Daimler Trucks
North America LLC

Campaign

Field Service

October 2024
SF691 AB

Subject: M2 Plus Work Brake

Models Affected: Specific model years 2024-2025 Business Class M2 vehicles manufactured between March 23, 2023, through July 30, 2024.

General Information

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF691 to modify the vehicles mentioned above.

REVISION: Additional vehicles have been added to the campaign, and a new campaign group (B) has been included. The work instructions for group B, along with a new SRT, have been incorporated into the bulletin.

The parameters that control the work brake function do not operate properly.

The work brake parameter will be updated. Group A will require the XMC1 X1 Connector Wires to be repositioned.

There are approximately 220 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

There are no replacement parts for this repair.

If our records show your dealership has ordered any vehicle(s) involved in campaign number SF691, a list of the customers and vehicle identification numbers will be available on DTNA Portal.

Table 1 - Replacement Parts for SF691

Campaign Number	Part Description	Part Number	QTY
SF691 A&B	BLANK COMPLETION STICKER	WAR261	**1 ea**

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.

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Codes	Corrective Action
SF691 A	Parameter update, and moving XMC1 X1 Connector Wires	1.7	996-F218A	12-Repair Recall/Campaign
SF691 B	PARAMETER, XMC1, WORK BRAKE, PROGRAM ONLY (SF691B)	0.4	996-F218B	12-Repair Recall/Campaign

Table 2

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate lo- cation on the vehicle, and attach the gray completion sticker provided in the field service kit (Form WAR261). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a field service kit is not required or there is no completion sticker in the kit, write the campaign number on a blank sticker and attach it to the base completion label.

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 **Field Service Campaign**.
- In the Campaign field, enter the campaign number and appropriate condition code (**SF691-A, SF691-B**).
- In the Primary Failed Part field, enter **25-SF691-000**.
- There are no replacement parts for this repair.
- 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 October 31st, 2025**. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on DTNA Portal.

IMPORTANT: OWL must be viewed prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed. Also, 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. U.S. and Canadian Dealers: All excess inventory to be returned to the PDC following the conclusion of the campaign must be returned in resaleable condition to the Memphis PDC within 90 days from the termination date. Please submit a PAR to request return to the Memphis PDC.

(Canadian dealers should return the kits to their facing PDC.) Export Distributors: Excess inventory is not returnable.

For questions, U.S., and Canadian dealers, contact the Warranty Campaigns Department via Web inquiry at DTNA Portal/WSC, or the Customer Assistance Center at (800) 385-4357, if you have any questions or need additional information. Export distributors submit a Web inquiry or contact your International Service Manager

October 2024
SF691 AB

Copy of Notice to Owners

Subject: M2 Plus Work Brake

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF691 to modify the vehicles mentioned above.

The parameters that control the work brake function do not operate properly.

The work brake parameter will be updated. Group A will require the XMC1 X1 Connector Wires to be repositioned.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. To locate an authorized dealer, go to

Daimler-TrucksNorthAmerica.com/Contact-Us/. Scroll down to “Locate a Dealer,” and select the appropriate brand. The campaign will take approximately one to two hours and will be performed at no charge to you.

This Field Service Campaign will **terminate on October 31st, 2025**. 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 Trucks North America LLC will not pay for any damage caused by failure to properly maintain your vehicle. Daimler Trucks 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.

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, if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: M2 Plus Work Brake

Models Affected: Specific model years 2024-2025 Business Class M2 vehicles manufactured between March 23, 202, through April 9, 2024.

Enabling the Work Brake Feature

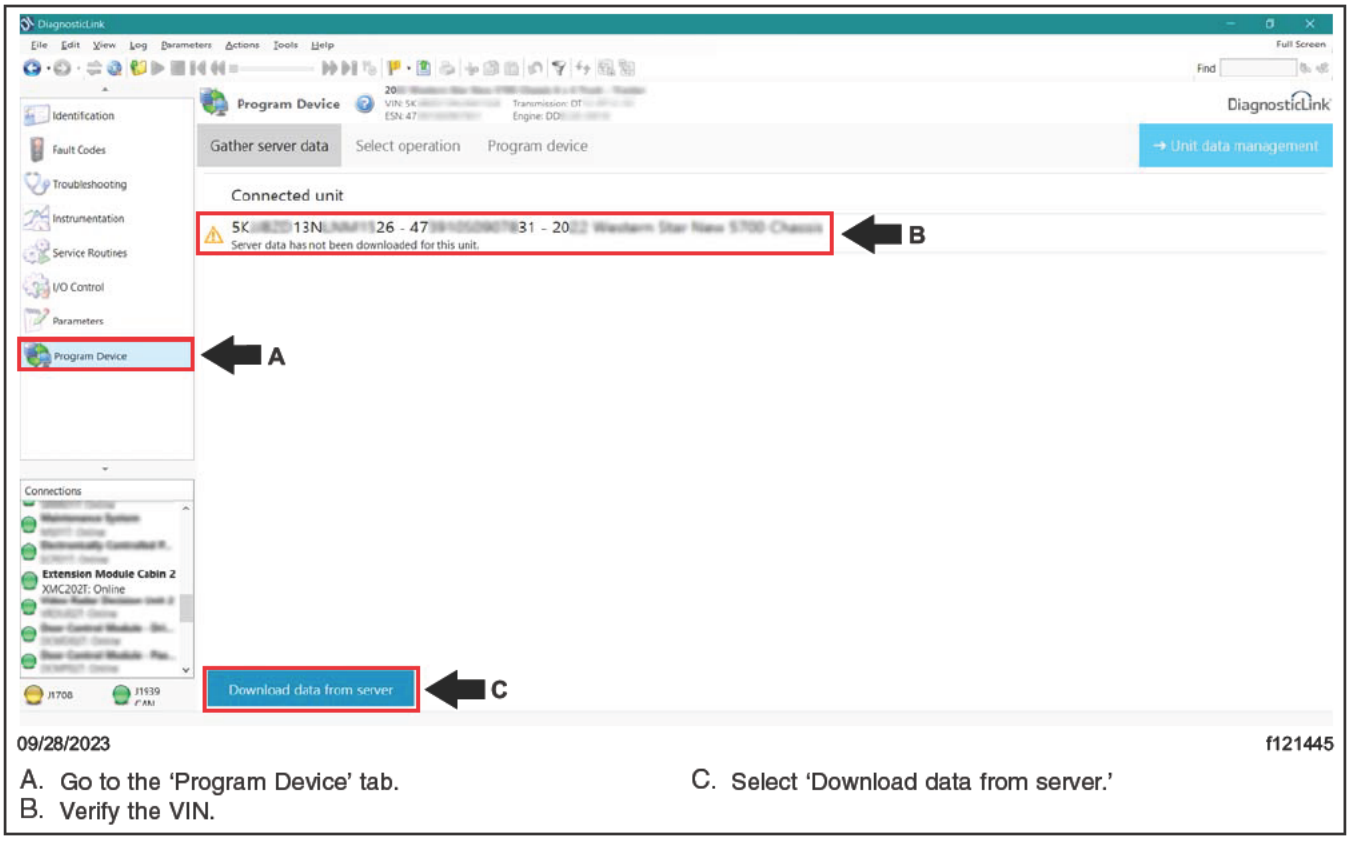
Updating the Single Signal Detect and Actuation Module (sSAM02T) and Extension Module Controller (XMC02T) Parameters

1. Check the base label (Form WAR259) for a completion sticker for SF691 (Form WAR261), indicating this work has been done. The base label is usually located on the passenger-side door, about 12 inches (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. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Connect an RP1210B-compliant vehicle diagnostic adaptor to the diagnostic connector on the vehicle.
4. Connect the other end of the RP1210B-compliant vehicle diagnostic adaptor to the laptop.
5. Open DiagnosticLink®.

IMPORTANT: Make sure that DiagnosticLink is updated to the latest version (8.20 at the time of publication, or newer) before programming the vehicle.

To update DiagnosticLink, from the menu bar, select ‘Tools,’ then select ‘Update’ from the drop-down menu.

6. Use the DTNA Portal credentials to connect DiagnosticLink to the server.
7. Go to the ‘Program Device’ tab, and make sure that the vehicle identification number (VIN) that appears is correct. Select ‘Download data from server.’ See **Fig. 1**.



A. Go to the 'Program Device' tab.
B. Verify the VIN.
C. Select 'Download data from server.'

Fig. 1, Downloading Data from the Server

8. After the server data download is complete, go to the 'Parameters' tab.
9. Select and expand the 'SSAM02T – Single SAM' folder.
10. Select and expand the 'ASC Horn Alert' sub-folder.
11. Select the 'PASC_Alert_Hrn_Enabled' parameter, and make sure the parameter value is already set to 'Enabled,' as shown in **Fig. 2**.

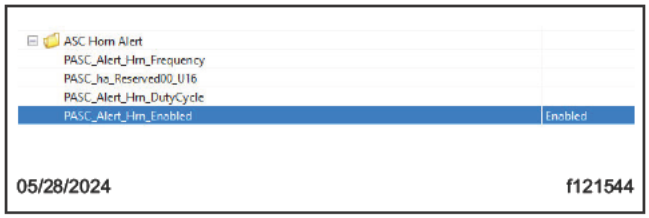


Fig. 2, PASC_Alert_Hrn_Enabled Parameter Value Set to Enabled

12. Select and expand the 'VAC Vehicle Alert Controls' sub-folder.
13. Select the 'PVAC_WorkBrk_Hrn_Enabled' parameter, and make sure the parameter value is already set to 'Enabled,' as shown in **Fig. 3**.

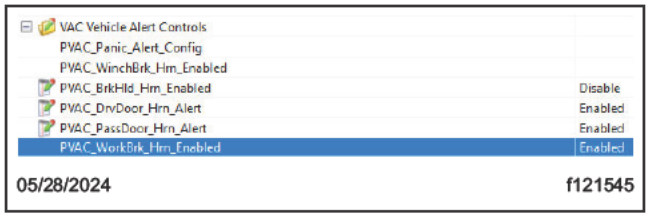


Fig. 3, PVAC_WorkBrk_Hrn_Enabled Parameter Value Set to Enabled

14. Select and expand the 'XMC02T – Extension Module Cabin' folder.
15. Select and expand the 'FSC Input Config' sub-folder.
16. Select the 'PFSC_AFnc0002_mode' parameter, and make sure the parameter value is already set to 'Volt_0_6,' as shown in Fig. 4.

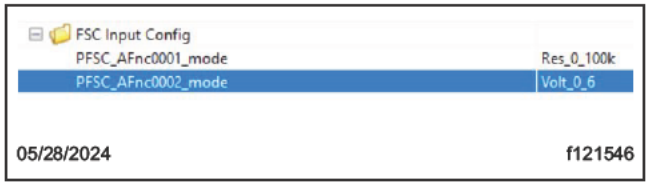


Fig. 4, Setting the PFSC_AFnc0002_mode Parameter Value to Volt_0_6

NOTE: Step 17 only applies to vehicles in SF691A. For vehicles in SF691B, skip step 17 and go to step 18.

17. Select and expand the 'Work Brake Diagnostics' sub-folder, and make sure the parameter value is already set, as shown in Fig. 5.

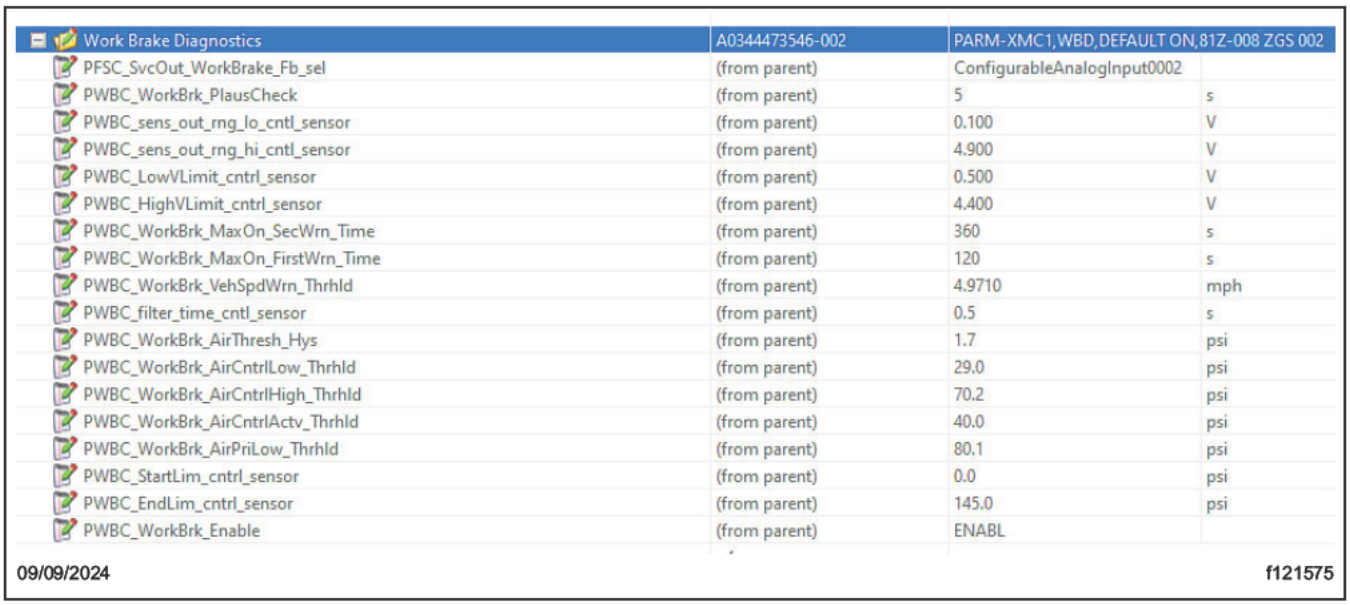


Fig. 5, Setting the Work Brake Diagnostics Parameter Value (SF691A)

NOTE: Step 18 only applies to vehicles in SF691B. For vehicles in SF691A, skip step 18 and go to step 19.

18. Select and expand the 'Work Brake Diagnostics' sub-folder, and make sure the parameter value is already set, as shown in Fig. 6.

Work Brake Diagnostics	A0374473446-001	PARM-XMC1,WBD,DEFAULT ON,81Z-010	
PFSC_SvcOut_WorkBrake_Fb_sel	(from parent)	ConfigurableAnalogInput0002	
PWBC_WorkBrk_PlausCheck	(from parent)	5.0	s
PWBC_sens_out_rng_lo_cntl_sensor	(from parent)	0.100	V
PWBC_sens_out_rng_hi_cntl_sensor	(from parent)	4.900	V
PWBC_LowVLimit_cntrl_sensor	(from parent)	0.500	V
PWBC_HighVLimit_cntrl_sensor	(from parent)	4.400	V
PWBC_WorkBrk_MaxOn_SecWrn_Time	(from parent)	360.0	s
PWBC_WorkBrk_MaxOn_FirstWrn_Time	(from parent)	120.0	s
PWBC_WorkBrk_VehSpdWrn_Thrhld	(from parent)	4.9710	mph
PWBC_filter_time_cntl_sensor	(from parent)	0.5	s
PWBC_WorkBrk_AirCntrlHigh_Thrhld	(from parent)	70.2	psi
PWBC_WorkBrk_AirCntrlActv_Thrhld	(from parent)	40.0	psi
PWBC_WorkBrk_AirPriLow_Thrhld	(from parent)	80.1	psi
PWBC_StartLim_cntrl_sensor	(from parent)	0.0	psi
PWBC_EndLim_cntrl_sensor	(from parent)	145.0	psi
PWBC_WorkBrk_Enable	(from parent)	ENABL	

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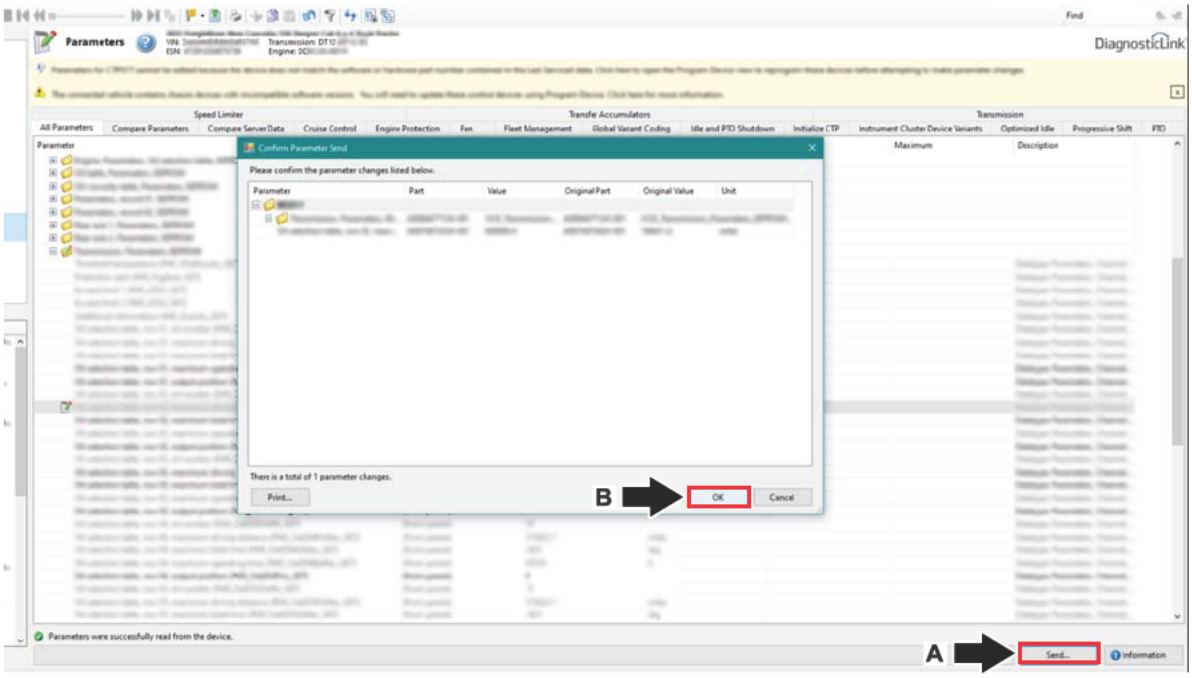
Fig. 6, Setting the Work Brake Diagnostics Parameter Value (SF691B)

19. Select the ‘Send’ button to write the parameter changes to the SSAM02T and XMC02T electronic control units (ECUs) in the vehicle. A pop-up window appears asking to confirm the parameter changes. Select ‘OK.’ See **Fig. 7**.



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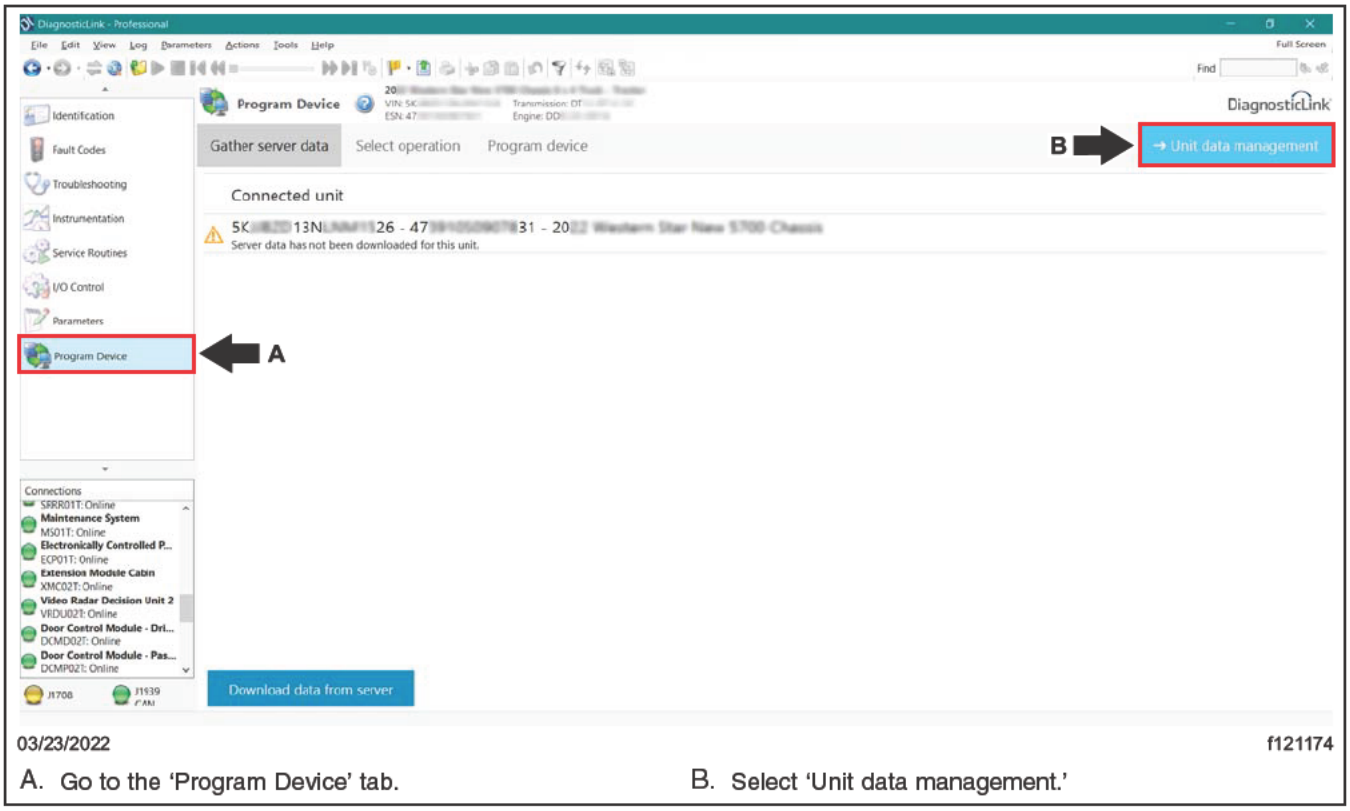
A. Select the ‘Send’ button.

B. Select ‘OK’ to confirm the parameter changes.

Fig. 7, Writing the Parameter Changes to the Vehicle

20. Once the parameter change is complete, go to the ‘Program Device’ tab. Select ‘Unit data management’ in the upper-right corner. See **Fig. 8**.



A. Go to the 'Program Device' tab.

B. Select 'Unit data management.'

Fig. 8, Selecting Unit Data Management

21. The information corresponding to the VIN should appear under the 'Unit data for upload.' Select 'Connect to server' to upload the new parameters. See **Fig. 9**.

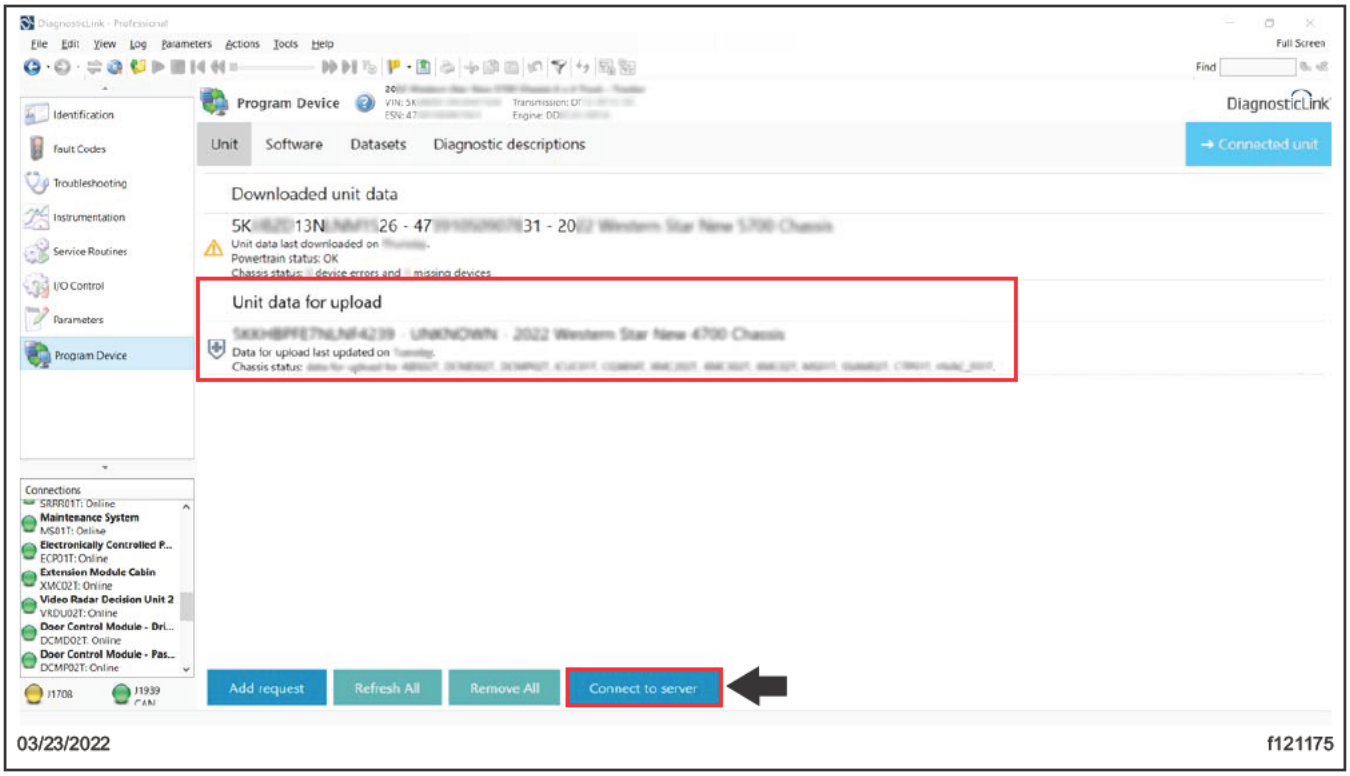


Fig. 9, Uploading the New Parameters

22. Once the parameter updates are uploaded to the server, disconnect the vehicle from DiagnosticLink.
23. Turn the ignition key to the OFF position.

Moving the XMC1 X1 Connector Wires

IMPORTANT: Inspect the XMC X1 connector and verify if the wires need to be repositioned.

1. To access the XMC1 module, the dash panels need to be removed. For instructions, see **Section 54.11** of the *Business Class M2 Plus Workshop Manual*.
2. Use the pin removal tool (DK10CHA17002-2 or DK10CHA17002-4) to remove the wire from pin 38 of the XMC1 X1 connector and insert into pin 1 of the same connector. See **Fig. 10** and **Fig. 11**.

   Figure 12 shows the XMC1 X1 connector pin layout.

   NOTE: If some other wire is already inserted into pin 1 of the XMC1 X1 connector, both the wires have to be spliced together.

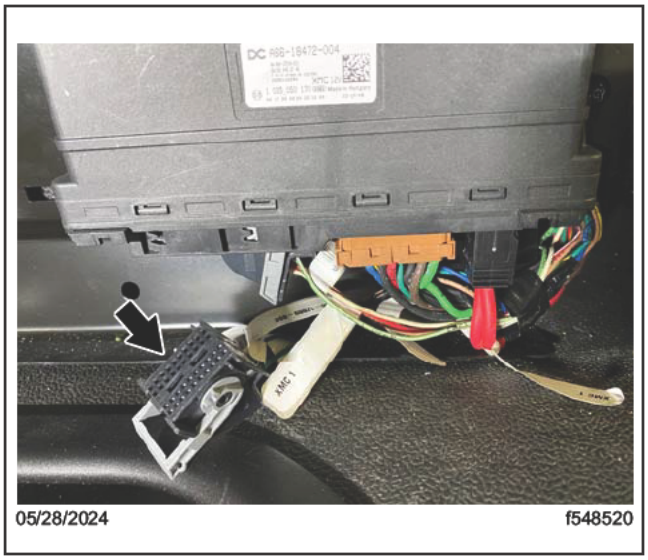


Fig. 10, XMC1 X1 Connector

Fig. 11, Pin Removal Tool

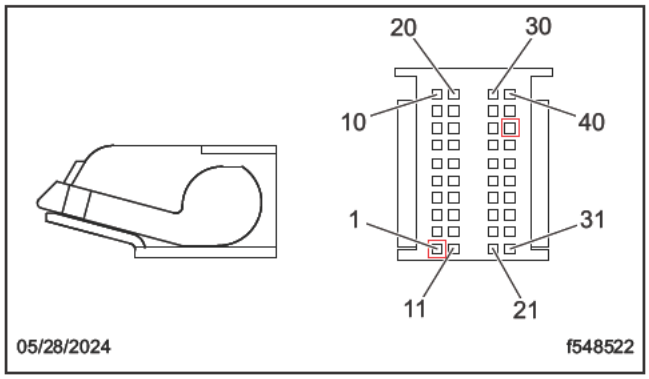


Fig. 12, XMC1 X1 Connector Pin Layout

Human-Machine Interface (HMI)/Auto Neutral Test

1. Turn the keyswitch to the ON position.
2. Make sure the primary air pressure is above 80 psi (552 kPa).
3. Release the parking brake.
4. Put the foot on the brake pedal.
5. Put the transmission into drive.
6. Move the vehicle slightly forward.
7. Use the brake pedal to stop the vehicle.
8. Activate the work brake (brake hold flipper switch).
   - 8.1 The transmission should go to neutral.
   - 8.2 Monitor the instrument cluster (ICU) for a green work brake tell-tale, shown in **Fig. 13**.

Fig. 13, Work Brake Tell-Tale on the ICU

8.3 The brake pressure is being applied to the rear brakes.

8.4 Open the door with the work brake activated.

- The in-cab warning should not sound.

9. Step on the brake pedal.
10. Deactivate the work brake.

10.1 The transmission should return to gear.

10.2 The tell-tale indication on the ICU should disappear.

Horn Alert Test

1. Release the parking brake.
2. Activate the work brake.
3. Put the transmission into drive.
4. Drive through the work brake resistance to 5 mph (8 km/h).

4.1 The city horn alert should sound continuously until the vehicle comes to a standstill.

Troubleshooting

1. The parking brake sets when the work brake is activated.

- Check the plumbing for an incorrectly plumbed inversion valve. **Figure 14** shows the work brake schematic.
- The inversion valve and the regulator valve are mounted together and can be incorrectly-plumbed.

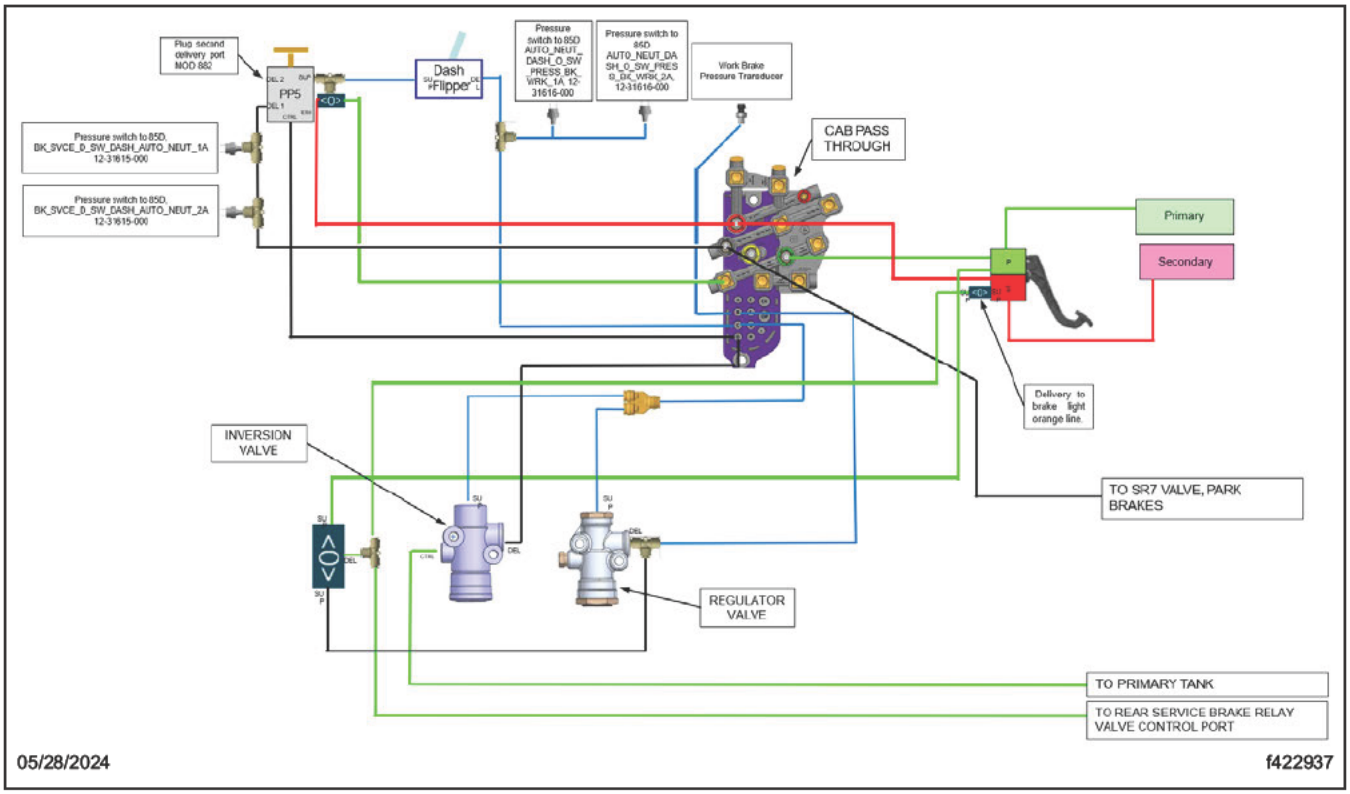


Fig. 14, Work Brake Schematic

2. The transmission does not go to neutral.
   - Ensure the transmission harness connector is plugged in, as shown in **Fig. 15**.

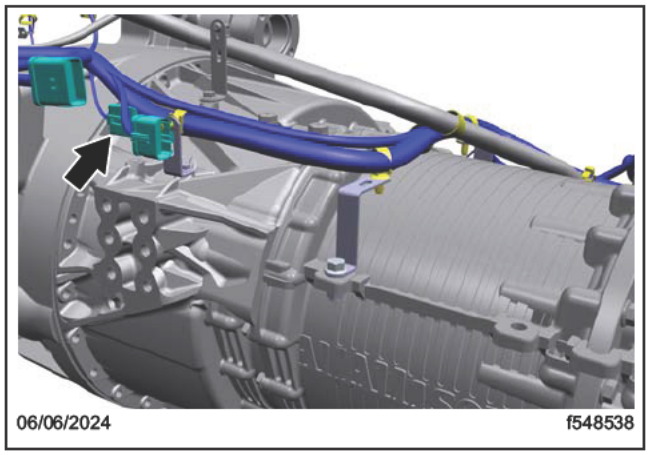


Fig. 15, Transmission Harness Connector

3. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF691 (Form WAR261), indicating this work has been completed.