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.: 08-001/22 Last Issued : 05/02/2022

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	04/08/22 and 03/17/22

APPLICABLE MODEL(S)/VINS

2019-2022 Mazda3

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 one or both 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.

To eliminate these concerns:

- A modification of the harness is being developed.
- The DTC detection level of the SAS control module has been optimized.

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

REPAIR PROCEDURE

1. Verify the customer concern.
2. Modify the routing of the wire harness to the concerned side of the side air bag module according to the Wire Harness Repair Procedure.
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.

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- 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. Since this DTC may turn to a current DTC depending on operations after the reprogramming, clear DTC after all repair work 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 accidently 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.

Wire Harness Repair Procedure

Outline

Procedure is the same for driver side and passenger side.
1. Remove the seat back trim and the urethane foam pad.
2. Remove the side air bag module (1) by loosening the nuts.
3. Partially remove the side air bag harness.
4. Remove the plastic cover.
5. Perform the following (may be done in different order).
   a. Work on the plastic cover.
   b. Work on the urethane foam pad.
   c. Work on the harness connector.
6. Install the side air bag module and the harness.
7. Install the seat back trim and the urethane foam pad.

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Parts and tools needed for repair

No.	Description	Quantity	Part number	Note
1	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.
2	Clip	1 or 2	H430-67-C91	For fixing the side air bag module harness (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.
3	Band	4-6	B25H-88-244	For seat trim (quantity depends on the specification of the seat). **NOTE:** These are small zip ties - source locally, if none available.
4	Multipurpose scissors	1	-	For cutting the plastic cover.
5	Small screw driver	1	-	For unlocking the connector lock.
6	Sand paper		-	For the cutting surface of the plastic cover.

NOTE:

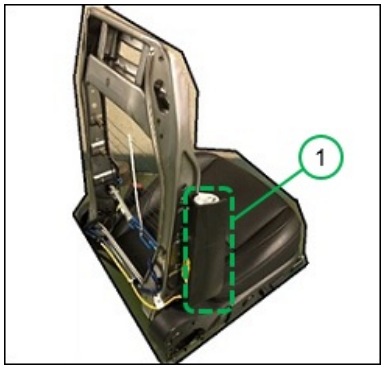
- Take care not to damage the air bag, harness and connector. If damaged, replace the side air bag module with a new one.
- DO NOT pull the harness or apply excess force to the connector to avoid damaging them.
- DO NOT apply excess shock to the side air bag module.
- Press the lock part of the connector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

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)



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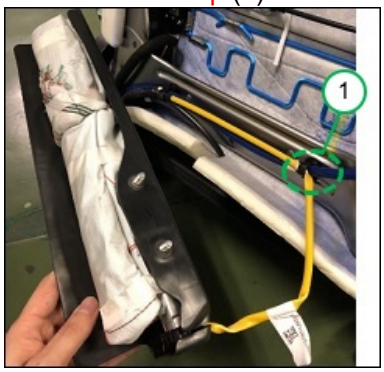
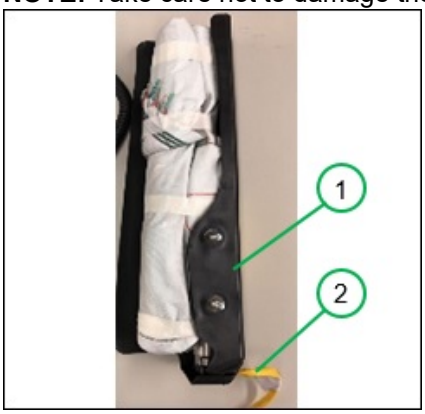
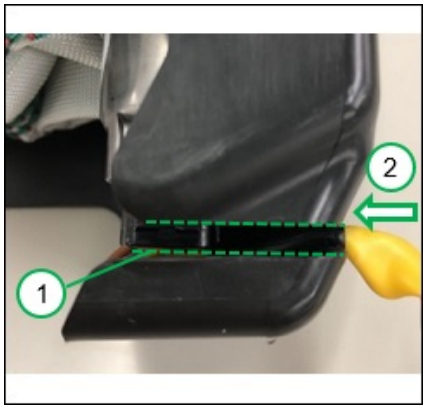
2. Remove the clip (1) that fixes the yellow harness for the side air bag module.



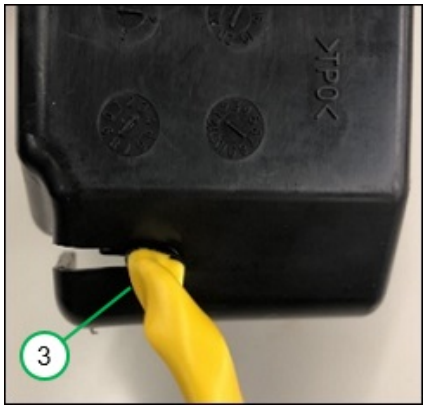
3. Remove the harness (2) from the hole and slit of the plastic cover (1).
NOTE: Take care not to damage the harness.



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



(1) Slit



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

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After removal of the harness

After removal of the harness

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.

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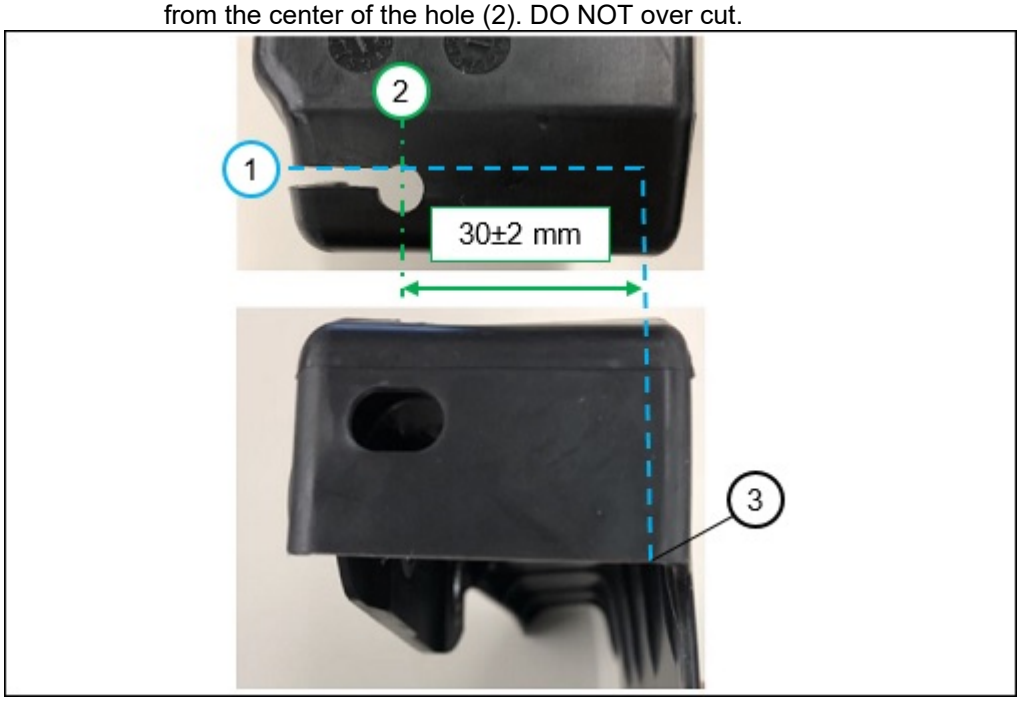
06/02/2022 11:56 AM cciz

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), keep 1.2 ± 0.8 in (30 ± 2 mm) from the center of the hole (2). DO NOT over cut.



      2) Cut along with the cutting line. For easier work, it is recommended to start cutting at the end (3) of the cover.
      NOTE: If there are any burrs, remove them using sand papers.

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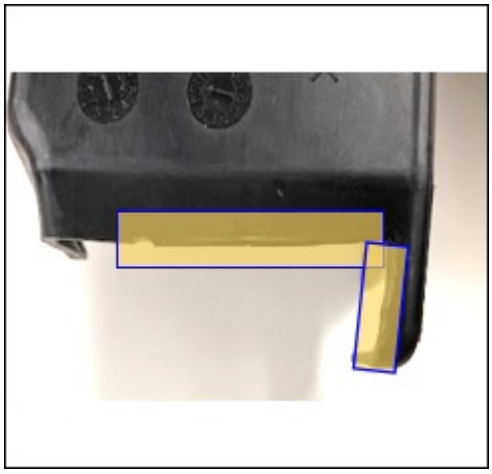
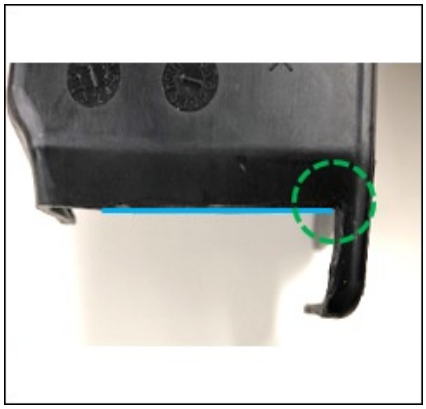
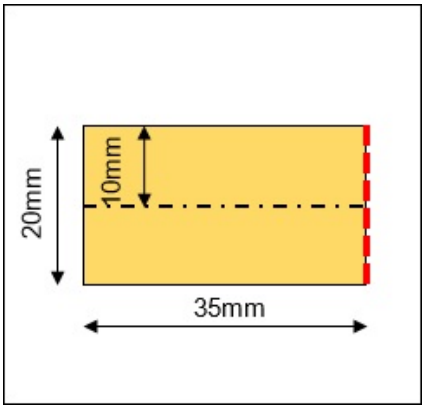
3) Stick the urethane foam sheet to the cut edges (this is to avoid damaging the air bag when deployed) after selecting urethane foam sheet (0.2 in x 3.9 in x 5.9 in (5mm x 100mm x 150mm)) from the “Noise Parts Set (TA01-76-100)" and cutting the sheet into a piece of 0.8 in x 1.38 in (20 mm x 35 mm)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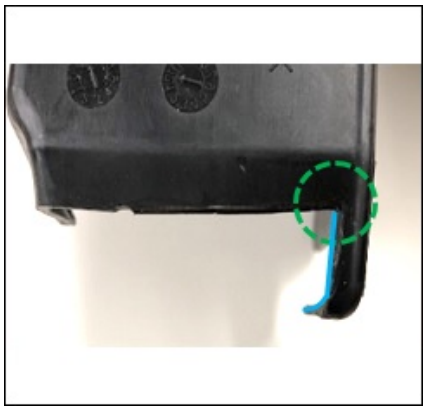

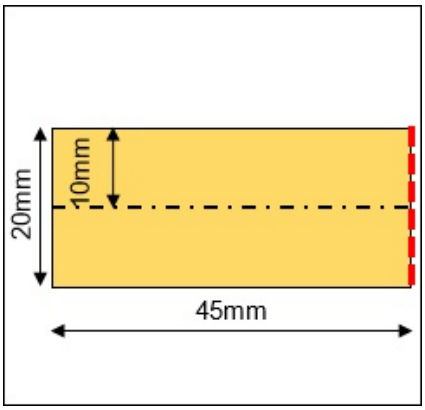

Finished

Finished

b. Modify the harness connector.

1) Unlock the connector lock (yellow part).

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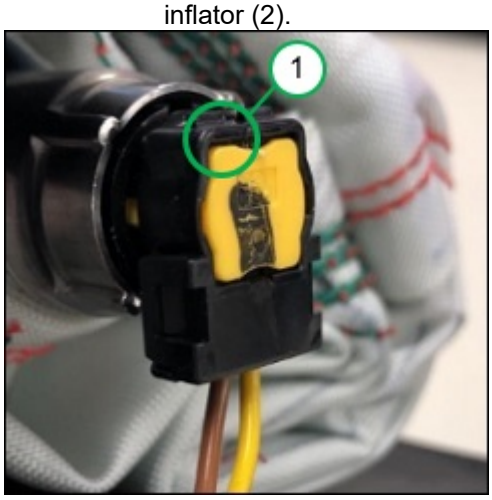
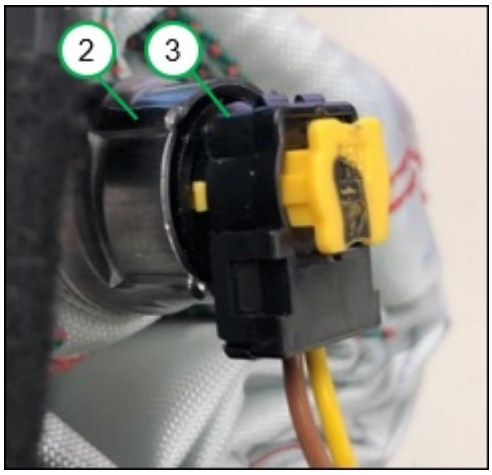
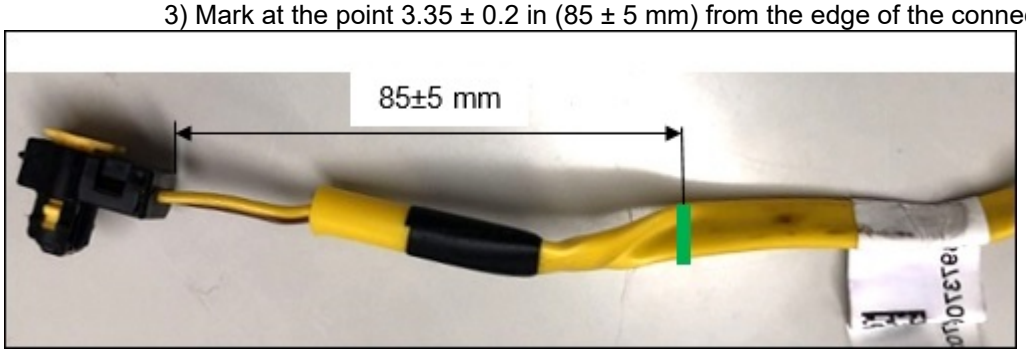
2) Insert a small tool into the hollow (1) and pull the yellow lock part, then pull the connector (3) from the inflator (2).





3) Mark at the point 3.35 ± 0.2 in (85 ± 5 mm) from the edge of the connector.



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

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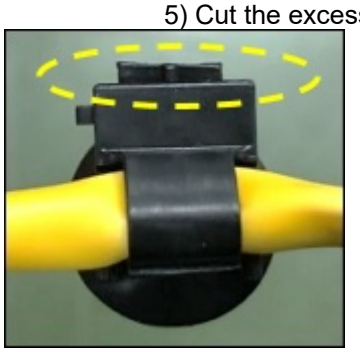
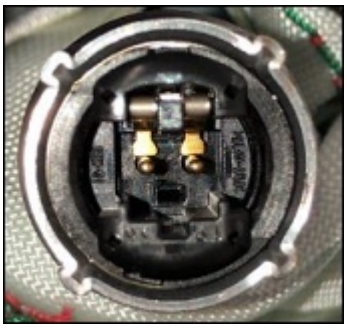
5) Cut the excess part of the band to 0.12 in (3 mm) or less.

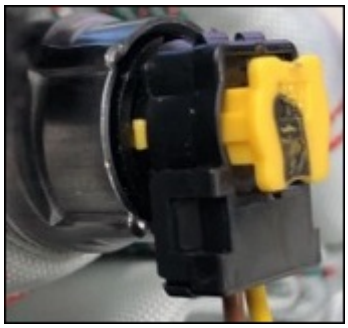


6) Before connecting, confirm that there is no deformation on two connector pins at the inflator side, then connect the connector.
NOTE: DO NOT use the part if the pin(s) are deformed.

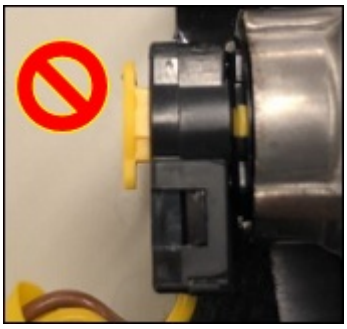
Deformed pins



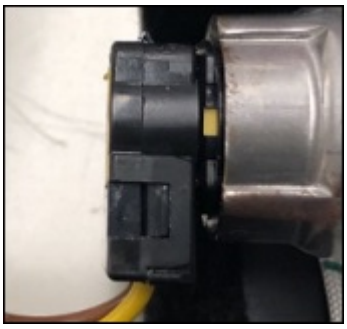
Normal (no deformation)



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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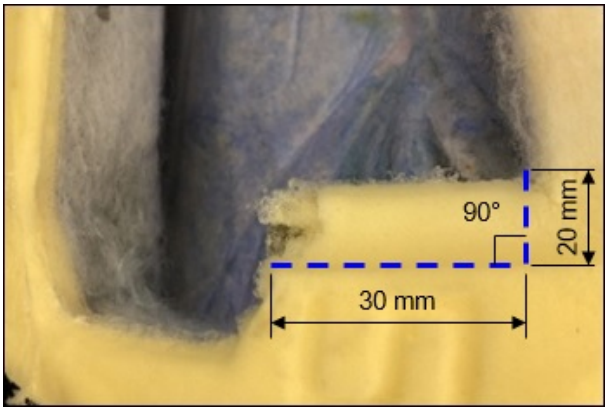
c. Modify the urethane foam pad.

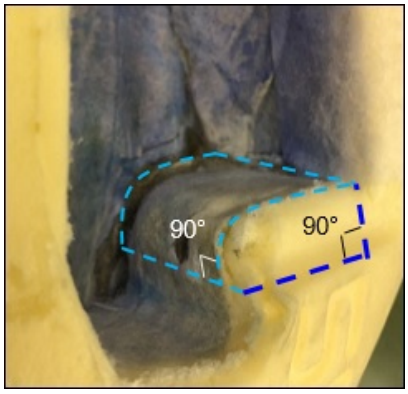
1) Mark the cutting line to the urethane foam pad.

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 and result in a secondary problem.



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.

a. Assemble the cover to the side air bag.

b. Secure the harness with the clip (1) as before.

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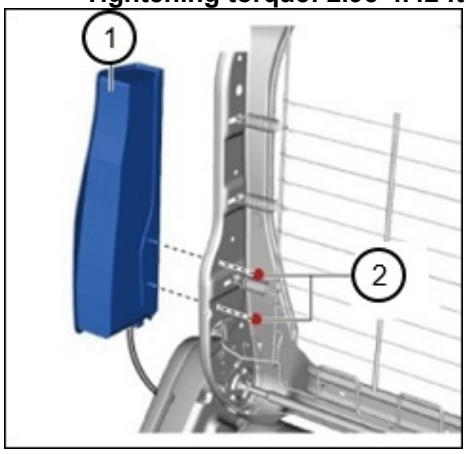
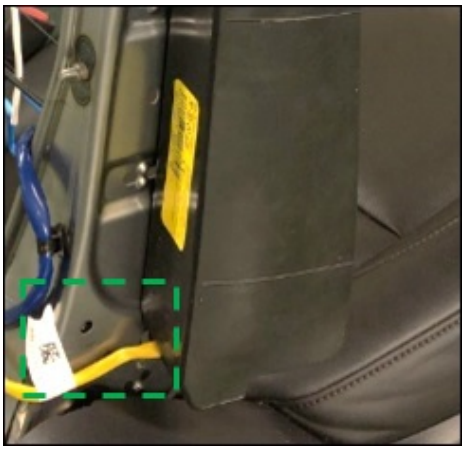
c. Install the side air bag module with two nuts to the seat frame according to the instructions on MGSS (SIDE AIR BAG MODULE REMOVAL/INSTALLATION).
Tightening torque: 2.95-4.42 ftlb (4-6 N·m).



d. Install the clip band (newly assembled to the harness) to the seat frame.



Before removing the side air bag module

Clip installed

8. 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.])

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CALIBRATION

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

PARTS INFORMATION

Parts Number	Description	Qty.	Notes
TA01-76-100	Noise Parts Set	1	1 set does one side or both sides
H430-67-C91	Clip	1-4	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.
B25H-88-244	Band	6 or 12	6 for one side or 12 for both sides **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).

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:	XXT8XGAX / 2.4 Hrs. (One side) XXT8XHAX / 4.1 Hrs. (Both sides)
	XXT8XXFX / 0.3 Hrs. (Reprogramming of SAS control module only if wire harness has already been modified)

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