

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922

**Subject:**

AIR BAG WARNING LIGHT ON WITH DTC B1126:13 OR B1127:13

Bulletin No.: 08-003/23

Last Issued : 05/17/2023

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted in Red.

Previous TSBs:	Date(s) Issued:
08-001/22	08/10/22, 05/02/22, 04/08/22 and 03/17/22

APPLICABLE MODEL(S)/VINS

2019-2023 Mazda3 (Japan built) vehicles with VINs lower than JM1 BP**** ** 618425 (Produced before Apr. 1, 2023)

2019-2023 Mazda3 (Mexico built) vehicles with VINs lower than 3MZ BP**** ** 361665 (Produced before Feb. 10, 2023)

DESCRIPTION

Some vehicles may exhibit that the air bag warning light turns on or repeats cycles of turning on and off with DTC B1126:13 and/or B1127:13 stored in memory.

- B1126:13 - Driver-side side air bag module circuit open circuit or resistance high
- B1127:13 - Passenger-side side air bag module circuit open circuit or resistance high

This issue is caused by any of the following:

- When the driver or passenger moves, a load is applied to the seat back and the load may cause displacement of the mating terminals in the side air bag module connector, resulting in insufficient contact and higher resistance.
- The DTC detection level is too sensitive.
- The form of the female terminals in the side air bag module connector may cause insufficient contact and higher resistance.

To eliminate these concerns, (1) the DTC detection level of the SAS control module has been optimized. (2) Design of the side air bag module connector has been modified.

(3) Layout of the side air bag module connector has been modified.

Customers having this concern should have their vehicle repaired using the following repair procedure.

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REPAIR PROCEDURE

1. Verify the customer concern.
2. Replace the concerned side of the short cord between the side air bag module and the vehicle side harness with a new one and modify the routing of the short cord to the concerned side of the side air bag module according to the [Repair Procedure for Short Cord](#).
3. Reprogram the SAS control module (SAS on MDARS screen) with the Mazda Modular Diagnostic System (M-MDS), using the Mazda Diagnostic And Repair Software (MDARS). Refer to MDARS ECU Reprogramming Procedure.
 - If the current calibration file name in the ECU FILENAME screen is the same as shown in the Calibration Files Information or with a later suffix, reprogramming is not necessary.
 - After the reprogramming, pending DTC P2610:00 [PCM] may be stored without the CHECK ENGINE light ON. Be sure to clear DTCs after all repair work is done.
 - If DTC U2120:00 or/and U2500:82 are stored and i-ACTIVSENSE warning light (amber) turns on after the reprogramming, refer to SA-043/20.
 - If the Welcome Lamp function is accidentally activated while using MDARS, it may also cause this concern. Check and correct as necessary. Refer to the SA-054/20 for details.
3. Clear the DTC, turn the ignition off, and get out of the vehicle.
4. Close and lock the door.
5. Wait for at least ten minutes.
6. Verify the repair by starting the engine and verifying that the air bag/seat belt pre-tensioner system warning light turns on for approx. 6 s and then turns off.

NOTE: If any DTCs remain after deleting DTCs, diagnose the DTCs according to the appropriate troubleshooting on MGSS.

Repair Procedure for Short Cord

Outline

Procedure is the same for driver side and passenger side.

1. Remove the seat back trim and the urethane foam pad, then remove the side air bag module (1).
2. Partially remove the side air bag short cord.
3. Remove the plastic cover.
4. Perform the following (may be done in different order).
 - a. Work on the plastic cover.
 - b. Assemble a clip band to the short cord
 - c. Work on the urethane foam pad.
5. Assemble the removed parts.
6. Install the seat back trim and the urethane foam pad.
7. Confirm the air bag warning / pre-tensioner warning light s do not stay on.



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Parts and tools needed for repair

No.	Description	Quantity	Part number	Note
1	Short Cord	1	B1Y5-67-SH0	For RH seat (manual seat or power seat) For LH seat (manual seat)
2	Short Cord	1	B1Y4-67-SH0	For LH seat (power seat)
3	Noise Parts Set	1	TA01-76-100	Use urethane foam sheet (0.2 in (5 mm thick)) in the set. For protection of the cutting surface of the plastic cover.
4	Clip	3	H430-67-C91	For fixing the side air bag module short cord (1 or 2 clips per seat). NOTE: If the existing clip (shown in step 2 of the Wire Harness Repair Procedure) is removed undamaged it may be reused and only 1 new clip is needed.
5	Band	4-6	B25H-88-244	For seat trim (4 for a manual seat) (6 for a power seat) NOTE: These are small zip ties - source locally, if none available.
6	Multipurpose scissors	1	-	For cutting the plastic cover.
7	Small screw driver	1	-	For unlocking the connector lock.
8	Sand paper		-	For the cutting surface of the plastic cover.

NOTE:

- Take care not to damage the air bag, harness and connector. If damaged, replace the side air bag module with a new one.
- DO NOT pull the harness or apply excess force when replacing the short cord to avoid damaging them.
- DO NOT apply excess shock to the side air bag module.
- Press the lock part of the connector until it aligns to the connector.
- DO NOT remove the urethane foam pad over the designated area.

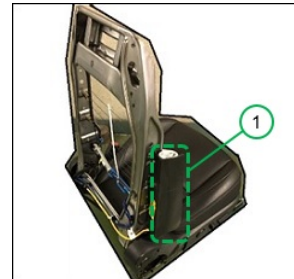
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1. Remove the side air bag module (1) according to the instructions on MGSS.

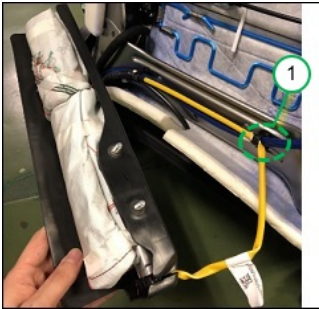
- US/Canada spec (SIDE AIR BAG MODULE REMOVAL/INSTALLATION [TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA SPEC.])
- Mexico Spec (SIDE AIR BAG MODULE REMOVAL/INSTALLATION [STANDARD DEPLOYMENT CONTROL SYSTEM - MEXICO SPEC.])

Number of bands

- 6 (with power seat system)
- 4 (Without power seat system)



2. Remove the clip (1) that fixes the yellow harness for the side air bag module.



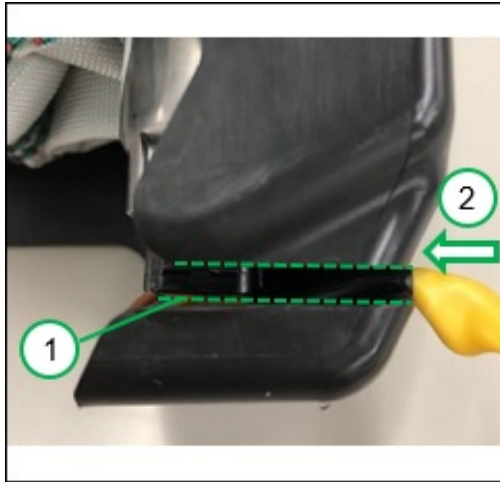
3. Remove the short cord (2) from the hole and the slit of the plastic cover (1).

NOTE: Take care not to damage the harness.

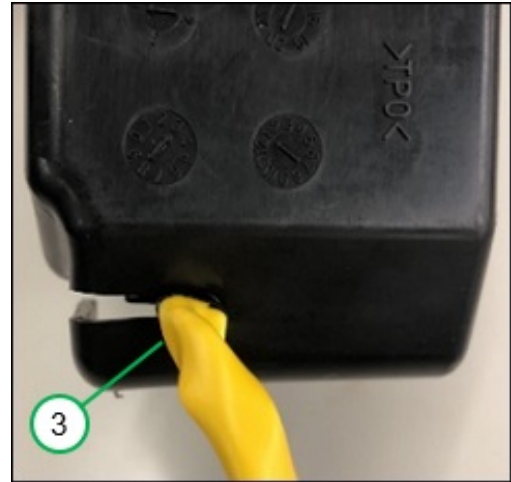


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4. Remove the short cord from the hole (3) and the slit (1).



(1) Slit



View from (2)
(3) Hole (diameter 5 mm)



After removal of the short cord

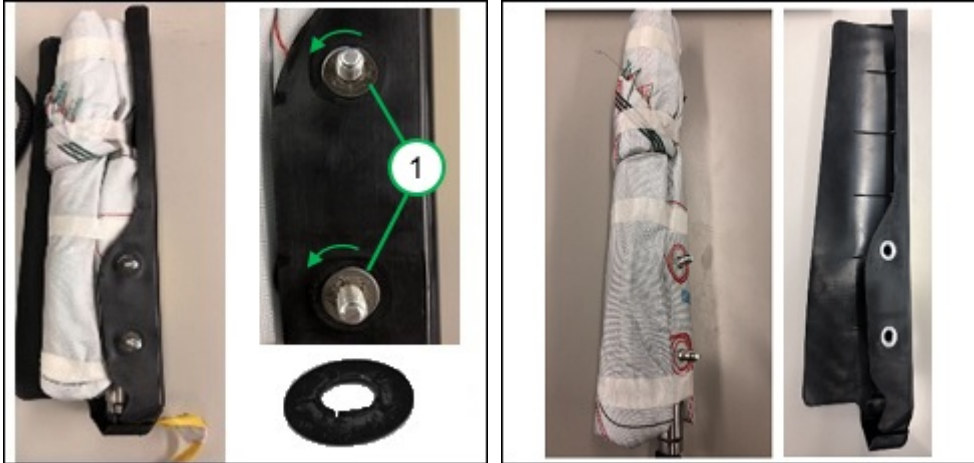


After removal of the short cord

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5. Remove two setting washers (1) from bolts and remove the air bag from the cover.

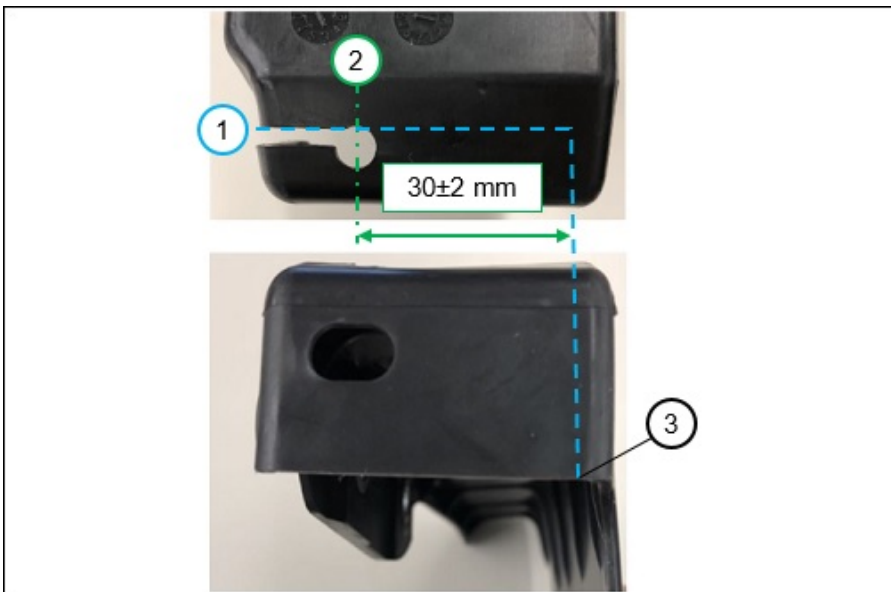
NOTE: While turning the setting washer counter clock wise and using a small screw driver, remove the setting washers and discard.



6. Perform the following:

a. Modify the cover

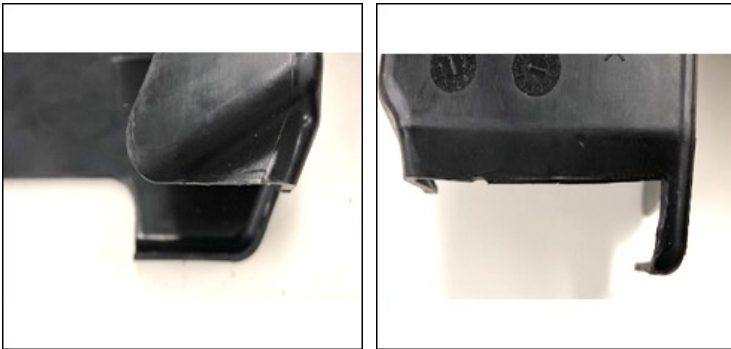
1) Mark the cutting line along the upper edge (1) of the slit to the end (3), keeping 1.2 ± 0.8 in (30 ± 2 mm) from the center of the hole (2). DO NOT over cut.



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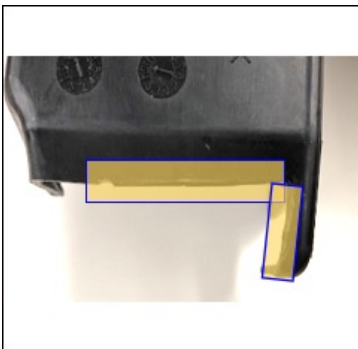
2) Cut along with the cutting line. For easier work, it is recommended to start cutting at the end (3) of the cover.

NOTE: DO NOT over cut. If there are any burrs, remove them using sand papers.

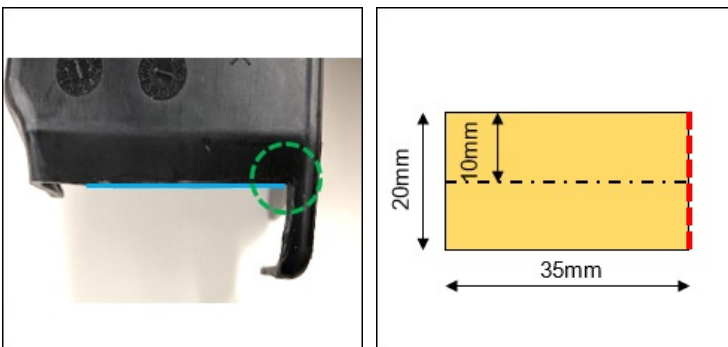


3) Stick the urethane foam sheet to the cut edges (this is to avoid damaging the air bag when deployed) after selecting urethane foam sheet (0.2 in x 3.9 in x 5.9 in (5mm x 100mm x 150mm)) from the "Noise Parts Set (TA01-76-100)" and cutting the sheet into a piece of 0.8 in x 1.38 in (20 mm x 35 mm) and a piece of 0.8 in x 1.77 in (20 mm x 45 mm).

NOTE: Use the designated urethane foam sheet only. DO NOT use other sheets included in the "Noise Parts Set".

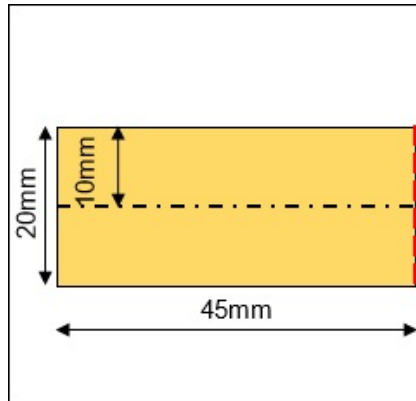


- Align the edge (red line in the figure) of the sheet to the corner (green circle in the picture).
- Align the center line of the sheet to the edge (blue line in the picture).



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- Align the edge (red line in the figure) of the sheet to the corner (green circle in the picture).
- Align the center line of the sheet to the edge (blue line in the picture).



Finished



Finished

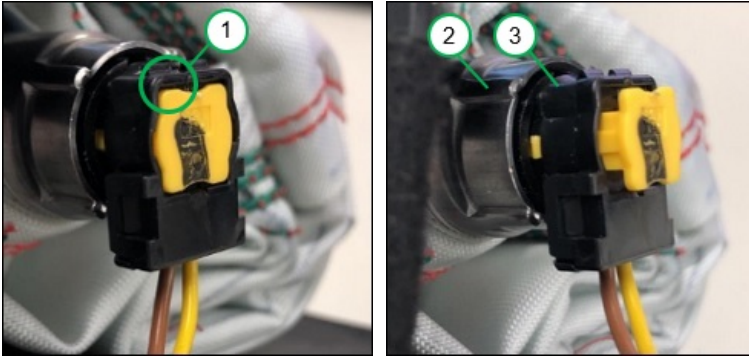
b. Assemble a clip band to the short cord

- 1) Unlock the connector lock (yellow part).



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2) Insert a small tool into the hollow (1) and pull the yellow lock part, then pull the connector (3) from the inflator (2). Remove and discard the short cord.



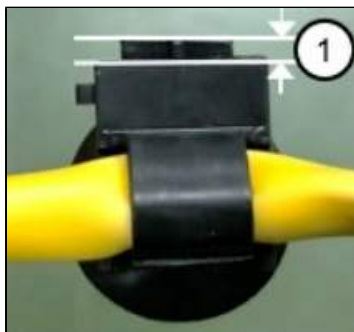
3) Prepare the new short cord.



4) Align the center of the clip band to the white marking and fix it to the short cord (Clip band: H430-67-C91).



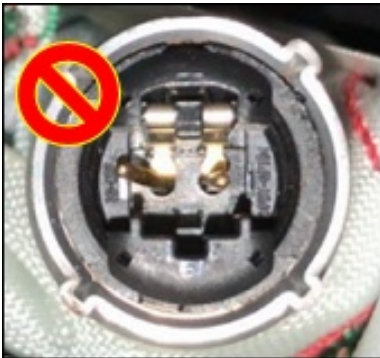
5) Cut the excess part of the band (1) to 0.12 in (3 mm) or less.



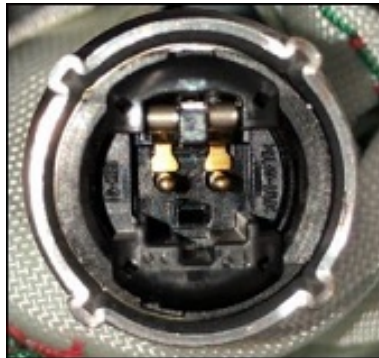
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6) Before connecting, confirm that there is no deformation on two connector pins at the inflator side, then connect the connector.

NOTE: DO NOT use the part if the pin(s) are deformed.



Deformed pins



Normal (no deformation)



7) Lock the connector.

NOTE: Press the lock part of the connector until it aligns to the connector.



Before locking



Locked



Locked

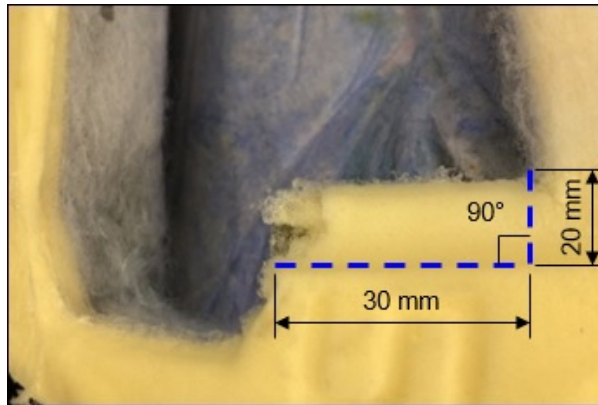
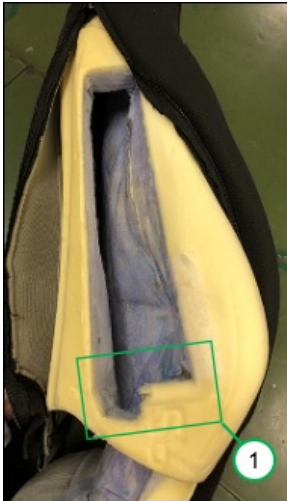
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c. Modify the urethane foam pad.

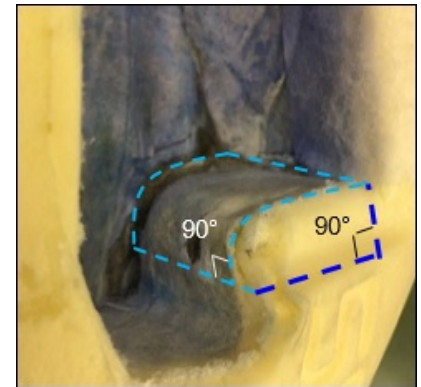
1) Mark the cutting line to the urethane foam pad.

NOTE: Allowance of the cut is + 0.12 in (5 mm) and -0 in (0 mm) both for height and width.

- If the pad is removed less than specified size, the pad may interfere with the connector, resulting in less than expected result.



Detail of (1)



Left front view of (1)

2) Cut the pad along with the marking and remove the pad.

3) Clean the urethane dust.

7. Assemble and install the parts.

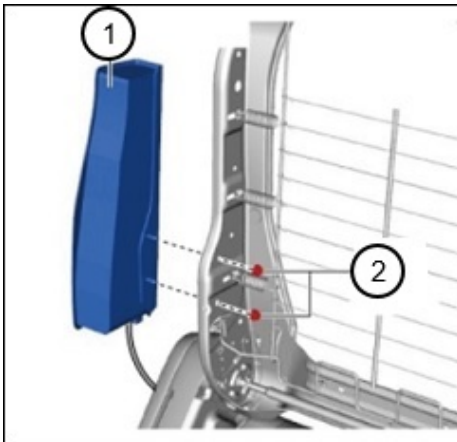
- Assemble the cover to the side air bag.
- Secure the harness with the clip (1) as before.



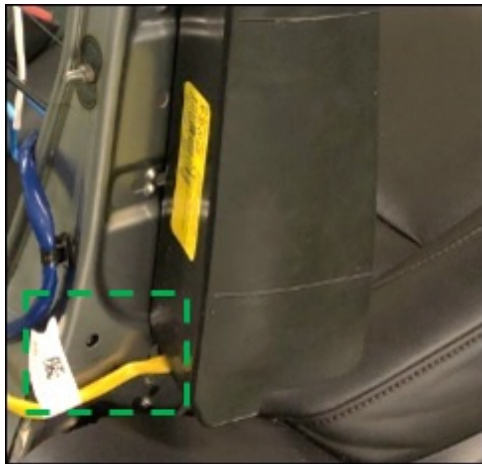
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c. Install the side air bag module with two nuts to the seat frame according to the instructions on MGSS (SIDE AIR BAG MODULE REMOVAL/INSTALLATION).

Tightening torque: 2.95-4.42 ftlb (4-6 N·m).



d. Install the clip band (newly assembled to the short cord in step 6-b-4) to the seat frame.



Before removing the side air bag module



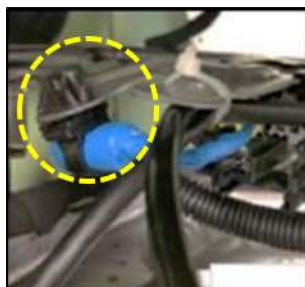
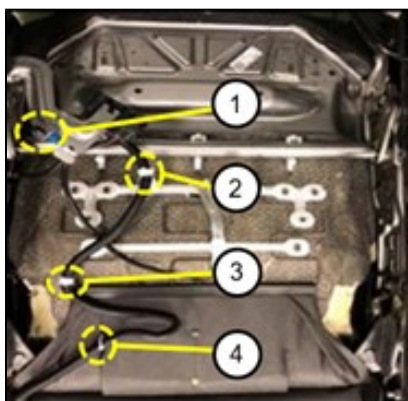
Clip installed

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8. Fix the short cord with the clip bands.



9. Fix the short cord under the seat with bands, then connect the short cord to the vehicle side harness.
(sample pictures below show driver's manual seat)



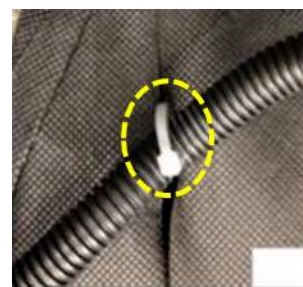
1. (No marking)
Clip band installed



2. White marking tape



3. White marking tape



4. (No marking)
9.25" +/- 0.4" (235 +/- 10 mm) from point 3

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10. Install the seat back trim and the urethane foam pad according to instructions on MGSS.

- US/Canada spec (SIDE AIR BAG MODULE REMOVAL/INSTALLATION [TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA SPEC.])
- Mexico Spec (SIDE AIR BAG MODULE REMOVAL/INSTALLATION [STANDARD DEPLOYMENT CONTROL SYSTEM - MEXICO SPEC.])

11. Start the engine and verify that the air bag/seat belt pre-tensioner system warning light turns on for approx. 6 s and then turns off.

12. Verify the repair.

CALIBRATION

Spec.	File Name
US and Canada	BCKA-57K31-F
Mexico	BEPN-57K31-F

PARTS INFORMATION

Part Number(s)	Description	Qty.	Notes
B1Y5-67-SH0	Cord, Short	1	For RH seat (manual seat or power seat) For LH seat (manual seat)
B1Y4-67-SH0	Cord, Short	1	For LH seat (power seat)
TA01-76-100	Noise Parts Set	1	1 set does one side or both sides
H430-67-C91	Clip	3	3 for one side, 6 for both sides NOTE: If the existing clip (shown in step 2 of the Wire Harness Repair Procedure) is removed undamaged it may be reused and only 1 new clip is needed.
B25H-88-244	Band	4-10	4-6 for one side or 8-10 for both sides (4 for a manual seat) (6 for a power seat) NOTE: These are small zip ties - source locally if none available (some seat will use less than 6, depending on the specification of the seat).

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WARRANTY INFORMATION**NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's Safety Warranty for 5 years/60K miles.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	64
Damage Code	99
Part Number Main Cause	7777-SP-W02
Quantity	0
Operation Number / Labor Hours:	Replacing the short cord if routing has already been modified XXT8XLRX / 0.7 Hrs. (One side) XXT8XMRX / 1.2 Hrs. (Both sides)
	Short cord routing using a new short cord XXT8XCRX / 2.1 Hrs. (One side) XXT8XDRX / 3.8 Hrs. (Both sides)
	Short cord routing using a new short cord and reprogramming of the SAS control module XXT8XGRX / 2.4 Hrs. (One side) XXT8XHRX / 4.1 Hrs. (Both sides)
	Reprogramming of SAS control module. XXT8XXFX / 0.3 Hrs.

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