Service Bulletin

Bulletin No.: 23-NA-009
Date: February, 2023

TECHNICAL

Subject: Broken/Damaged Low Frequency Antenna Covers in Rear Cargo Area

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
BrightDrop	EV600	2022	2022			All	All
	Zevo 600	2023	2023				

Involved Region or Country	United States, Canada
Additional Options (RPOs)	
Condition	 6252194 Some customers may comment that the low frequency antenna covers, located in the rear cargo area, may have become damaged during normal vehicle usage.
Cause	The cause of the condition can be attributed to the current location of the rear cargo area antennas, which are mounted to the rear cargo wheel wells.
Correction	Following the steps in the Service Procedure below, Dealers are to relocate the antennas, using new mounting brackets and reroute the existing antenna wire harnesses to new locations, that will reduce that possibility of damage during vehicle usage.

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Service Procedure

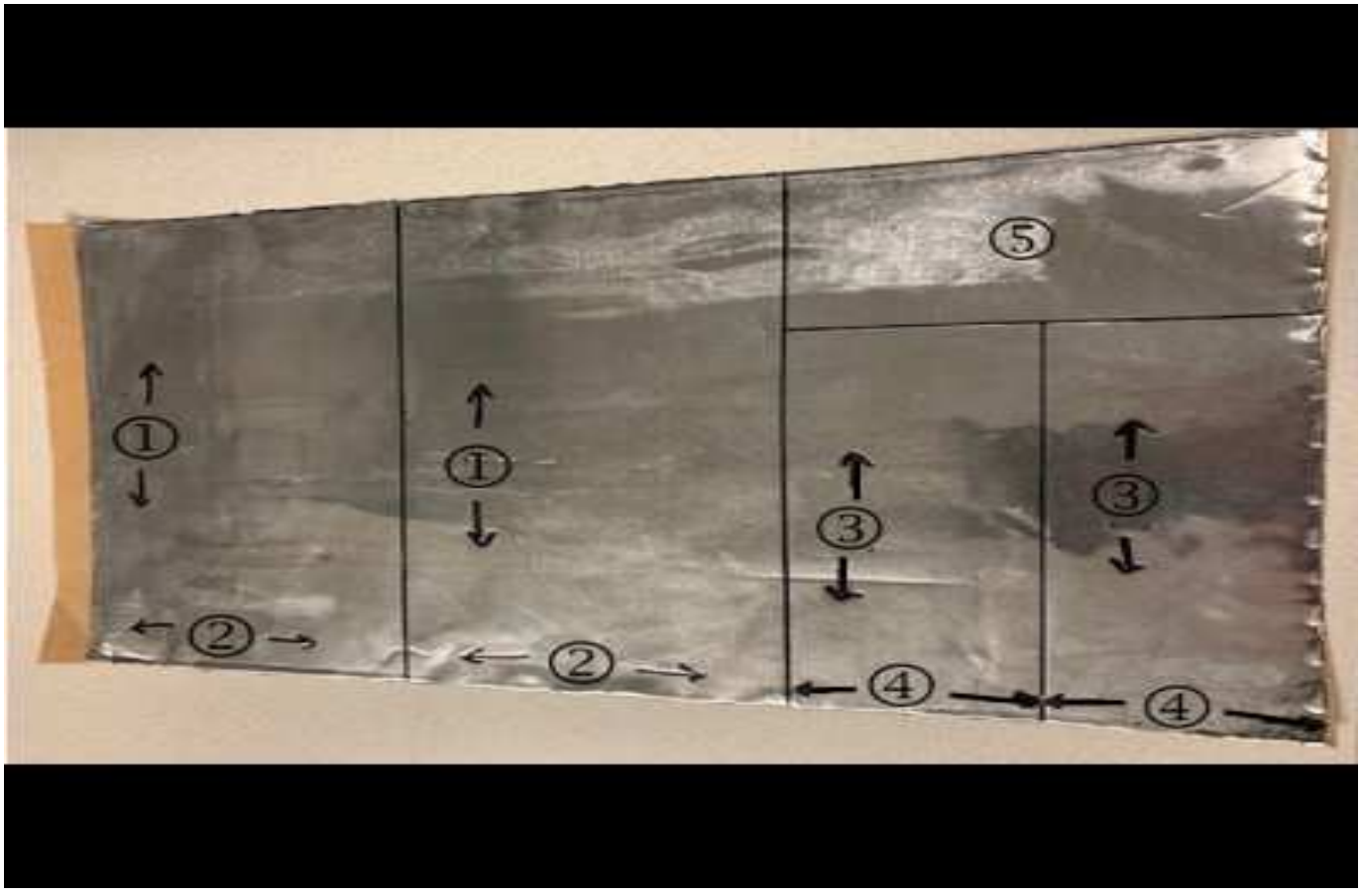
Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

Important: This technical service bulletin (TSB) can only be completed by BrightDrop dealers or BrightDrop certified repair facilities who have met all BrightDrop specific training, tool and equipment requirements. Repairs must be performed by a technician who has successfully completed the required training.

Preliminary Steps

1. Check for DTC's in the BCM that may be related to the operation of the applicable interior, and/or, passive entry vehicle functions. Address any related DTC's before proceeding to the Service Procedure listed below.
2. Disengage the rear cargo antenna covers and inspect both antennas for signs of damage. If either antenna is damaged, new antenna(s) will be required for the Service Procedure below

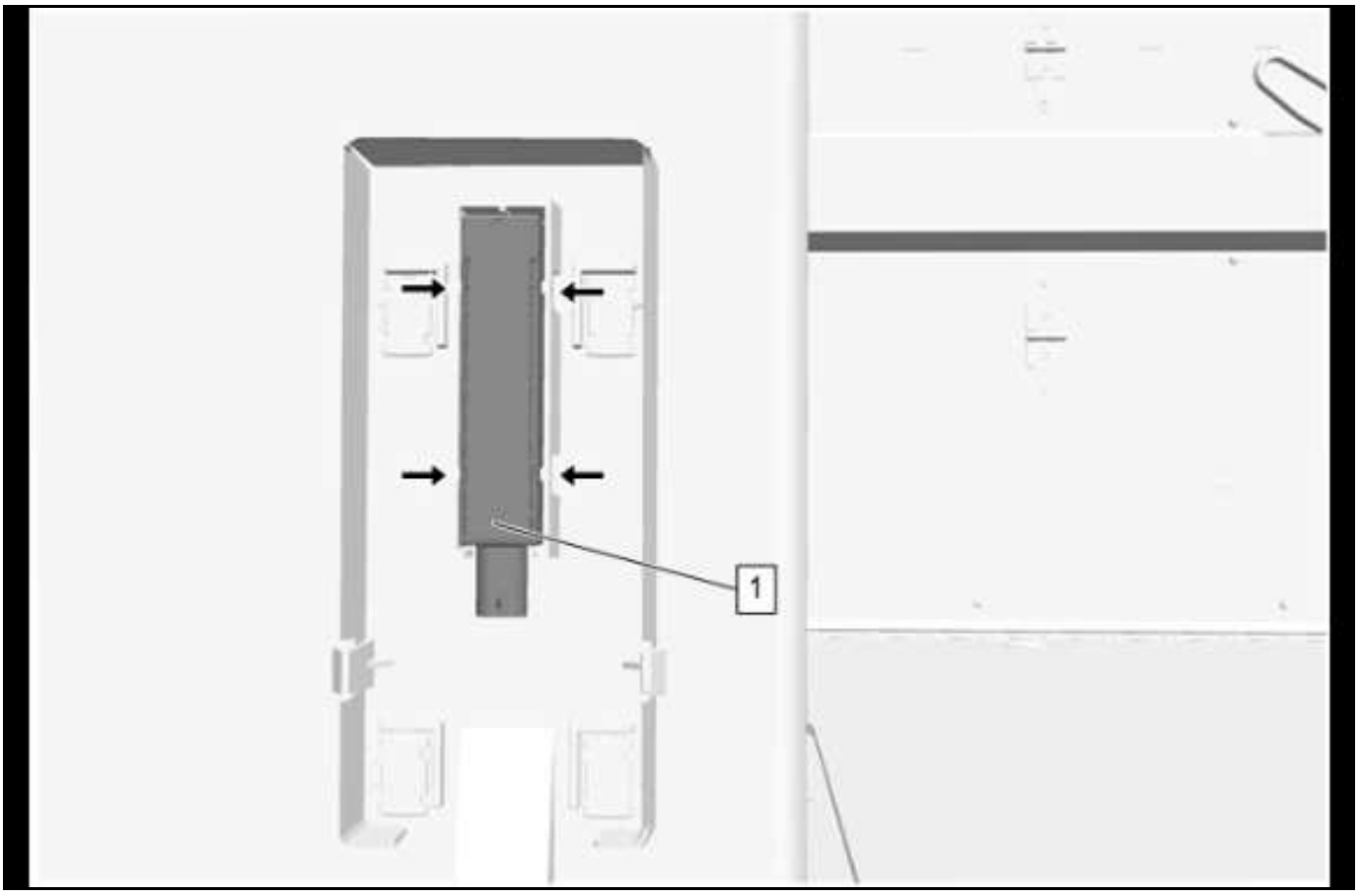
Antenna Bracket Removal and Mastic Patch install



6252195

200 mm (8 in) (1)
100 mm (4 in) (2)
140 mm (5.5 in) (3)
57 mm (2.25 in) (4)
Discard (5)

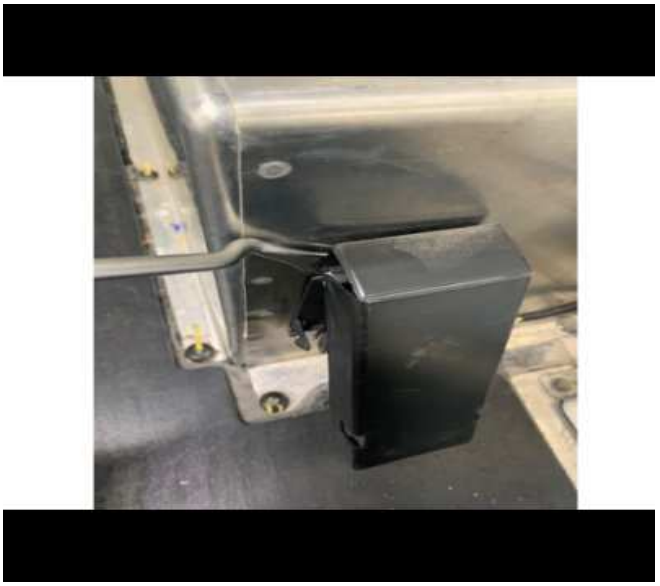
1. Obtain the mastic patch (GM P/N 84190291) and measure out the approximate dimensions, shown above.
2. Using a pair of scissors, cut the mastic patch into the specified dimensions.



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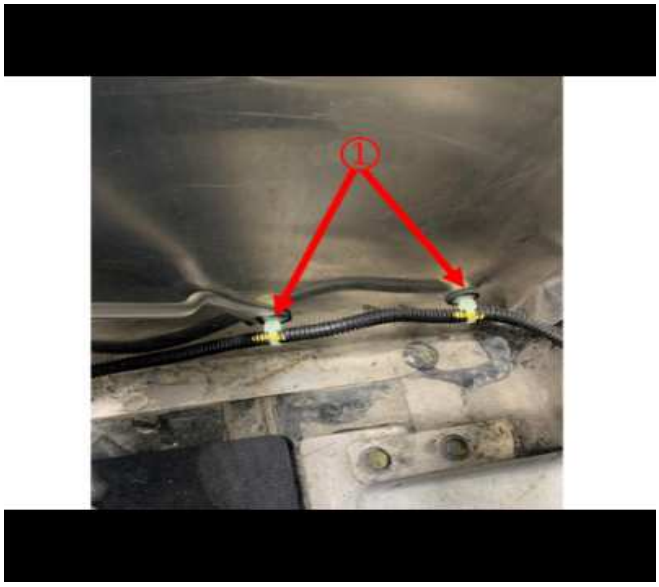
Note: Set antennas aside in a safe and protected environment. Care must be taken to not drop or damage the antennas.

3. Remove both the low frequency antennas (1) from BOTH the LH and RH antenna brackets. Refer to *Low Frequency Rear Compartment Antenna Replacement,* in SI.



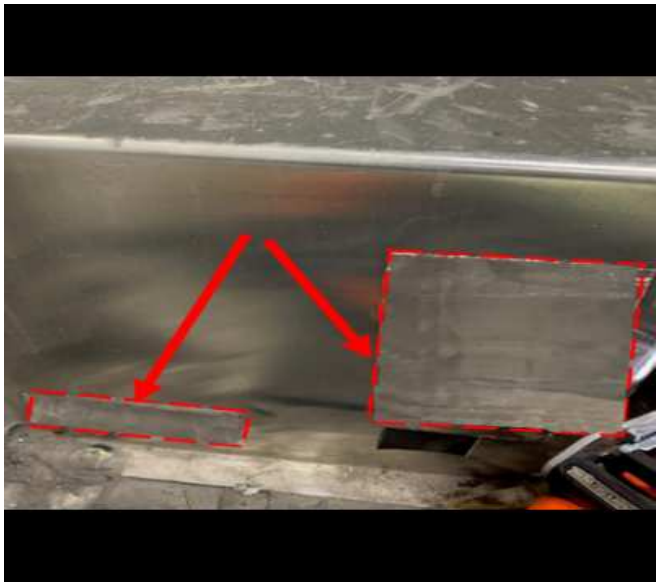
6252196

4. Using a trim tool, disengage each of the fasteners (4 each side) securing the antenna brackets to the BOTH the LH and RH wheel wells. Take care to not damage/distort the wheel wells.
5. Discard the antenna brackets after removal.



6252197

6. Using a trim tool, release both wire harness clips (1) from the mounting points at BOTH the LH and RH wheel wells.



6252198

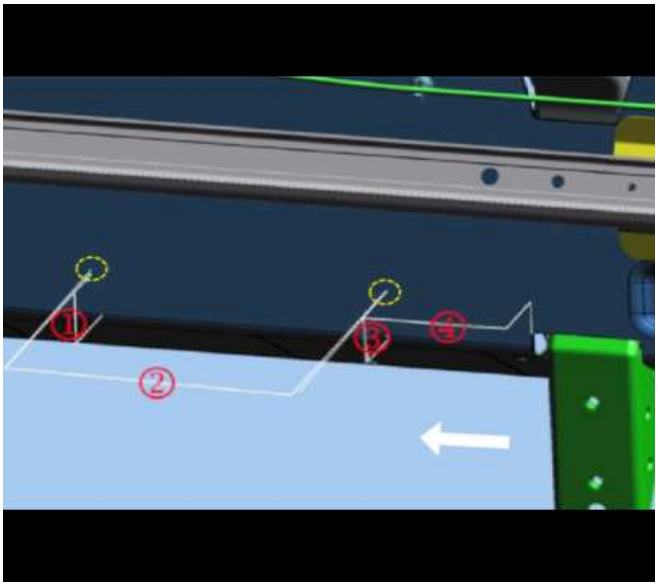
7. Center the mastic patches over the 2 sets of holes on BOTH the LH and RH wheel wells and press firmly to fully seat the mastic matches in place.

Bracket Installation and Harness Routing – Passenger Side



6252199

The completed rerouting should look like that shown in the above graphic.



6252200

45 mm (1.8 in) (1)
215 mm (8.5 in) (2)
38 mm (1.5 in) (3)

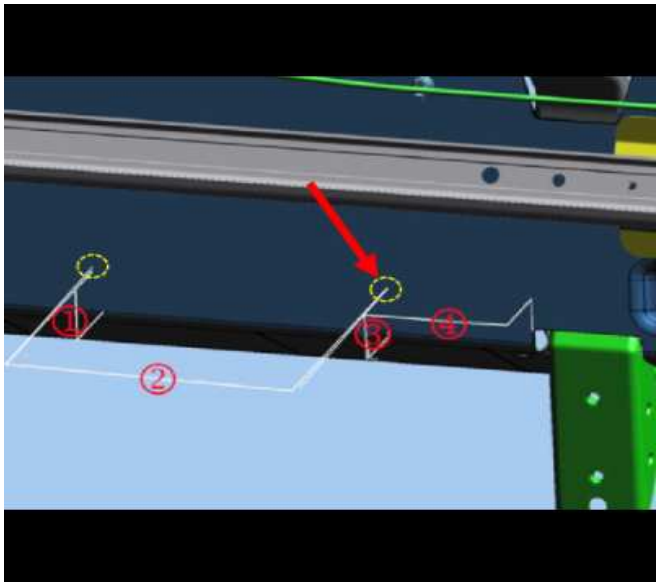
108 mm (4.25 in) (4)

1. Drill the new mounting bracket, and wire harness support hole locations, then attach the bracket and support, following the steps below and the dimensions noted above:



6252201

Note: Once drilled, the harness support hole (1) and bracket holes (2) drilled locations should look like those shown in the above graphic.



6252202

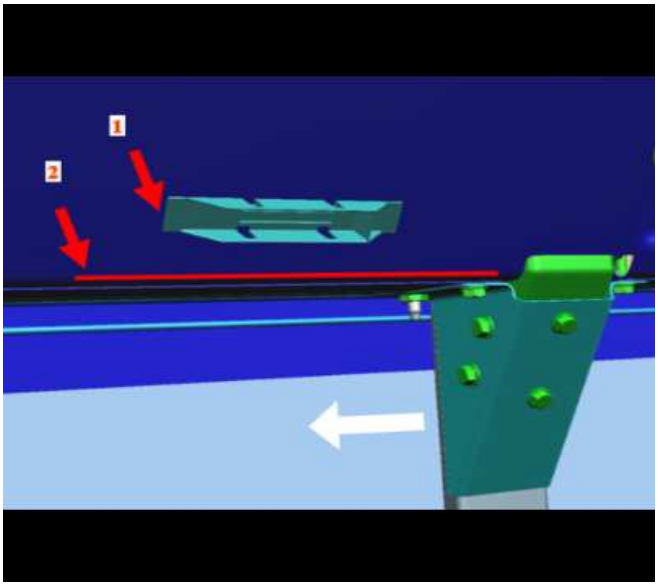
Note: It is only necessary to locate the dimensions of the rear mounting hole, noted by arrow in graphic above. The forward hole can be located and marked using the new bracket as a template, when the rear attachment point is placed in the newly drilled hole.

1.1. Starting at the RH side of the cargo area, mark the new bracket **rear** mounting location, using a punch and following the dimensions (3) & (4) noted at the start of the procedure.



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1.2. Using a drill stop set to 12.7 mm (0.50 in) and a **17/64 in** drill bit, drill the rear mounting hole.



6252203

Important: The bracket must be positioned so the open area of the bracket (1) is pointing toward the front of the vehicle to allow for the antennae wiring harness to made with the antenna.

1.3. Position the bracket so the rearward retainer of the bracket is centered in the newly drilled hole and mark the position of the **forward** mounting hole. Ensure the bracket is positioned so that it sits parallel with the leading edge (2) of the lower roof rail and mark the forward mounting hole.

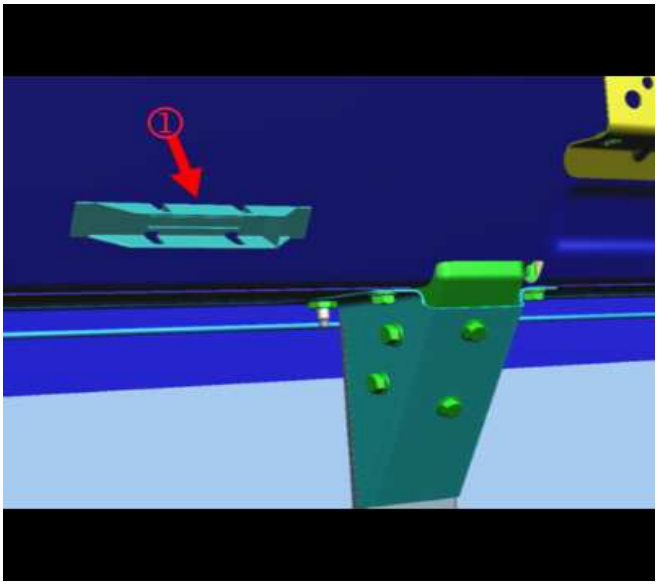
1.4. Using a drill stop set to 12.7 mm (0.50 in) and a **17/64 in** drill bit, drill the forward mounting hole.



6252201

1.5. Mark the position of the wire harness support (1) using the dimensions (1) & (2) noted at the start of the procedure.

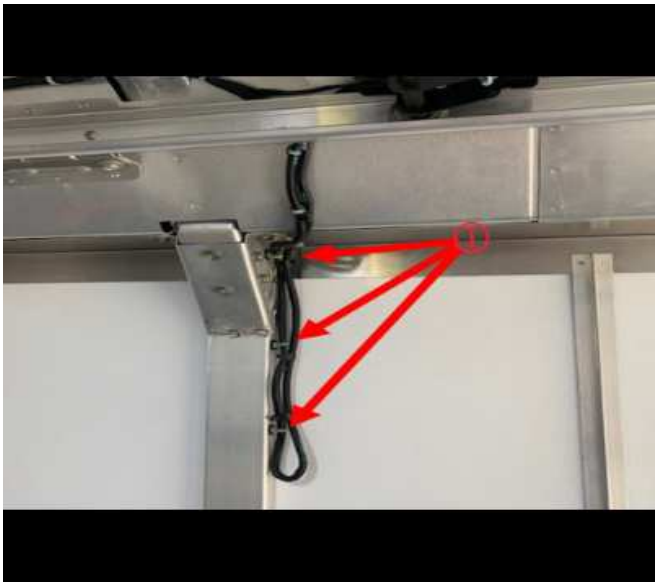
1.6. Still using a drill stop set to 12.7 mm (0.50 in), change the drill bit to **1/4 in** and drill the harness support mounting hole (1).



6252206

1.7. Place the bracket (1) into the newly drilled mounting holes and push firmly to secure the bracket to the roof rail.

2. Disengage the harness retainers from the vertical support rail, reroute the harness and install the antenna, following the steps below:



6252205

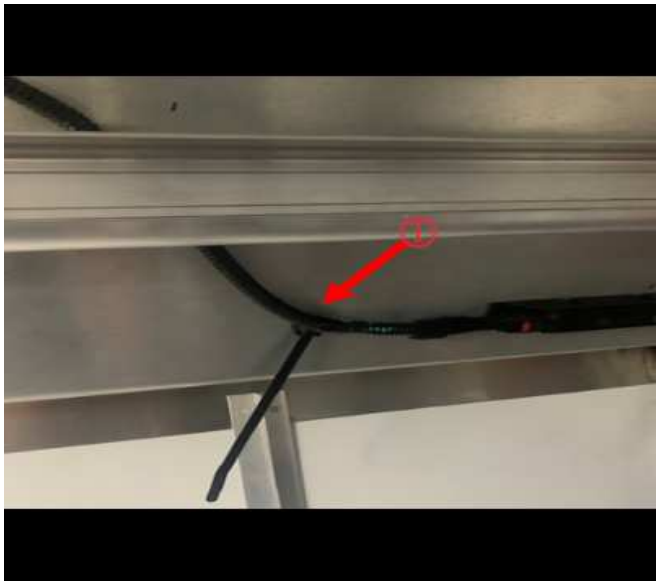
Important: The top 3 retainers (1) should remain secured to the vertical support rail.

2.1. Starting from the floor area, disengage the harness retainers from the vertical support rail.

Note: The retainers that were disengaged from the vertical support can be removed from the wire harness and discarded.

2.2. Route the harness under the rear door track and position the connector close to the newly mounted antenna bracket.

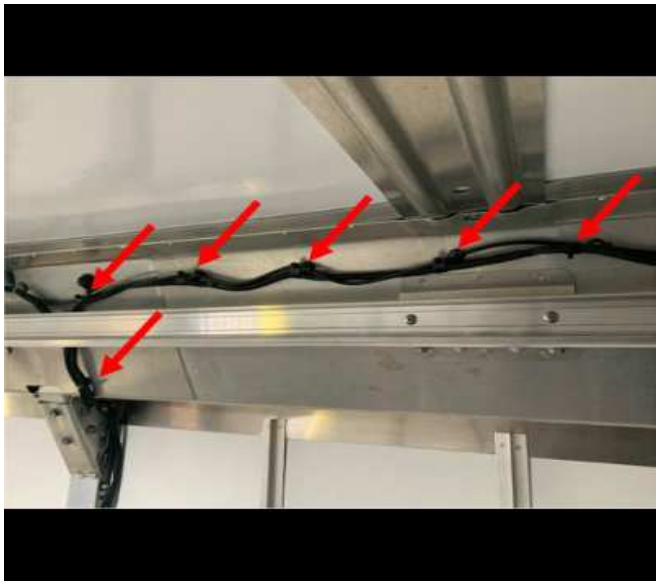
2.3. Connect the antenna connector to the antenna and firmly mount the antenna to the newly mounted bracket. Ensure the antenna is fully engaged to the retainers.



6252207

2.4. Install the tie strap with rose bud (GM PN 19130464) into the harness support mounting hole (1).

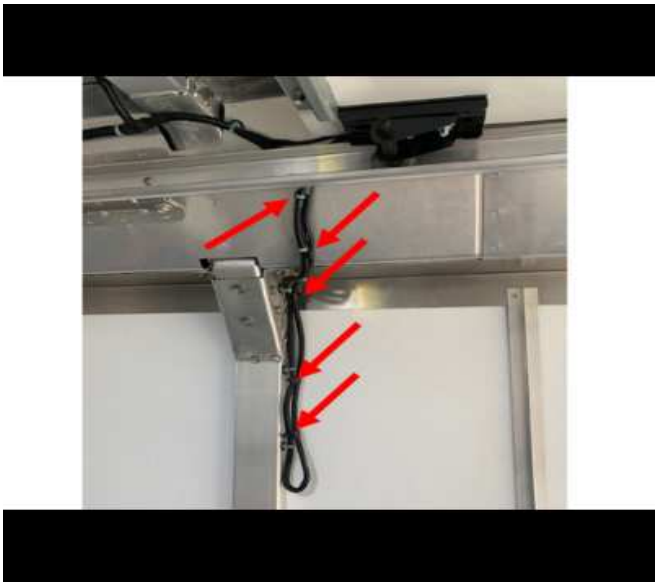
2.5. Secure the antenna wiring harness onto the tie strap, making sure the harness is not pulling tightly on the antenna connector.



6252208

Note: Ensure the harness is routed and secured so that the harness does not make contact with any surrounding components and does not create any stress on the wires themselves.

2.6. Using standard tie straps, secure the remaining upper section of the antenna wire harness to the existing coax cable at each of the coax mounting locations, shown above. The zip ties securing the harness to the coax should be placed as close as possible to the existing locations as the coax retainers.



6252209

Note: Again, ensure the harness is routed and secured so that the harness does not make contact with any surrounding components and does not create any stress on the wires themselves.

2.7. Using standard tie straps, secure the vertical section of the antenna wire harness to the existing antenna wiring harness at each of the antenna wiring harness mounting locations, shown above, as well as to the harness as it routes behind the rear roll up door track.

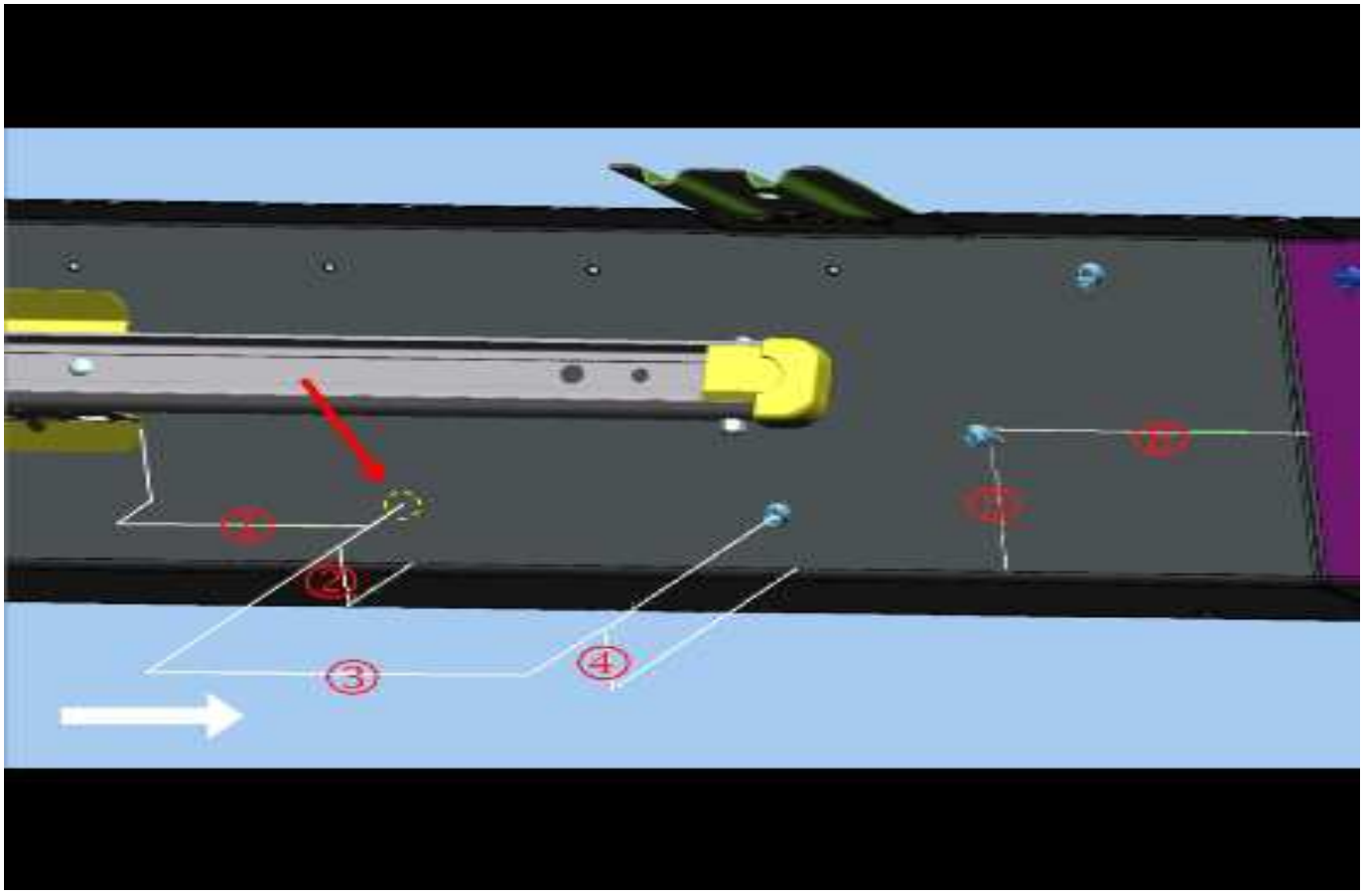
2.8. Cut off all of the tie strap ends and ensure the tie lock ends are positioned so they do not contact or damage the wire harnesses or nearby components.

Bracket Installation and Harness Routing – Driver Side



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The completed rerouting should look like that shown in the above graphics.



6252211

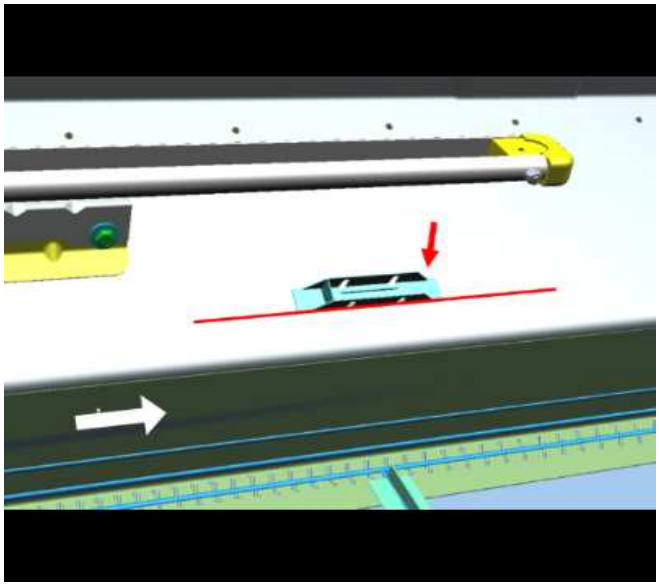
142 mm (5.6 in) (1)
45 mm (1.8 in) (2)
215 mm (8.5 in) (3)
45 mm (1.8 in) (4)
103 mm (4 in) (5)
180 mm (7 in) (6)

1. Drill the new mounting bracket, and wire harness support locations, then attach the bracket and supports, following the steps below and the dimensions noted above.

Note: It is only necessary to locate the dimensions of the rear mounting hole noted by arrow in graphic above. The forward hole can be located and marked using the new bracket as a template, when the rear attachment point is placed in the newly drilled hole.

1.1. Starting at the LH side of the cargo area, mark the new bracket **rear** mounting location, using a punch and following the dimensions (1) & (2) noted above.

1.2. Using a drill stop set to 12.7 mm (0.50 in) and a 17/64” **17/64 in** drill bit, drill the rear mounting hole.

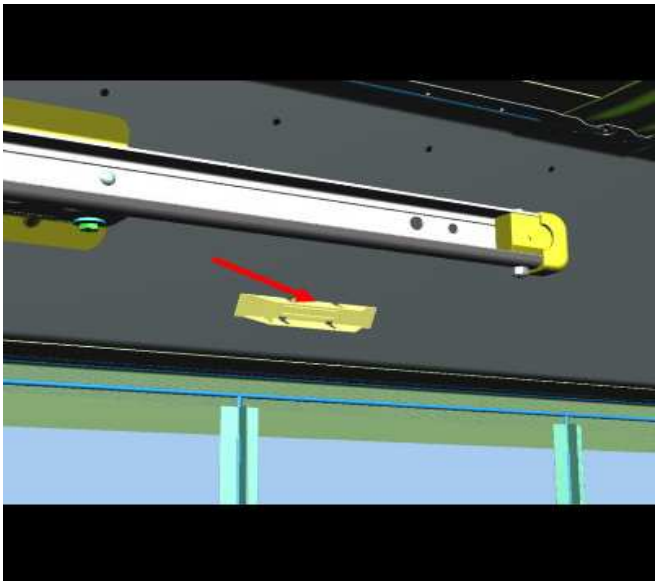


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Note: The bracket much be positioned so the open area of the bracket is pointing toward the front of the vehicle to allow for the antennae wiring harness to made with the antenna.

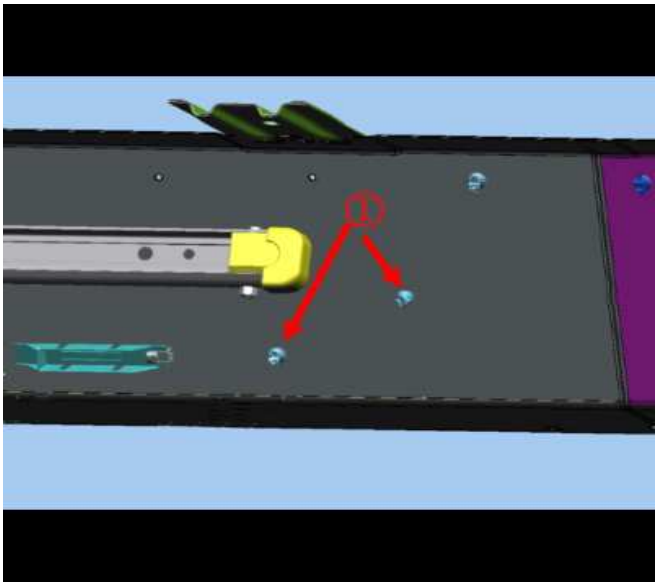
1.3. Position the bracket so the rearward retainer of the bracket is centered in the newly drilled hole and mark the position of the **forward** Ensure the bracket is positioned so that it sits parallel with the leading edge of the lower roof rail and mark the forward mounting hole

1.4. Using a drill stop set to 12.7 mm (0.50 in) and a **17/64 in** drill bit, drill the forward mounting hole.



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1.5. Place the bracket into the newly drilled mounting holes and push firmly to secure the bracket to the roof rail



6252223

1.6. Mark the position of the wire harness supports (1) using the dimensions (3), (4), (5) & (6) noted at the start of the procedure.

1.7. Using a drill stop set to 12.7 mm (0.50 in) change the drill bit to **1/4 in** and drill the 2 harness support mounting holes (1)

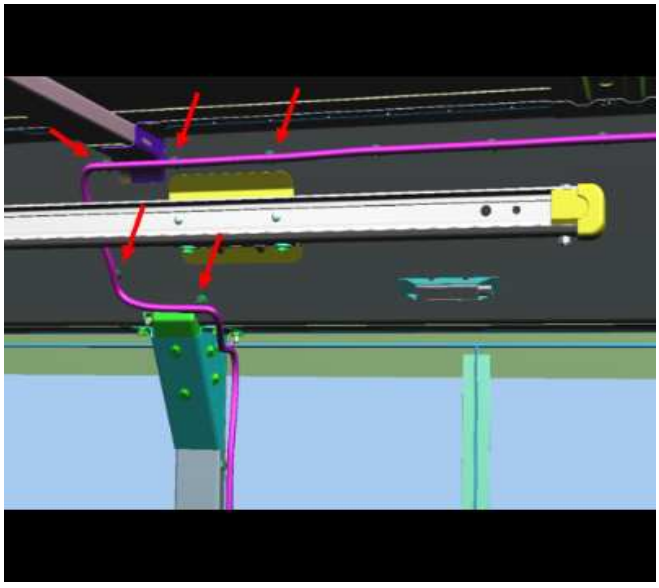
2. Disengage the harness retainers from the vertical support rail, reroute the harness and install the antenna, following the steps below:



6252214

Note: The retainers that were disengaged from the vertical support can be removed from both the wire harness and body, and then discarded.

2.1. Starting from the floor area, disengage all of the harness retainers from the vertical support rail.



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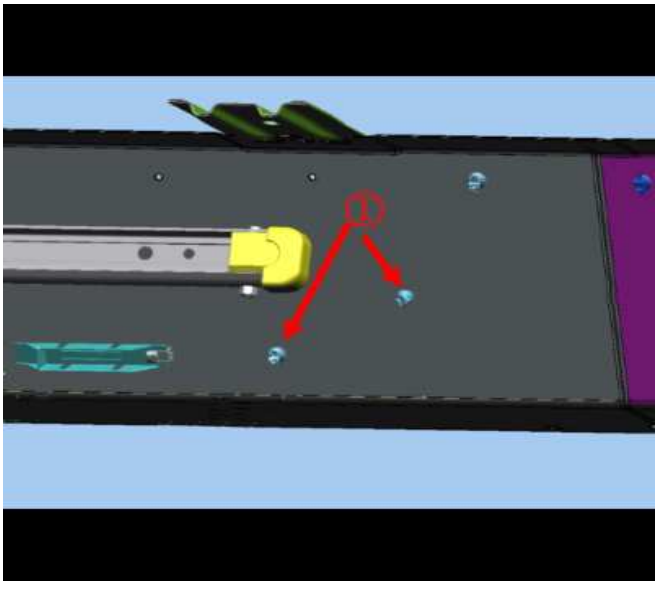


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2.2. Disengage the wire harness retainers from the upper roof rail at the locations shown above.

2.3. Route the harness under the rear door track and position the connector close to the newly mounted antenna bracket.

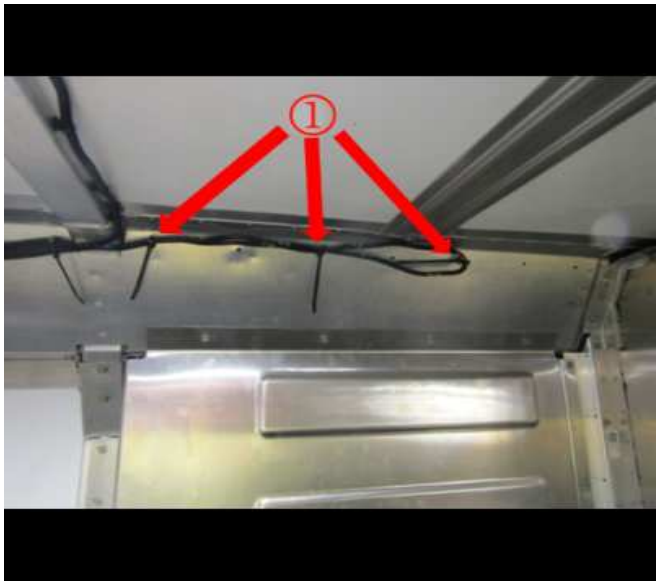
2.4. Connect the antenna connector to the antenna and firmly mount the antenna to the newly mounted bracket. Ensure the antenna is fully engaged to the retainers.



6252217

2.5. Install the tie straps with rose buds (GM P/N 19130464) into the harness support mounting holes (1).

2.6. Secure the antenna wiring harness onto the tie straps, making sure the harness is not pulling tightly on the antenna connector.



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2.7. Install 4 tie straps with rose buds into the existing holes in the forward section of the body (1) and then loop the wiring harness into position.



6252220

Note: Ensure the harness is routed and secured so that the harness does not contact any surrounding components and does not create any stress on the wires themselves.

2.8. Secure the remaining section of the antenna wire harness to the existing harness at each of the harness mounting locations using standard tie straps. The tie straps securing the wire harness should be placed as close as possible to the existing wire harness retainers.



6252221

2.9. Cut off all of the tie strap ends and ensure the tie lock ends are positioned so they do not contact or damage the wire harnesses or nearby components.

Parts Information

Causal Part	Description	Part Number	Qty
N/A	DEADENER, RF PNL FRT	84190291	1
	BRACKET-IGN LK KEY XMTR ANT	22981745	2
	STRAP, TIE, 7" W/ROSEBUD	19130464	6
	STRAP, TIE	11509086	19

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6486218*	Relocate Both Low Frequency Rear Compartment Antenna Modules	1.2 hr
*This is a unique Labor Operation for Bulletin use only.		

Version	1
Modified	Released February 03, 2023

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.

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