS control module to detect that the vehicle is in a rollover condition, which may accidentally operate (deploy) the curtain air bag module and pre-tensioner seat belt. Therefore, before turning the ignition switch to the ON position with the connector connected, securely fix the SAS control module to the vehicle.

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 CONFIGURATION.**)
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 following parts:

1. Dashboard under cover (Passenger side) (See DASHBOARD UNDER COVER REMOVAL/INSTALLATION .)
2. Side wall (See SIDE WALL REMOVAL/INSTALLATION .)
3. Console panel (Passenger side) (See CONSOLE PANEL REMOVAL/INSTALLATION .)
5. Remove the connector.
6. Remove the nuts.
7. Remove the SAS control module in the direction of the arrow
8. Install in the reverse order of removal.
9. 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.
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, refer to the on-board diagnostic system (air bag system) and perform inspection of the system. (See FLOWCHART .)

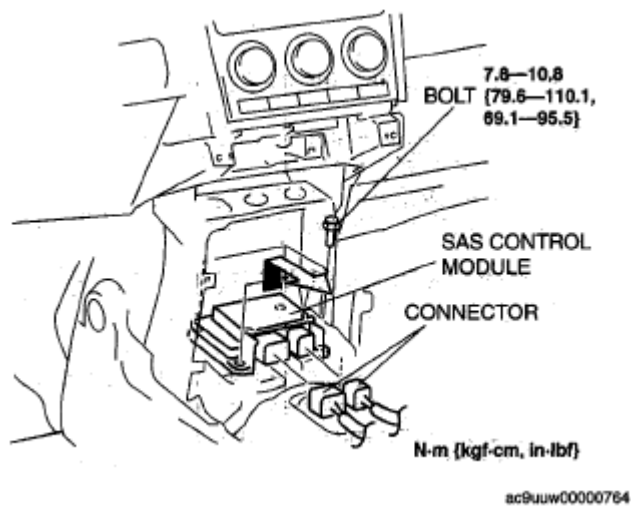


Fig. 19: Identifying SAS Control Module, Connector & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

SAS CONTROL MODULE CONFIGURATION.

NOTE:

- Use the IDS (laptop PC) because the PDS (Pocket PC) does not support the SAS CONTROL MODULE CONFIGURATION.

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
 - When using the IDS (laptop PC)
 1. Select "Module Programming".

3. Then, select items from the screen menu in the following order.
 1. Select "Programmable Module Installation".
 2. Select "RCM".
4. Perform the configuration according to the directions on the screen.
5. Retrieve DTCs by the M-MDS, then verify that there is no DTC present.
 - If a DTC (s) is detected, perform the applicable DTC inspection. (See **DTC TABLE** .)

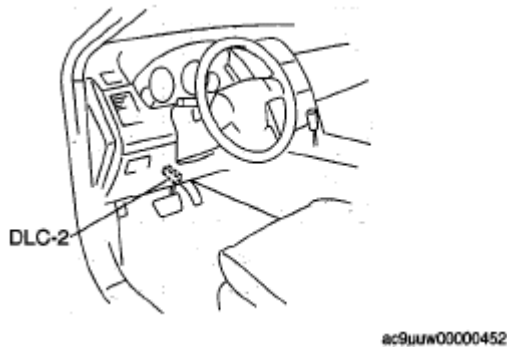


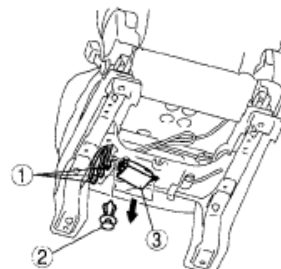
Fig. 20: Identifying DLC-2 Location
 Courtesy of MAZDA MOTORS CORP.

SEAT WEIGHT SENSOR CONTROL MODULE REMOVAL/INSTALLATION

- CAUTION:**
- When the seat weight sensor control module is replaced with a new one, perform the seat weight sensor calibration using the M-MDS. (See **SEAT WEIGHT SENSOR CALIBRATION**.)

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 passenger seat. (See **FRONT SEAT REMOVAL/INSTALLATION** .)
4. Remove in the order indicated in the table.

1	Connector
2	Fastener
3	Seat weight sensor control module



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Fig. 21: Identifying Seat Weight Sensor Control Module, Connector And Fastener
 Courtesy of MAZDA MOTORS CORP.

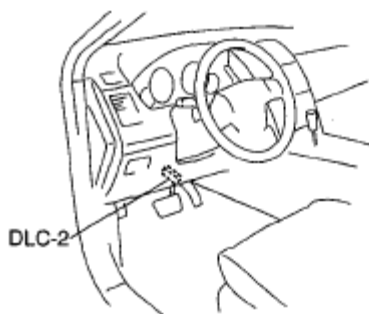
5. Install in the reverse order of removal.

SEAT WEIGHT SENSOR CALIBRATION

CAUTION:

- If any of the following work is performed, perform the seat weight sensor calibration using the M-MDS.
 - Replacement with a new seat weight sensor
 - Replacement with a new seat weight sensor control module
 - Replacement with new front passenger-side seat parts
 - Disassembly of the front passenger-side seat
- If any of the following work is performed or when the vehicle has been involved in a collision, perform the seat weight sensor inspection using the M-MDS. (See SEAT WEIGHT SENSOR INSPECTION.)
 - Removal of the front passenger-side seat
 - Loosening and retightening of front passenger-seat fixing bolts

1. Have two **20 kg {44 lb}** weights ready to use.
2. Connect the M-MDS to the DLC-2.
3. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
 - When using the IDS (laptop PC)
 1. Select "Body".
 2. Select "Restraints".
 - When using the PDS (Pocket PC)
 1. Select "All Tests and Calibrations".
4. Then, select item from the screen menu in the following order.
 1. Select "Passenger Seat Weight Sensor ReZero".
5. Perform calibration following the procedures on the M-MDS screen.



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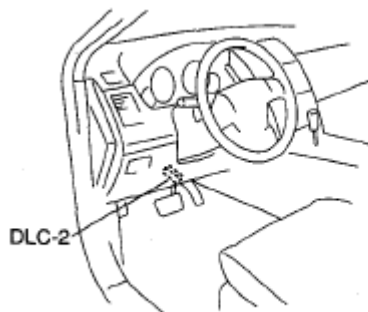
Fig. 22: Identifying DLC-2 Location
 Courtesy of MAZDA MOTORS CORP.

SEAT WEIGHT SENSOR INSPECTION

CAUTION:

- If any of the following work is performed or when the vehicle has been involved in a collision, perform the seat weight sensor inspection using the M-MDS.
 - Removal of the front passenger-side seat
 - Loosening and retightening of front passenger-seat fixing bolts
- If any of the following work is performed, perform the seat weight sensor calibration using the M-MDS. (See SEAT WEIGHT SENSOR CALIBRATION.)
 - Replacement with a new seat weight sensor
 - Replacement with a new seat weight sensor control module
 - Replacement with new front passenger-side seat parts
 - Disassembly of the front passenger-side seat

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
 - When using the IDS (laptop PC)
 1. Select "Body".
 2. Select "Restraints".
 - When using the PDS (Pocket PC)
 1. Select "All Tests and Calibrations".
3. Then, select item from the screen menu in the following order.
 1. Select "Passenger Seat Weight Sensor ReZero".
4. Perform inspection following the procedures on the M-MDS screen.



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Fig. 23: Identifying DLC-2 Location
 Courtesy of MAZDA MOTORS CORP.

SIDE AIR BAG SENSOR NO. 1 REMOVAL/INSTALLATION

- WARNING:**
- Handling the side air bag sensor improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the air bag system service warnings and cautions before handling the side air bag sensor. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM 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. Front scuff plate inner (See FRONT SCUFF PLATE REMOVAL/INSTALLATION .)
 2. Rear scuff plate inner (See REAR SCUFF PLATE REMOVAL/INSTALLATION .)
 3. Front seat belt lower anchor installation bolt (Driver side) (See FRONT SEAT BELT REMOVAL/INSTALLATION .)
 4. B-pillar lower trim (See B-PILLAR LOWER TRIM REMOVAL/INSTALLATION .)
4. Remove in the order indicated in the table.

1	Nut
2	Connector
3	Side air bag sensor No. 1

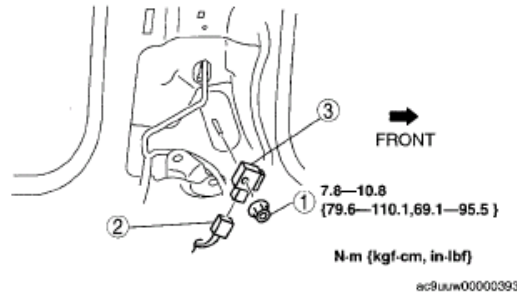


Fig. 24: Identifying Side Air Bag Sensor No. 1, Connector & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

5. Install in the reverse order of removal.
6. Turn the ignition switch to the ON position and hold for **10 s or more** .
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 normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system. (See FLOWCHART .)

SIDE AIR BAG SENSOR NO. 2 REMOVAL/INSTALLATION

- WARNING:**
- Handling the side air bag sensor improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the air bag system service warnings and cautions before handling the side air bag sensor. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM 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. Trunk box (See **TRUNK BOX REMOVAL/INSTALLATION** .)
 2. Seat side box (See **SEAT SIDE BOX REMOVAL/INSTALLATION** .)
 3. Trunk end trim (See **TRUNK END TRIM REMOVAL/INSTALLATION** .)
 4. Third-row seat (See **THIRD-RROW SEAT REMOVAL/INSTALLATION** .)
 5. Third-row seat belt lower anchor installation bolt (See **THIRD-RROW SEAT BELT REMOVAL/INSTALLATION** .)
 6. Trunk side trim (See **TRUNK SIDE TRIM REMOVAL/INSTALLATION** .)
4. Remove in the order indicated in the table.

1	Nut
2	Side air bag sensor No. 2
3	Connector

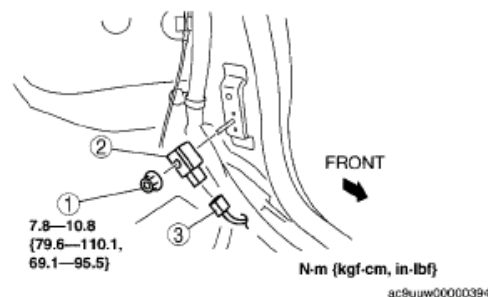


Fig. 25: Identifying Side Air Bag Sensor No. 2, Connector & Torque Specifications
 Courtesy of MAZDA MOTORS CORP.

5. Install in the reverse order of removal.
6. Turn the ignition switch to the ON position and hold for **10 s or more** .
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 normally, refer to the on-board diagnostic system (air bag system) and perform inspection of the system. (See **FLOWCHART** .)

CLOCK SPRING REMOVAL/INSTALLATION

1. Disconnect the negative battery cable and wait for **1 min or more** .
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. Column cover (See **COLUMN COVER REMOVAL/INSTALLATION** .)
3. Remove in the order indicated in the table.

1	Connector
2	Screw
3	Clock spring

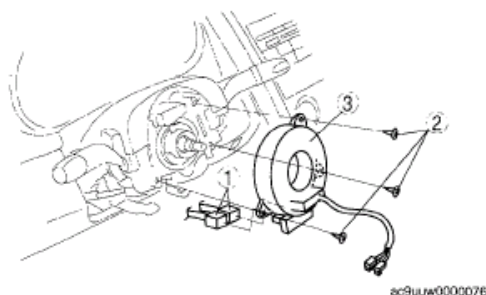


Fig. 26: Identifying Clock Spring, Screw And Connector
 Courtesy of MAZDA MOTORS CORP.

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. (See **FLOWCHART** .)

CLOCK SPRING ADJUSTMENT

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.

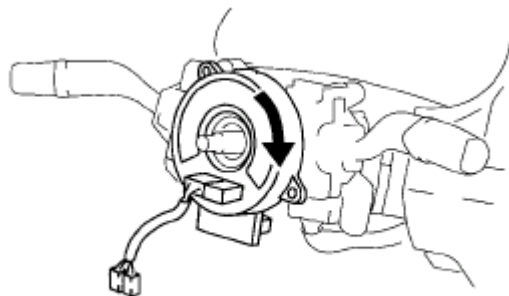
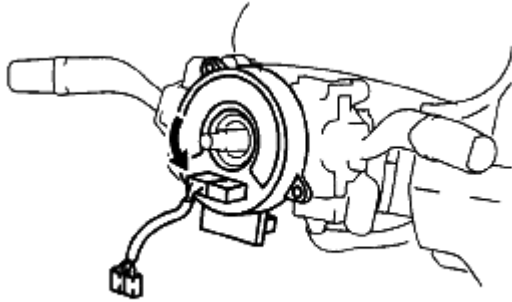


Fig. 27: Turning Clock Spring Clockwise
 Courtesy of MAZDA MOTORS CORP.

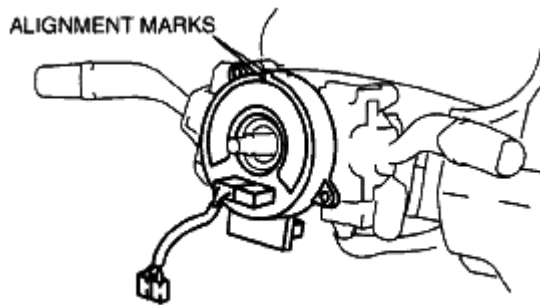
3. From the stopped position, turn the clock spring counterclockwise **2 3/4 turns** .



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Fig. 28: Turning Clock Spring Counterclockwise
Courtesy of MAZDA MOTORS CORP.

4. Align the marks.



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Fig. 29: Aligning Marks
Courtesy of MAZDA MOTORS CORP.

CLOCK SPRING INSPECTION

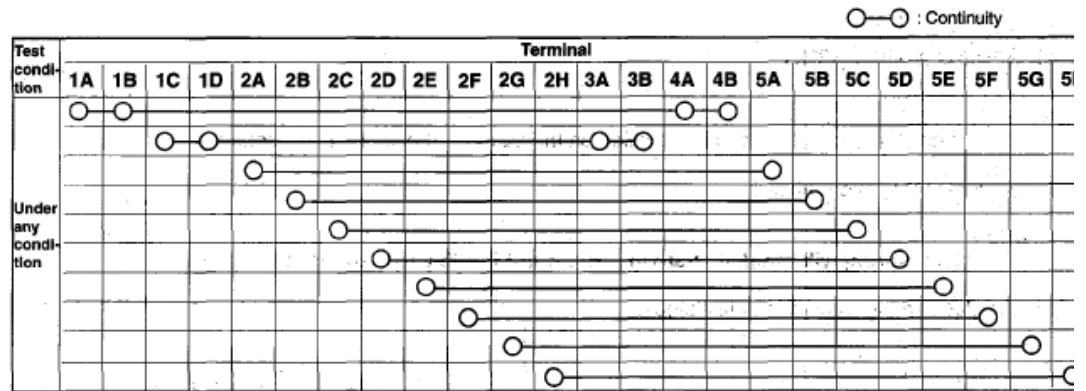
1. Verify that the continuity is as indicated in the table.
 - If not as indicated in the table, replace the clock spring.

NOTE:

- When the vehicle-side connector for the clock spring is disconnected, terminals 1A, 1B, 1C and 1D are shorted to prevent unexpected operation (deployment) of the air bag module.

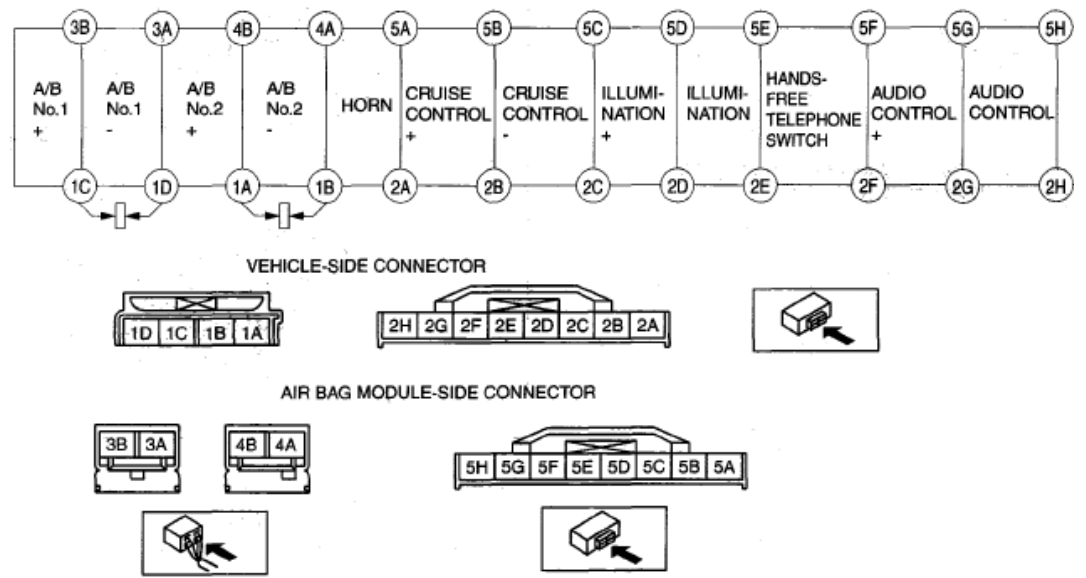
2008 Mazda CX-9 Grand Touring

2008 RESTRAINTS Air Bag System - Mazda CX-9



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Fig. 30: Continuity Chart
Courtesy of MAZDA MOTORS CORP.



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Fig. 31: Identifying Vehicle-Side Connector And Air Bag Module-Side Connector Terminals
Courtesy of MAZDA MOTORS CORP.

AIR BAG MODULE AND PRE-TENSIONER SEAT BELT DEPLOYMENT PROCEDURES

WARNING:

- A live (undeployed) air bag module or pre-tensioner seat belt 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 seat belt. 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 seat belts 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 seat belts outside the vehicle.**

- If the vehicle is to be scrapped, or when disposing of any air bag modules or pre-tensioner seat belts, operate (deploy) them inside the vehicle by following the deployment procedure below and using the **SST (Deployment tool)** .
- When disposing of an operated (deployed) air bag module and pre-tensioner seat belt, refer to "**AIR BAG MODULE AND PRE-TENSIONER SEAT BELT 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 seat belt.

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:

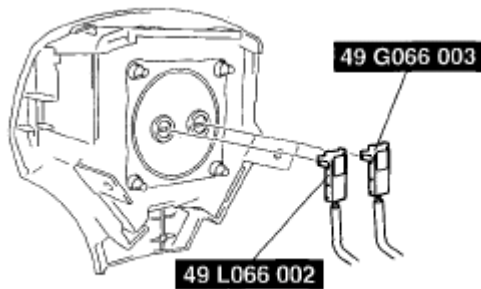
- **The SSTs , two types of adapter harnesses (for inflators No.1 and No.2) and two deployment tools are to be used to operate (deploy) the driver-side air bag module.**

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.

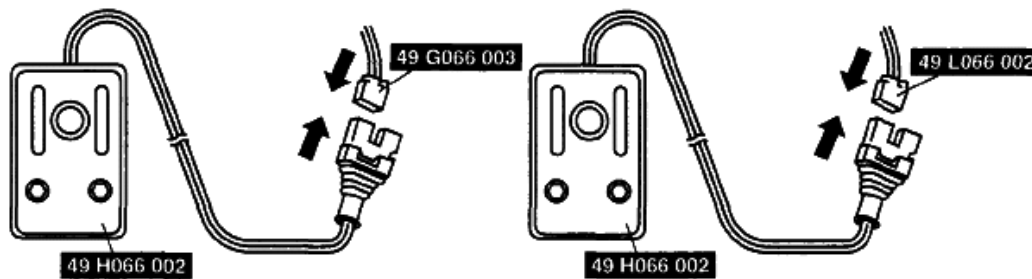
(See **DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION**.)



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Fig. 32: Connecting SSTs To Driver-Side Air Bag Module
Courtesy of MAZDA MOTORS CORP.

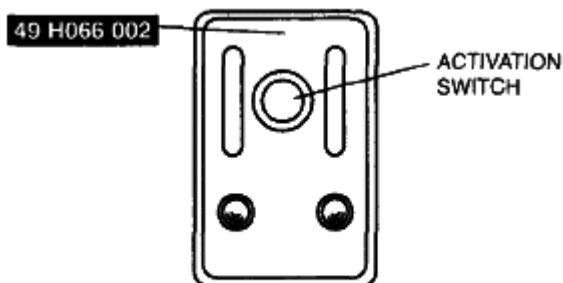
4. Connect the SSTs (Deployment tool) to the SSTs (Adapter harness) .



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Fig. 33: Connecting SSTs (Deployment Tool) To SSTs (Adapter Harness)
Courtesy of MAZDA MOTORS CORP.

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).



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Fig. 34: Identifying Activation Switch

Courtesy of MAZDA MOTORS CORP.

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 if the air bag module operates (deploy) unexpectedly. If the two operation (explosive) sounds are not heard, perform Step 8 again. If a total of two operation (explosive) sounds cannot be verified even though Step 8 is performed again, leave the air bag module alone for 30 min or more before approaching 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.

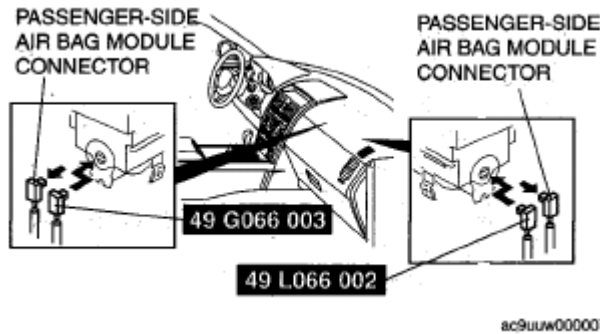


Fig. 35: Connecting SST (Adapter Harness) To Passenger-Side Air Bag Module
 Courtesy of MAZDA MOTORS CORP.

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

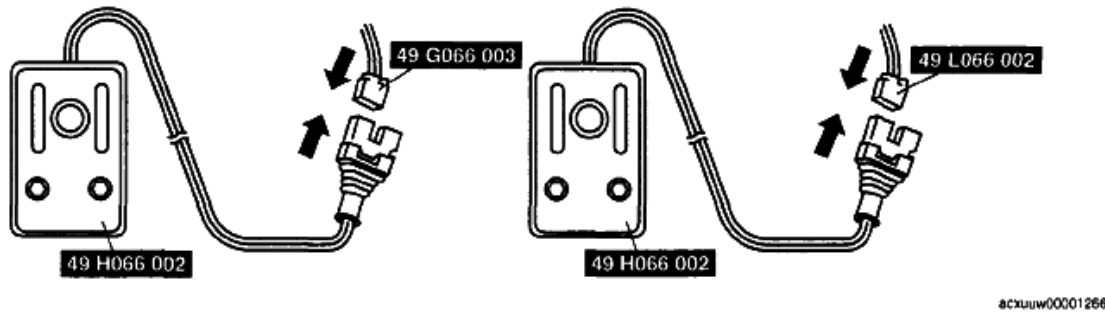


Fig. 36: Connecting SSTs (Deployment Tool) To SSTs (Adapter Harness)
 Courtesy of MAZDA MOTORS CORP.

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).

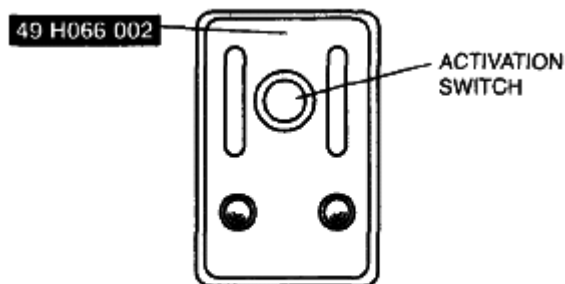


Fig. 37: Identifying Activation Switch
 Courtesy of MAZDA MOTORS CORP.

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 if the air bag module operates (deploy) unexpectedly. If the two operation (explosive) sounds are not heard, perform Step 8 again. If a total of two operation (explosive) sounds cannot be verified even though Step 8 is performed again, leave the air bag module alone for 30 min or more before approaching 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

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

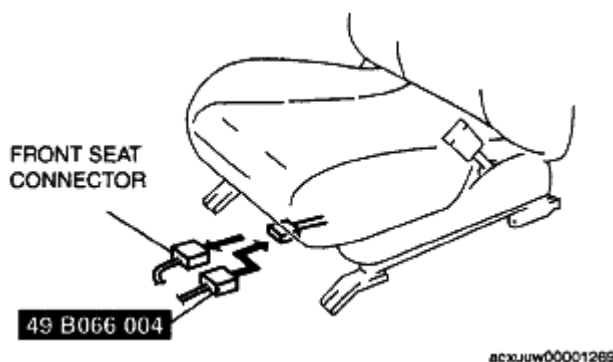
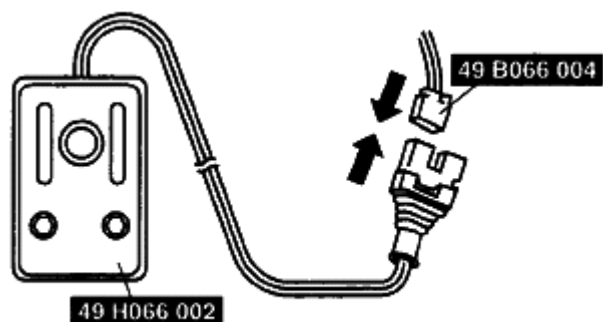


Fig. 38: Connecting SST To Side Air Bag Module And Pre-Tensioner Seat Belt Connector
 Courtesy of MAZDA MOTORS CORP.

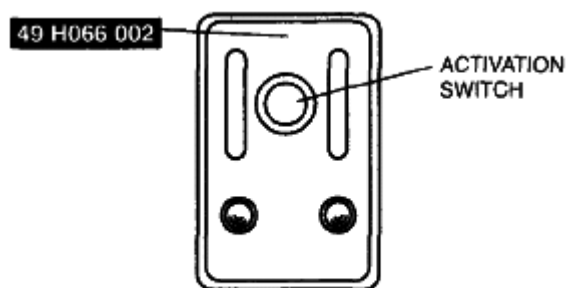
3. Connect the SST (Deployment tool) to the SST (Adapter harness) .
4. Connect the SST (Deployment tool) to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
5. Verify that the red lamp on the SST (Deployment tool) is illuminated.
6. Verify that all persons are standing at least 6 m {20 ft} away from the vehicle.



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Fig. 39: Connecting SST (Deployment Tool) To SST (Adapter Harness)
 Courtesy of MAZDA MOTORS CORP.

7. Press the activation switch on the **SST (Deployment tool)** to operate (deploy) the side air bag module.
8. Disconnect the **SSTs (Deployment tool)** from the **SSTs (Adapter harness)** .



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Fig. 40: Identifying Activation Switch
 Courtesy of MAZDA MOTORS CORP.

CURTAIN AIR BAG MODULE

1. Remove the C-pillar trim.
 (See C-PILLAR TRIM REMOVAL/INSTALLATION .)
2. Remove the D-pillar trim.
 (See D-PILLAR TRIM REMOVAL/INSTALLATION .)
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.

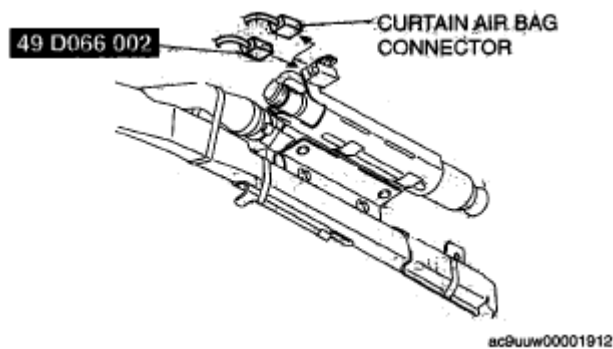


Fig. 41: Connecting SST To Curtain Air Bag Module
Courtesy of MAZDA MOTORS CORP.

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.

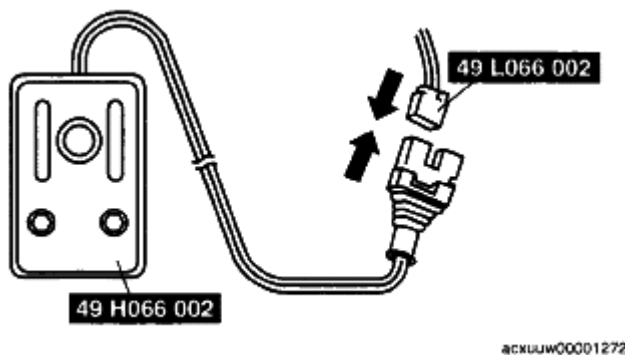
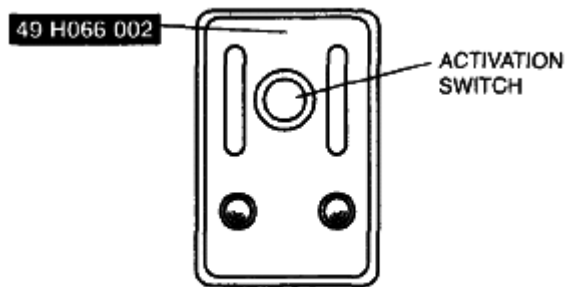


Fig. 42: Connecting SST (Deployment Tool) To SST (Adapter Harness)
Courtesy of MAZDA MOTORS CORP.

9. Press the activation switch on the SST (**Deployment tool**) to operate (deploy) the curtain air bag module.
10. Disconnect the SSTs (**Deployment tool**) from the SSTs (**Adapter harness**) .



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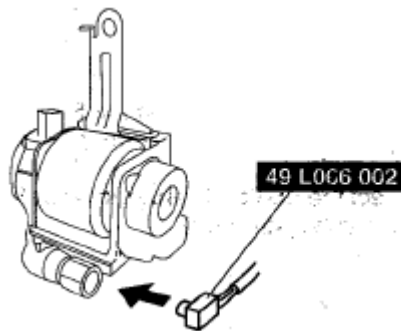
Fig. 43: Identifying Activation Switch
 Courtesy of MAZDA MOTORS CORP.

PRE-TENSIONER SEAT BELT

1. Remove the B-pillar lower trim.

(See **B-PILLAR LOWER TRIM REMOVAL/INSTALLATION** .)

2. Remove the pre-tensioner seat belt and connect the **SST (Adapter harness)** as shown in the figure. (See **FRONT SEAT BELT REMOVAL/INSTALLATION** .)
3. Install the pre-tensioner seat belt.



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Fig. 44: Connecting SST To Pre-Tensioner Seat Belt
 Courtesy of MAZDA MOTORS CORP.

4. Connect the **SST (Deployment tool)** to the **SST (Adapter harness)** .
5. 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.
6. Verify that the red lamp on the **SST (Deployment tool)** is illuminated.
7. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

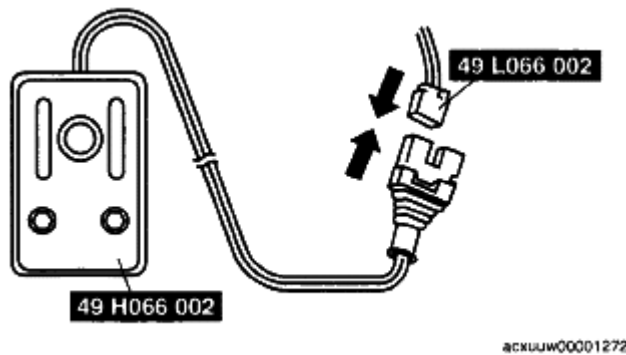


Fig. 45: Connecting SST (Deployment Tool) To SST (Adapter Harness)
 Courtesy of MAZDA MOTORS CORP.

8. Press the activation switch on the **SST (Deployment tool)** to operate (deploy) the pre-tensioner seat belt.
9. Disconnect the **SSTs (Deployment tool)** from the **SSTs (Adapter harness)** .

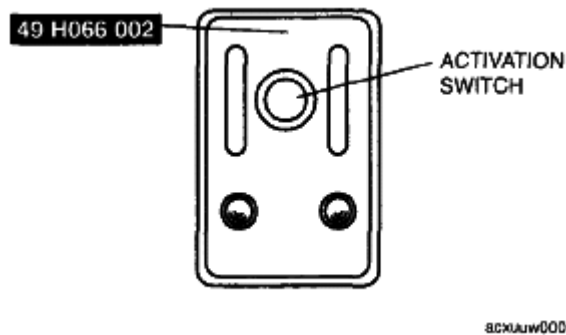


Fig. 46: Identifying Activation Switch
 Courtesy of MAZDA MOTORS CORP.

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 seat belt.

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.

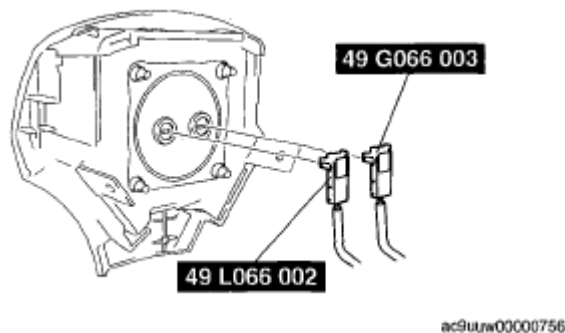


Fig. 47: Connecting SST To Driver-Side Air Bag Module
Courtesy of MAZDA MOTORS CORP.

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 mm^2 {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.

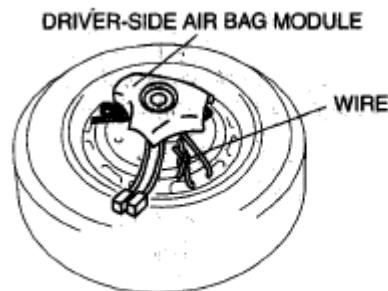


Fig. 48: Placing Driver-Side Air Bag Module On Center Of Tire Wheel
Courtesy of MAZDA MOTORS CORP.

- 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.

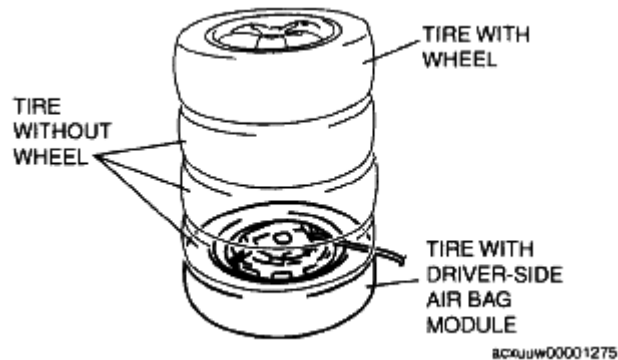


Fig. 49: Placing Tires
Courtesy of MAZDA MOTORS CORP.

- Secure the tires with wire.



Fig. 50: Securing Tires With Wire
Courtesy of MAZDA MOTORS CORP.

- Connect the SSTs (**Deployment tool**) to the SSTs (**Adapter harness**) .
- 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.
- Verify that the red lamp on both SSTs (**Deployment tool**) is illuminated.
- Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.

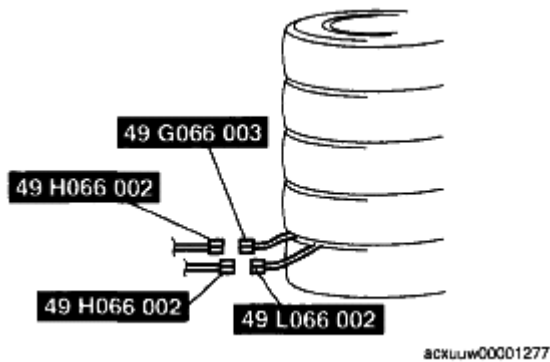


Fig. 51: Connecting SSTs (Deployment Tool) To SSTs (Adapter Harness)
 Courtesy of MAZDA MOTORS CORP.

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 other **SST (Deployment tool)** to operate (deploy) the air bag module (both inflators).

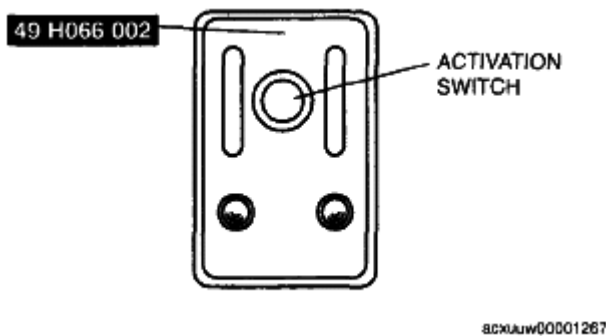


Fig. 52: Identifying Activation Switch
 Courtesy of MAZDA MOTORS CORP.

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 if the air bag module operates (deploy) unexpectedly. If the two operation (explosive) sounds are not heard, perform Step 8 again. If a total of two operation (explosive) sounds cannot be verified even though Step 8 is performed again, leave the air bag module alone for 30 min or more before approaching 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. Install the bolts to the passenger-side air bag module.

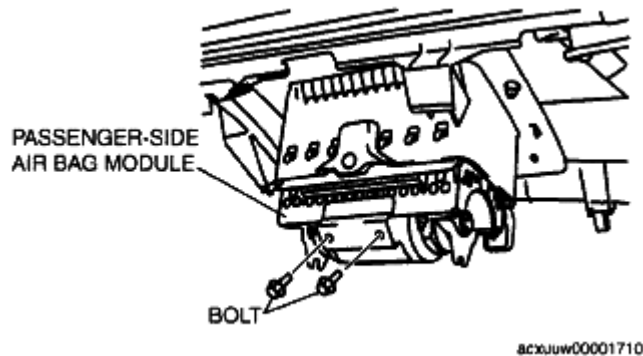


Fig. 53: Identifying Bolts And Passenger-Side Air Bag Module
 Courtesy of MAZDA MOTORS CORP.

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

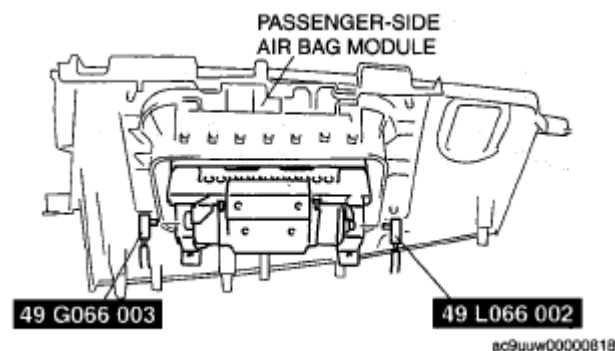


Fig. 54: Connecting SST To Passenger-Side Air Bag Module
 Courtesy of MAZDA MOTORS CORP.

4. 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 mm^2 {0.002 in²} or more) through the tire and around the bolts at least 4 times as shown in the figure.

WARNING:

- If the air bag module is not properly secured to the tire, the tires may fall over by the impact of operation (deployment) and cause serious injury. To prevent this, secure the air bag module properly with the padded surface facing the center of the tire

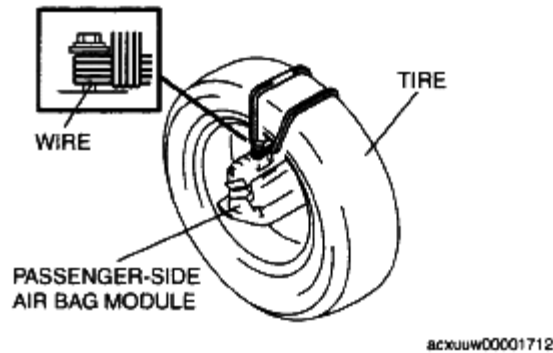


Fig. 55: Placing Passenger-Side Air Bag Module Center Of Tire
Courtesy of MAZDA MOTORS CORP.

5. 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.

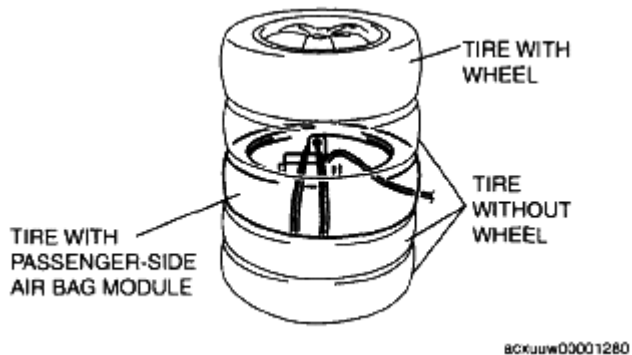


Fig. 56: Placing Tires
Courtesy of MAZDA MOTORS CORP.

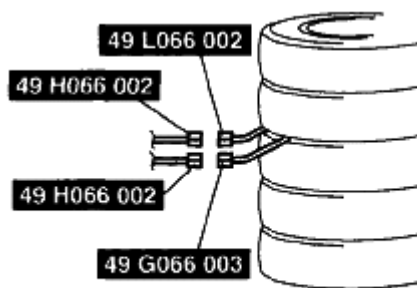
6. Secure the tires with wire.



8CXUJW00001276

Fig. 57: Securing Tires With Wire
 Courtesy of MAZDA MOTORS CORP.

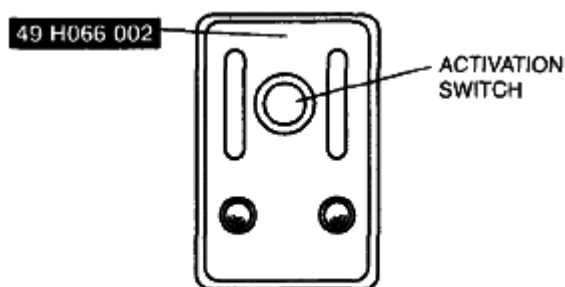
7. Connect the **SSTs (Deployment tool)** to the **SSTs (Adapter harness)** .
8. Connect both **SSTs (Deployment tool)** to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
9. Verify that the red lamp on both **SSTs (Deployment tool)** is illuminated.
10. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.



8CXUJW00001281

Fig. 58: Connecting SSTs (Deployment Tool) To SSTs (Adapter Harness)
 Courtesy of MAZDA MOTORS CORP.

11. Press the activation switch on the **SST (Deployment tool)** connected with 46 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).



ackuuw00001267

Fig. 59: Identifying Activation Switch
Courtesy of MAZDA MOTORS CORP.

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 if the air bag module operates (deploy) unexpectedly. If the two operation (explosive) sounds are not heard, perform Step 8 again. If a total of two operation (explosive) sounds cannot be verified even though Step 8 is performed again, leave the air bag module alone for 30 min or more before approaching 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.

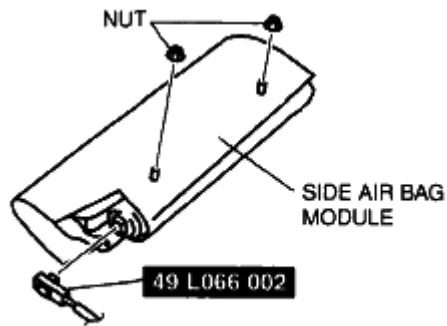
12. Disconnect the SSTs (Deployment tool) from the SSTs (Adapter harness) .

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 as shown in the figure, and connect the SST (Adapter harness) .



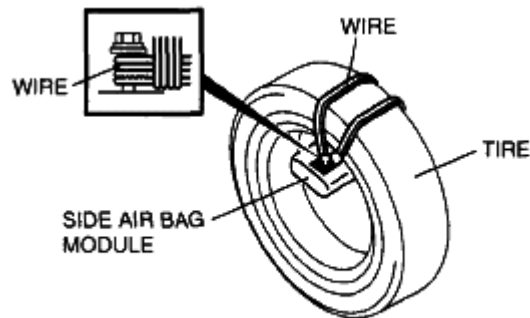
@CXUW00001282

Fig. 60: Identifying Side Air Bag Module And Nuts
Courtesy of MAZDA MOTORS CORP.

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 mm^2 {0.002 in²} or more) through the tire and around the bolts **at least 4 times**.

WARNING:

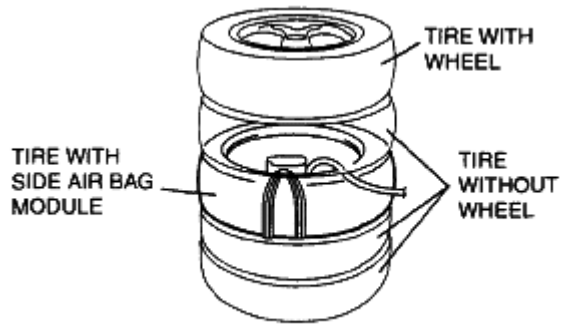
- If the air bag module is not properly secured to the tire, the tires may fall over by the impact of operation (deployment) and cause serious injury. To prevent this, secure the air bag module properly with the padded surface facing the center of the tire.



@CXUW00001283

Fig. 61: Placing Side Air Bag Module Center Of Tire
Courtesy of MAZDA MOTORS CORP.

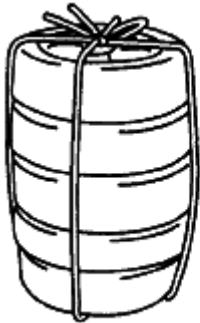
4. Stack the tire with the side air bag module on top of two tires without wheels. Stack a tire without a wheel on top of the tire with the side air bag module, and then stack another tire with a wheel on the very top.



8CKUW00001284

Fig. 62: Placing Tires
Courtesy of MAZDA MOTORS CORP.

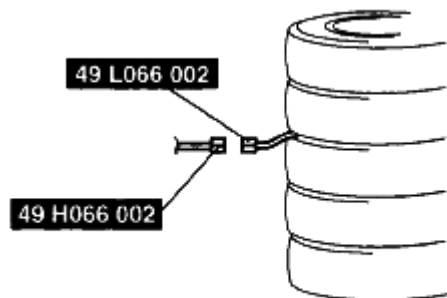
5. Secure the tires with wire.



8CKUW00001276

Fig. 63: Securing Tires With Wire
Courtesy of MAZDA MOTORS CORP.

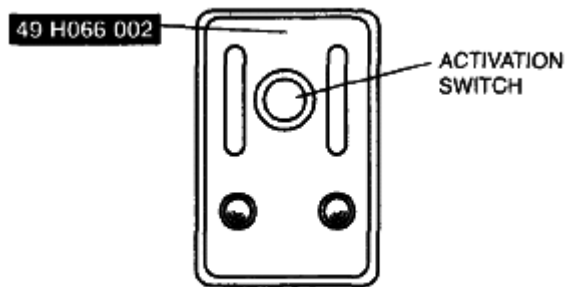
6. Connect the **SST (Deployment tool)** to the **SST (Adapter harness)** .
7. Connect the **SST (Deployment tool)** to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
8. Verify that the red lamp on the **SST (Deployment tool)** is illuminated.
9. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.



8CKUW00001285

Fig. 64: Connecting SST (Deployment Tool) To SST (Adapter Harness)
 Courtesy of MAZDA MOTORS CORP.

10. Press the activation switch on the **SST (Deployment tool)** to operate (deploy) the side air bag module.
11. Disconnect the **SSTs (Deployment tool)** from the **SSTs (Adapter harness)** .

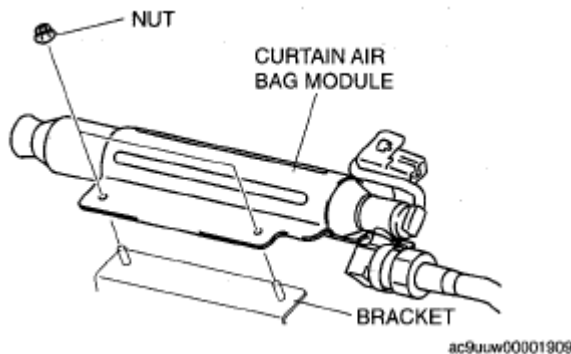


ac9uuw00001267

Fig. 65: Identifying Activation Switch
 Courtesy of MAZDA MOTORS CORP.

CURTAIN AIR BAG MODULE

1. Remove the curtain air bag module. (See **CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.**)
2. Remove the nuts.
3. Remove the curtain air bag module from the curtain air bracket.



ac9uuw00001909

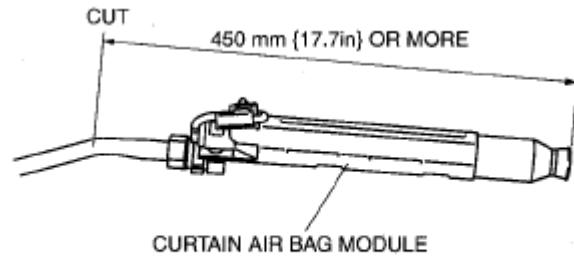
Fig. 66: Identifying Curtain Air Bag Module & Nuts
 Courtesy of MAZDA MOTORS CORP.

4. 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

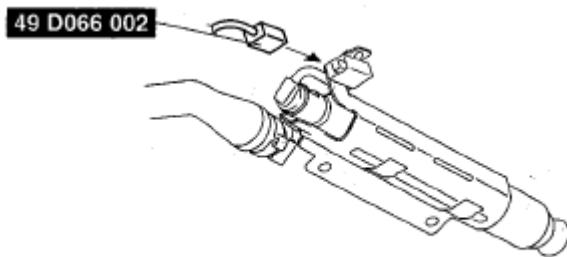
(deployment).



ac9uuw00001910

Fig. 67: Identifying Curtain Air Bag Module Dimension
Courtesy of MAZDA MOTORS CORP.

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



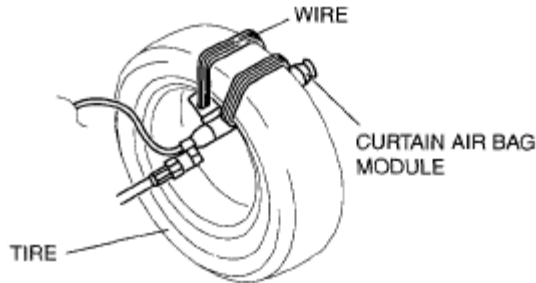
ac9uuw00001908

Fig. 68: Connecting SST To Curtain Air Bag Module
Courtesy of MAZDA MOTORS CORP.

6. Secure the curtain air bag module to the tire, by wrapping a wire (cross section 1.25 mm^2 { 0.002 in^2 } or more) through the tire and the bolt installation holes **at least 4 times** as shown in the figure.

WARNING:

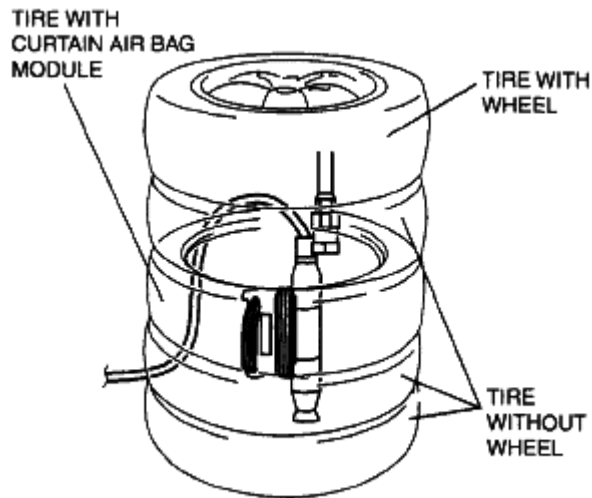
- If the air bag module is not properly installed to the tire, serious injury may occur when the module is operated (deployed). Make sure to install the air bag module securely.



acxuuw00001288

Fig. 69: Securing Curtain Air Bag Module To Tire
Courtesy of MAZDA MOTORS CORP.

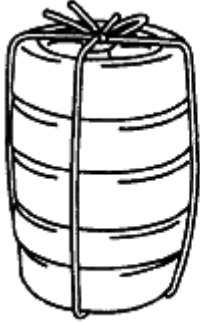
7. Stack the tire with the curtain air bag module on top of two tires without wheels. Stack a tire without a wheel on top of the tire with the curtain air bag module, and then stack another tire with a wheel on the very top.



acxuuw00001289

Fig. 70: Placing Tire
Courtesy of MAZDA MOTORS CORP.

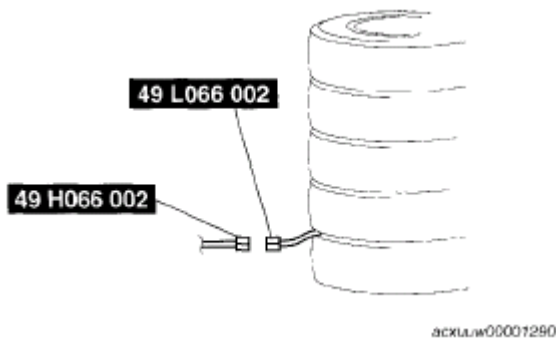
8. Secure the tires with wire.



8CXUJW00001276

Fig. 71: Securing Tires With Wire
Courtesy of MAZDA MOTORS CORP.

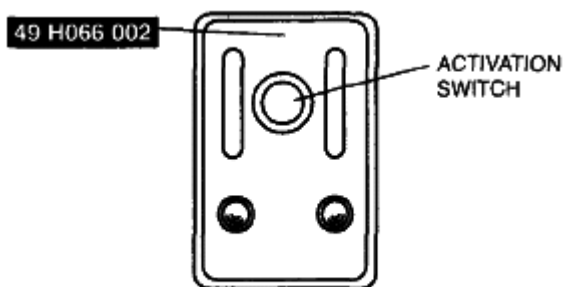
9. Connect the **SST (Deployment tool)** to the **SST (Adapter harness)** .
10. Connect the **SST (Deployment tool)** to the battery. Connect the power supply red clip to the positive battery terminal, and the black clip to the negative battery terminal.
11. Verify that the red lamp on the **SST (Deployment tool)** is illuminated.
12. Verify that all persons are standing **at least 6 m {20 ft}** away from the vehicle.



8CXUJW00001290

Fig. 72: Connecting SST (Deployment Tool) To SST (Adapter Harness)
Courtesy of MAZDA MOTORS CORP.

13. Press the activation switch on the **SST (Deployment tool)** to operate (deploy) the curtain air bag module.
14. Disconnect the **SSTs (Deployment tool)** from the **SSTs (Adapter harness)** .



8CXUJW00001267

Fig. 73: Identifying Activation Switch
Courtesy of MAZDA MOTORS CORP.

PRE-TENSIONER SEAT BELT

1. Remove the pre-tensioner seat belt.

(See FRONT SEAT BELT REMOVAL/INSTALLATION .)

2. Connect the SST (Adapter harness) to the pre-tensioner seat belt as shown in the figure.

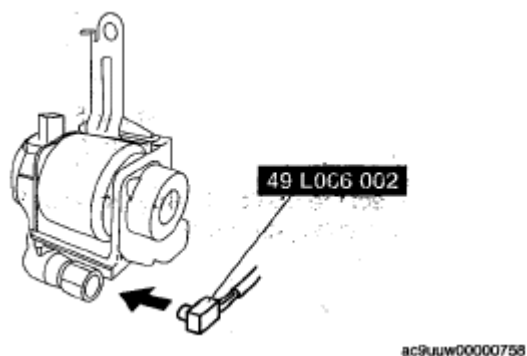


Fig. 74: Connecting SST To Pre-Tensioner Seat Belt
Courtesy of MAZDA MOTORS CORP.

3. Put the pre-tensioner seat belt inside the tire and secure it to the tire by wrapping a wire (cross section of 1.25 mm^2 { 0.002 in^2 } or more) through the tire and the bolt installation holes **at least 4 times** .

WARNING:

- If the pre-tensioner seat belt is not properly installed to the tire, serious injury may occur when the pre-tensioner part is operated (deployed). When installing the pre-tensioner seat belt to the tire, make sure the pre-tensioner part is inside the tire.

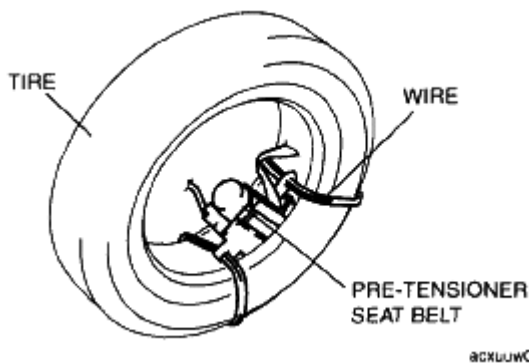


Fig. 75: Placing Pre-Tensioner Seat Belt Inside Tire
Courtesy of MAZDA MOTORS CORP.

4. Stack the tire with the pre-tensioner seat belt on to of two tires without wheels. Stack a tire without a wheel on top of the tire with the pre-tensioner seat belt, and then stack another tire with a wheel on the very top.

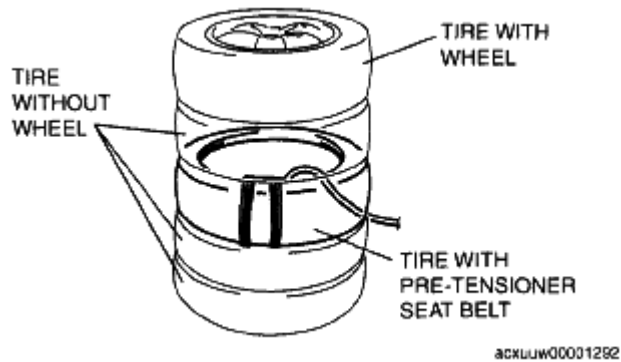


Fig. 76: Placing Tires
Courtesy of MAZDA MOTORS CORP.

5. Secure the tires with wire.

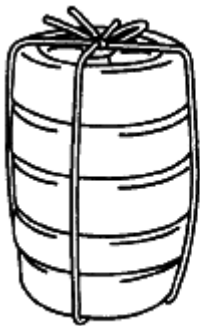


Fig. 77: Securing Tires With Wire
Courtesy of MAZDA MOTORS CORP.

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.

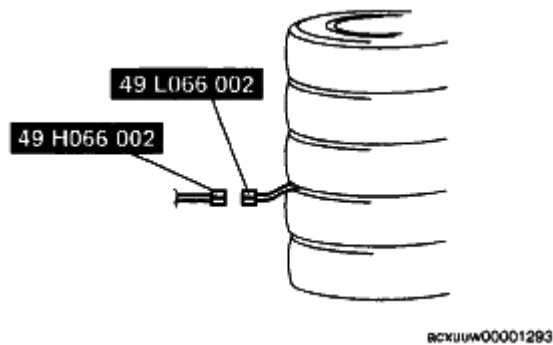


Fig. 78: Connecting SST (Deployment Tool) To SST (Adapter Harness)
Courtesy of MAZDA MOTORS CORP.

10. Press the activation switch on the **SST (Deployment tool)** to operate (deploy) the pre-tensioner seat belt.
11. Disconnect the **SSTs (Deployment tool)** from the **SSTs (Adapter harness)** .

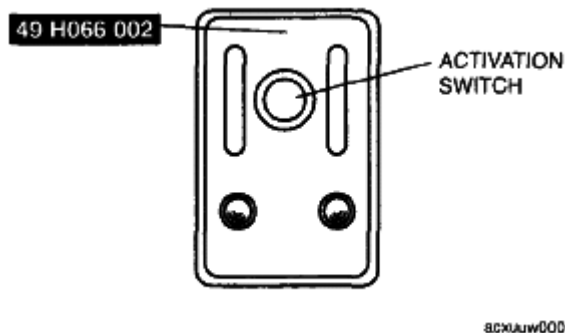


Fig. 79: Identifying Activation Switch
Courtesy of MAZDA MOTORS CORP.

AIR BAG MODULE AND PRE-TENSIONER SEAT BELT DISPOSAL PROCEDURES

WARNING:

- A live (undeployed) air bag module or pre-tensioner seat belt may accidentally operate (deploy) when it is disposed of and cause serious injury. Always refer to the "**AIR BAG MODULE AND PRE-TENSIONER SEAT BELT DEPLOYMENT PROCEDURES**" and dispose of air bag modules and pre-tensioner seat belts in a deployed condition.
- The air bag modules and the pre-tensioner seat belts are very hot immediately after they are deployed. You can be burned. Do not touch an air bag module and pre-tensioner seat belt for at least 15 min after deployment.
- Pouring water on the deployed air bag module and pre-tensioner seat belt 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 seat belt.

- The deployed air bag module or pre-tensioner seat belt may contain deposits of sodium hydroxide, a caustic by product 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 seat belt, 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 seat belt.
2. Put the air bag module or pre-tensioner seat belt in a plastic bag, seal the bag, and then dispose of it.



8CXUW00002421

Fig. 80: Placing Air Bag Module Or Pre-Tensioner Seat Belt In Plastic Bag
Courtesy of MAZDA MOTORS CORP.

INSPECTION OF SST (DEPLOYMENT TOOL)

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

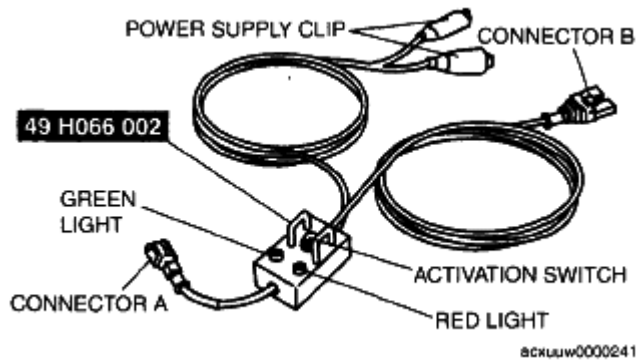


Fig. 81: Identifying SST (Deployment Tool)
 Courtesy of MAZDA MOTORS CORP.

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 seat belt 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.

DIAGNOSIS PROCEDURE

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

2008 Mazda CX-9 Grand Touring

2008 RESTRAINTS Air Bag System - Mazda CX-9

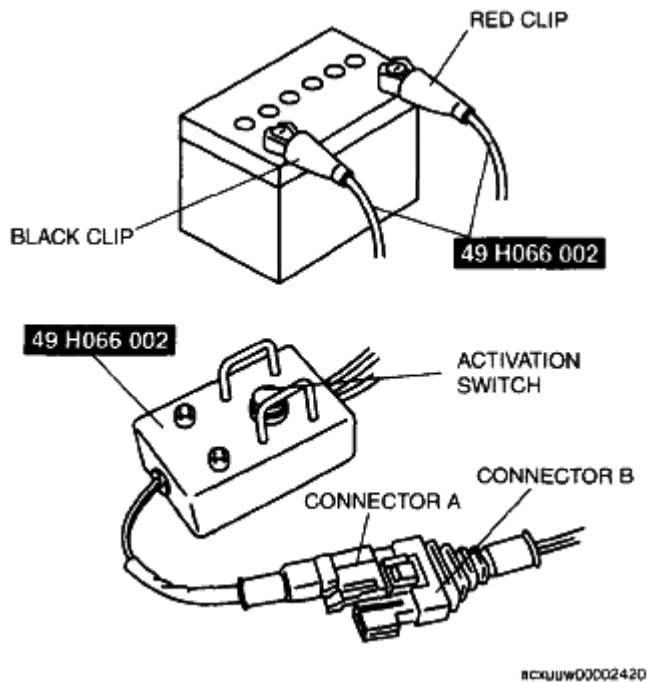


Fig. 82: Connecting SST To Battery
Courtesy of MAZDA MOTORS CORP.