

SF706 A-B

Creation Date: February 2026

Cascadia Axle Conversion: Adaptive Tandem (AT) 6x4 to New Final Drive (NFD)

Models Affected					
Make	Model	Model Year Start	Model Year End	Production Start Date	Production End Date
Freightliner	Cascadia	2021	2024	02/24/2020	02/02/2023

General Information

On behalf of the entity listed below, Daimler Truck North America LLC (DTNA), is initiating Field Service Campaign SF706 to modify the affected vehicles.

- Freightliner Trucks Division

PROBLEM: Due to discontinued production, certain vehicles with an Adaptive Tandem (AT) 6x4 axle configuration will no longer be supported with service documentation and service parts.

SOLUTION: The vehicles will be retrofitted, replacing the AT 6x4 axle configuration with New Final Drive (NFD) axles and supporting parts.

There are approximately 63 vehicles involved.

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.

Please contact Warranty Campaigns for consideration of additional charges prior to performing the repair.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR261).

Replacement Parts

NOTE: Do not order parts. DTNA will coordinate the shipment of axles and kits to each repair location after confirming with the dealer and/or their DSM the specific locations where customers will be and the timing of their visits.

If our records show your dealership has ordered any vehicle(s) involved in campaign SF706, a list of the customers and vehicle identification numbers will be available on the DTNA Portal via OWL.

Important – After Repair is Complete:

Attach a red completion sticker (WAR261) to the base label (WAR259).

If the vehicle does not have a base label, clean a spot on the appropriate location and attach a base label prior to attaching the completion sticker.

Failure to install a completion sticker may result in a chargeback of the campaign claim.

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Table 1 – Parts Table

Groups	Part/Kit Numbers	Part/Kit Descriptions	Qty	Note
A-B	Various	Axles & Part Kits Provided by DTNA	Various	Do Not Order (DTNA will arrange shipment.)
	WAR261	Blank Completion Sticker	1	

Removed Axles and Other Parts

- **Axles must be returned to a Detroit Reman Consolidation Center (Reman West).**
- Do not destroy the box/pallet as it may be used for return shipping.
- **Return Address:**
 Detroit Diesel Remanufacturing
 135 South Lodestone Way
 Tooele UT 84074
- For all other parts: U.S. and Canadian Dealers, use the part disposition to determine how to manage removed parts (return, scrap, etc.). Dispositions are available at the date of the repair.

Claim Reimbursement – Labor Allowance

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

You will be reimbursed for your parts, labor, and handling by submitting your claim through the warranty system within 30 days of completing this campaign.

- In OWL, use the 'Retrieve' function and select the appropriate procedure. This will auto-populate the PFP, component code, cause, corrective action, and SRT code(s).

Table 2 – Claim Reimbursement Table

Claim Type	Field Service Campaign
Campaign	SF706 A-B
VMRS Component Code	F99-999-005
Cause Code	A1 – Campaign
Primary Failed Part	25-SF706-000

Table 3 – Labor Allowance

Group	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
A	Replace Rear Axles (DCDL)	65.3	996-F248A	12-Repair Recall/Campaign
B	Replace Rear Axles (Non-DCDL)	42.3	996-F248B	12-Repair Recall/Campaign

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Claims for Credit

- Claim type is Field Service Campaign
- In the Campaign field, enter the campaign number and group (SF706 A or B).
- In the Primary Failed Part field, enter 25-SF706-000.
- In the Parts section, no entry is required as kits are provided by DTNA. However, if additional parts were needed, they may be added to this section.
- In the Labor section, enter the appropriate SRT from the Labor Allowance Table. Administrative time will auto-populate if applicable using SRT 939-6010A for 0.3 hours.
- In the Other Charges section, enter sublet repair information if a tire shop was involved.
- 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 Field Service Pre-Approval Request for a decision.
 - Include the approved amount on your OWL 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.
 - The Dealer is required to reimburse the customer the appropriate amount.

IMPORTANT: OWL must be viewed prior to performing the Field Service campaign 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 via the Prism Network Assist (PNA) located on the DTNA Portal if you have any questions or need additional information. Export distributors, submit a PNA 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.

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.

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Copy of Notice to Owners

Cascadia Axle Conversion: Adaptive Tandem (AT) 6x4 to New Final Drive (NFD)

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division is initiating Field Service Campaign SF706 to modify specific model years 2021-2024 Freightliner Cascadia vehicles, manufactured February 24, 2020, to February 2, 2023.

Due to discontinued production, certain vehicles with an Adaptive Tandem (AT) 6x4 axle configuration will no longer be supported with service documentation and service parts.

Vehicles will be retrofitted, replacing the AT 6x4 axle configuration with New Final Drive (NFD) axles and supporting parts.

Please contact an authorized DTNA dealer to arrange to have the campaign performed and to ensure that parts are available. The campaign will take approximately fifty hours and will be performed **free of charge**. To locate an authorized dealer go to <https://northamerica.daimlertruck.com/brands/support>. At the bottom of the page, click on the appropriate brand (shown as an icon), and at the top of each brand's page is an option to 'Find a Dealer'.

This Field Service Campaign will **terminate on February 28, 2027**. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer's expense.

As stated in the terms of your express limited warranty, Daimler Truck North America LLC will not pay for any damage caused by failure to properly maintain your vehicle. Daimler Truck North America LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

If you have any questions, contact the Warranty Campaigns Department at (800) 547-0712, from 7 a.m. to 4 p.m. Pacific Time, Monday through Friday, e-mail address: dtna-war-campaigns@daimlertruck.com, or the Customer Assistance Center at (800) 385-4357.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

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Work Instructions

Cascadia Axle Conversion: Adaptive Tandem (AT) 6x4 to New Final Drive (NFD)

Models Affected					
Make	Model	Model Year Start	Model Year End	Production Start Date	Production End Date
Freightliner	Cascadia	2021	2024	02/24/2020	02/02/2023

Adaptive Tandem (AT) 6x4 to New Final Drive (NFD) Axle Conversion

NOTE: The individual performing the work should be supplied with a copy of these work instructions. For any questions, please submit a ticket to the Campaigns team via the Prism Network Assist (PNA) located on the DTNA Portal.

NOTE: These work instructions are intended for dealers to perform the work. If the modification is passed to a customer, body builder, etc., it is up to the dealer that filed the request to provide support to the third party.

Disclaimer of Warranty and Limitation of Liability:

Daimler Truck North America makes no warranty of any kind, express or implied, including any implied warranty of merchantability or fitness for a particular purpose in connection with the parts and services provided, beyond the warranty for materials and workmanship of the parts sold. Except as otherwise required by law, your acceptance of this parts list constitutes agreement to the provisions above and to agreement that Daimler Truck North America is not liable for any damages beyond the warranty for materials and workmanship of the parts sold.

Preparing the Chassis for Removal of the Axle

1. Check the base label (Form WAR259) for a completion sticker for SF706 (Form WAR261), indicating this work has been done. The base label is usually located on the passenger-side door, about 12 in (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, proceed to the next step.
2. Record the Vehicle Identification Number (VIN).
3. Identify the new matching sales axles that will go into the vehicle.
4. For warranty purposes, record the new axle serial numbers and the last six sales axle numbers. Additionally, take pictures of the axle tags.

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Removal of the Rear Drive Axle

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

IMPORTANT: All eight tires must be discarded and replaced with new ones.

2. Remove the rear 1/4 fender aero fairings.
3. Remove all rear axle wheel flow below covers (hub wheel covers).
4. Remove the tire pressure monitoring system from rear wheel ends.
5. Remove the rear axle tires.
6. Place the chassis/axles on the jack stands for safety.
7. Disconnect the rear axle Antilock Braking System (ABS) sensor connections.
8. Disconnect the rear axle temperature sensor wiring and cut the tie straps that secure the wiring to the axles.
9. Deflate the air system allowing the suspension air bags to flatten.
10. Disconnect the inter-axle driveline from the rear drive axle only and let the end fall loose.

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11. Raise the chassis and roll the dolly under the rear drive axle, then lower the chassis to rest the axle on the dolly. See [Fig. 1](#).



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Fig. 1, Resting the Axle on the Dolly

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12. Disconnect the air hoses from the brake chambers. See [Fig. 2](#).

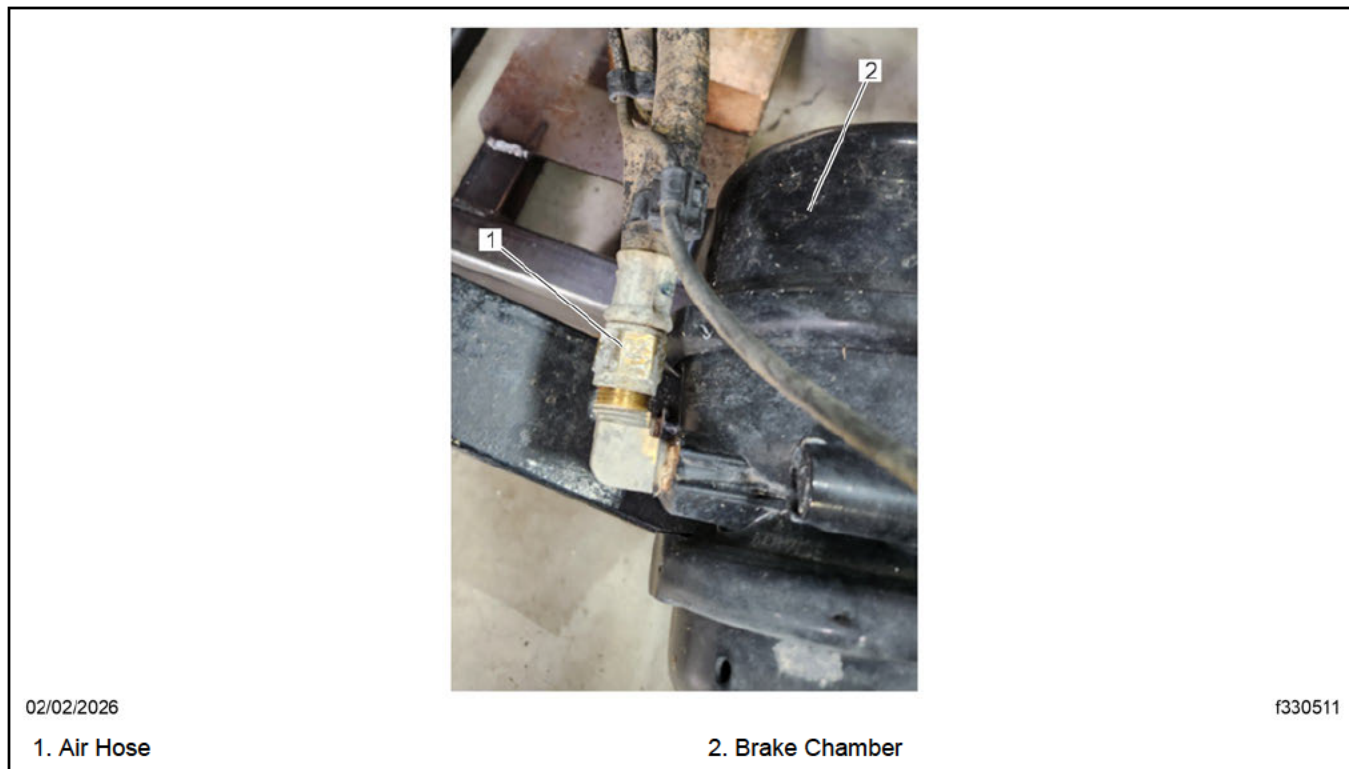


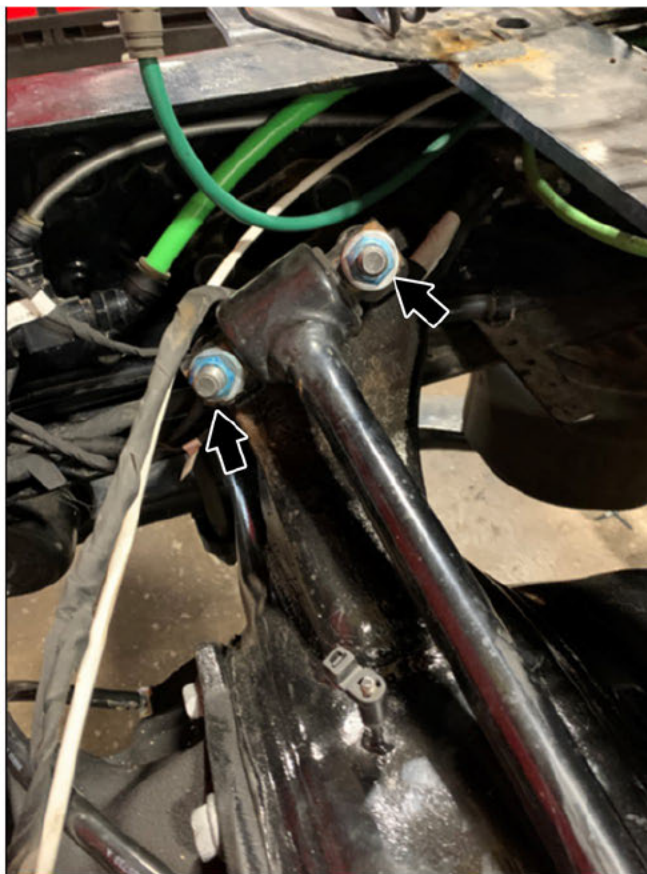
Fig. 2, Air Hoses Connected to the Brake Chambers

13. Remove the top mount rear drive axle shock bolts only, and save the bolts for installation.
14. Remove the rear drive axle only air bag bell nuts and washers.

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15. Remove the two lateral rod bolts that secure the rear drive axle tower to the frame. See [Fig. 3](#).



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Fig. 3, Lateral Rod Bolts Connecting the Rear Drive Axle Tower to the Frame

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16. Remove the bolts from the spring eye for the rear drive axle only.
17. Lift the chassis from the axle and roll the axle out from under the vehicle.
18. Leave the axle on the dolly to facilitate stripping the axle. See [Fig. 4](#).



Fig. 4, Axle Removed from the Chassis

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Uncrating Both New Axles / Craning to the Jack Stand Rack

1. Cut the strapping/wood blocks to remove the new axles from the shipping crate. See [Fig. 5](#).



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Fig. 5, New Axle on a Shipping Crate

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2. Use the overhead hoist crane with chains to remove the axles from the shipping crate.
3. Crane the new rear drive axle and place the axle on the jack stand rack. See [Fig. 6](#).



Fig. 6, Craning the New Rear Drive Axle

Stripping the Rear Drive Axle

1. Remove the shocks from the springs. Save the shocks and fasteners for installation.
2. Remove the springs. Save the springs along with the axle top and bottom spring pad for installation.
3. Discard the existing axle seat, U-bolts, nuts, and washers.
4. Remove the axle temperature sensor, and save the sensor for installation.
5. Remove the axle vent tube, and save for installation.

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Building-Up the Rear Drive Axle on the Jack Stand Rack

1. Grab two axle seats from the kit.
2. Grab two new shim plates from the kit.
3. Grab four U-bolts, eight washers, and nuts from the kit.
4. Place the shim plates on top of the axle housing (rear drive axle only) under the axle stop cast pad.
5. Hang the top axle stop pads U-bolts on the axle.
6. Place the new axle seat on top of the spring in proper position.
7. Install the spring with the bottom pad, with the tail facing back.
8. Install the U-bolts, nuts, and washers to hold the spring in place.
9. Verify the top axle pad is in proper location with the shim being used.
10. Tighten the U-bolt nuts just enough to allow the spring to move a bit side-to-side for axle hang.
11. Remove the rear axle oil plug.
12. Weld the sensor guard to protect the axle temperature sensor, if missing from the new axle.
13. Install the temperature sensor.
14. Verify that the axle is filled with oil (in case axle was shipped dry), and top off to compensate for any oil lost after installing the temperature sensor.
15. Install the new brass brake hose fittings in proper ports for service and parking brakes.
16. Install the rear shocks using the original fasteners at the spring side.
17. Install the axle vent tube.
18. Place new lateral rod bolts from kit through the tower and secure with a tie strap. This provides clearance for bolts.

Craning the Old Rear Drive Axle into the Shipping Crate

1. Attach the overhead crane/chain to the old axle.
2. Crane the old rear drive axle and place in the shipping crate for return.
3. Take the crane to the new rear drive axle sitting on the jack stand rack, and place the axle on the floor for installation at a later step.
4. Lift and crane the new matching forward drive axle from the shipping crate and place on the jack stand rack.

Removal of the Forward Drive Axle from the Chassis

IMPORTANT: All eight tires must be discarded and replaced with new ones.

1. Disconnect the axle ABS sensor connections.
2. Disconnect the axle temperature sensor wiring and cut the tie straps that secure the wiring to the axles.
3. Raise the chassis and roll the dolly under the forward drive axle and lower the chassis to rest the axle on the dolly.

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4. Disconnect the air hoses from the brake chambers.
5. Remove the inter-axle driveline from the back of the forward drive axle.
6. Remove the suspension leveling rod.
7. Remove only the top mounting bolts of the shock from the drive axle. Save the fasteners for installation.
8. Remove the forward drive axle only air bag bell nuts and washers. Save the fasteners for installation.
9. Remove the two bolts that secure the lateral rod to the drive axle tower.
10. Remove the bolts from the spring eyes for the drive axle.
11. Lift the chassis from the axle and roll the axle out from under the vehicle.
12. Leave the axle on the dolly to facilitate removal of the axle components.
13. Rest the chassis on the jack stands for safety.

Removal of Components from the Forward Drive Axle

1. Remove the shocks from the springs. Save the shocks and fasteners for installation.
2. Remove the springs. Save the springs along with the axle top and bottom spring pad for installation.
3. Discard the existing axle seat, U-bolts, nuts, and washers.
4. Remove the axle temperature sensor, and save the sensor for installation.
5. Remove the axle vent tube, and save for installation.
6. After the components are removed, crane the old forward drive axle and place into the shipping crate.

Building-Up the Forward Drive Axle on the Jack Stand Rack

1. Grab two axle seats from the kit.
2. Grab the two new shim plates from the kit.
3. Grab four U-bolts, eight washers, and nuts from the kit.
4. Place the axle stop cast on the top axle housing in position.
5. Hang the U-bolts on the top axle stop pads on the axle.
6. Place the new axle seat on top of the spring in proper position.
7. Install the spring with the bottom pad, with the tail facing back.
8. Install the U-bolts nuts and washers to hold the spring in place.
9. Verify the top axle pad is in proper location with the shim being used.
10. Tighten the U-bolt nuts just enough to allow the spring to move a bit side-to-side for axle hang.
11. Remove the axle oil plug and install the temperature sensor.
12. Weld the sensor guard to protect the axle temperature sensor.

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13. Verify that the axle is filled with oil (in case axle was shipped dry), and top off to compensate for any oil lost after installing the temperature sensor.
14. Install the new brass brake hose fittings in proper ports for service and parking brakes.
15. Install the rear shocks using the original fasteners at the spring side.
16. Install the axle vent tube.
17. Crane the new forward drive axle and place on the axle hang dolly.
18. Install the inter-axle driveline on the back of the forward drive axle, and tighten the fasteners.
19. Install the main driveline on the front of the forward drive axle, and tighten the fasteners.
20. Place the front of the main driveline slip joint/yoke on the dolly.
21. Place new lateral rod bolts from kit through the tower, and secure with a tie strap. This provides clearance for bolts.

Reworking the Frame for Lateral Rod / Reinforcement Plates

1. Remove the bolts that attach both forward and rear lateral rods and saddles to the frame.
2. Remove the shock bracket from the right-hand rear axle frame.
3. Remove the right-hand frame axle stop casting by cutting the four frame hucks.
4. Remove the left-hand forward shock bracket.
5. Remove the left-hand forward frame axle stop casting from frame by cutting the four frame hucks.

Installation of Frame Reinforcement Plates for Axle Lateral Rods

1. Place and align the appropriate reinforcement plate on the right-hand side frame rail to relocate the lateral rod for the rear-rear drive axle.
2. Using the plate as a template, position it on the outside of the frame rail, aligning the three holes for the frame axle stop.
3. Once the holes are aligned, install temporary bolts and tighten them, leaving the frame axle stop off for now to keep the plate properly located.
4. Place and align the appropriate reinforcement plate on the left-hand forward frame rail to relocate the lateral rod for the forward-rear drive axle.
5. Using the plate as a template, position it on the outside of the frame rail, aligning the three holes for the frame axle stop.
6. Once the holes are aligned, install temporary bolts and tighten them, leaving the axle stop off for now to keep the plate properly located.

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7. Use a 5/8-inch mag drill or equivalent to drill out the required holes in the left-hand forward frame through the holes for the lateral rod and reinforcement plate. See [Fig. 7](#).



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Fig. 7, Left-Hand Forward Lateral Rod and Bolt Installation After Drilling Is Completed

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8. Use a 5/8-inch mag drill or equivalent to drill out the required holes in the right-hand frame through the holes for the lateral rod and reinforcement plate. See [Fig. 8](#).



Fig. 8, Right-Hand Lateral Rod and Bolt Installation After Drilling Is Completed

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9. After drilling, remove the temporary bolts and move the reinforcement plates to the inside of the frame rail where the holes were drilled.
10. Install the shock mount and axle frame stop bracket using the proper length bolts. Fill the remaining holes following the same guidelines, ensuring three to four threads extend through the nuts.
11. Repeat this process for each reinforcement plate on the forward and rear drive axles at both frame rails.
12. Tighten all bolts securing the reinforcement plates on both frame rails, except the lateral rod and saddle bolts, to allow axle installation.

Installation of the Forward Drive Axle into the Chassis

1. Raise the chassis with an overhead hoist or a four-point lift.
2. Roll the forward drive axle that is on the axle dolly under the chassis.
3. Extend the shocks out to the max position.
4. As the chassis is being lowered on to the axle, line up the suspension air bag bell studs into the rear spring.
5. Install the airbag stud using the new nuts and washers, and tighten with a screw gun.
6. Continue to lower the chassis on to the axle, lining up the front spring eyes with the castings.
7. Insert the new fasteners into the front spring eyes, not the castings.
8. Line up the top shock into the frame shock bracket, and secure using the original fasteners.
9. Line up and install the new fasteners that attach the lateral rod to the axle tower.
10. Tighten the front spring eyes, shock bolts, and lateral rod bolts at the axle towers and the frame.
11. Raise the main driveline, connect it to the midship driveline using new fasteners, and tighten to 148 lbf-ft (200 N·m).
12. Raise the chassis and remove the dolly.
13. Rest the chassis on the jack stands for safety.

Crane the Rear Drive Axle on to the Installation Dolly

Installation of Rear Drive Axle into the Chassis

1. Raise the chassis with an overhead hoist.
2. Roll the rear drive axle that is on the axle dolly under the chassis.
3. Extend the shocks out to the max position.
4. As the chassis is being lowered on to the axle, line up the suspension air bag bell studs into the rear spring.
5. Install the airbag stud using the new nuts and washers, and tighten to specification.
6. Continue to lower the chassis on to the axle, lining up the front spring eyes with the spring hangers.
7. Insert the new fasteners from the hanger side into the front spring eyes.
8. Line up the top shock into the frame shock bracket, and secure using the original fasteners.
9. Line up and install the new fasteners that attach the lateral rod to the axle tower.

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10. Tighten the front spring eyes, shock bolts, and lateral rod bolts at the axle towers and the frame.
11. Raise the chassis with an overhead hoist and set the chassis on jack stands under the forward drive hubs.
12. Connect the interaxle driveline to both the axles, and tighten the bolts.

Connecting the ABS / Plumbing to Axles

1. Connect the hoses to the hose fittings on the service and parking brake chambers.
2. Use the original clips or butterfly straps to route and connect the ABS harness at all the four wheel ends.
3. Install the new suspension rod from the kit between the suspension-levelling valve and the forward drive axle.

Tightening the Fasteners

1. Tighten the axle U-bolts in a star pattern 200 lbf·ft (271 N·m).
2. Tighten the axle U-bolts again in a star pattern 300 lbf·ft (407 N·m).
3. Check the rear axle oil levels.

Installation of the Rear Wheels and New Tires / Inflation and Monitoring System

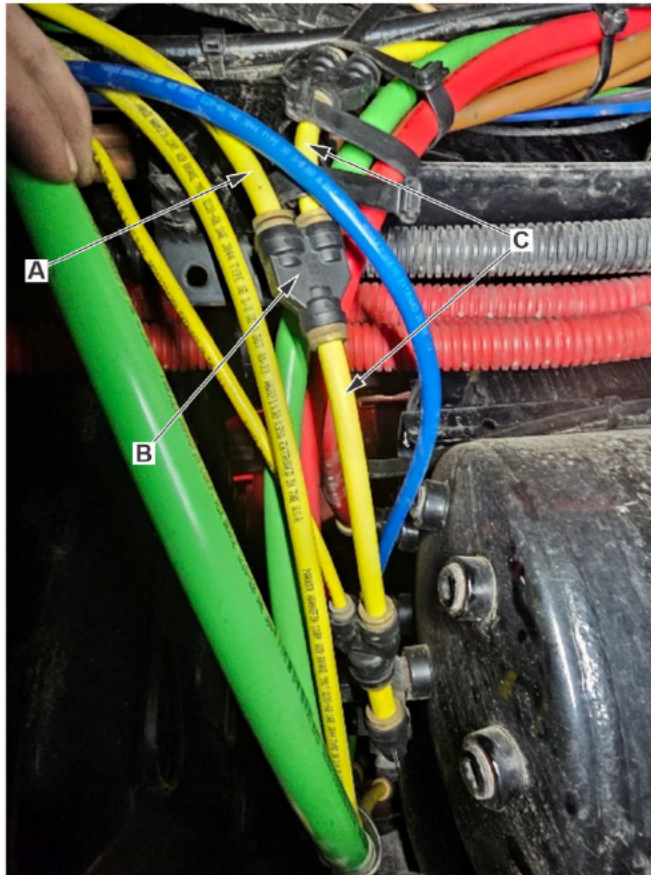
1. Install the wheels and new tires.
2. Tighten the wheel lug nuts 500 lbf·ft (678 N·m).
3. Install the tire pressure monitoring system on the rear wheel ends.
4. Install all rear axle wheel flow below covers (hub wheel covers).
5. Install the rear 1/4 fender aero fairings.

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Plumbing the Manual Inter-Axle Switch and Plumbing

1. Drain all air from the system. Remove the plumbing from the solenoids above the rear axle, then remove the solenoids. Save the 1/4-inch white airline for later use.
2. Remove the yellow supply line for solenoids from the frame, then remove the Y-connector and two short yellow lines. Use a section of the removed yellow line to replace the Y-connector and two short yellow section lines. See [Fig. 9](#).



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A. Remove the supply line for solenoids from the frame.

C. Remove the two short yellow lines.

B. Remove the Y-connector.

Fig. 9, Y-Connector

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3. Move the old temperature sensor and differential lock harnesses aside as far as possible.
4. Pull the dash panels including the ICU to route the dash harness and airline for the dash switch. See [Fig. 10](#).



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Fig. 10, Dash Side Panel

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5. Use wiring diagram **G06-92166-002** to connect the harness. The splice packs can be accessed from the tunnel on the passenger side. The splice pack locations are shown in **Fig. 11**.

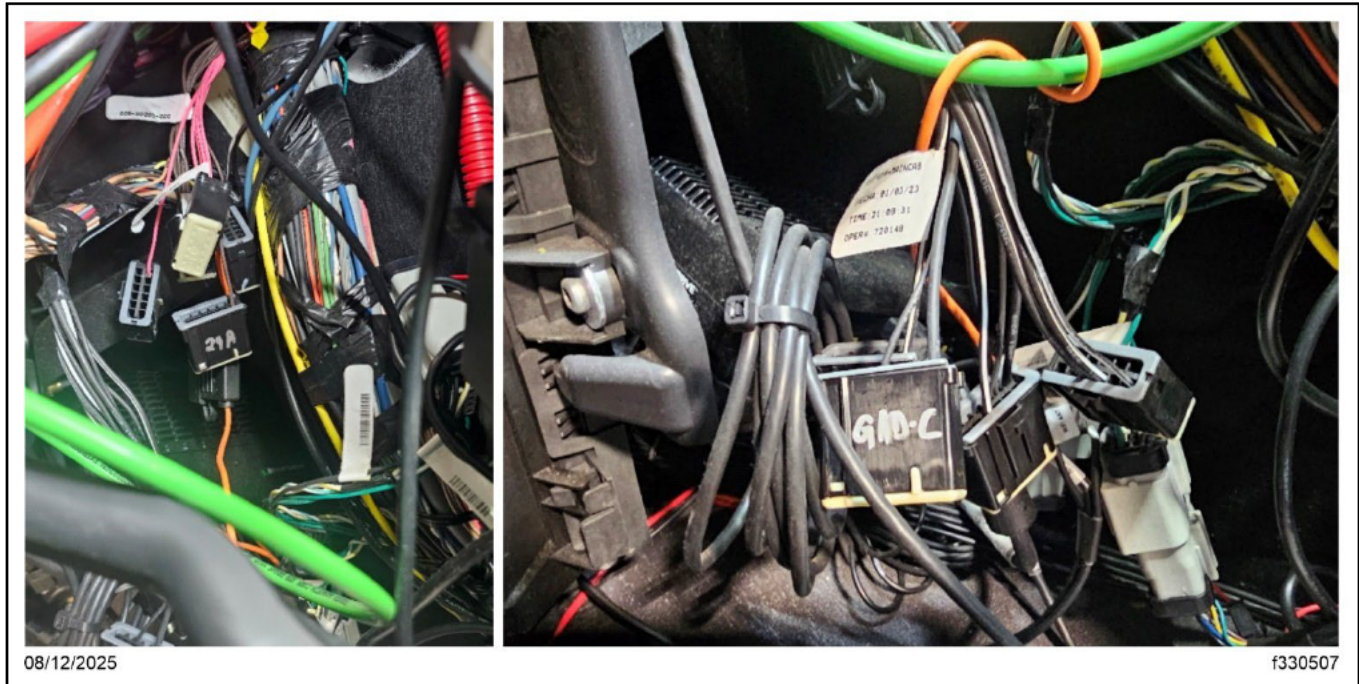


Fig. 11, Splice Pack

6. The old axle harness, shown in **drawing G66-08370-001**, may be incorrectly routed. **Verify the circuit number** before removing the connector. The pins 30 and 43 are in BHM_1A instead of BHB_1B. Remove pin 30 from the dash side.
7. Cut out a new spot in the dash for the switch, then install the switch.
8. Use the 1/4-inch white airline saved earlier and route it into the passthrough and then to the switch. Install the dash panels.
9. Use the 1/4-inch coupler from the kit and run about 25 feet of the 1/4-inch white airline to the differential lock.
10. The temperature sensor harness is routed differently due to new axles. Wrap the temperature sensor harness back to where they split, and wrap 2 feet back on the axle lock sensor harness.
11. Put the split for the temperature sensor harness at the crossmember, right behind the batteries.
12. Run and secure both the harnesses to the split point, then wrap both the harnesses together. Two unused brackets may be found on the crossmember, use the brackets by flipping them around so the wires do not rub on the frame.
13. Run the harness to the front of vehicle and cut to length, there may be almost 20 ft of extra wire. Put new pins on wires and pin them per the wiring diagram. The connector locations are shown in **Fig. 11**.
14. Remove all the old axle harness pins from chassis side connectors, then install the plugs.

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15. Run the unit and check for air leaks.
16. Perform the ride height calibration.
17. Check the functioning of the differential lock and the interaxle lock.

Alignment / Tracking and Spacing of the Rear Axle

1. Set the tracking and spacing of the rear axles.
2. Perform the axle alignment.
3. Tighten the axle U-bolts 500 lbf·ft (678 N·m).
4. Tighten the front spring eye bolts after alignment.
5. Tighten the lateral rod bolts at the towers after alignment.
6. Set and calibrate the rear suspension.
7. After alignment & suspension set, perform a final check on the axle oil levels ensuring they are at the proper fill level.

Painting

1. Paint the new axles and drivelines.
2. Paint the chassis at the reworked area—left-hand forward drive axle area and/or right-hand rear drive axle area.

SF706A – Updating Vehicle Parameters (SF706B on Page 38)

NOTICE

Parameters **cannot be copied or downloaded from another truck**. All parameters must be individually loaded to prevent corruption of the data and/or transfer.

1. Turn the keyswitch to the ON position.
2. Connect an RP1210B-compliant vehicle diagnostic adaptor to the diagnostic connector on the vehicle.
3. Connect the other end of the adaptor to the laptop. Ensure the laptop is connected to a power source.
4. Open DiagnosticLink®.

IMPORTANT: Make sure that DiagnosticLink is updated to the latest version (8.23 SP1 at the time of publication or newer) before programming the vehicle.

- 4.1. Use the DTNA Portal credentials to connect DiagnosticLink to the server.

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- 4.2. Make sure the Electronic Control Unit (ECU) modules are connected and are visible in the 'Logged Connections' panel at the bottom-left of the window. See Fig. 12.
5. Go to the 'Program Device' tab, then select 'Download data from server.' See Fig. 12.

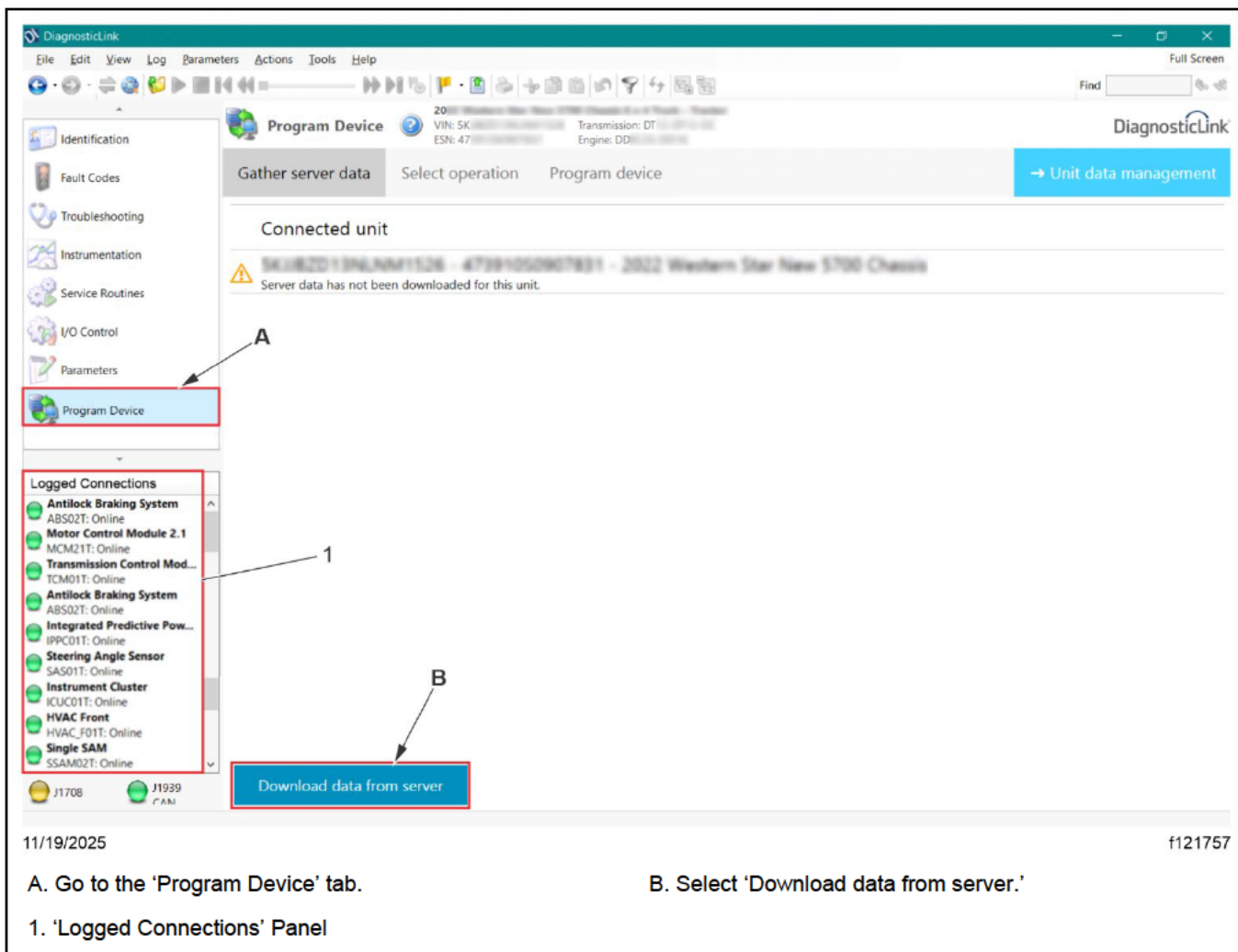


Fig. 12, Downloading the Data from the Server

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6. Once the data is downloaded from the server, go to the 'Parameters' tab.
7. Adjust the rear axle ratio in the Common Powertrain Controller (CPC).
8. Select and expand the 'ICUC01T – Instrument Cluster' parameter folder.
 - 8.1. Select and expand the 'PID 0x43 (FTL config)' parameter sub-folder.
 - 8.1.1. Select the 'paramGaugePos3' parameter and set the parameter value to 'A0414473921-001 paramGaugePos3 Rear-Rear Axle Oil Temp.' See Fig. 13.

The screenshot shows the DiagnosticLink interface with the 'Parameters' tab selected. The left sidebar shows the 'Parameters' tab highlighted. The main window displays a tree view of parameters under 'ICUC01T - Instrument Cluster'. The 'PID 0x43 (FTL config)' folder is expanded, and the 'paramGaugePos3' parameter is selected. The parameter value is set to 'A0414473921-001 paramGaugePos3 Rear-Rear Axle Oil Temp.'.

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- A. Go to the 'Parameters' tab.
- B. Select and expand the 'ICUC01T – Instrument Cluster' parameter folder.
- C. Select and expand the 'PID 0x43 (FTL config)' parameter sub-folder.
- D. Select the 'paramGaugePos3' parameter.
- E. Set the parameter value to 'A0414473921-001 paramGaugePos3 Rear-Rear Axle Oil Temp.'

Fig. 13, Setting the paramGaugePos3 Parameter Value

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- 8.1.2. Select the 'paramAxleOilTempRA2' parameter and set the parameter value to 'A0414471821-001 paramAxleOilTempRA2 available.' See Fig. 14.

The screenshot shows the DiagnosticLink Parameters interface for a 2025 Freightliner M2 106 Medium Duty 4 x 2 Truck. The 'ICUC01T - Instrument Cluster' section is expanded, and the 'paramAxleOilTempRA2' parameter is selected. The parameter value is set to 'A0414471821-001 paramAxleOilTempRA2 available'. Annotations 'A' and 'B' point to the parameter name and the value field, respectively.

Parameter	Part	Value	Units	Minimum	Maximum	Description
paramAxleOilTempRA2		(from parent)				

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A. Select the 'paramAxleOilTempRA2' parameter.
B. Set the parameter value to 'A0414471821-001 paramAxleOilTempRA2 available.'

Fig. 14, Setting the paramAxleOilTempRA2 Parameter Value

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8.2. Select and expand the 'PID 0x45 (FTL Config)' parameter sub-folder.

8.2.1. Select the 'paramGaugeListPos3' parameter and set the parameter value to 'A0414475521-001 paramGaugeListPos3 available.' See Fig. 15.

The screenshot shows a software interface for configuring vehicle parameters. At the top, it displays 'Parameters' for a 2025 Freightliner M2 106 Medium Duty 4 x 2 Truck with VIN: 1FUCAR185H1V10773. A warning message states: 'Parameters for CT901T cannot be edited because it was not possible to verify their Last Serviced data. Click here to open the Program Device view to download data for this vehicle before attempting.' Below this, there are tabs for 'All Parameters', 'Compare Parameters', 'Compare Server Data', 'Global Variant Coding', 'Initialize CTP', 'Instrument Cluster Device Variants', and 'Transfer Accumulators'. The main area shows a tree view under 'ICUC01T - Instrument Cluster' with sub-folders for 'PID 0x45 (FTL config)' and 'paramGaugeListPos3'. The 'PID 0x45 (FTL config)' folder is expanded, and the 'paramGaugeListPos3' parameter is selected. The parameter table shows the following data:

Parameter	Part	Value	Units	Minimum	Maximum
PID 0x45 (FTL config)	n/a				
paramGaugeListPos1	A0414475521-001	Default String PID 45s general BUS			
paramGaugeListPos2	A0414475521-001	Default String PID 45s Truck			
paramGaugeListPos3	n/a				
paramGaugeListPos4	n/a				
paramGaugeListPos5	n/a				
paramGaugeListPos6	n/a				
paramGaugeListPos7	n/a				
paramGaugeListPos8	n/a				
paramGaugeListPos9	n/a				
paramGaugeListPos10	n/a				

Annotations in the image: 'A' points to the 'PID 0x45 (FTL config)' folder, 'B' points to the 'paramGaugeListPos3' parameter, and 'C' points to the value 'A0414475521-001 paramGaugeListPos3 available' in the 'Value' column. The date '11/18/2025' is shown at the bottom left, and 'f121742' is at the bottom right.

A. Select and expand the 'PID 0x45 (FTL Config)' parameter sub-folder.
B. Select the 'paramGaugeListPos3' parameter.
C. Set the parameter value to 'A0414475521-001 paramGaugeListPos3 available.'

Fig. 15, Setting the paramGaugeListPos3 Parameter Value

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9. Select and expand the 'SSAM02T – Single SAM' parameter folder.
 - 9.1. Select the 'ACS Interaxle Locks' parameter sub-folder and set the parameter value to 'A0224433658-001 ACS Interaxle Lock - Air Switch.' See Fig. 16.

Parameter	Value	Units	Minimum	Maximum
SSAM02T - Single SAM				
ACS Active Lubrication Manager	A0224433658-001	ACS AUM - No AUM 42%		
ACS ACS Air Lock Detection				
ACS ACS Lockup Test				
ACS Axle Temperature	100			
ACS Axle Temperature Sensing	A0224433658-001	ACS Axle Temp Sensor - No Axle Temp Sensor 42% 002		
ACS Chassis Sensors	100			
ACS FMS wheel slide	A0224433658-001	ACS FMS Wheel Slide - Disabled, Pre-Instal Default		
ACS FMS Wheel Slide Continuity	100			
ACS Forward Differential Lock	100			
ACS IMR Config	A0224433658-001	ACS IMR Config - Default 002		
ACS Interaxle Locks	A0224433658-001			
ACS Interaxle Lock - Air Switch				
ACS Interaxle Lock - 002 42%				
ACS Interaxle Lock - 002 Buffer 42%				
ACS Interaxle Lock - 003 Buffer 42%				
ACS Interaxle Lock - 004 42%				
ACS Interaxle Lock - Disable All Features 42%				
ACS Interaxle Lock - No IMR, Buffer				
ACS Interaxle Lock - No IMR, no Buffer				
ACS Interaxle Lock - IMR, Buffer				
ACS Interaxle Lock - IMR, no Buffer				
ACS Interaxle Lock - Air Switch, Buffer				
ACS Interaxle Lock - No IMR, no Buffer 002				
ACS Interaxle Lock - 003 42% 002				
ACS Interaxle Lock - No IMR, no Buffer 002				

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A. Select and expand the 'SSAM02T – Single SAM' parameter folder.
 B. Select the 'ACS Interaxle Locks' parameter sub-folder.
 C. Set the parameter value to 'A0224433658-001 ACS Interaxle Lock - Air Switch.'

Fig. 16, Setting the ACS Interaxle Locks Parameter Value

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9.2. Expand the 'ACS Interaxle Locks' parameter sub-folder.

9.2.1. Select the 'PACS_DiffLk_IA_MaxEngSpeed' parameter and set the parameter value to 'A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7.' See Fig. 17.

The screenshot shows a parameter configuration table with the following columns: Parameter, Value, Units, Minimum, and Maximum. The 'ACS Interaxle Locks' folder is expanded, and the 'PACS_DiffLk_IA_MaxEngSpeed' parameter is selected. A dropdown menu is open, showing the selected value: 'A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7'. Arrows labeled 'A' and 'B' point to the parameter name and the dropdown menu respectively.

Parameter	Value	Units	Minimum	Maximum
SSAM02T - Single SAM				
ACS Active Lubrication Management	A0194402018-001	ACS Active Lub - No Active Lub		
ACS Active Axle Lock Detection				
ACS Active Locking State				
ACS Axle Temperature	110			
ACS Axle Temperature Sensing	A0194402018-002	ACS Axle Temp Sensor - No Axle Temp Sensor 43N-002		
ACS Drive Sensors	110			
ACS Drive Wheel State	A0194402018-001	ACS Drive Wheel State - Disabled, No Wheel Speed		
ACS Drive Wheel State Command	110			
ACS Forward Differential Lock	110			
ACS IMB Config	A0194402018-002	ACS IMB IMB On - Disabled IMB		
ACS Interaxle Locks	A0194402018-001	ACS Interaxle Locks - 43N-001		
PACS_DiffLk_IA_MaxEngSpeed	(from parent)	IAD 43N (65534, from parent)		mph
PACS_DiffLk_IA_MaxEngSpeed_IA	(from parent)	A0194402018-001 ACS Interaxle Locks - IAD 43N 43N-001 (from parent)		
PACS_DiffLk_IA_MaxEngSpeed_IA	(from parent)	A0194402018-002 PACS DiffLk IA MaxEngSpeed = 40 Gen 7		
PACS_IA_ReverseDrift_S01	(from parent)	A0194402018-002 PACS DiffLk IA MaxEngSpeed = 40 Gen 7		
PACS_DiffLk_IA_Speed	(from parent)	A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7		

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A. Select the 'PACS_DiffLk_IA_MaxEngSpeed' parameter.
B. Set the parameter value to 'A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7.'

Fig. 17, Setting the PACS_DiffLk_IA_MaxEngSpeed Parameter Value

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9.2.2. Select the 'PACS_DiffLk_MaxEnggSpeed_IA' parameter and set the parameter value to 'A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 65534.' See Fig. 18.

The screenshot shows a configuration window with a tree view on the left and a parameter table on the right. The tree view is expanded to 'ACS Interaxle Locks', and 'PACS_DiffLk_MaxEnggSpeed_IA' is selected. The table below shows the parameter details and its value being set to a specific campaign value.

Parameter	Value	Units	Minimum	Maximum
SSAM02T - Single SAM				
ACS Active Lubrication Management	A0144402038-001	ACS-ALM - No-ALM-40%		
ACS - ACM Air Leak Detection				
ACS ACM Leakage Test				
ACS Axle Temperature	NA			
ACS Axle Temperature Sensing	A0144402038-002	ACS Axle Temp Sense - No Axle Temp Sense 40% 0%		
ACS - Drive Sensing	NA			
ACS Drive Wheel Slide	A0224430358-001	ACS Drive Wheel Slide - Disabled, No Wheel Slide		
ACS Drive Wheel Slide Control	NA			
ACS Forward Differential Lock	NA			
ACS - IWB Config	A0224430358-002	ACS IWB Config - Default 0%		
ACS Interaxle Locks	A0224430358-001	ACS Interaxle Locks - Air Switch		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	40720.9		mph
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	Air Switch (65534, from parent)		mph
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 ACS Interaxle Locks - Air Switch 000%		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 65534		

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A. Select the 'PACS_DiffLk_MaxEnggSpeed_IA' parameter.
B. Set the parameter value to 'A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 65534.'

Fig. 18, Setting the PACS_DiffLk_MaxEnggSpeed_IA Parameter Value

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9.3. Select and expand the 'MSC MSF Modular switch field' parameter sub-folder.

9.3.1. Select the 'PMSC_InteraxleSw_Var_DTNA' parameter and set the parameter value to 'A0434477858-001 MSC InterSwVarDTNA - Air, Fdbk LG3.' See Fig. 19.

Parameter	Part	Value	Units	Minimum
SSAM02T - Single SAM				
ESC - Limp Home Mode	n/a			
ESC Mirror Utility Light	n/a			
MSC MSF Modular switch field	n/a			
PMSC_InteraxleSw_Var_DTNA	n/a	A0434477858-001 MSC InterSwVarDTNA - Air, Fdbk LG3		

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A. Select and expand the 'MSC MSF Modular switch field' parameter sub-folder.
 B. Select the 'PMSC_InteraxleSw_Var_DTNA' parameter.
 C. Set the parameter value to 'A0434477858-001 MSC InterSwVarDTNA - Air, Fdbk LG3.'

Fig. 19, Setting the PMSC_InteraxleSw_Var_DTNA Parameter Value

9.4. Select the 'ELC Daytime running lights' parameter sub-folder and set the parameter value to 'AA0154432058-001 ELC DRL - LED Standard 43N.' See Fig. 20.

Parameter	Part	Value	Units	Minimum
SSAM02T - Single SAM				
ESC - Limp Home Mode	n/a			
ESC Mirror Utility Light	n/a			
ELC Daytime running lights	A0154432058-001	AA0154432058-001 ELC DRL - LED Standard 43N		

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A. Select the 'ELC Daytime running lights' parameter sub-folder.
 B. Set the parameter value to 'AA0154432058-001 ELC DRL - LED Standard 43N.'

Fig. 20, Setting the ELC Daytime running lights Parameter Value

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- 9.5. Select the 'ELC Head lamp switch pos2' parameter sub-folder and set the parameter value to 'A0154432258-001 ELC Hdmp Sw Pos 2 - Standard 43N.' See Fig. 21.

Parameter	Value	Units	Minimum	Maximum	Description
SSAM02T - Single SAM					
ELC Head lamp switch pos2	A0154432258-003				ELC Hdmp Sw Pos 2 - Standard 43N 003

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A. Select the 'ELC Head lamp switch pos2' parameter sub-folder.
B. Set the parameter value to 'A0154432258-001 ELC Hdmp Sw Pos 2 - Standard 43N.'

Fig. 21, Setting the ELC Head lamp switch pos2 Parameter Value

- 9.6. Select the 'ELC - HW Config' parameter sub-folder and set the parameter value to 'A0334476058-003 ELC HW Config - LED 003.' See Fig. 22.

Parameter	Part	Value	Units	Minimum
SSAM02T - Single SAM				
ELC - HW Config	A0334476058-003	A0334476058-003 ELC HW Config - LED 003		

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A. Select the 'ELC - HW Config' parameter sub-folder. Select the 'ELC - HW Config' parameter sub-folder.
B. Set the parameter value to 'A0334476058-003 ELC HW Config - LED 003.'

Fig. 22, Setting the ELC - HW Config Parameter Value

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10. Select and expand the 'MS01T – Maintenance System' parameter folder.
 - 10.1. Select the 'Rear axle 1, Parameters, EEPROM' parameter sub-folder and set the parameter value to 'A0044474324-001 VCD_Rear_axle_1_Parameters_EEPROM.' See Fig. 23.

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- A. Select and expand the 'MS01T – Maintenance System' parameter folder.
- B. Select the 'Rear axle 1, Parameters, EEPROM' parameter sub-folder.
- C. Set the parameter value to 'A0044474324-001 VCD_Rear_axle_1_Parameters_EEPROM.'

Fig. 23, Setting the Rear axle 1, Parameters, EEPROM Parameter Value

- 10.2. Expand the 'Rear axle 1, Parameters, EEPROM' parameter sub-folder, and set the parameter values as listed below. See Fig. 24.

Parameter Name	Parameter Value
Oil selection table, row 01, oil number (PAR_OatZ01OelNr_HA1)	A0074471224-001 Oil Number Row01 HA1 No. 24
Oil selection table, row 01, maximum driving distance (PAR_OatZ01FsMax_HA1)	A0074471024-001 Oil Maximum Driving Distance Row 01 800tkm
Oil selection table, row 01, maximum operating time (PAR_OatZ01BzMax_HA1)	A0074471724-001 Oil Selection Table Row 01 Max Operating Time 3yr

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Fig. 24, Setting Parameter Values Within the Rear axle 1, Parameters, EEPROM Parameter Sub-Folder

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- 10.3. Select the 'Rear axle 2, Parameters, EEPROM' parameter sub-folder and set the parameter value to 'A0044474424-001 VCD_Rear_axle_2_Parameters_EEPROM.' See [Fig. 25](#).

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A. Select the 'Rear axle 2, Parameters, EEPROM' parameter sub-folder.
B. Set the parameter value to 'A0044474424-001 VCD_Rear_axle_2_Parameters_EEPROM.'

Fig. 25, Setting the Rear axle 2, Parameters, EEPROM Parameter Value

- 10.4. Expand the 'Rear axle 2, Parameters, EEPROM' parameter sub-folder, and set the parameter values as listed below. See [Fig. 26](#).

Parameter Name	Parameter Value
Oil selection table, row 01, oil number (PAR_OatZ01OeINr_HA2)	A0074471124-001 Oil Selection Table Row 01 Oil No. 24
Oil selection table, row 01, maximum driving distance (PAR_OatZ01FsMax_HA2)	A0074471324-001 Oil Selection Table Row 01 Max Driving Dist 80tkm
Oil selection table, row 01, maximum operating time (PAR_OatZ01BzMax_HA2)	A0074471624-001 Oil Selection Table Row 01 Max Operating Time 3yr

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Fig. 26, Setting Parameter Values Within the Rear axle 2, Parameters, EEPROM Parameter Sub-Folder

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10.5. Select and expand the 'Parameters, record 01, EEPROM' parameter sub-folder. Set the parameter values as listed below. See Fig. 27.

Parameter Name	Parameter Value
Channel activation (PAR_KanAktiv_HA1)	A0054470024-001 Chanel activation HA1 ON
Quality factor, mechanical (PAR_QfMech_HA1)	A0044479924-001 Quality factor, mechanical (PAR_QfMech_HA1)
Oil number, selected (PAR_OeINr_HA1)	A0084473424-001 Oil number, selected (PAR_OeINr_HA1) No. 24 - 235.31
Channel activation (PAR_KanAktiv_HA2)	A0044474824-001 Chanel activation HA2 ON
Quality factor, mechanical (PAR_QfMech_HA2)	A0074472524-001 Quality factor, mechanical - Par_QfMech_HA2
Oil number, selected (PAR_OeINr_HA2)	A0074470024-001 Oil Number Selected HA2 Nr 24

Parameter	Part	Value
MS01T - Maintenance System		
Parameters, record 01, EEPROM ← A	n/a	
Channel activation (PAR_KanAktiv_HA1)	A0054470024-001	yes
Quality factor, mechanical (PAR_QfMech_HA1)	A0044479924-001	60
Oil number, selected (PAR_OeINr_HA1)	A0084473424-001	24
Channel activation (PAR_KanAktiv_HA2)	A0044474824-001	yes
Quality factor, mechanical (PAR_QfMech_HA2)	A0074472524-001	60
Oil number, selected (PAR_OeINr_HA2)	A0074470024-001	24

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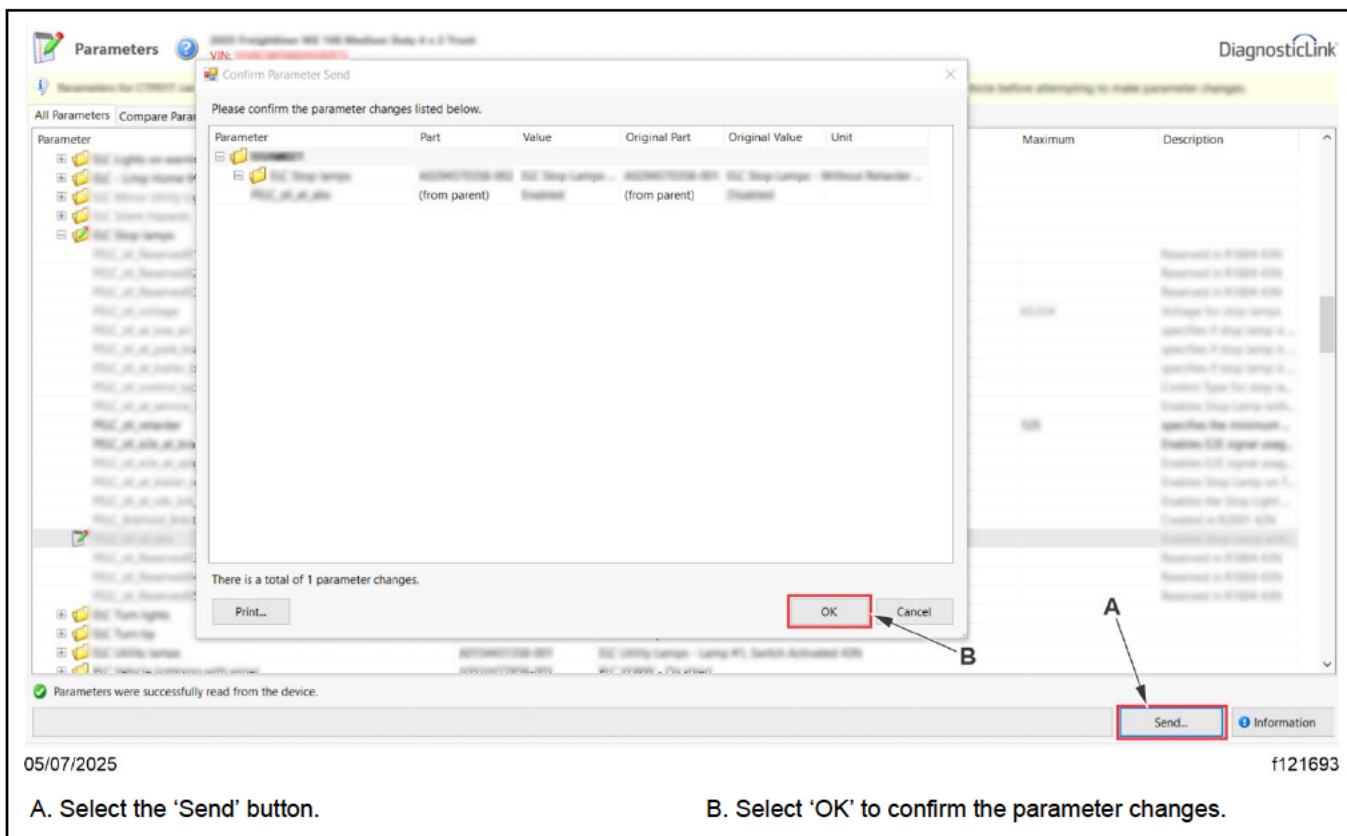
A. Select and expand the 'Parameters, record 01, EEPROM' parameter sub-folder.

Fig. 27, Setting Parameter Values Within the Parameters, record 01, EEPROM Parameter Sub-Folder

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11. Select the 'Send' button to write the parameter changes to the vehicle. A window opens asking to confirm the parameter changes. Select 'OK.' See Fig. 28.



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A. Select the 'Send' button.

B. Select 'OK' to confirm the parameter changes.

Fig. 28, Writing the Parameter Changes to the Vehicle

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- Once the parameter change is complete, go to the 'Program Device' tab. Select 'Unit data management' at the top-right of the window. See Fig. 29.

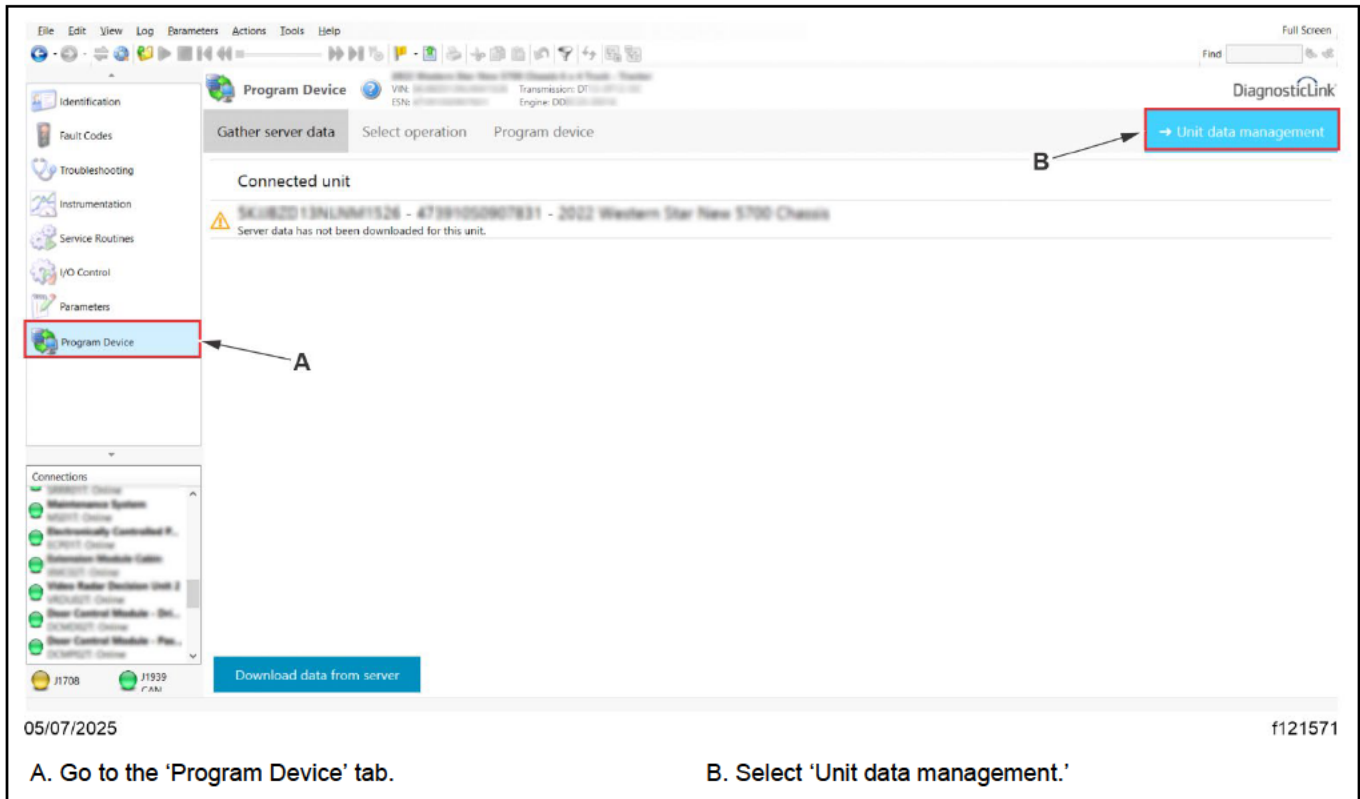


Fig. 29, Navigating to the Unit Data Management Screen

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- The information corresponding to the VIN should appear in the 'Unit data for upload' panel. Select 'Connect to server' to upload the new parameters. See Fig. 30.

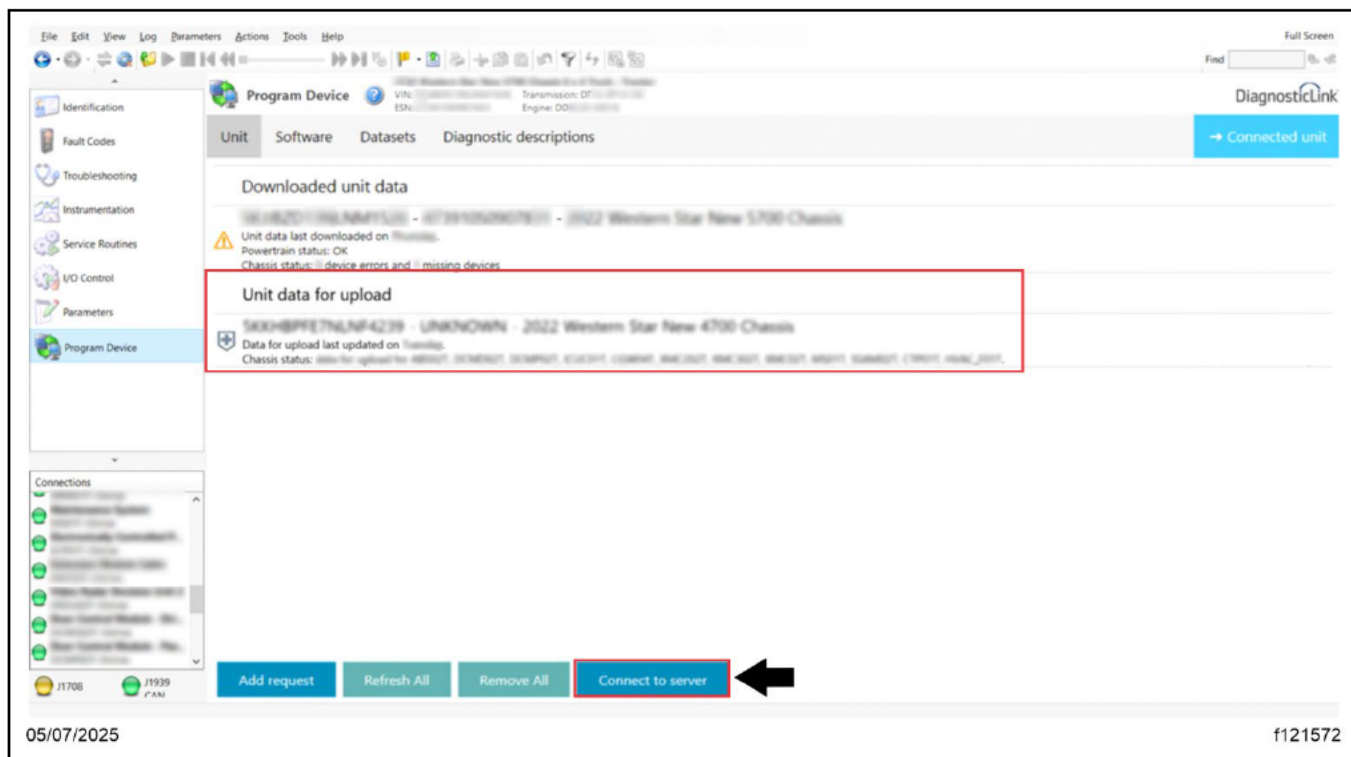


Fig. 30, Unit Data Upload to the Server

- Once the parameter updates are uploaded to the server, disconnect the vehicle from DiagnosticLink.
- Turn the ignition key to the OFF position.
- Road test the vehicle to verify the repair, and check for noise, leaks, or vibrations. Check the torque on the U-bolts.
- Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF706 (Form WAR261).

SF706B – Updating Vehicle Parameters

NOTICE

Parameters **cannot be copied or downloaded from another truck**. All parameters must be individually loaded to prevent corruption of the data and/or transfer.

- Turn the keyswitch to the ON position.
- Connect an RP1210B-compliant vehicle diagnostic adaptor to the diagnostic connector on the vehicle.
- Connect the other end of the adaptor to the laptop. Ensure the laptop is connected to a power source.

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4. Open DiagnosticLink®.

IMPORTANT: Make sure that DiagnosticLink is updated to the latest version (8.23 SP1 at the time of publication or newer) before programming the vehicle.

4.1. Use the DTNA Portal credentials to connect DiagnosticLink to the server.

4.2. Make sure the Electronic Control Unit (ECU) modules are connected and are visible in the 'Logged Connections' panel at the bottom-left of the window. See Fig. 31.

5. Go to the 'Program Device' tab, then select 'Download data from server.' See Fig. 31.

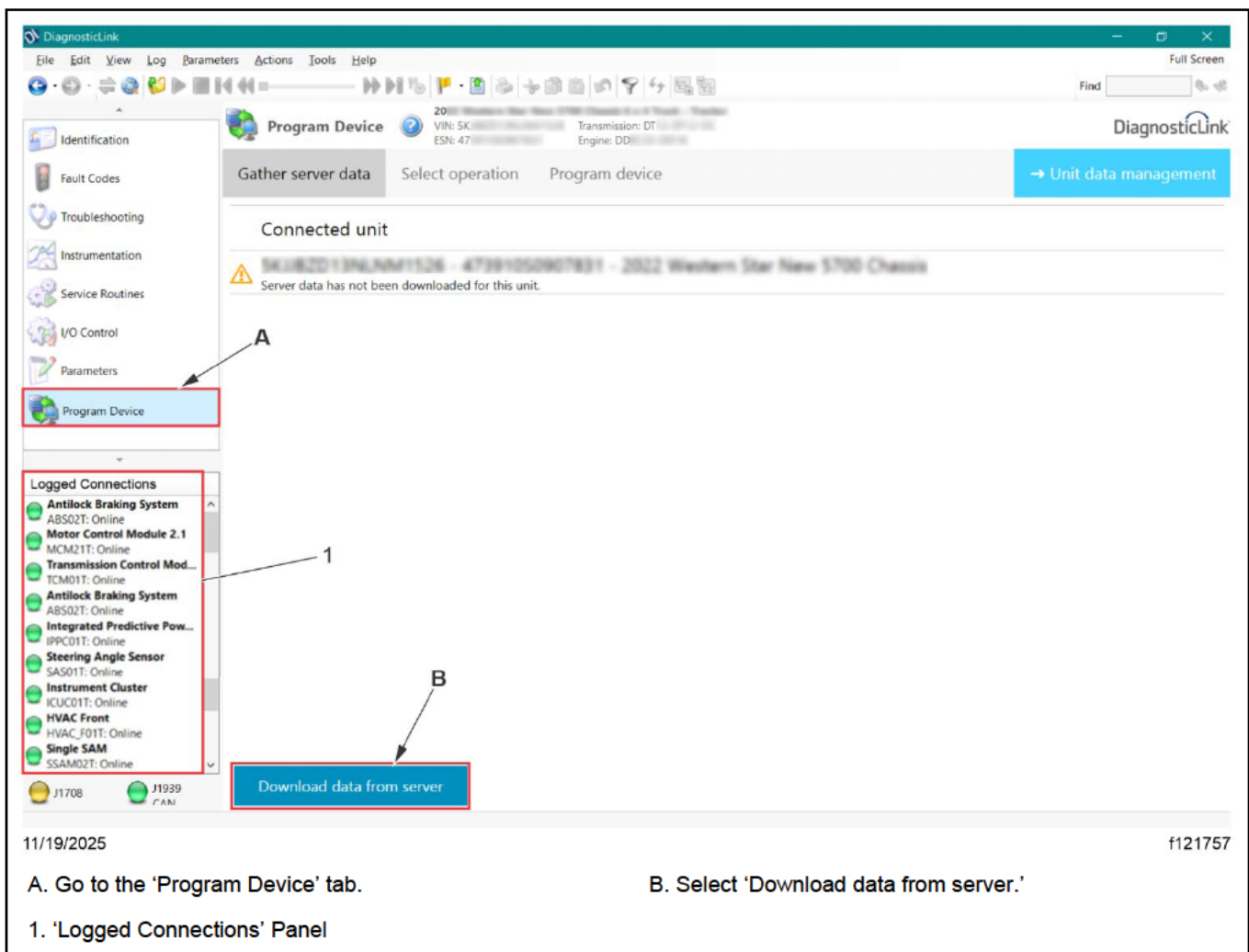


Fig. 31, Downloading the Data from the Server

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6. Once the data is downloaded from the server, go to the 'Parameters' tab.
7. Adjust the rear axle ratio in the Common Powertrain Controller (CPC).
8. Select and expand the 'ICC501T – Instrument Cluster' parameter folder.
 - 8.1. Select and expand the 'PID 0x43 FTL configuration' parameter sub-folder.
 - 8.1.1. Select the 'PD_AXOT_GaugeRA_AVL' parameter and set the parameter value to 'A0544479821-001 Axle Oil Temp RA available.' See Fig. 32.

The screenshot shows the 'Parameters' tab in a diagnostic tool. On the left, a sidebar contains various system categories, with 'Parameters' highlighted and labeled 'A'. The main window displays a tree view of parameters. 'ICC501T - Instrument Cluster' is expanded and labeled 'B'. Under it, 'PID 0x43 FTL configuration' is expanded and labeled 'C'. Within this sub-folder, 'PD_AXOT_GaugeRA_AVL' is selected and labeled 'D'. The parameter's value is set to 'A0544479821-001 Axle Oil Temp RA available', which is highlighted and labeled 'E'. The interface also shows a 'Logged Connections' list on the left, a status bar at the bottom with connection IDs J1708 and J1939, and a date of 11/19/2025.

A. Go to the 'Parameters' tab.

B. Select and expand the 'ICC501T – Instrument Cluster' parameter folder.

C. Select and expand the 'PID 0x43 FTL configuration' parameter sub-folder.

D. Select the 'PD_AXOT_GaugeRA_AVL' parameter.

E. Set the parameter value to 'A0544479821-001 Axle Oil Temp RA available.'

Fig. 32, Setting the PD_AXOT_GaugeRA_AVL Parameter Value

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9.2. Expand the 'ACS Interaxle Locks' parameter sub-folder.

9.2.1. Select the 'PACS_DiffLk_IA_MaxEngSpeed' parameter and set the parameter value to 'A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7.' See Fig. 34.

The screenshot shows a parameter configuration window for 'SSAM02T - Single SAM'. The 'ACS Interaxle Locks' folder is expanded, and the 'PACS_DiffLk_IA_MaxEngSpeed' parameter is selected. The value field is set to '(from parent)' and the units are 'mph'. A dropdown menu is open, showing a list of values, with 'A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7' selected. Arrows labeled 'A' and 'B' point to the parameter name and the selected value, respectively.

Parameter	Value	Units	Minimum	Maximum
SSAM02T - Single SAM				
ACS Active Lubrication Management	A0394573958-001	ACS Active Lub - No Active Lub		
ACS Active Axle Lock Detection				
ACS Active Lockup State				
ACS Axle Temperature	110			
ACS Axle Temperature Sensing	A0394573958-002	ACS Axle Temp Sensor - No Axle Temp Sensor 43N-002		
ACS Drive Sensors	110			
ACS Drive Wheel State	A0394573958-001	ACS Drive Wheel State - Default, No Wheel State		
ACS Drive Wheel State Command	110			
ACS Forward Differential Lock	110			
ACS IMB Config	A0394573958-002	ACS IMB IMB On - Default 43N		
ACS Interaxle Locks	A0394573958-001	ACS Interaxle Locks - 43N-001		
PACS_DiffLk_IA_MaxEngSpeed	(from parent)	IAD 43N (65534, from parent)		mph
PACS_DiffLk_IA_MaxEngSpeed_IA	(from parent)	A0394573958-001 ACS Interaxle Locks - IAD 43N 43N-001 (from parent)		
PACS_DiffLk_IA_MaxEngSpeed_IA	(from parent)	A0394573958-002 PACS DiffLk IA MaxEngSpeed = 40 Gen 7		
PACS_IA_ReverseDrift_S01	(from parent)	A0394573958-002 PACS DiffLk IA MaxEngSpeed = 40 Gen 7		
PACS_DiffLk_IA_Reverse	(from parent)	A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7		

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A. Select the 'PACS_DiffLk_IA_MaxEngSpeed' parameter.
B. Set the parameter value to 'A0394573958-002 PACS DiffLk IA MaxEngSpeed = 65534 Gen 7.'

Fig. 34, Setting the PACS_DiffLk_IA_MaxEngSpeed Parameter Value

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9.2.2. Select the 'PACS_DiffLk_MaxEnggSpeed_IA' parameter and set the parameter value to 'A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 65534.' See Fig. 35.

Parameter	Value	Units	Minimum	Maximum
SSAM02T - Single SAM				
ACS Active Lubrication Management	A0144402038-001	ACS-ALM - No ALM-420		
ACS - ACM Air Leak Detection				
ACS ACM Leakage Test				
ACS Axle Temperature	NA			
ACS Axle Temperature Sensing	A0144402038-002	ACS Axle Temp Sense - No Axle Temp Sense 420-002		
ACS - Drive Sensing	NA			
ACS FWH wheel slide	A0224430358-001	ACS SW Wheel Slid - Chosen, The Wheel Chosen		
ACS FWH wheel slide Continued	NA			
ACS Forward Differential Lock	NA			
ACS - IWB Config	A0224430358-001	ACS IWB Config - Default 001		
ACS Interaxle Locks	A0224430358-001	ACS Interaxle Locks - Air Switch		
PACS_DiffLk_MaxEnggSpeed	(from parent)	40720.9		mph
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	Air Switch (65534, from parent)		mph
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 ACS Interaxle Locks - Air Switch 001/004, from parent		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 40		
PACS_DiffLk_MaxEnggSpeed_IA	(from parent)	A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 65534		

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A. Select the 'PACS_DiffLk_MaxEnggSpeed_IA' parameter.
B. Set the parameter value to 'A0224430358-001 PACS DiffLk MaxEnggSpeed IA = 65534.'

Fig. 35, Setting the PACS_DiffLk_MaxEnggSpeed_IA Parameter Value

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9.3. Select and expand the 'MSC MSF Modular switch field' parameter sub-folder.

9.3.1. Select the 'PMSC_InteraxleSw_Var_DTNA' parameter and set the parameter value to 'A0434477858-001 MSC InterSwVarDTNA - Air, Fdbk LG3.' See Fig. 36.

The screenshot shows a table with columns: Parameter, Part, Value, Units, and Minimum. The 'MSC MSF Modular switch field' folder is expanded, and the 'PMSC_InteraxleSw_Var_DTNA' parameter is selected. A dropdown menu is open, showing the selected value 'A0434477858-001 MSC InterSwVarDTNA - Air, Fdbk LG3' highlighted in blue. Arrows A, B, and C point to the folder, parameter, and dropdown menu respectively.

Parameter	Part	Value	Units	Minimum
SSAM02T - Single SAM				
ESC - Limp Home Mode	n/a			
ESC Mirror Utility Light	n/a			
MSC MSF Modular switch field	n/a			
PMSC_mof_pgmst_premoving_time	100	100		0
PMSC_mof_parking_offset	100	0		0
PMSC_DiffLock_Max_Request_time	100	0.000	s	0.000
PMSC_mof_pgmst_parking_duration	100	0		0
PMSC_mof_parking_gamma_max	100	25		0
PMSC_mof_max_number_of_watches	100	10		0
PMSC_InteraxleSw_Var_DTNA	n/a			
PMSC_DiffLock_Max_SSD	100			
PMSC_DiffLock_Max_DiffLock	100			
PMSC_AuxiliaryControl_Trip	100			
PMSC_DiffLock_Max_Air	100			

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A. Select and expand the 'MSC MSF Modular switch field' parameter sub-folder.
 B. Select the 'PMSC_InteraxleSw_Var_DTNA' parameter.
 C. Set the parameter value to 'A0434477858-001 MSC InterSwVarDTNA - Air, Fdbk LG3.'

Fig. 36, Setting the PMSC_InteraxleSw_Var_DTNA Parameter Value

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Creation Date: February 2026

10. Select and expand the 'MS01T – Maintenance System' parameter folder.

10.1. Select the 'Rear axle 1, Parameters, EEPROM' parameter sub-folder and set the parameter value to 'A0044474324-001 VCD_Rear_axle_1_Parameters_EEPROM.' See Fig. 37.

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A. Select and expand the 'MS01T – Maintenance System' parameter folder.
 B. Select the 'Rear axle 1, Parameters, EEPROM' parameter sub-folder.
 C. Set the parameter value to 'A0044474324-001 VCD_Rear_axle_1_Parameters_EEPROM.'

Fig. 37, Setting the Rear axle 1, Parameters, EEPROM Parameter Value

10.2. Expand the 'Rear axle 1, Parameters, EEPROM' parameter sub-folder, and set the parameter values as listed below. See Fig. 38.

Parameter Name	Parameter Value
Oil selection table, row 01, oil number (PAR_OatZ01OelNr_HA1)	A0074471224-001 Oil Number Row01 HA1 No. 24
Oil selection table, row 01, maximum driving distance (PAR_OatZ01FsMax_HA1)	A0074471024-001 Oil Maximum Driving Distance Row 01 800tkm
Oil selection table, row 01, maximum operating time (PAR_OatZ01BzMax_HA1)	A0074471724-001 Oil Selection Table Row 01 Max Operating Time 3yr

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Fig. 38, Setting Parameter Values Within the Rear axle 1, Parameters, EEPROM Parameter Sub-Folder

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- 10.3. Select the 'Rear axle 2, Parameters, EEPROM' parameter sub-folder and set the parameter value to 'A0044474424-001 VCD_Rear_axle_2_Parameters_EEPROM.' See [Fig. 39](#).

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A. Select the 'Rear axle 2, Parameters, EEPROM' parameter sub-folder.
B. Set the parameter value to 'A0044474424-001 VCD_Rear_axle_2_Parameters_EEPROM.'

Fig. 39, Setting the Rear axle 2, Parameters, EEPROM Parameter Value

- 10.4. Expand the 'Rear axle 2, Parameters, EEPROM' parameter sub-folder, and set the parameter values as listed below. See [Fig. 40](#).

Parameter Name	Parameter Value
Oil selection table, row 01, oil number (PAR_OatZ01OeINr_HA2)	A0074471124-001 Oil Selection Table Row 01 Oil No. 24
Oil selection table, row 01, maximum driving distance (PAR_OatZ01FsMax_HA2)	A0074471324-001 Oil Selection Table Row 01 Max Driving Dist 80tkm
Oil selection table, row 01, maximum operating time (PAR_OatZ01BzMax_HA2)	A0074471624-001 Oil Selection Table Row 01 Max Operating Time 3yr

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Fig. 40, Setting Parameter Values Within the Rear axle 2, Parameters, EEPROM Parameter Sub-Folder

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10.5. Select and expand the 'Parameters, record 01, EEPROM' parameter sub-folder. Set the parameter values as listed below. See Fig. 41.

Parameter Name	Parameter Value
Channel activation (PAR_KanAktiv_HA1)	A0054470024-001 Chanel activation HA1 ON
Quality factor, mechanical (PAR_QfMech_HA1)	A0044479924-001 Quality factor, mechanical (PAR_QfMech_HA1)
Oil number, selected (PAR_OelNr_HA1)	A0084473424-001 Oil number, selected (PAR_OelNr_HA1) No. 24 - 235.31
Channel activation (PAR_KanAktiv_HA2)	A0044474824-001 Chanel activation HA2 ON
Quality factor, mechanical (PAR_QfMech_HA2)	A0074472524-001 Quality factor, mechanical - Par_QfMech_HA2
Oil number, selected (PAR_OelNr_HA2)	A0074470024-001 Oil Number Selected HA2 Nr 24

Parameter	Part	Value
MS01T - Maintenance System		
Parameters, record 01, EEPROM ← A	n/a	
Channel activation (PAR_KanAktiv_HA1)	A0054470024-001	yes
Quality factor, mechanical (PAR_QfMech_HA1)	A0044479924-001	60
Oil number, selected (PAR_OelNr_HA1)	A0084473424-001	24
Channel activation (PAR_KanAktiv_HA2)	A0044474824-001	yes
Quality factor, mechanical (PAR_QfMech_HA2)	A0074472524-001	60
Oil number, selected (PAR_OelNr_HA2)	A0074470024-001	24

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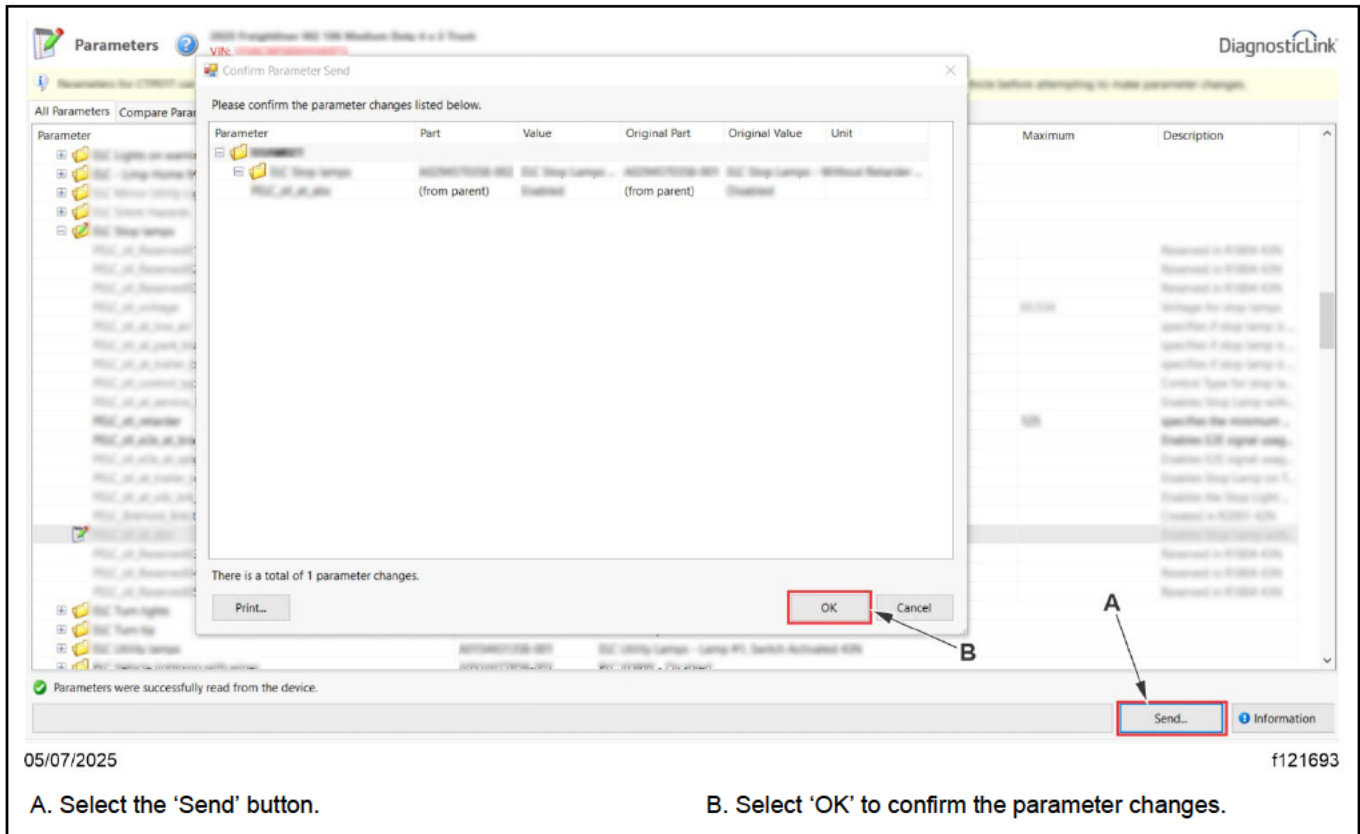
A. Select and expand the 'Parameters, record 01, EEPROM' parameter sub-folder.

Fig. 41, Setting Parameter Values Within the Parameters, record 01, EEPROM Parameter Sub-Folder

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11. Select the 'Send' button to write the parameter changes to the vehicle. A window opens asking to confirm the parameter changes. Select 'OK.' See Fig. 42.



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A. Select the 'Send' button.

B. Select 'OK' to confirm the parameter changes.

Fig. 42, Writing the Parameter Changes to the Vehicle

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12. Once the parameter change is complete, go to the 'Program Device' tab. Select 'Unit data management' at the top-right of the window. See Fig. 43.

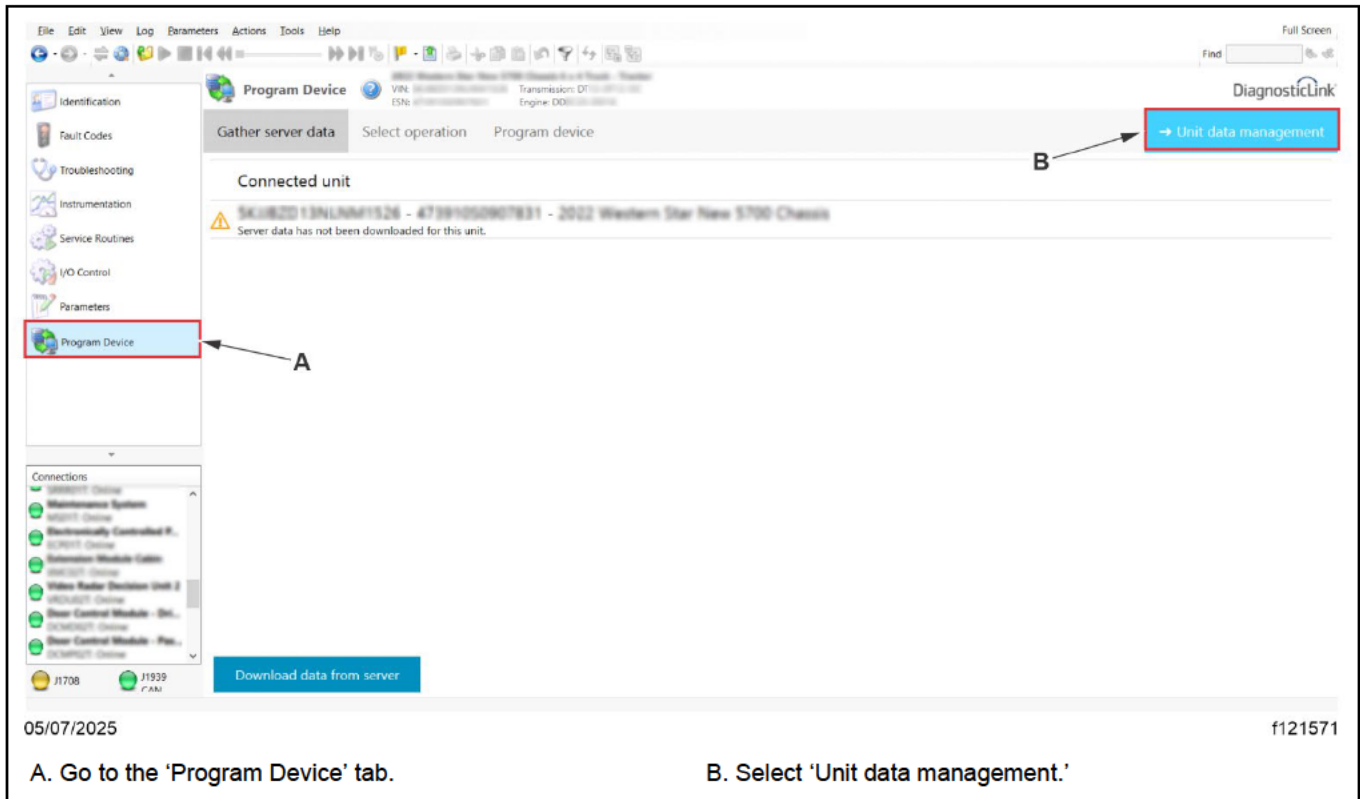


Fig. 43, Navigating to the Unit Data Management Screen

