

January 2022
SF643A

Subject: Cascadia with Allison Transmission - Inconsistent Shift

Models Affected: Specific model year 2020-2021 Freightliner Cascadia vehicles, manufactured September 23, 2019, through December 22, 2020.

General Information

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF643A to modify the vehicles mentioned above.

On certain Freightliner Cascadia vehicles with Allison automatic transmissions, a software error may prevent the transmission from shifting out of neutral.

An update will be applied to the sSAM controller parameter(s) to correct the software error.

There are approximately 337 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.

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

This is a software update; no replacement parts required.

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts, although no parts are anticipated to be used for this repair.

Labor Allowance

Table 1 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
SF643A	PARAMETER UPDATE, SSAM, SERVICE BRAKE	0.3	996-F116A	12-Repair Recall/Campaign

Table 1

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location on the vehicle, and attach a gray completion sticker (Form WAR261). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle, and attach one prior to attaching the completion sticker.

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Claims for Credit

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. Please reference the following information in OWL:

- Claim type is **Field Service Campaign**.
- In the Campaign field, enter the campaign number and appropriate condition code (**SF643-A**).
- In the Primary Failed Part field, enter **25-SF643-000**.
- In the Parts section, there should be no entry unless there were special circumstances, as this is a software update.
- In the Labor section, enter the appropriate SRT from the Labor Allowance Table. Administrative time will be included automatically as SRT 939-6010A for 0.3 hours.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- This Field Service Campaign will **terminate on January 31, 2023**. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on DTNACConnect.com.

IMPORTANT: Check OWL prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed. Check for a completion sticker before beginning work.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign.

For questions, contact the Warranty Campaigns Department via Web inquiry at DTNACConnect.com/WSC, or the Customer Assistance Center at (800) 385-4357.

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Copy of Notice to Owners

Subject: Cascadia with Allison Transmission - Inconsistent Shift

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks division, is initiating Field Service Campaign SF643A to modify specific model year 2020-2021 Freightliner Cascadia vehicles, manufactured September 23, 2019, through December 22, 2020.

On certain Freightliner Cascadia vehicles with Allison automatic transmissions, a software error may prevent the transmission from shifting out of neutral.

An update will be applied to the sSAM controller parameter(s) to correct the software error.

Please contact an authorized DTNA dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. The campaign will take approximately one hour and will be performed at no charge to you. To locate an authorized dealer, search online at Daimler-TrucksNorthAmerica.com/contact-us/. Scroll down to "Locate a Dealer," and select the appropriate brand.

This Field Service Campaign will **terminate on January 31, 2023**. 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, DTNA will not pay for any damage caused by failure to properly maintain your vehicle. DTNA 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.

Contact the Warranty Campaigns Department at (800) 547-0712, e-mail address DTNA-War-Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357, if you have any questions.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

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Work Instructions

Subject: Cascadia with Allison Transmission - Inconsistent Shift

Models Affected: Specific model year 2020-2021 Freightliner Cascadia vehicles, manufactured September 23, 2019, through December 22, 2020.

SSAM Service Brake Parameter Update

1. Check the base label (Form WAR259) for a completion sticker for SF643 (Form WAR261) indicating this work has been done. The base label is usually located on the passenger door about 12 inches (30 cm) below the door latch. If a sticker is present, no work is needed. If there is no sticker, proceed with the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

IMPORTANT: Make sure that DiagnosticLink® is updated to the latest version (8.15 at the time of publication, or newer) before programming the vehicle.

3. Open DiagnosticLink prior to connecting to the vehicle.
4. Using DTNACONnect credentials, connect DiagnosticLink to the server. The sign-in to the server will remain active until DiagnosticLink is closed. See [Fig. 1](#).

Authentication

Please enter your user name and password.

User Name

Remember my user name

Password

[Logon Help](#)

You have 60 days remaining before a server login is required to keep the tool active.

OK Cancel

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Fig. 1, Sign-In Window

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5. Connect the vehicle to DiagnosticLink. Ensure the sSAM rollcalls, and is visible in the 'Connections' window. See [Fig. 2](#).

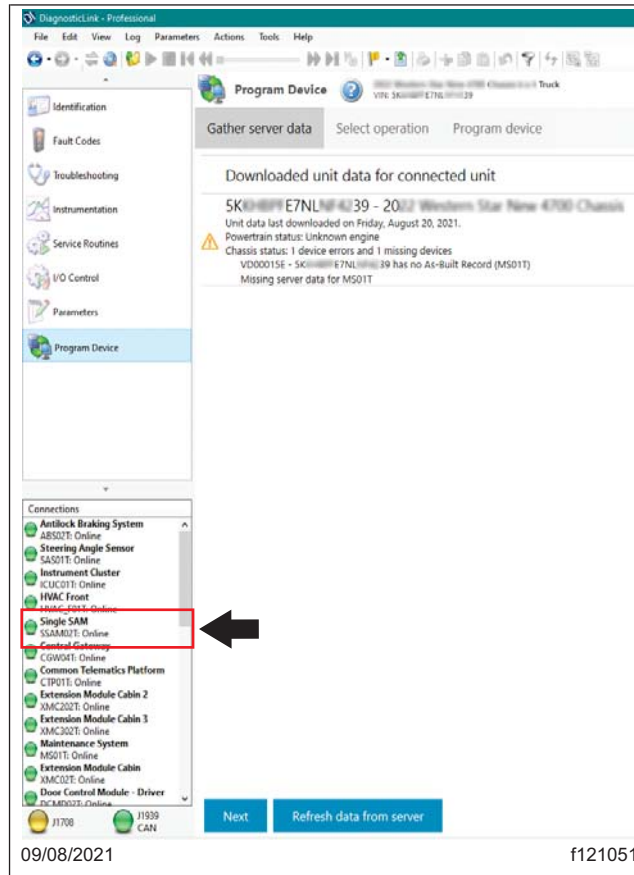


Fig. 2, sSAM Connected

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- Open the 'Parameters' tab, and allow the parameters to be read completely by DiagnosticLink, as indicated by the status bar at the bottom of the screen. See [Fig. 3](#).

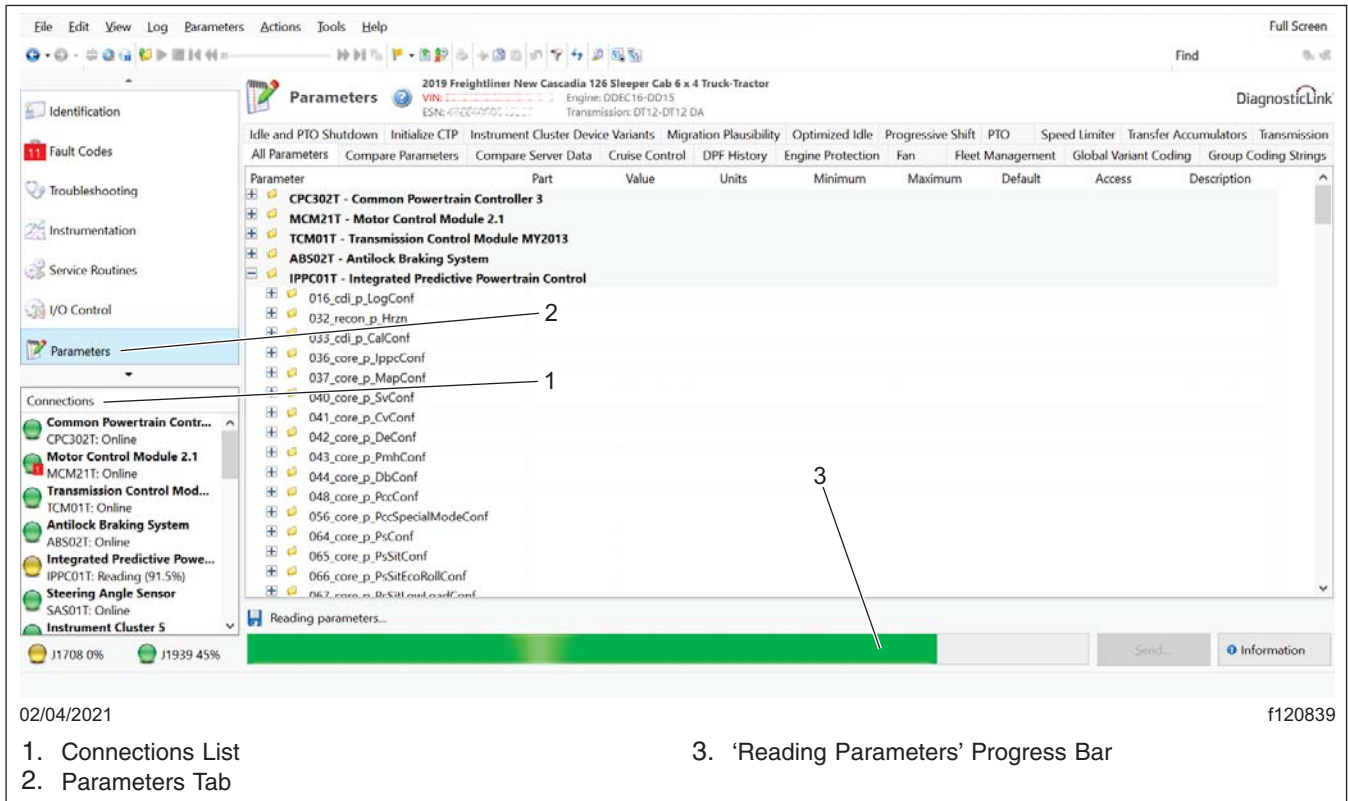


Fig. 3, Connecting Default ECUs and Reading Vehicle Parameters in DiagnosticLink

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- Go to 'Program Device,' and make sure that the vehicle identification number (VIN) information that appears is correct. If not, remove each VIN by selecting the 'Remove' button located at the far right-hand side of that VIN. To remove all the VINs at once, select the 'Remove All' button at the bottom of the screen. See Fig. 4.

If the VIN is not automatically detected, select 'Add request,' then enter the VIN. Select the electronic control unit (ECU) to be connected. See Fig. 5 and Fig. 6.

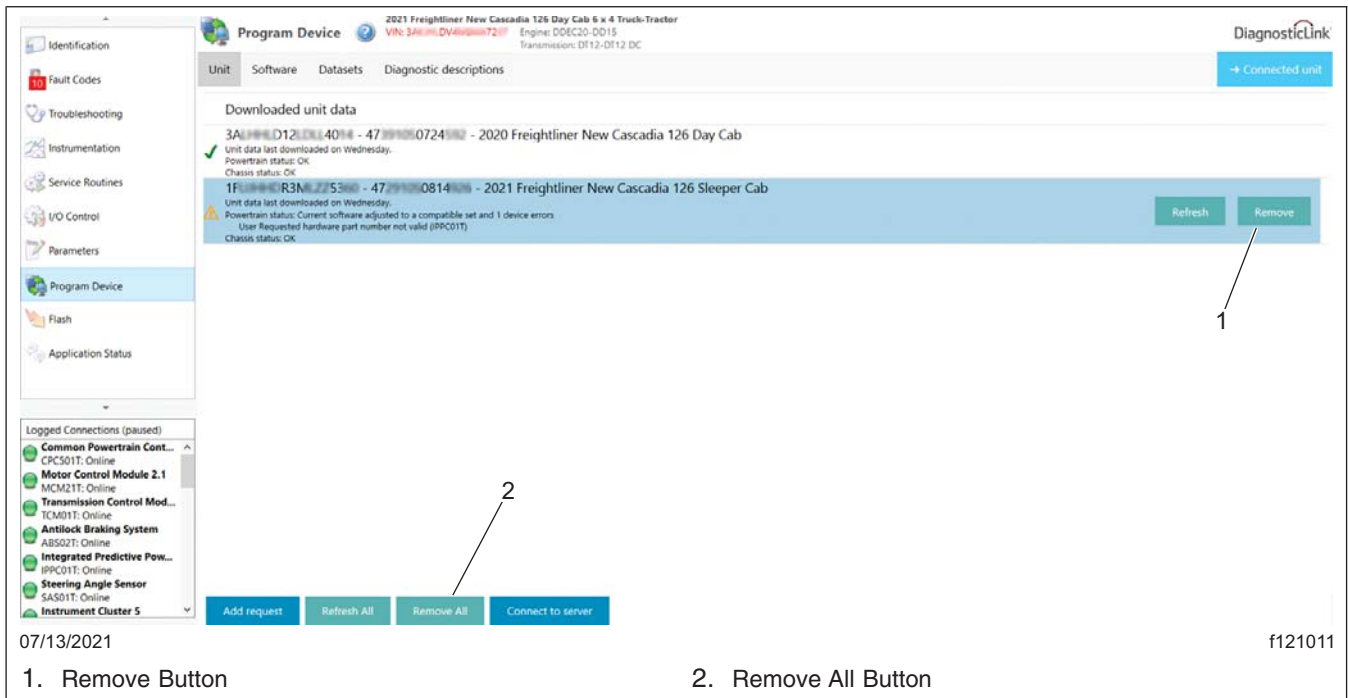


Fig. 4, Removing VINs

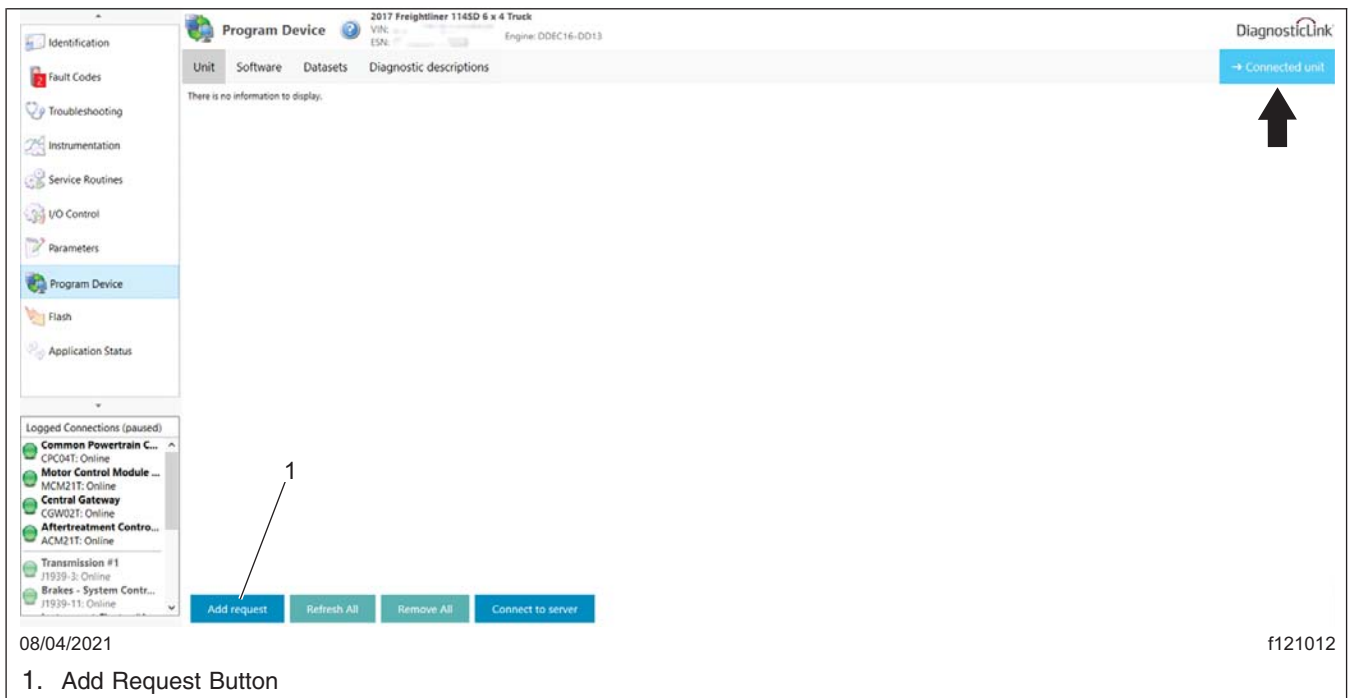


Fig. 5, Add Request and Connected Unit Button

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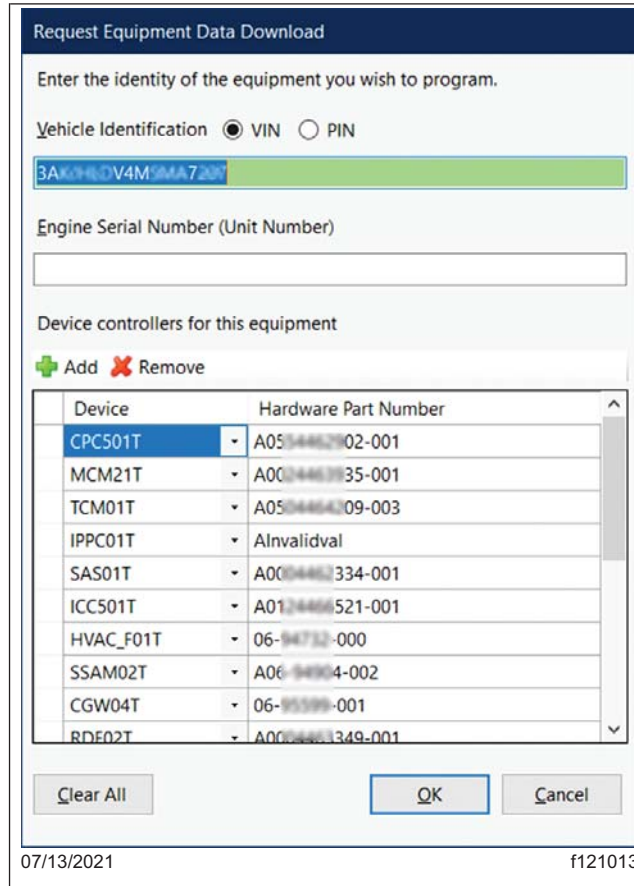


Fig. 6, Manually Connecting to DiagnosticLink

8. Select 'Connected Unit.' Make sure the VIN information populated in the center window is correct; then select 'Download data from server' at the lower left-hand side of the screen. See Fig. 7.

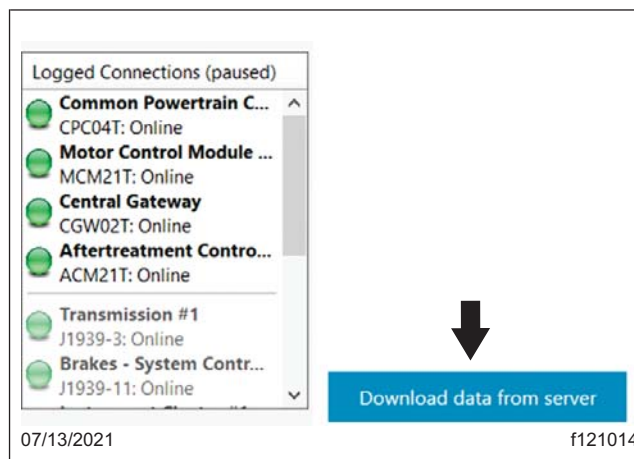


Fig. 7, Downloading Data from the Server

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- After the server data download is complete, go to the 'Parameters' tab. In the 'All Parameters' tab, go to **BSC Service Brake Inspections** folder, then select the **PBSC_sb_pedal_pos_cval_waitTime** parameter. Set the parameter value to **A0374573458-002 PBSC_sb_pedal_pos_cval_waitTime = 0**. See [Fig. 8](#).

DiagnosticLink - Professional

2020 Freightliner New Cascadia 126 Sleeper Cab 6 x 4 Truck-Tractor
VIN: 1FUJHHEXLLP8B88

Parameter	Part	Value	Units	Minimum	Maximum
APC Supply Air Pressure Sensing	A0444470258-001				
APC Suspension Air	A0434475358-003				
APC Suspension Air - Reserved					
ASC Backup Alarm	A0734473958-001				
ASC Backup Alarm Continued					
ASC City horn active	A0344471158-001				
ASC Comfort Locking Acoustic Feedback	A0334470858-001				
ASC - Continued	A0434473358-001				
ASC Horn Primary and Secondary	A0734474158-001				
ASC - HW Config	A0334474458-001				
BSC E2E Signals					
BSC - HW Config	A0334474558-001				
BSC Park Brake	n/a				
BSC Park Brake Drag	A0694478358-001				
BSC Service Brake	A0324477458-002				
BSC Service Brake Inspections	A0694478458-001				
PBSC_brake_inspection_present	(from parent)	Not available			
PBSC_brake_inspection_timer	(from parent)	0	s	0	250
PBSC_sb_pedal_pos_cval_lowThres	(from parent)	0.0	%	0.0	100.0
PBSC_sb_pedal_pos_cval_uppThres	(from parent)	47.2	%	0.0	100.0
PBSC_sb_pedal_pos_cval_waitTime	(from parent)				250
PBSC_sb_speed_interlock_Thres	(from parent)				77.67
BSC Trailer Detection	A0444470758-001				
CCS - HW Config	A0334474658-001				
CCS Outside Air Temperature					
DBC Heated mirrors	A0694478758-001				
DBC - HW Config	A0334474758-002				
DGM - HW Config	A0444472058-001				
ELC Backup lighting	A0314476458-001				

Parameters were successfully read from the device.

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Fig. 8, Setting Parameter PBSC_sb_pedal_pos_cval_waitTime

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10. Select the 'Send' button to write the parameter changes to the sSAM ECU in the vehicle. A window will open asking to confirm the parameter change, select 'OK.' See Fig. 9.

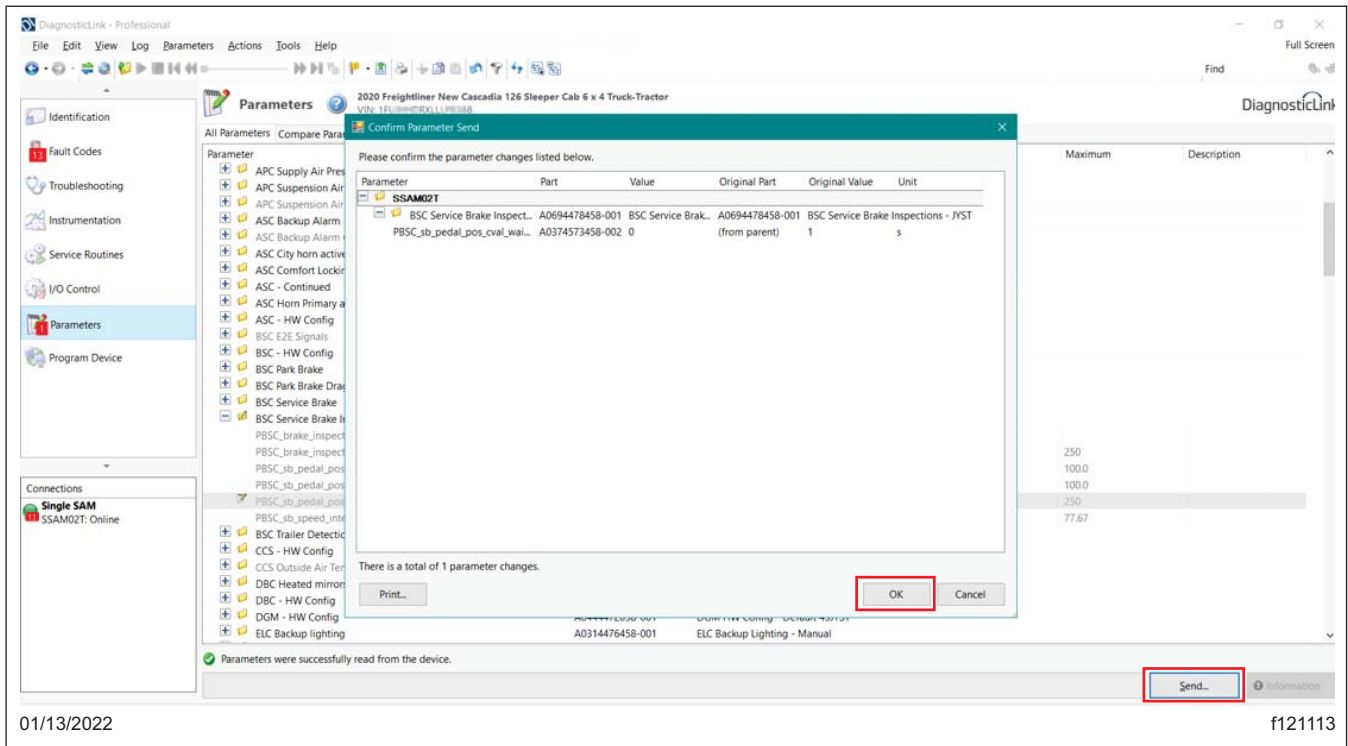


Fig. 9, Selecting Send Button and Confirming Parameter Send

11. Once the parameter write is complete, go to the 'Program Device' tab and verify there is a pending upload.
 - If there is a pending upload, select 'Connect to Server' to upload the parameter updates to the server.
 - If there is no pending upload, go to the 'Parameters' tab, then select 'Refresh.' Verify the parameters are set as shown in step 9. Go to 'Program Device,' there should now be a pending upload. Select 'Connect to Server' to upload the parameter updates to the server.
12. Once the parameter updates are uploaded to the server, disconnect the vehicle from DiagnosticLink.
13. Clean a spot on the base label (Form WAR259), write the campaign number, SF643, on a blank gray completion sticker (Form WAR261), and attach it to the base label, indicating this work has been completed.