

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

Subject: TBB HDX Battery Cables

Models Affected: Specific model year 2019-2023 Thomas Built Buses (TBB) HDX model buses, manufactured March 8, 2018, through March 24, 2022.

General Information

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

On certain TBB HDX model buses, the battery cables may chafe on the transmission oil cooler hoses, which can cause an electrical short circuit, increasing the risk of a fire.

The battery cable routing will be repaired to prevent contact with the transmission oil cooler hoses.

There are approximately 3,107 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 part number(s) listed below from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicle(s) involved in campaign number FL928, a list of the customers and vehicle identification numbers will be available on the DTNA Portal. Please refer to this list when ordering parts for this recall.

Table 1 - Replacement Parts for FL928

Campaign Number	Part Number	Part Description	Qty. per VIN
FL928 AB	TYC DCT110HIR	TIE STRAP	14
	23-12886-001	MOUNT-DUAL SWIVEL SADDLE SZ4	6
	23-13476-000	CLAMP-CA TIE 4.13X15IN 0.5W	14
	DK 016 0020	4/0 BATTERY CABLE CL	2

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.

January 2023
 FL928 AB
 NHTSA #22V-271 (School Bus)
 NHTSA #22V-272 (Non-School Bus)
 Transport Canada #2022-207 (School Bus)
 Transport Canada #2022-208 (Non-School Bus)

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
FL928 AB	Reroute battery cables and trans cooler lines	0.5	996-R164A	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 (**FL928-A, FL928-B, etc.**).
- In the Primary Failed Part Number field, enter **25-FL928-000**.
- In the Parts field, enter the appropriate 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.

U.S. and Canadian dealers, contact the Warranty Campaigns Department via a WSC (Wty Support Ctr) ticket on the 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.

**January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)**

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.

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

Copy of Notice to Owners

Subject: TBB HDX Battery Cables

For the Notice to U.S. Customers: This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. **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 (TBB), has decided that a defect which relates to motor vehicle safety exists in certain TBB model years 2019-2023, HDX model school and commercial buses, manufactured March 8, 2018, through March 24, 2022.

On certain TBB HDX model school and commercial buses, the battery cables may chafe on the transmission oil cooler hoses, which can cause an electrical short circuit, increasing the risk of a fire.

The battery cable routing will be repaired to prevent contact with the transmission oil cooler hoses. Repairs will be performed by Daimler Truck North America authorized service facilities.

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. The Recall will take approximately one hour and will be performed at no charge to you.

To locate an authorized dealer, search online at 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 online at dtna-dlrinto.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 in the postage-paid envelope 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 the Notice to U.S. Customers:** If you are not able to have the defect remedied 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>. **For the Notice to Canadian Customers:** If you wish to submit a complaint about this recall, you can contact Transport Canada road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call (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

January 2023

FL928 AB

NHTSA #22V-271 (School Bus)

NHTSA #22V-272 (Non-School Bus)

Transport Canada #2022-207 (School Bus)

Transport Canada #2022-208 (Non-School Bus)

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.

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

Work Instructions

Subject: TBB HDX Battery Cables

Models Affected: Specific model year 2019-2023 Thomas Built Buses (TBB) HDX model buses, manufactured March 8, 2018, through March 24, 2022.

Routing & Clipping of Power Cables & Transmission Cooler Hoses

NOTE: The affected population for this recall includes vehicles with both Cummins and Detroit Diesel engines, integrated with Allison 2000-series and 3000-series transmissions. The work instructions are predominantly identical for all, unless mentioned otherwise.

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.
4. Open the engine compartment door.

 **WARNING**

Do not use bottle jacks to raise the vehicle. Always use floor jacks. Bottle jacks can slip, allowing the vehicle to fall, which could result in damage to the axle, serious injury, or death.

5. Raise the vehicle, and support it with appropriate jack stands.

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

NOTE: The transmission cooler hoses and the power cables are located under the rear of the vehicle.

6. Inspect for any blemishes caused due to interference (rubbing) between the power cables and the transmission cooler hoses. See [Fig. 1](#) and [Fig. 2](#).



Fig. 1, Blemishes on the Power Cables and the Cooler Hoses

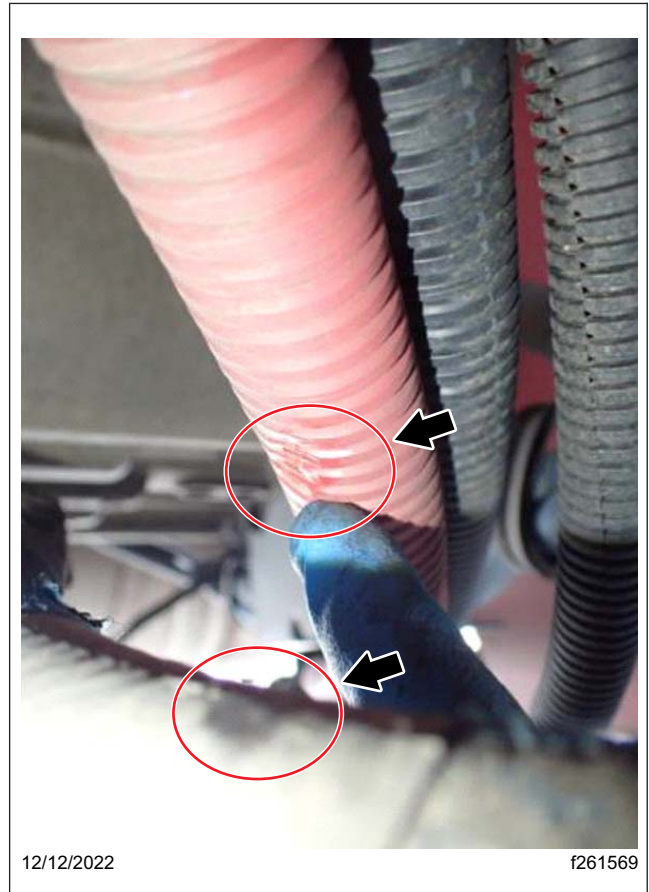


Fig. 2, Blemishes on the Power Cables and the Cooler Hoses

NOTE: Excessive movement of cables and hoses can lead to unwanted cable chaffing due to the vibration.

7. Inspect the power cables and the transmission cooler hoses for excessive movement.
8. Perform a pull-push test to check the amount of movement available to cables. Grip the cables firmly and check for excessive movement, if any.
9. If required, secure the cables with the help of cable ties. For instructions regarding routing and clipping of the cables, see **Thomas Built Buses Service Bulletin 00-008 - Routing and Clipping Tips for Extending School Bus Life**.

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

10. **Figure 3** and **Figure 4** show the ideal positioning of the power cables, clamps, and transmission cooler hoses.

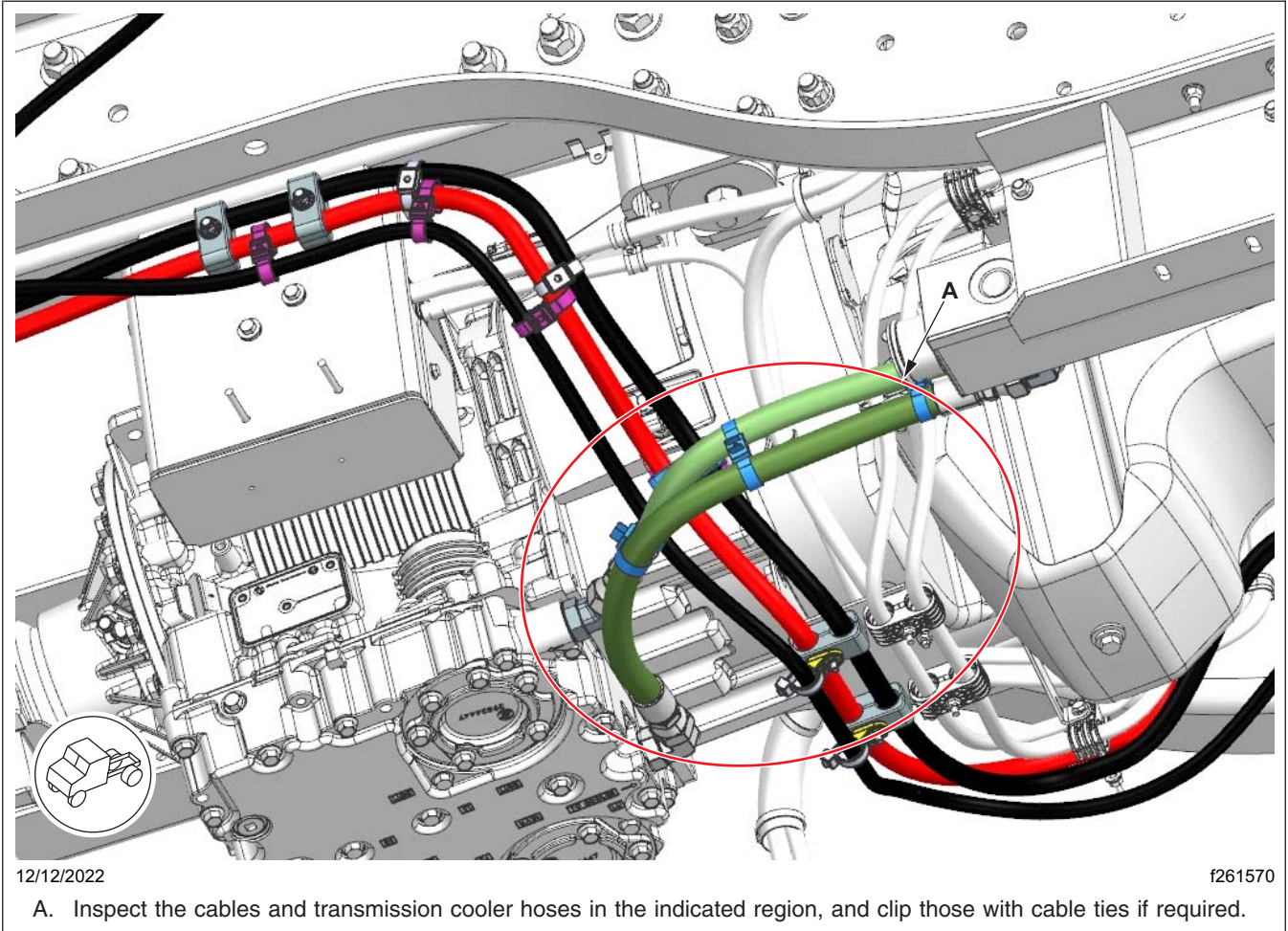


Fig. 3, Ideal Positioning of the Cables, Clamps, and Hoses

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

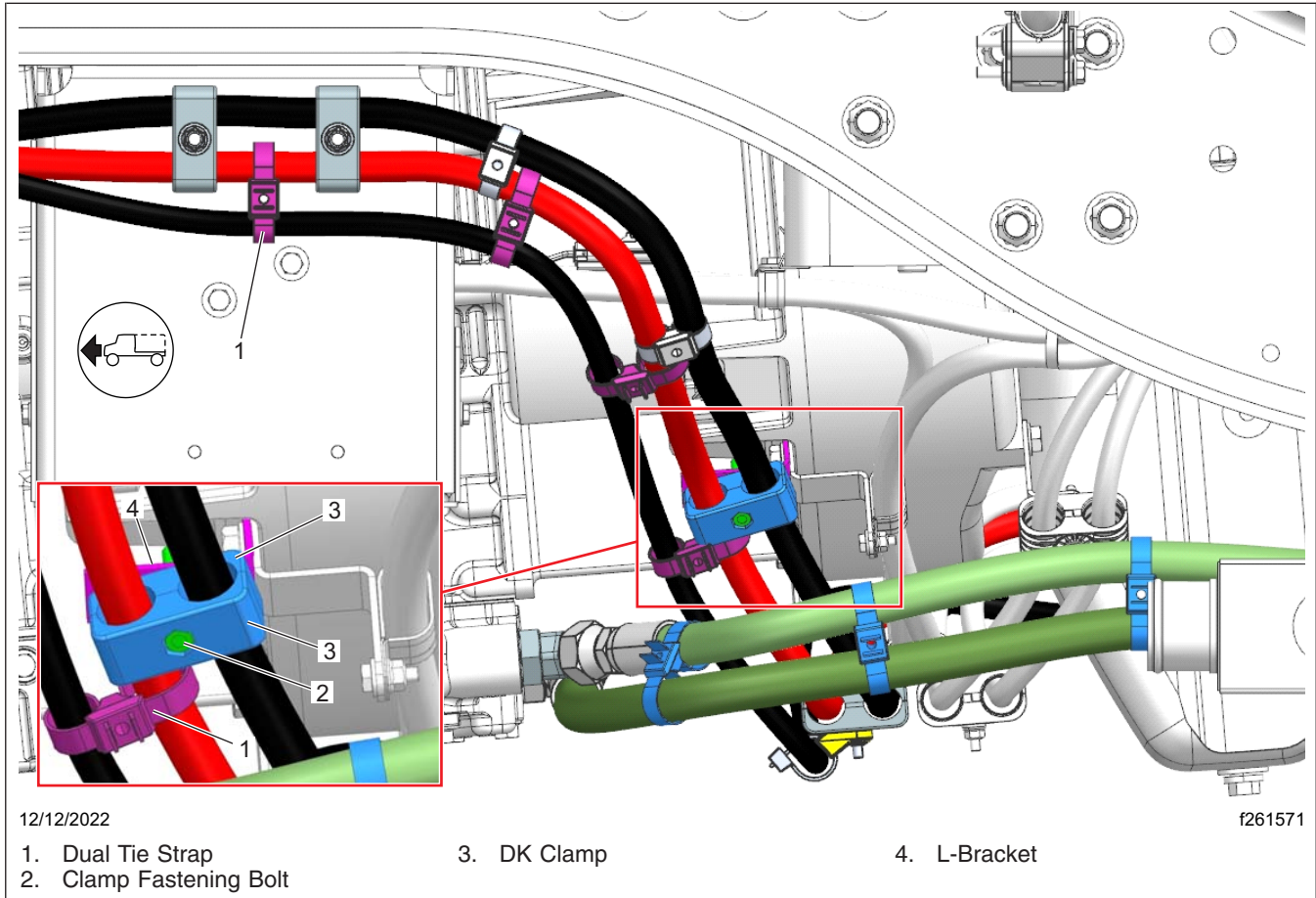


Fig. 4, Clipping the Cables and Hoses

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

11. *For vehicles equipped with an Allision 3000-series transmission:*

If so equipped, remove and discard the clamp securing the transmission cooler hoses, shown in **Fig. 5**, by removing the mounting fastener.

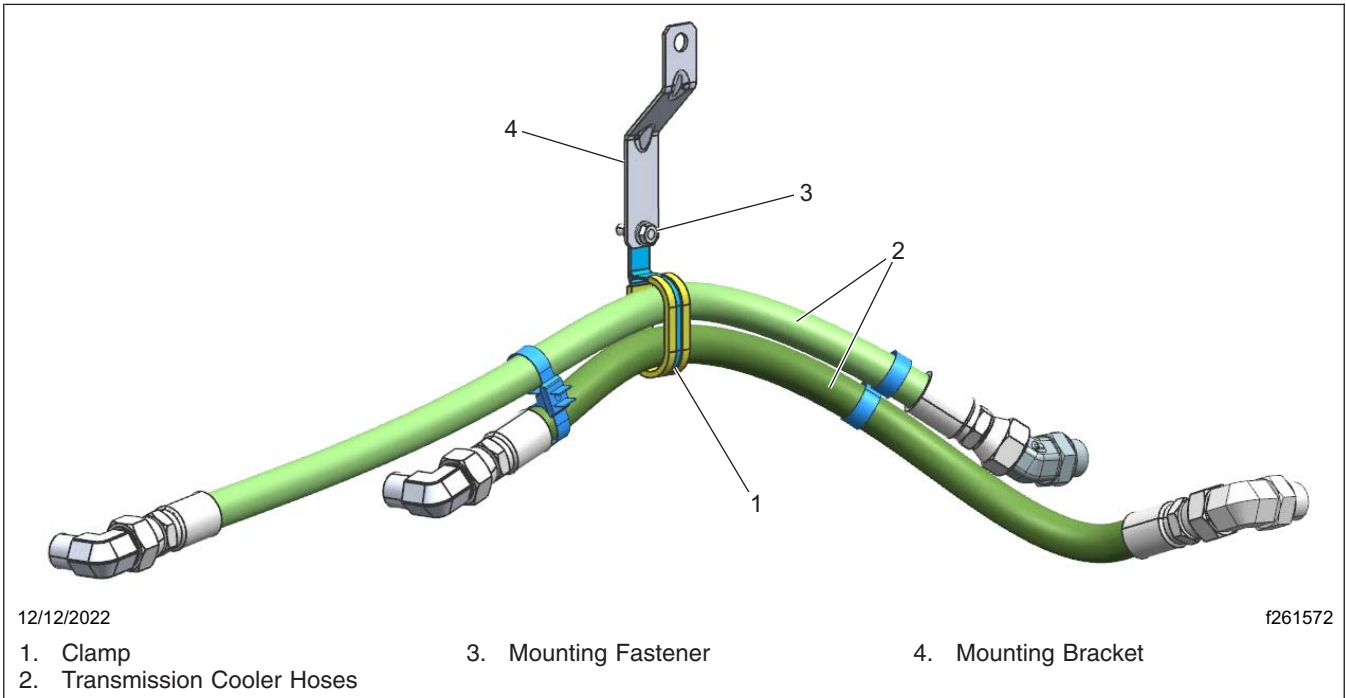


Fig. 5, Transmission Cooler Hose Clamp Removal

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

NOTE: Removing the clamp allows the adjustment of the transmission cooler hoses as instructed in step 12.

12. If necessary, loosen the transmission cooler hose fittings at the transmission, then position the hoses to maintain clearance between the hose and the hose fitting as shown in **Fig. 6**.

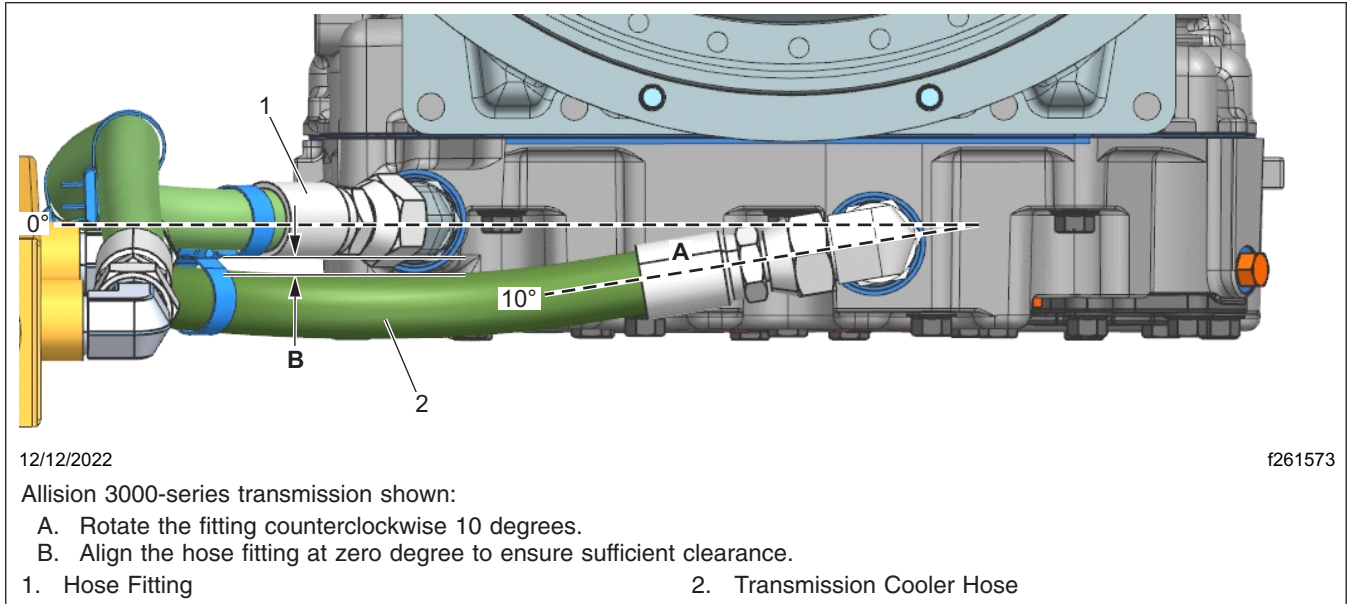


Fig. 6, Maintaining Clearance between the Hose and the Hose Fitting
(Allision 3000-series transmission shown)

January 2023
FL928 AB
NHTSA #22V-271 (School Bus)
NHTSA #22V-272 (Non-School Bus)
Transport Canada #2022-207 (School Bus)
Transport Canada #2022-208 (Non-School Bus)

13. **For vehicles equipped with an Allison 2000-series transmission:**

Route and secure the cooler hoses as shown in [Fig. 7](#).

14. If necessary, loosen the transmission cooler hose fittings, and rotate the hoses slightly to ensure zero contact between the power cables and the cooler hoses.

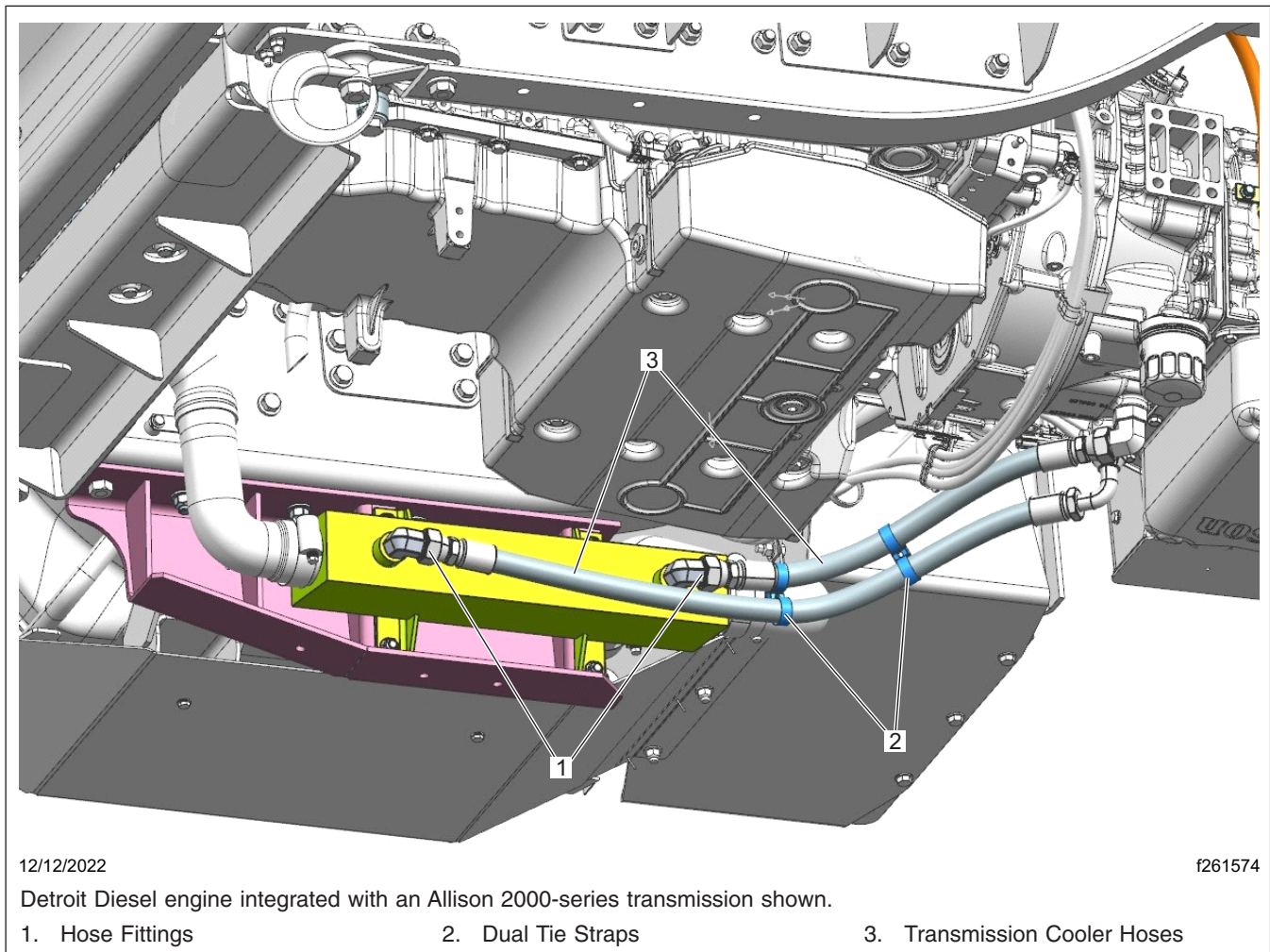


Fig. 7, Securing the Transmission Cooler Hoses
(Detroit Diesel engine integrated with an Allison 2000-series transmission shown)

15. Connect the negative battery cables at the batteries.
16. Turn the MPDS to the ON position.
17. Start the engine to verify the repair.