

May 2023
FL957A-D
NHTSA #22V-762 (School Bus)
Transport Canada #2022-577 (School Bus)

Subject: Thomas Built Bus Roof Sheet Joint

Models Affected: Specific model years 2011-2023 Thomas Built EFX and HDX school buses manufactured March 1, 2010, through August 1, 2022.

General Information

Daimler Truck North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses, has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

On the affected vehicles, the adhesive may not have been properly applied in between the steel panels that form the roof sheet lap joints. A body joint on a school bus with insufficient strength may increase the risk of injury in the event of a crash without prior warning.

A Daimler Truck North America authorized service facility will add additional mechanical fasteners to the joints on affected vehicles. The Recall will take approximately five hours and will be performed free of charge.

There are approximately 17,916 vehicles involved in this campaign.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions.

Replacement Parts

Replacement parts are now available and can be obtained by ordering the kit and/or part number(s) listed below from your facing Parts Distribution Center.

NOTE: One reusable fixture kit TBB 240564 is required for campaign completion. Order allocation of Qty = 1 per dealer. If additional kit is needed, contact the Customer Assistance Center at 1-855-639-8686, from 8 a.m. to 5 p.m. Eastern time, Monday through Friday.

If our records show your dealership has ordered any vehicle(s) involved in campaign number FL957, a list of the customers and vehicle identification numbers will be available on DTNA Portal. Please refer to this list when ordering parts for this recall.

Table 1 - Replacement Parts for FL957

Campaign Number	Part Description	Part Number	Qty.
FL957A-D	SCREW TAPPING NO.12	TBB 69003250	1 pack (400pcs)

Table 1

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

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Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
FL957A	Repair joints/seams 7, 8, 9 with A/C	4.0	996-R202A	12-Repair Recall/Campaign
FL957B	Repair joints/seams 7, 8, 9 without A/C	2.5	996-R202B	12-Repair Recall/Campaign
FL957C	Repair joints/seams 10, 11, 12 with A/C	5.0	996-R202C	12-Repair Recall/Campaign
FL957D	Repair joints/seams 10, 11, 12 without A/C	3.5	996-R202D	12-Repair Recall/Campaign

Table 2

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

- Claim type is **Recall Campaign**.
- In the Campaign field, enter the campaign number and appropriate condition code (e.g. **FL957-A, FL957-B, etc.**).
- In the Primary Failed Part Number field, enter **25-FL957-000**.
- In the Parts field, enter the appropriate kit or part number(s) as shown in the Replacement Parts Table.
- In the Labor field, enter the appropriate SRT from the Labor Allowance Table.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- **U.S. and Canada -- Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines.)
 - Submit an OWL Recall Pre-Approval Request for a decision.
 - Include the approved amount on your claim in the Other Charges section.
 - Attach the documentation to the pre-approval request.
 - If approved, submit a based on claim for the pre-approval.
 - Reimburse the customer the appropriate amount.

IMPORTANT: OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

U.S. and Canadian dealers, contact the Warranty Campaigns Department using WSC app located on DTNA Portal, if you have any questions or need additional information. Export distributors, submit a Web inquiry or contact your International Service Manager.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number. Export Distributors: Excess inventory is not returnable.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

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Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

May 2023
FL957A-D
Transport Canada #2022-577 (School Bus)

Copy of Notice to Owners

Subject: Thomas Built Bus Roof Sheet Joint

For the Notice to Canadian Customers: This notice is sent to you in accordance with the requirements of the Motor Vehicle Safety Act. This is to inform you that your vehicle may contain a defect that could affect the safety of a person.

Daimler Truck North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses, has decided that a defect which relates to motor vehicle safety exists in certain model years 2011-2023 Thomas Built EFX and HDX school buses manufactured March 1, 2010, through August 1, 2022.

On the affected vehicles, the adhesive may not have been properly applied in between the steel panels that forms the roof sheet lap joints. A body joint on a school bus with insufficient strength may increase the risk of injury in the event of a crash without prior warning.

A Daimler Truck North America authorized service facility will add additional mechanical fasteners to the joints on affected vehicles. The Recall will take approximately five hours and will be performed free of charge.

Please contact an authorized Daimler Truck North America dealer to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at <https://northamerica.daimlertruck.com/contact-us>. Scroll down to "Locate a Dealer" and select the appropriate brand. You may also confirm your vehicle's involvement in this recall at the following URL: <https://dtna-dlrinfo.prd.freightliner.com:48518/VinLookup/vin-module/getVinLookupPage>.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimlertruck.com. For other concerns, you may contact the Customer Assistance Center at (800) 385-4357. For other concerns, you may contact the Customer Assistance Center at (800) 385-4357. If you have a safety concern relating to this Recall, you may wish to contact Transport Canada – Motor Vehicle Safety at, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or phone (800) 333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

May 2023
FL957A-D
NHTSA #22V-762 (School Bus)

Copy of Notice to Owners

Subject: Thomas Built Bus Roof Sheet Joint

For the Notice to U.S. Customers: This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. This is to inform you that your vehicle may contain a defect that could affect the safety of a person.

Daimler Truck North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses, has decided that that certain model year 2011-2023 Thomas Built EFX and HDX school buses manufactured March 1, 2010, through August 1, 2022, fail to conform to the Federal Motor Vehicle Safety Standard No. 221 "School bus body joint strength."

On the affected vehicles, the adhesive may not have been properly applied in between the steel panels that forms the roof sheet lap joints. A body joint on a school bus with insufficient strength may increase the risk of injury in the event of a crash without prior warning.

A Daimler Truck North America authorized service facility will add additional mechanical fasteners to the joints on affected vehicles. The Recall will take approximately five hours and will be performed free of charge.

Please contact an authorized Daimler Truck North America dealer to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at <https://northamerica.daimlertruck.com/contact-us>. Scroll down to "Locate a Dealer" and select the appropriate brand. You may also confirm your vehicle's involvement in this recall at the following URL: <https://dtna-dlrinfo.prd.freightliner.com:48518/VinLookup/vin-module/getVinLookupPage>.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimlertruck.com. For other concerns, you may contact the Customer Assistance Center at (800) 385-4357. If your dealer fails to remedy the defect without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or go to <http://www.nhtsa.gov>.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

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Reimbursement to Customers for Repairs Performed Prior to Recall

If you have already **paid** to have this recall condition corrected you may be eligible to receive reimbursement.

Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by an authorized Daimler Truck North America LLC dealer. The following documentation must be presented to your dealer for consideration for reimbursement.

Please provide original or clear copies of all receipts, invoices, and repair orders that show:

- The name and address of the person who paid for the repair
- The Vehicle Identification Number (VIN) of the vehicle that was repaired
- What problem occurred, what repair was done, when the repair was done
- Who repaired the vehicle
- The total cost of the repair expense that is being claimed
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt)

Reimbursement will be made by check from your Daimler Truck North America LLC dealer.

Please speak with your Daimler Truck North America LLC authorized dealer concerning this matter.

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Work Instructions

Subject: Thomas Built Bus Roof Sheet Joint

Models Affected: Specific model years 2011-2023 school buses manufactured March 1, 2010, through August 1, 2022.

Roof Joint Repair

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

NOTE: The main power disconnect switch (MPDS) is located in the battery box compartment.

2. Turn the MPDS to the OFF position.

3. Disconnect the negative battery cables at the batteries.

NOTE: One reusable fixture kit TBB 240564 is required for campaign completion. Order allocation of Qty = 1 per dealer. If additional kit is needed, contact the Customer Assistance Center at 1-855-639-8686, from 8 a.m. to 5 p.m. Eastern time, Monday through Friday.

4. A marking fixture (template) is used for each type of roof joint repair to locate the position of the additional screws. The three different fixtures, and their applications are listed in [Table 3](#).

Fixture Types and their Applications			
Fixture #	Part Number	Application	Figure Reference
Fixture Kit	TBB 240564	Kit Includes: Fixture A, B, and C	—
Fixture A	TBB 240418	Used for Standard/Typical Roof Joint	Fig. 1
Fixture B	TBB 242524	Used for Roof Hatch Joint with One Hole between the Centerline of Vehicle	Fig. 2
Fixture C	TBB 242525	Used for Roof Hatch Joint with Two Holes straddling the Centerline of Vehicle	Fig. 3

Table 3, Fixture Types and their Applications

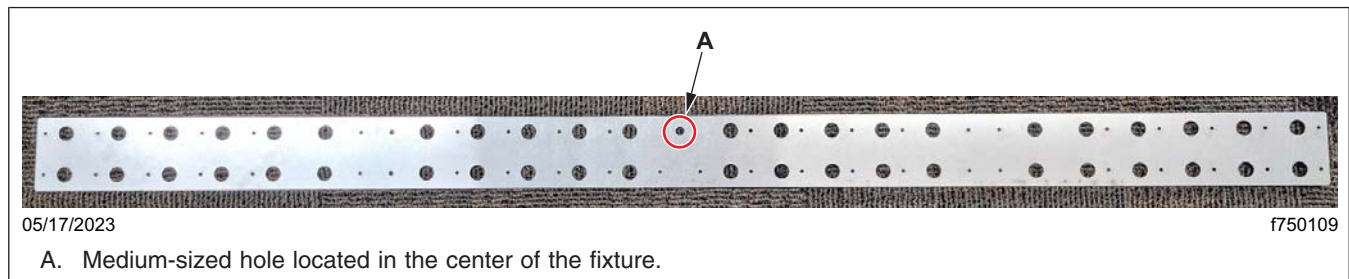


Fig. 1, Fixture A

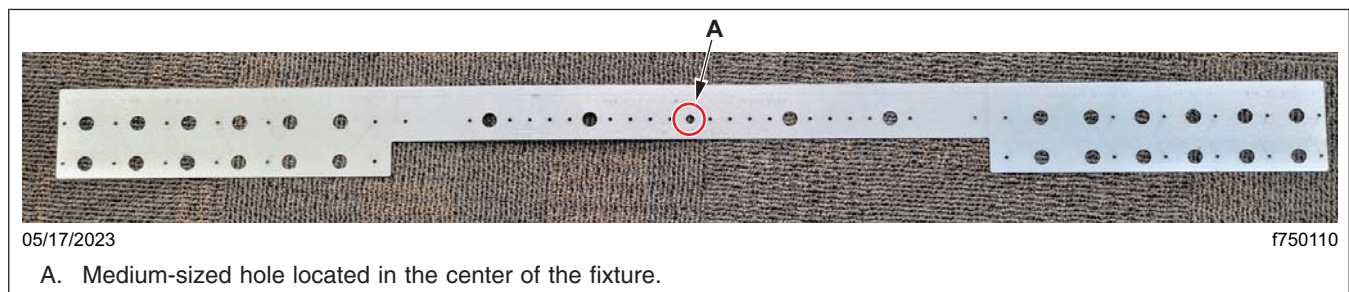
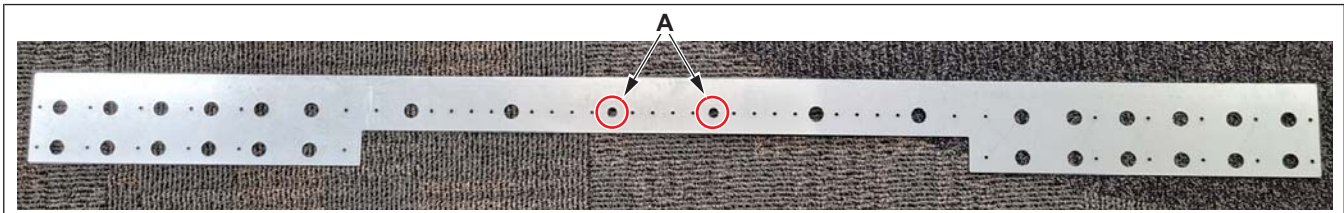


Fig. 2, Fixture B

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A. Two medium-sized holes located in the center of the fixture.

Fig. 3, Fixture C

5. If equipped with a roof-top air-conditioning (A/C) system, as shown in [Fig. 4](#), remove the A/C condenser unit to access the roof joint for repair.

Is the vehicle equipped with a roof-top A/C system?

YES → Follow steps 6 through 10 to remove the roof-top A/C unit.

NO → Proceed to step 11.



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Fig. 4, Vehicle Equipped with Factory-Installed Roof-Top A/C Unit

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NOTE: The instructions for the roof-top A/C unit disconnection and removal are for a typical unit. Depending on the configuration of the vehicle being repaired, the instructions may slightly vary.

6. Remove the A/C roof-top guard, if so equipped.
7. Remove the six mounting screws that hold the plastic condenser cover in place. Set the cover aside.
8. Remove the ten Huck rivets that secure the condenser to the roof. See [Fig. 5](#).
9. Loosen the putty that seals the unit to the roof. See [Fig. 6](#).

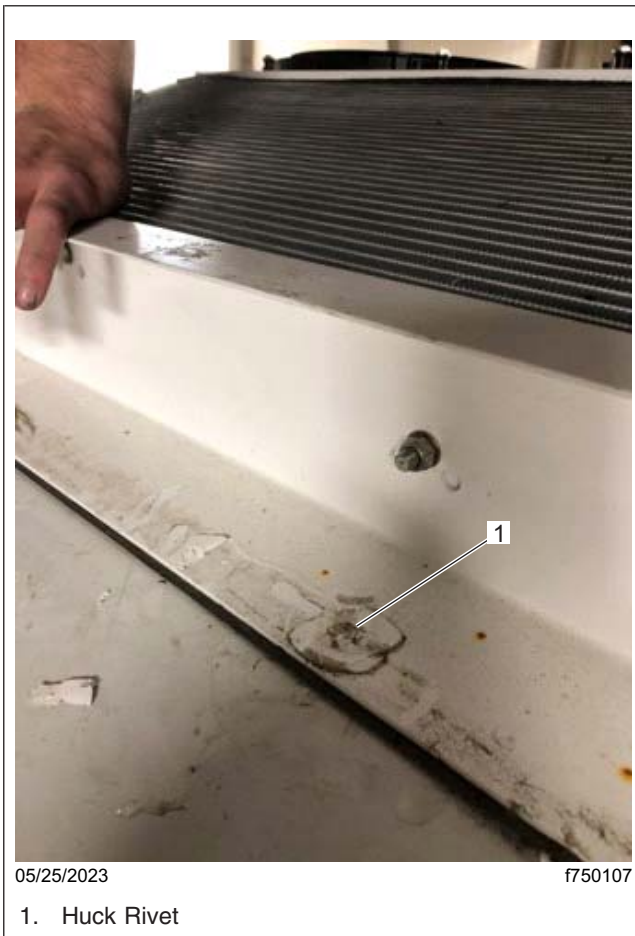


Fig. 5, Roof-Top A/C Secured with Huck Rivets



Fig. 6, Roof-Top A/C Sealed with Putty

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10. Check if the A/C unit can be lifted and repositioned.

Can the A/C unit be lifted and repositioned?

YES → Lift and reposition the AC unit to access the roof joint.

NO → Evacuate the refrigerant, and disconnect the roof-top A/C plumbing, shown in [Fig. 7](#). Reposition the A/C unit to access the roof joint.



Fig. 7, Roof-Top A/C Plumbing

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11. To repair the standard roof joint, place the fixture A over the center rivet of the roof joint on the vehicle, as shown in **Fig. 8**.
12. The center rivet should fit securely in the medium-sized hole, located near the center of each fixture, as shown in **Fig. 9**.

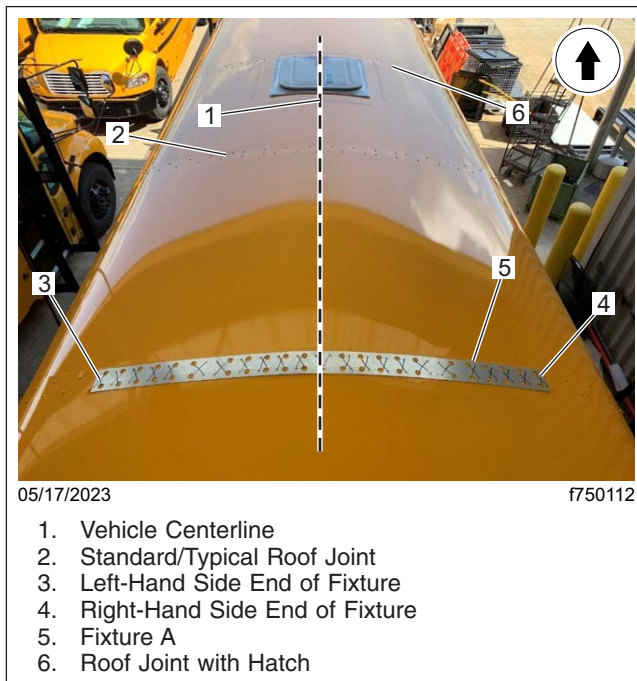


Fig. 8, Standard Joint Repair

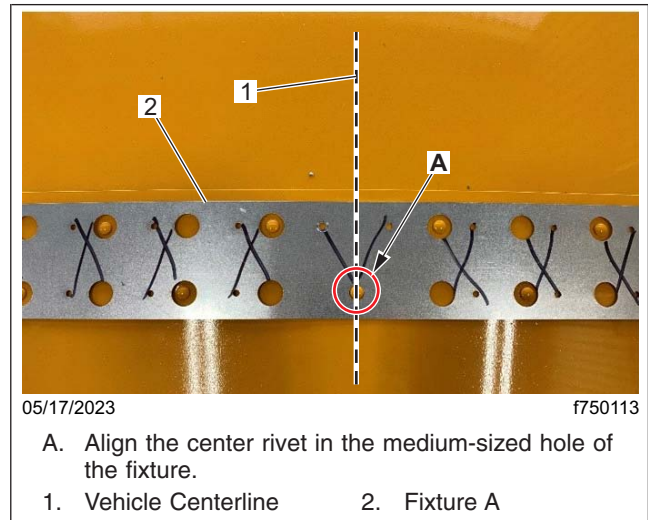


Fig. 9, Aligning the Center Rivet, Fixture A

NOTE: Some rivets may not be fitted in the exact center.

13. Adjust the left-hand side and right-hand side ends of the fixture to align with the rivets.
14. Secure the fixture to the roof using duct tape to prevent movement of the fixture while marking the new hole locations. Make sure not to cover any holes on the fixture with duct tape.

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NOTICE

Do not mark every hole on the fixture. Mark only the holes identified by yellow circles in [Fig. 10](#) and [Fig. 11](#).

IMPORTANT: A standard joint should have 28 pilot hole marks.

15. Once the fixture is secured in place, locate the rivets, and follow the arrows shown in [Fig. 10](#) to identify the marking locations. Use a Sharpie marker to mark the pilot holes for drilling the holes in the roof.

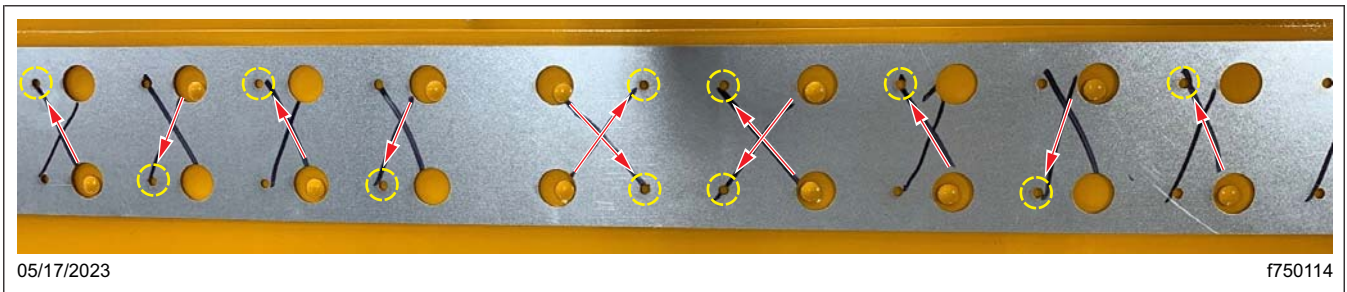


Fig. 10, Identifying the Marking Locations



Fig. 11, Pilot Hole Locations

16. The center rivet has two marked locations, connected by lines. See [Fig. 12](#).

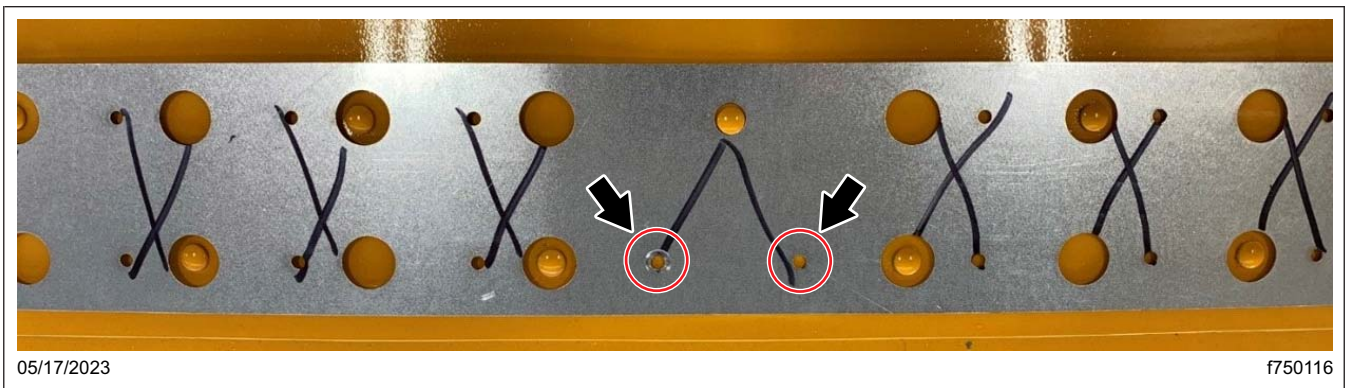


Fig. 12, Two Marked Locations Connected to the Center Rivet

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17. Once all pilot holes are marked, remove the fixture. Make sure the number of markings is equal to 28.
18. Use a 3/16-inch drill bit and a drill stopper along with a corded drill to drill 1/2-inch deep holes in all the marked locations. See [Fig. 13](#).

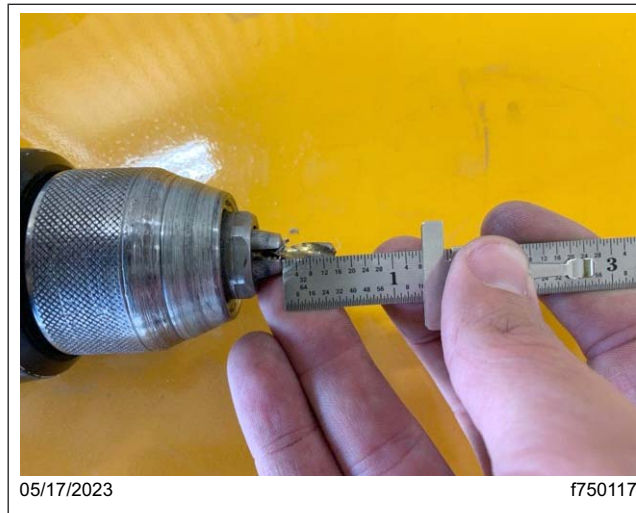


Fig. 13, Corded Drill with 3/16-Inch Drill Bit

NOTICE

Care should be taken while cleaning. Do not damage the paint on the roof.

19. Remove any metal chips, and clean the drilled surface with a brush.
20. Install a screw in each pilot hole. See [Fig. 14](#). Verify that 28 screws are added per joint.



Fig. 14, Installing the Screws along the Joint

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21. Remove any metal chips, and clean the surface with a cloth. See [Fig. 15](#).



Fig. 15, Cleaned Surface

⚠ CAUTION

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

22. Re-paint or touch-up wherever required. See [Fig. 16](#).



Fig. 16, Paint and Brush

23. Add caulk on every gap between the roof sheets.

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IMPORTANT: Any eight-inch span of the seam should have a minimum of six fasteners (including rivets and screws), as shown in [Fig. 17](#). If the number of fasteners is less than six, add additional screws wherever required.

24. Repeat steps 11 through 23 to repair the other standard joints on the vehicle.

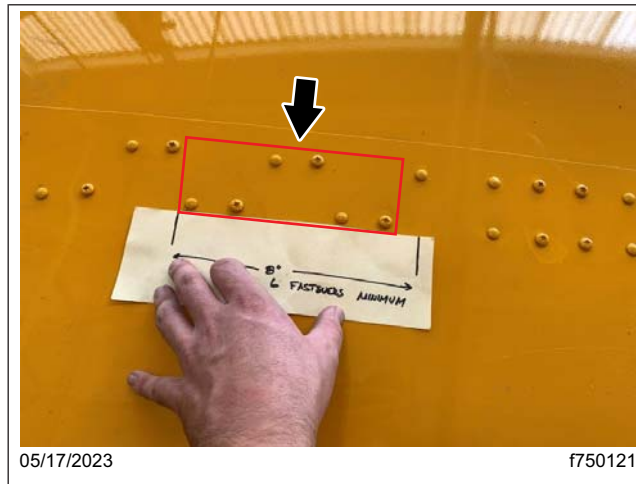


Fig. 17, Six Fasteners Installed in an Eight-Inch Span

25. Fixture B and fixture C are used to repair roof joints that have a roof hatch, as shown in [Fig. 18](#). Depending on the number of rivets at the centerline of the vehicle roof, the appropriate fixture is determined.

- If the roof joint has a single rivet at the centerline of the vehicle, use fixture B (TBB 242524).
- If the roof joint has two rivets straddling over the centerline of the vehicle, as shown in [Fig. 19](#), use fixture C (TBB 242525).

26. Position the appropriate fixture over the center rivet(s) of the roof joint on the vehicle. See [Fig. 18](#).

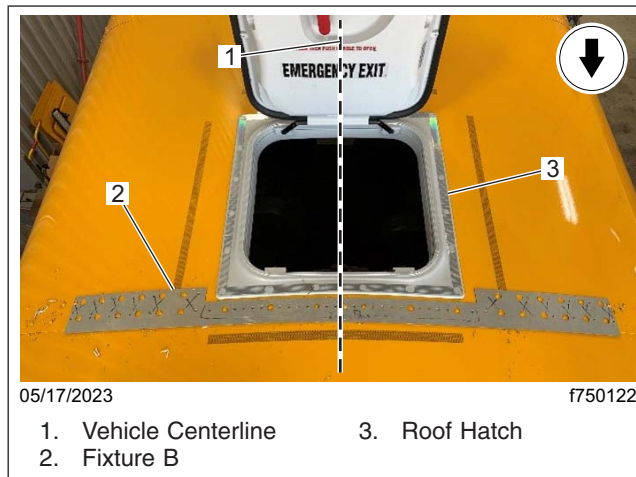


Fig. 18, Roof Hatch Joint Repair

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27. The center rivet(s) should fit securely in the medium-sized hole, located near the center of each fixture, as shown in **Fig. 19**.

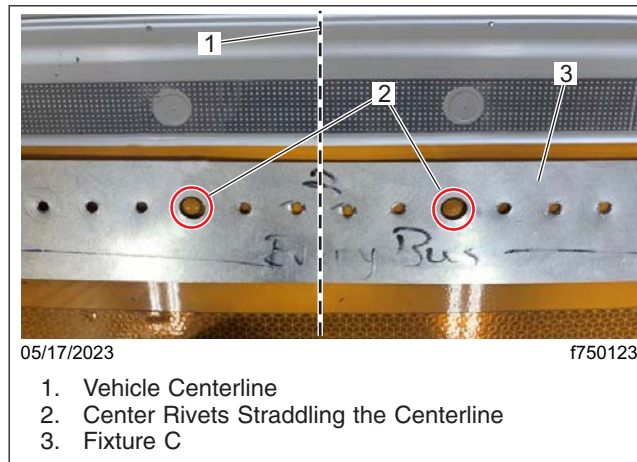


Fig. 19, Two Rivets Straddling the Centerline

NOTE: Some rivets may not be fitted in the exact center.

28. Adjust the left-hand side and right-hand side ends of the fixture to align with the rivets.

29. Secure the fixture to the roof using duct tape to prevent movement of the fixture while marking the new hole locations. Make sure not to cover any holes on the fixture with duct tape.

NOTICE

Do not mark every hole on the fixture. Mark only the holes identified by the arrows and the yellow rectangle in **Fig. 20.**

IMPORTANT: **Table 4** shows the number of pilot hole marks to be made for each fixture.

30. Once the fixture is secured in place, locate the rivets, and follow the arrows to identify the marking locations. See **Fig. 20**. Mark all pilot holes falling in the region identified by the yellow rectangle. Use a Sharpie marker to mark the pilot holes for drilling the holes in the roof.

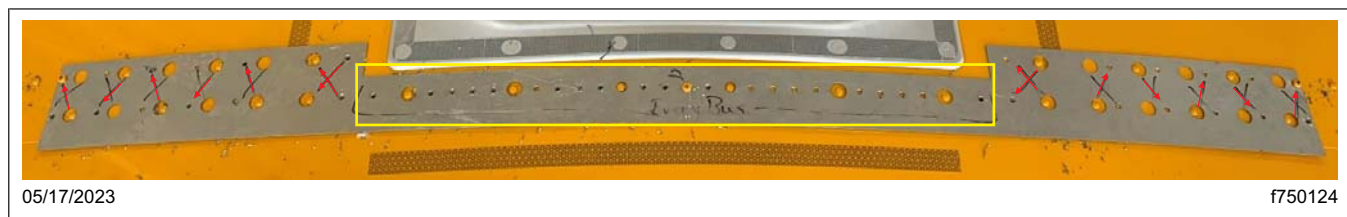


Fig. 20, Identifying the Marking Locations

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31. Mark all pilot holes in the region indicated by 'MARK EVERY PILOT HOLE WITHIN THIS RANGE.' See [Fig. 21](#) for fixture B, and [Fig. 22](#) for fixture C.

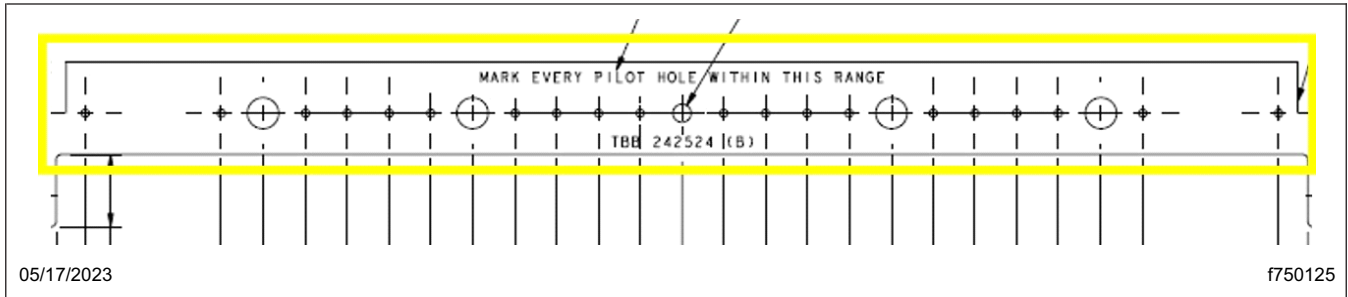


Fig. 21, Region Showing all Pilot Holes to be Marked, Fixture B

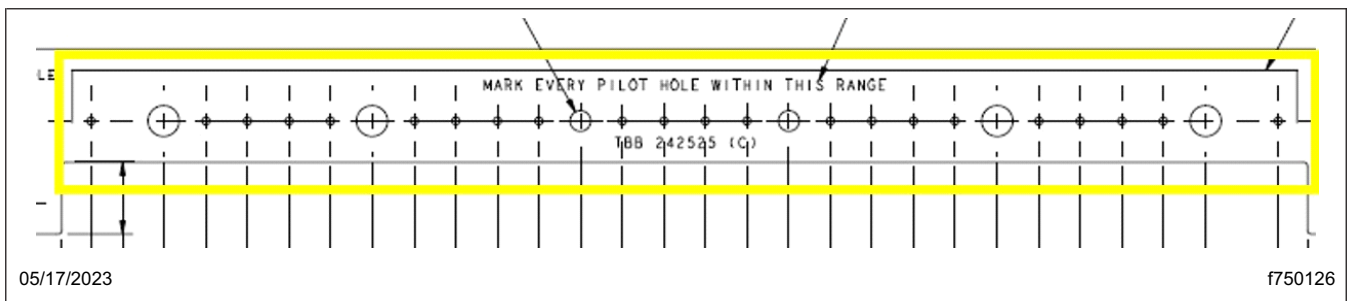


Fig. 22, Region Showing all Pilot Holes to be Marked, Fixture C

32. Once all pilot holes are marked, remove the fixture.
33. Use a 3/16-inch drill bit and a drill stopper along with a corded drill to drill 1/2-inch deep holes in all the marked locations. See [Fig. 13](#).

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NOTICE

While cleaning, be careful not to damage the paint on the roof.

- 34. Remove any metal chips, and clean the drilled surface with a brush.
- 35. Install a screw in each pilot hole, as shown in [Fig. 23](#). See [Table 4](#) for the number of screws to be added per joint.

Screw Usage		
Fixture #	Description	No. of Screws
Fixture B	Roof Hatch with One Hole on the Centerline	34
Fixture C	Roof Hatch with Two Holes straddling the Centerline	36

Table 4, Screw Usage

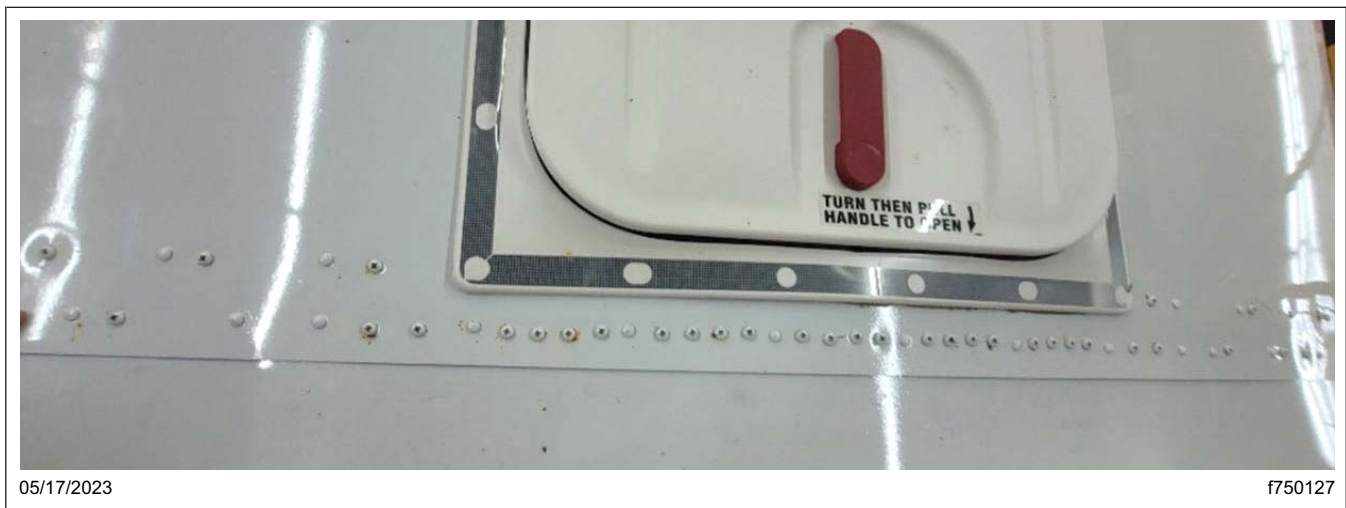


Fig. 23, Additional Screws Installed

- 36. Remove any metal chips, and clean the surface with a cloth.

⚠ CAUTION

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

- 37. Re-paint or touch-up wherever required. See [Fig. 16](#).
 - 38. Add caulk on every gap between the roof sheets.
- IMPORTANT:** Any eight-inch span of the seam should have a minimum of six fasteners (including rivets and screws), as shown in [Fig. 17](#). If the number of fasteners is less than six, add additional screws wherever required.
- 39. After all roof joints are repaired, install the A/C, if so equipped. Evacuate and recharge the refrigerant.
 - 40. Connect the negative battery cables to the battery.
 - 41. Turn the MPDS to the ON position. Repair complete.