Daimler Trucks North America LLC

Recall Campaign

October 2019
FL780AB
NHTSA #18V-491
Transport Canada #2018-387
FOURTH REVISED NOTICE

Subject: Cascadia ICUC Bulb Check Function

Models Affected: Specific Freightliner Cascadia vehicles manufactured May 3, 2016, through July 11, 2018, and equipped with a certain ICUC.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its Freightliner Trucks Division, has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 49,435 vehicles involved in this campaign.

On certain vehicles, under certain conditions, if the ignition is cycled off, then on quickly, the Instrument Cluster Unit Common (ICUC) may not perform a bulb check upon startup, as required by FMVSS 121/Antilock Brake System (ABS), and 136/Electronic Stability Control (ESC)

The ICUCs will be reprogrammed so that there will be a bulb check each time the key is switched to the "on" position. The Tire Pressure Monitoring System (TPMS) ECU will be replaced as needed.

FOURTH REVISION: Group B TPMS replacement instructions have been added back in (Steps 28-39). The work instructions have been revised for improved clarity of individual programming steps to ensure that the vehicle parameters are uploaded to the server correctly.

Additional Repairs

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

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

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR260).

Replacement Parts

IMPORTANT: The current TPMS ECU configuration file must be saved prior to installing new TPMS ECU.

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

If our records show your dealership has ordered any vehicles involved in campaign number FL780, a list of the customers and vehicle identification numbers will be available in OWL. Please refer to this list when ordering parts for this recall.

Table 1 - Replacement Parts for FL780B

Campaign Number	Part Number	Part Description	Qty.
FL780B	BW 200 0229N	TPMS ECU, FPT	1 ea
FL788AB	WAR260	BLANK COMPLETION STICKER	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 Code	Corrective Action
FL780A	Reprogram ICUC bulb check function	0.3	996-R051A	12-Repair Recall/Campaign
FL780B	Reprogram ICUC bulb check function, replace TPMS	0.9	996-R051C	12-Repair Recall/Campaign
FL780AB	Reprogram incompatible devices (claim optional SRT once for each incompatible device, up to 10)	0.2	996-R051B	12-Repair Recall/Campaign

Table 2

IMPORTANT: When the Recall has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the red completion sticker provided in the recall kit (Form WAR260). 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 recall kit is not required or there is no completion sticker in the kit, write the recall 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 **Recall Campaign**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (**FL780-A or FL780-B**).
- In the Primary Failed Part Number field, enter **25-FL780-000**.
- In the Labor field, first 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 **003-006-016** and the Cause Code is **A1 - Campaign**.
- **U.S. and Canada -- Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
    - Accept the documentation of the previous repair.
    - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines.)
    - Submit an OWL Recall Pre-Approval Request for a decision.
    - Include the approved amount on your claim in the Other Charges section.
    - Attach the documentation to the pre-approval request.
    - If approved, submit a based on claim for the pre-approval.
    - Reimburse the customer the appropriate amount.

October 2019
FL780AB
NHTSA #18V-491
Transport Canada #2018-387
FOURTH REVISED NOTICE

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

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

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

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

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.

October 2019
FL780AB
NHTSA #18V-491
Transport Canada #2018-387
FOURTH REVISED NOTICE

Copy of Notice to Owners

Subject: Cascadia ICUC Bulb Check Function

For the Notice to U.S. Customers: This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. **For the Notice to Canadian Customers:** This notice is sent to you in accordance with the Canadian Motor Vehicle Safety Act.

Daimler Trucks North America LLC (DTNA), on behalf of its Freightliner Trucks Division, has decided that a defect that relates to motor vehicle safety exists on specific Freightliner Cascadia vehicles manufactured May 3, 2016, through July 11, 2018, and equipped with a certain Instrument Cluster Unit Common (ICUC).

On certain vehicles, under certain conditions, if the ignition is cycled off, then on quickly, the ICUC may not perform a bulb check upon startup, as required by FMVSS 121/Antilock Brake System (ABS), and 136/Electronic Stablity Control (ESC)

The ICUCs will be reprogrammed so that there will be a bulb check each time the key is switched to the "on" position. The Tire Pressure Monitoring System (TPMS) ECU will be replaced as needed.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, go to www.Daimler-TrucksNorthAmerica.com. On the menu tab, select “Contact,” scroll down to “Find a Dealer,” and select the appropriate brand. The Recall will take approximately one to three hours and will be performed at no charge to you.

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

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

For the Notice to U.S. Customers: If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to http://www.safercar.gov. **For the Notice to Canadian Customers:** If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours.

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

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

October 2019
FL780AB
NHTSA #18V-491
Transport Canada #2018-387
FOURTH REVISED NOTICE

Reimbursement to Customers for Repairs Performed Prior to Recall

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

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

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

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

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

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

October 2019
FL780AB
NHTSA #18V-491
Transport Canada #2018-387
FOURTH REVISED NOTICE

Work Instructions

Subject: Cascadia ICUC Bulb Check Function

Models Affected: Specific Freightliner Cascadia vehicles manufactured May 3, 2016, through July 11, 2018, and equipped with a certain ICUC.

FOURTH REVISION: Group B TPMS replacement instructions have been added back in (Steps 28-39). The work instructions have been revised for improved clarity of individual programming steps to ensure that the vehicle parameters are uploaded to the server correctly.

ICUC Software Update and Replacement of the TPMS ECU

IMPORTANT: The current TPMS ECU configuration file must be saved prior to installing new TPMS ECU. Before performing this procedure, make sure to document and address any pre-existing conditions or fault codes.

It is recommended that DiagnosticLink (DL) be configured to connect only to "Default" modules when flashing using DL, and that it stay in this configuration unless you specifically need to manually connect to the Common Telematics Platform (CTP). The default modules will allow DL to connect only to the modules that need flashing, and ignore things like CTP, or the Steering Angle Sensor.

To make this change in DiagnosticLink:

From the top click "Tools", and select "Options" form the drop down menu

Find and select the "Connection" tab.

Click the "Select Defaults" box on the right side of the tab, and hit "Apply"

1. Check the base label (Form WAR259) for a completion sticker for FL780 (Form WAR260) 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 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, set the parking brakes, and shut down the engine. Chock the tires.

3. Connect the vehicle to DiagnosticLink. Make sure that DiagnosticLink is updated to the latest version, 8.10. To update DiagnosticLink, select "Update" from the dropdown menu under "Tools." See **Fig. 1**.

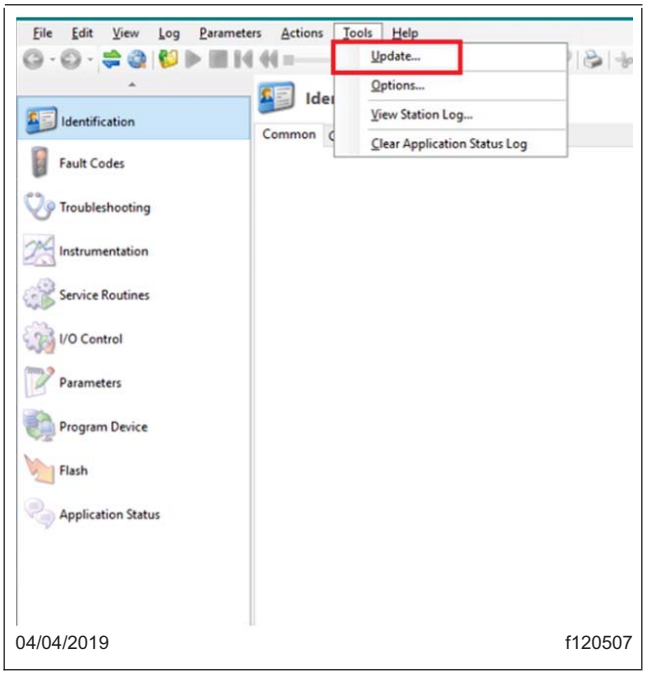
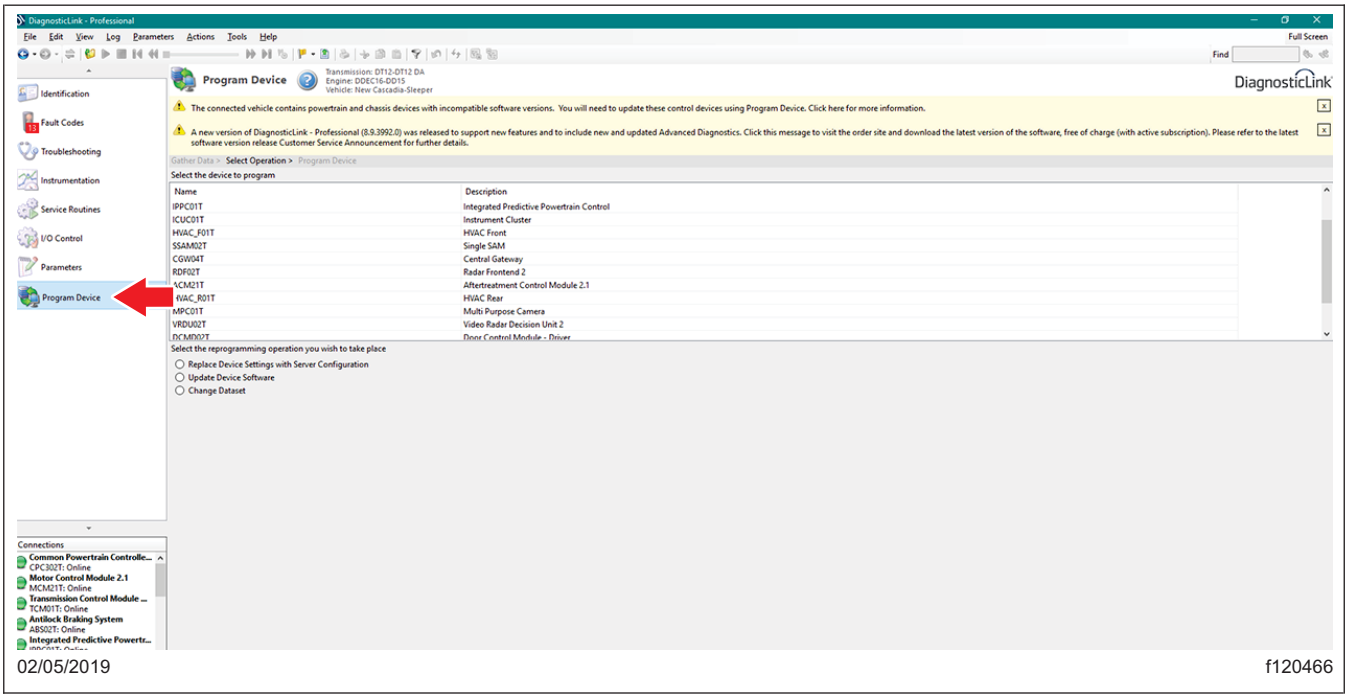


Fig. 1, Updating DiagnosticLink to the Latest Version

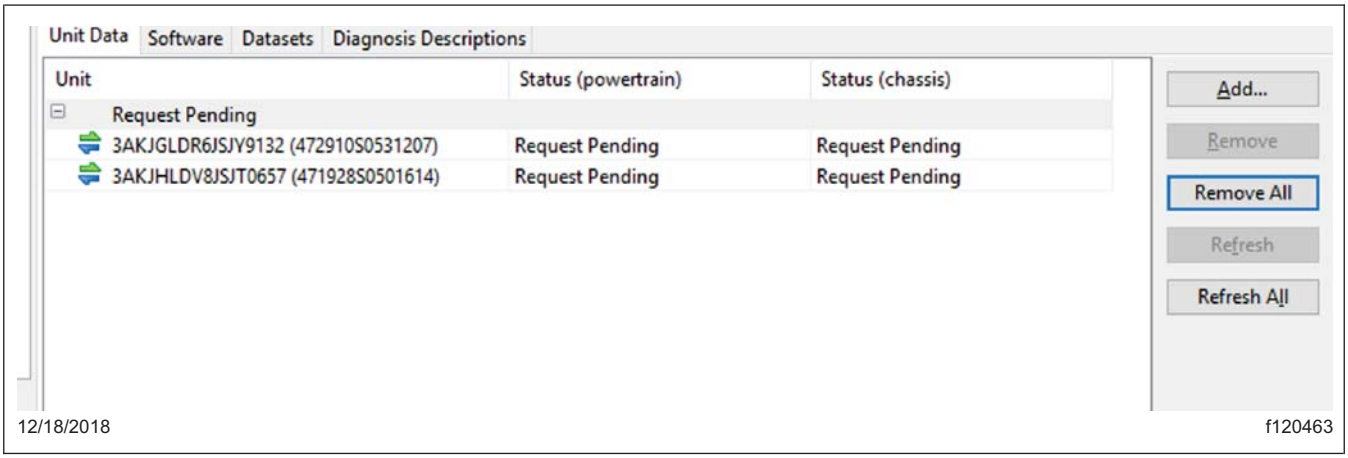
IMPORTANT: Before performing this procedure, make sure to address any pre-existing conditions or fault codes first.

4. Select "Program Device." See **Fig. 2** . If there are any items in the section "Request Pending" downloads, they should be removed. To remove them, select the "Request Pending" list item, then press the "Remove All" button. See **Fig. 3**.



02/05/2019 f120466

Fig. 2, Program Device Screen



12/18/2018 f120463

Fig. 3, Removing Pending Requests

5. Once all controllers are connected, read the vehicle parameters. See **Fig. 4**.

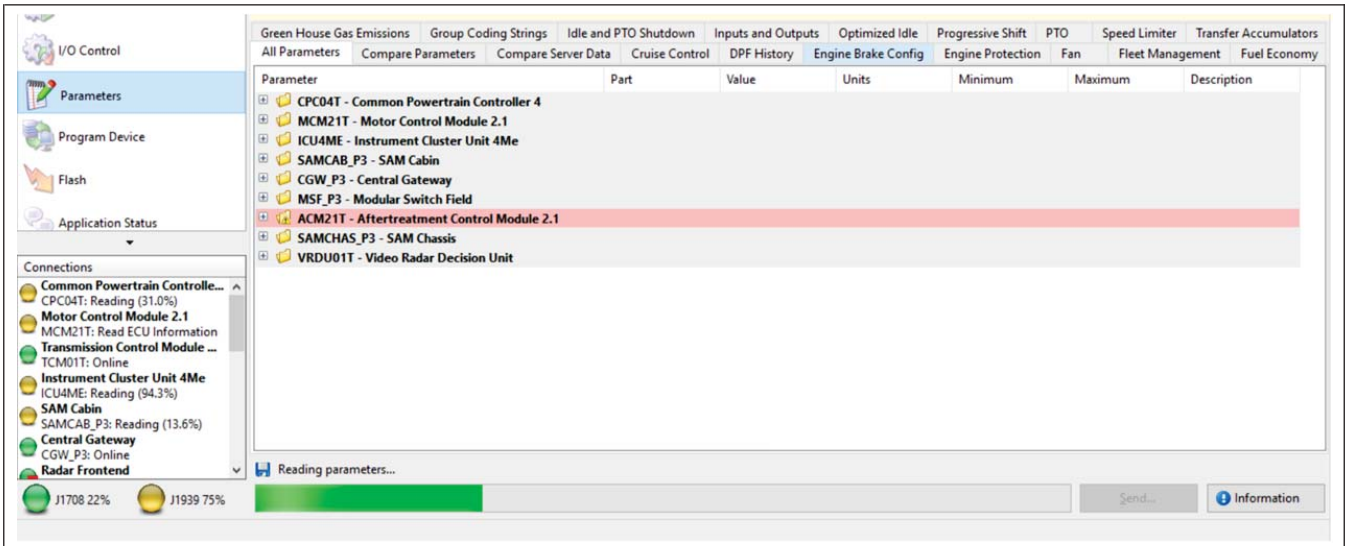
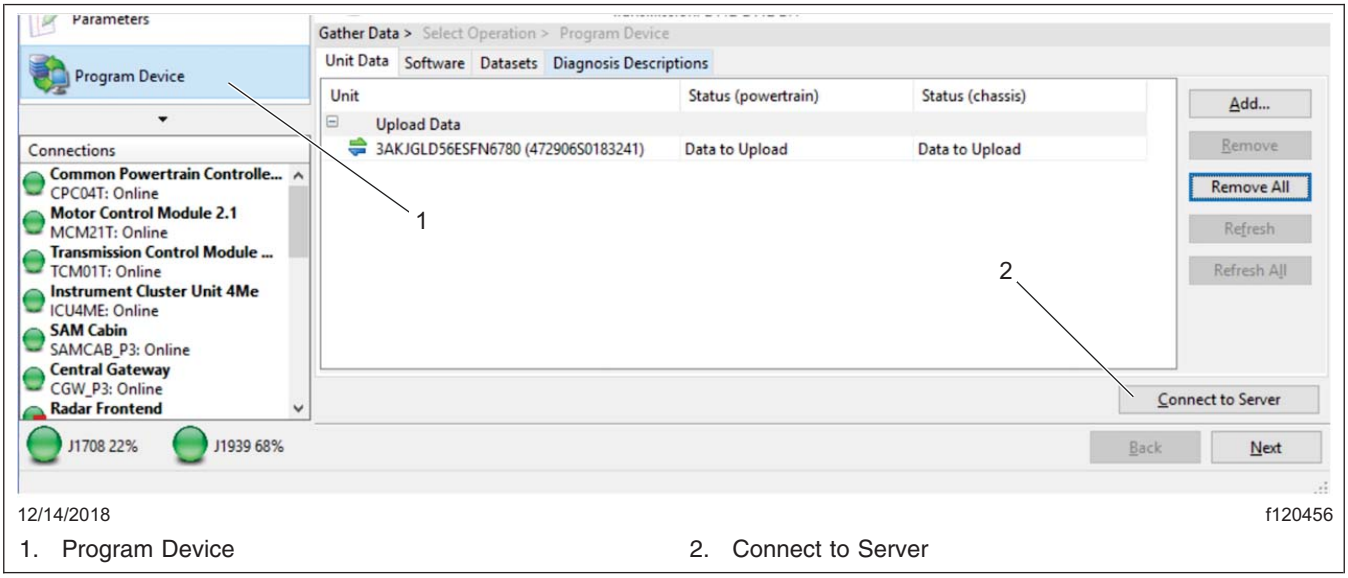


Fig. 4, Reading Vehicle Parameters on DiagnosticLink

6. Select "Program Device." There should be data to upload. Click "Connect to Server" to upload vehicle parameters to the server. See **Fig. 5**.



1. Program Device
2. Connect to Server

Fig. 5, Uploading Vehicle Parameters

7. Click "Add" to add a download request for the vehicle. See **Fig. 6**.

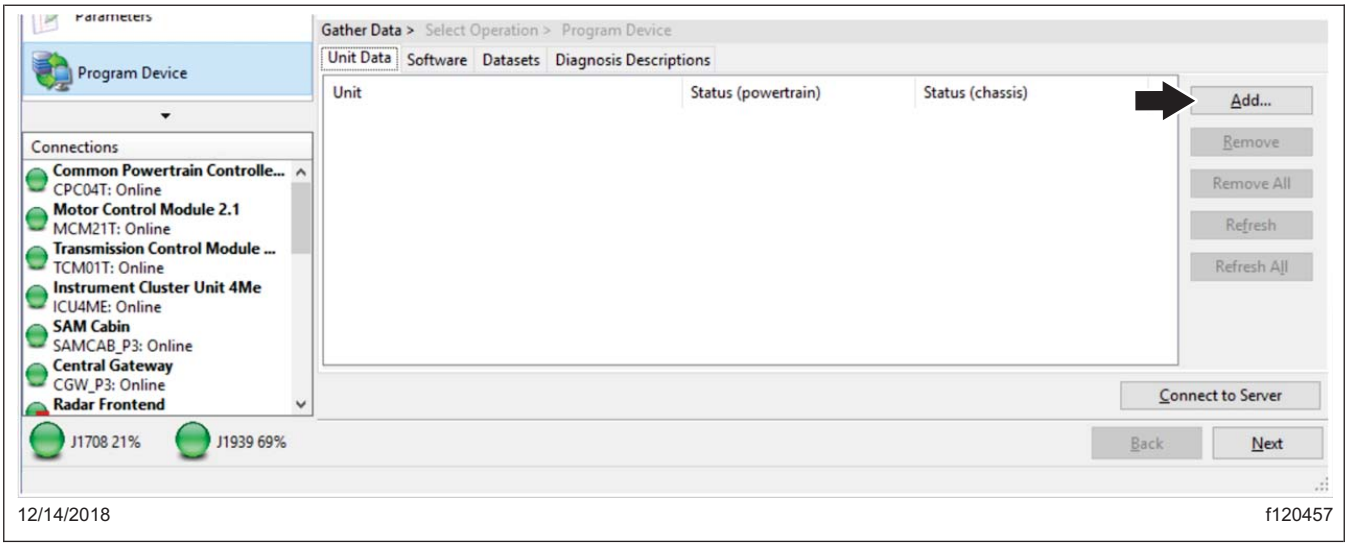


Fig. 6, Adding the VIN to Download Updated Server Data

8. Make sure the correct VIN and hardware is populated, then click OK. See **Fig. 7**.

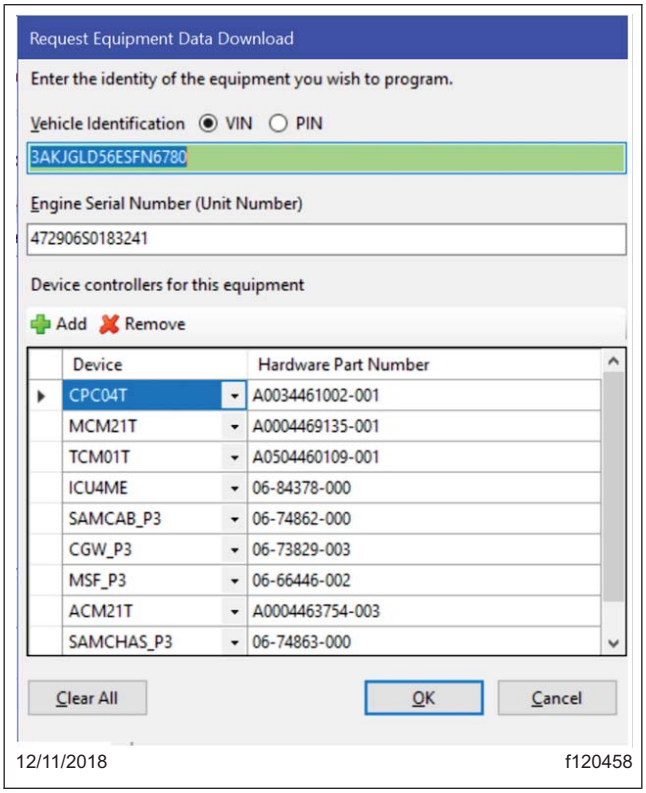


Fig. 7, Verifying Correct VIN Hardware

9. There should be a request pending status for the VIN. Click "connect to server" to download the updated unit data. See **Fig. 8**. The server will provide any new software available on the server as well as updated parameter sets for the new software, adjusted for the parameter set that was just uploaded from the vehicle.

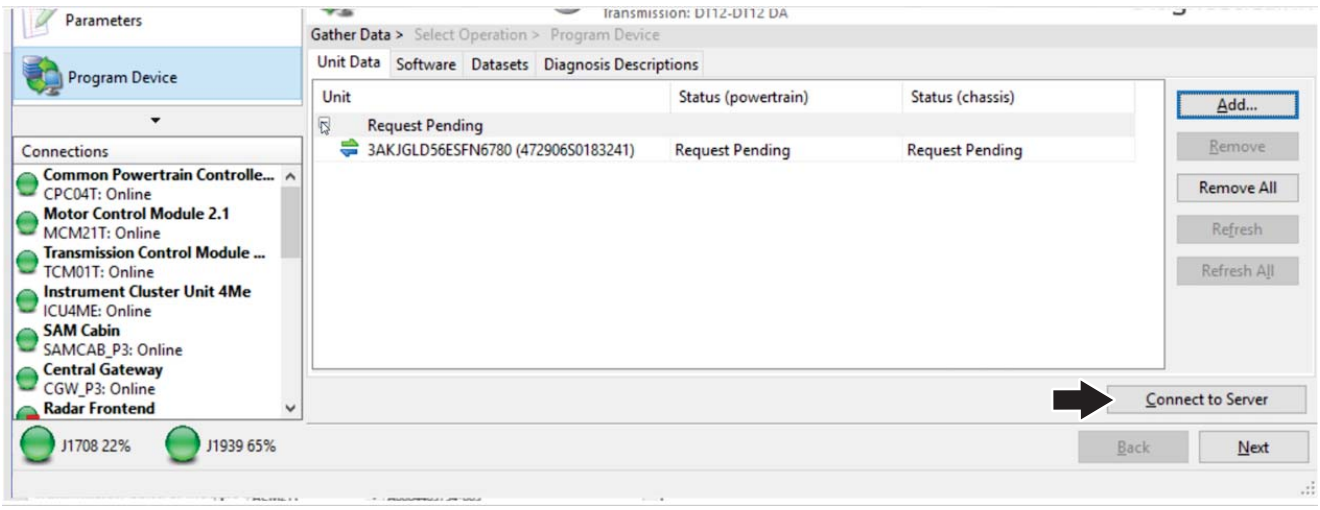


Fig. 8, Downloading Updated Unit Data

10. Once the data has been downloaded, click "Next". See **Fig. 9**.

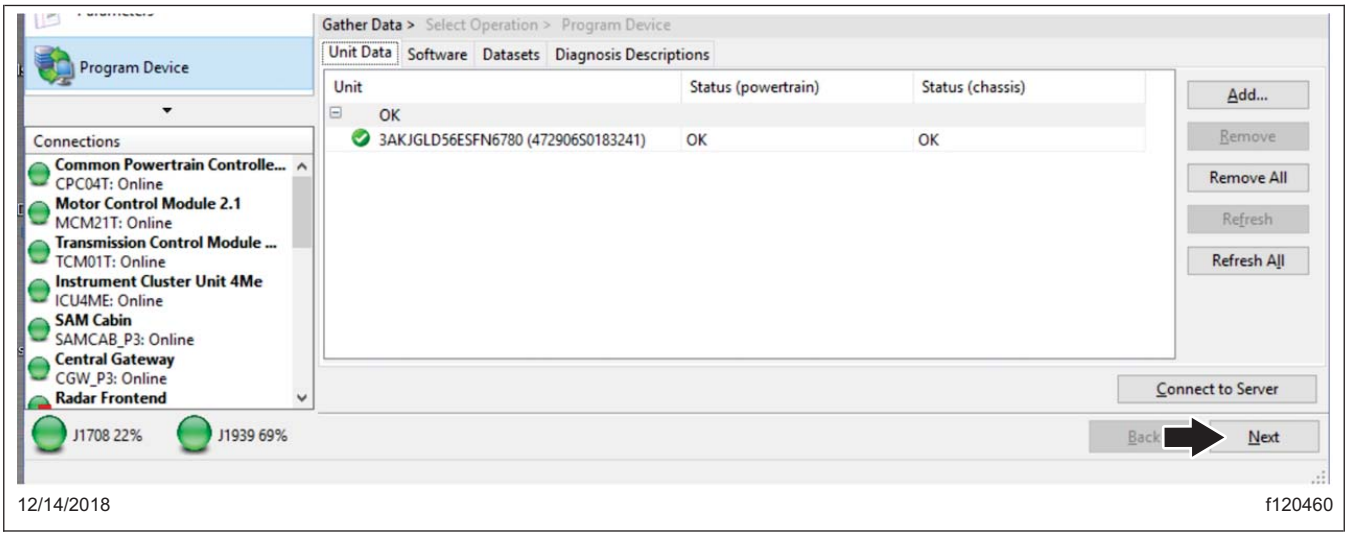


Fig. 9, Clicking Next

NOTE: "Latest" is the last service record (may be older software) and "Newest" is the most up to date software available for the installed hardware. Both will have parameter sets that have been updated relative to the upload from the vehicle. If the last service record is the most up to date software available, no "Newest" record will be provided.

11. Choose the ICUC (ICUC01T) from the "Select the device to program" list.

12. Select "Newest" from the "Settings" list, then press "Next." A message may appear stating that the selected software ICUC1T is not compatible with other connected devices, and that the software combinations that would allow compatibility for those devices is not available for this unit. Please contact Daimler Trucks North America Dealer Help Desk before proceeding. If this message is displayed, click "OK" to bypass the warning.

13. Review and verify the VIN and hardware part number. Click "Start" to program the controller. The software will be flashed and the new parameter set will be written to the controller on the vehicle. See **Fig. 10**.

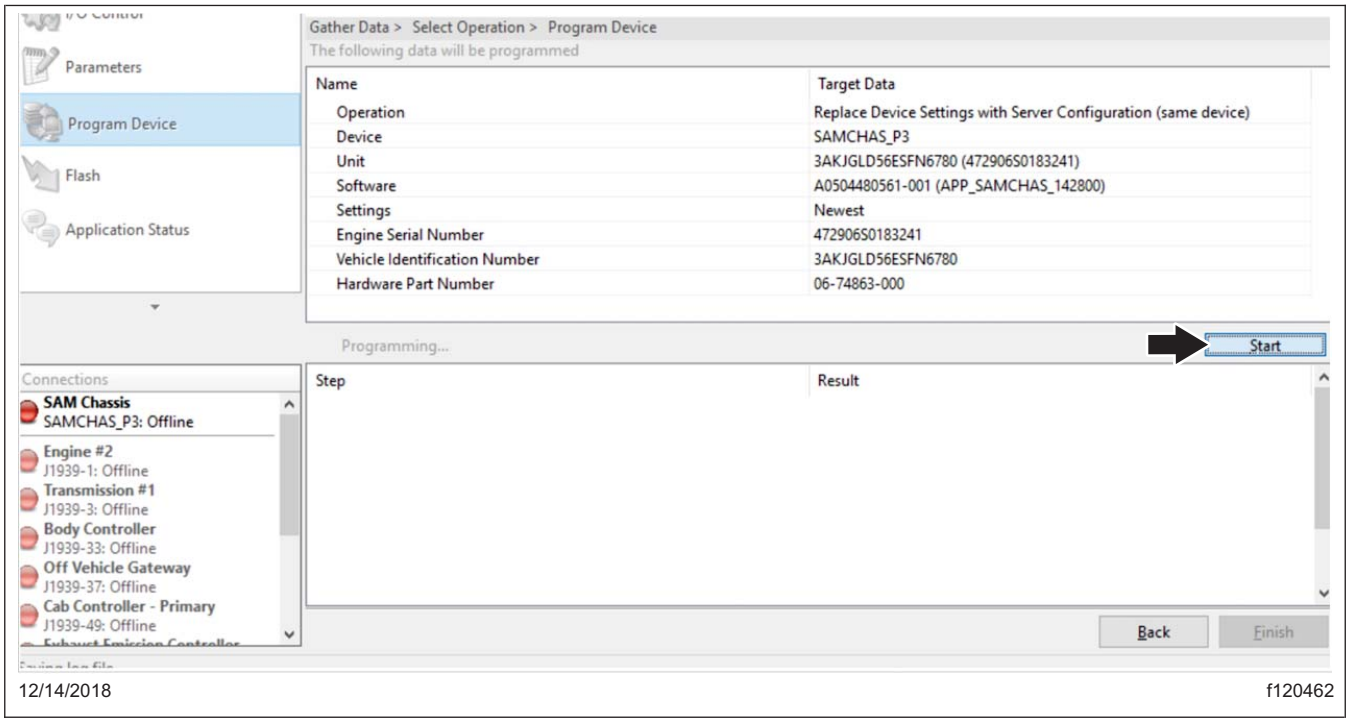


Fig. 10, Programming the Controller

14. When programming is complete, the page will display "The device was successfully programmed." Press "Finish."

IMPORTANT: After programming is complete, the following message may appear in DiagnosticLink: "The connected vehicle contains powertrain and Chassis devices with incompatible software versions, you will need to update these control devices using Program Device. Click here for more information." If this message is shown, continue with the next step. Otherwise, go to step 18.

15. Click on the banner message. See **Fig. 11**.

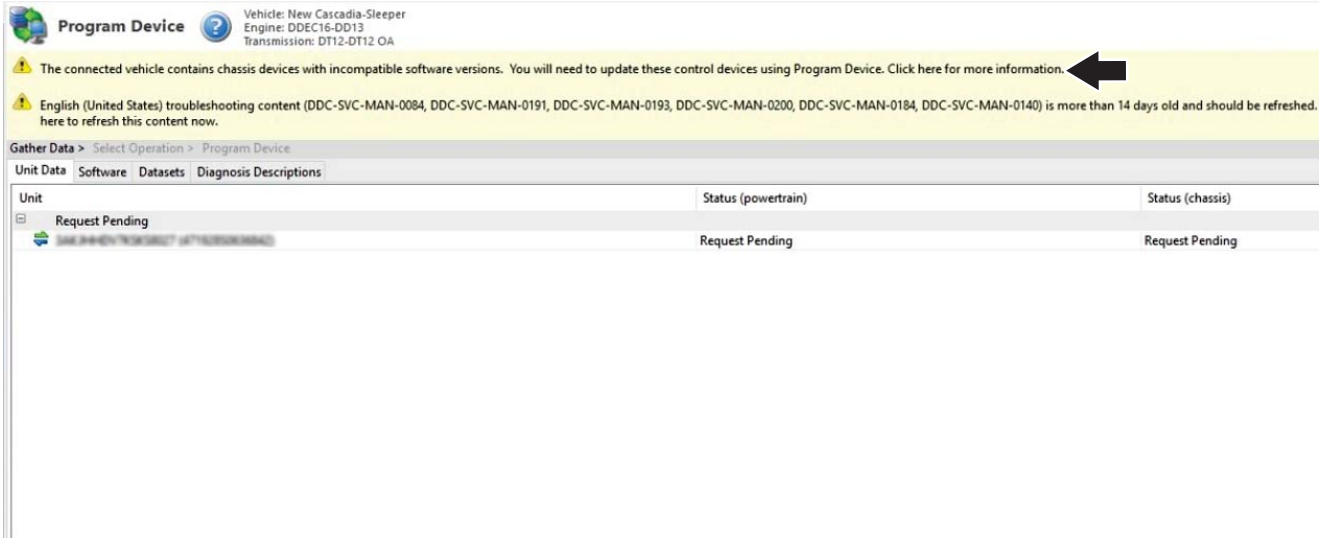


Fig. 11, Clicking on the Banner Message

16. Print or take a screen shot of the incompatible ECUs. See **Fig. 12**.

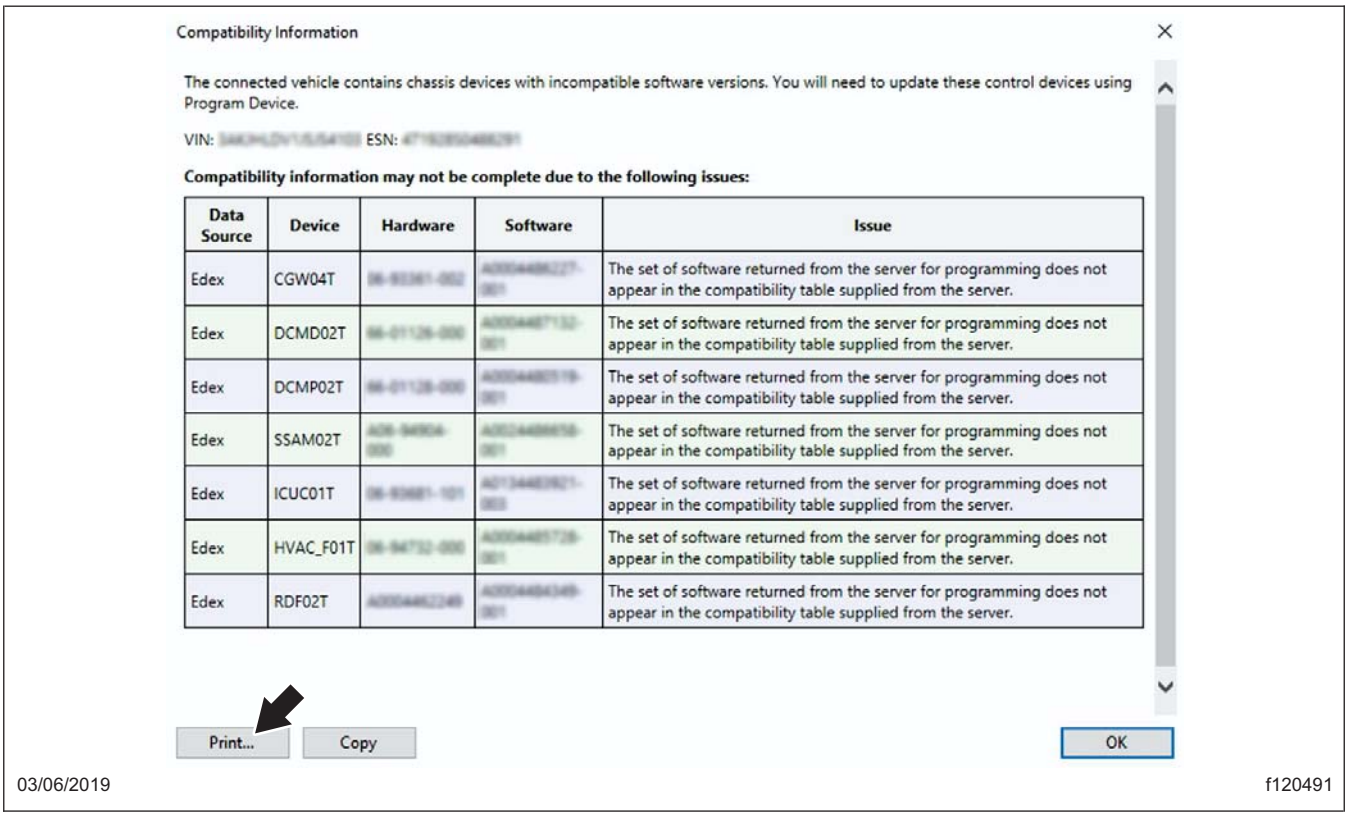


Fig. 12, Printing the List of Incompatible ECUs

17. Program all devices listed as incompatible from step 12.
18. Turn the ignition to the OFF position, unplug from the diagnostic port, and restart DiagnosticLink. Wait one minute.
19. Go to "Program Device" and click "Connect to Server."

IMPORTANT: After a programming, some fault codes may become active and some ECUs may not auto connect. Cycling the ignition may clear the faults and reconnect the ECUs.

20. Cycle the ignition 3 times, waiting 30 seconds between key off and key on.

NOTE: This action will enable Intelligent Predictive Powertrain Control (IPPC) to start communicating on Roll Call, and eliminate codes for the IPPC not communicating.

21. Turn the key to the ON position and connect the vehicle to DiagnosticLink.
22. Go to "Actions" and select "ICUC Automatic Configuration." Click "Start."
23. Turn the ignition to the OFF position, unplug from the diagnostic port, and start DiagnosticLink. Wait one minute.
24. Connect Diagnostic Link and turn the key to the ON position. Clear inactive trouble codes and troubleshoot any active codes.
25. Disconnect the vehicle from DiagnosticLink.
26. Verify the proper operation of the ICUC bulb check by quickly cycling the ignition off and then on (key off less than 3 seconds) and verify that the ICUC bulb check is initiated.
27. For FL780B, continue with the next step. For vehicles in FL780A, go to step 40.

NOTE: Steps 28-39 are for vehicles in FL780B that require replacement of the TPMS ECU.

28. In order to read and store the current TPMS ECU configuration, download the “DTNA ECUSwap” files available at the following link: **http://www.smartire.com/downloads/DTNA_ECUSwap.zip**. When the link is clicked, the user will be prompted to save the DTNA_ECUSwap Zip file and then to extract all files from the Zip file to the computer.

NOTE: The Zip file also includes additional information for this procedure, located in the file "TPMS ECU Configuration Transfer Instructions."

29. Once the file extraction is complete, open the file “DTNA_ECUSwap.exe” and press "Start ECU Replacement" to begin configuration process. Turn the ignition on and connect the laptop to the vehicle, then follow the prompts to read and store the current TPMS ECU configuration.
30. When the ECU configuration is done reading, the following message will display: "The ECU configuration has been read. You may now replace the ECU with Part Number 200.0229. Please leave this window open until ECU has been replaced. Ensure power to ECU has been applied for at least 10 seconds and press OK."
31. Turn the ignition off and disconnect the batteries.
32. Remove the front bumper to gain access to the TPMS ECU receiver, which is mounted under the front engine support. Refer to Section 31.02, Subject 100 in the New Cascadia Workshop Manual. for instructions.
33. Disconnect the wiring harness and antenna cable from the TPMS ECU Receiver. See **13**.
34. Remove the two M6 x 1 flange-head capscrews and remove the TPMS ECU Receiver.
35. Use the existing bolt holes and the two M6 x 1 flange-head capscrews to attach the new TPMS ECU Receiver to the vehicle. Tighten the capscrews 7 to 10 lbf·in (79 to 158 N·cm).

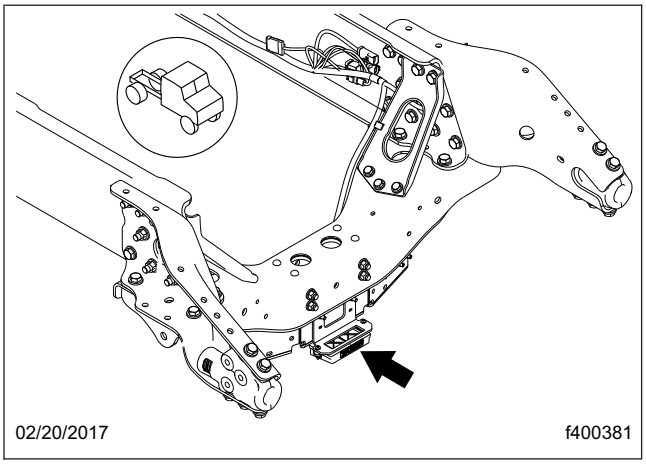


Fig. 13, TPMS Receiver

36. With the ignition off, connect the wiring harness and antenna cable to the TPMS ECU Receiver.
37. Install the front bumper. Refer to Section 31.02, Subject 100 in the *New Cascadia Workshop Manual* for instructions.
38. Connect batteries and turn ignition on. Wait 10 seconds, then follow the DTNA_ECUSwap prompts and press OK. Continue to follow the prompts to transfer the configuration to the new TPMS ECU. When complete, the following message will display: "ECU Configuration has been successfully transferred."

NOTE: TPMS sensors may take several minutes to be read by the TPMS ECU after each ignition switch cycle or after the batteries have been connected. Turn off ignition and disconnect the laptop.

39. Turn the ignition to the ON position, and verify that the TPMS sensor readings are present. Use the left-hand steering wheel buttons to scroll to the ICUC Tire Pressure Monitoring screen. See **Fig. 14** . Tire pressures should be present for each configured axle.

Fig. 14, ICUC Tire Pressure Monitoring Screen

40. Clean a spot on the base label (Form WAR259). Write the recall number, FL780, on a completion sticker (Form WAR260), and attach it to the base label to indicate this recall has been completed.