Daimler Truck North America LLC

Field Service Campaign

June 2023
SF672 A-B
(Revised November 2023)

Subject: Common Telematics Platform Software Update

Models Affected: Specific model years 2018-2024 Freightliner 108SD, 114SD, M2 106, Cascadia, eCascadia; and Western Star 47X, 48X, 49X, 57X vehicles, manufactured February 10, 2017, through March 3, 2023.

General Information

REVISION: A statement was added to page 5 for clarification: CTP01T as displayed within DiagnosticLink represents the CTP ECU Device and not the type of CTP. Both CTP1 and CTP2 will display as CTP01T.

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division and wholly owned subsidiary, Western Star Truck Sales, Inc., is initiating Field Service Campaign SF672 A-B to modify the vehicles mentioned above.

Due to an upcoming certification expiration, the Common Telematics Platform (CTP) will no longer be able to communicate.

CTPs will receive a software update to restore communication functionality.

There are approximately 5,513 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).

Required Tools/Parts

NOTE: The tools in Table 1 below are required to complete the SF672 repair. These tools are now available and can be obtained by ordering the tool number(s) listed below from your facing Parts Distribution Center (PDC). No other parts are required other than a completion sticker (WAR261).

The USB sticks are pre-loaded with software. The USB Stick-to-CTP Adaptor Harness is on-the-go (OTG) protocol compliant. Each USB Stick and Adaptor Harness can be used to update multiple vehicles.

If our records show your dealership has ordered any vehicle(s) involved in campaign number SF672, a list of the customers and vehicle identification numbers will be available using the OWL app on the DTNA Portal. Please refer to this list when ordering the tools/parts for this campaign.

Table 1 - Replacement Tools/Parts for SF672

Campaign Number	Tool/Part	Tool/Part Description	Qty.
SF672 A	DDE DKICHA022003-4	SF672A v1 CTP1 USB STICK	For Use On Multiple Vehicles
	DDE DKICHA022003-1	USB STICK TO CTP ADAPTOR HARNESS	For Use On Multiple Vehicles
SF672 B	DDE DKICHA022003-5	SF672B v1 CTP2 USB STICK	For Use On Multiple Vehicles
	DDE DKICHA022003-1	USB STICK TO CTP ADAPTOR HARNESS	For Use On Multiple Vehicles
ALL GROUPS	WAR261	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

NOTE: In rare cases, the software update may fail. If this occurs, contact Daimler Truck Technical Support at 1-855-253-0422 for assistance and possible authorization for CTP replacement.

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
SF672 A	Update Software, CTP1	1.4	996-F156A	12-Repair Recall/Campaign
	(In Rare Cases Only - Authorization Required) Remove & Replace CTP1 w/ CTP2 Install Antenna, Initialize CTP2	2.4	996-F156C	12-Repair Recall/Campaign
SF672 B	Update Software, CTP2	1.2	996-F156B	12-Repair Recall/Campaign
	(In Rare Cases Only - Authorization Required) Remove & Replace CTP2 w/ New CTP2 Initialize CTP2	1.7	996-F156D	12-Repair Recall/Campaign

Table 2

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location 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 (**SF672-A, SF672-B**).
- In the Primary Failed Part field, enter **25-SF672-000**.
- In the Parts section, enter the appropriate tool/part number(s) as shown in the Replacement Parts Table.
- 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 June 30, 2024**. Dealers will be notified of any changes to the termination date via an Important Campaign Information Letter (ICI) posted on the 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 additional information, U.S. and Canadian dealers, contact the Warranty Campaigns Department using the Warranty Support Center (WSC) app, located on the DTNA Portal. Export distributors submit a WSC inquiry or contact your International Service Manager.

Copy of Notice to Owners

Subject: Common Telematics Platform Software Update

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks division, and wholly owned subsidiary, Western Star Truck Sales, Inc., is initiating Field Service Campaign SF672 A-B to modify specific model years 2018-2024 Freightliner 108SD, 114SD, M2 106, Cascadia, eCascadia; and Western Star 47X, 48X, 49X, 57X vehicles, manufactured February 10, 2017, through March 3, 2023.

Due to an upcoming certification expiration, the Common Telematics Platform (CTP) will no longer be able to communicate.

CTPs will receive a software update to restore communication functionality.

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 1.5 to 2.5 hours and will be **performed free of charge**. To locate an authorized dealer, search online: NorthAmerica.DaimlerTruck.com/Contact-Us/. Scroll down to “Locate a Dealer,” and select the appropriate brand.

This Field Service Campaign will **terminate on June 30, 2024**. 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.

For additional information, 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.Warranty.Campaigns@DaimlerTruck.com, or the Customer Assistance Center at (800) 385-4357.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: Common Telematics Platform Software Update

Models Affected: Specific model years 2018-2024 Freightliner 108SD, 114SD, M2 106, Cascadia, eCascadia; and Western Star 47X, 48X, 49X, 57X vehicles, manufactured February 10, 2017, through March 3, 2023.

IMPORTANT: New tools are required for SF672 A-B. Both USB sticks are pre-loaded with the correct software: SF672A/CTP1 (DDE DKICHA022003-4), and SF672B/CTP2 (DDE DKICHA022003-5). These USB sticks, along with the USB Stick-to-CTP Adaptor Harness (DDE DKICHA022003-1), which is on-the-go (OTG) protocol compliant, can be purchased through your facing Parts Distribution Center (PDC). See **Fig. 1**, **Fig. 2**, and **Fig. 3**.

It is required to purchase and use these tools, also listed in **Table 1**, on page 1, to program the CTP. The software on each USB stick, and the adaptor harness can be used to update multiple vehicles.

Fig. 1, CTP1 USB Stick with SF672A v1 (DDE DKICHA022003-4)

Fig. 2, CTP2 USB Stick with SF672B v1 (DDE DKICHA022003-5)

Fig. 3, USB Stick-to-CTP Adaptor Harness (DDE DKICHA022003-1)

SF672 A - CTP1 Software Update

(SF672 B - CTP2 Software Update, see page 15)

1. Check the base label (Form WAR259) for a completion sticker for SF672 (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.
3. Make sure the ignition key and battery cut-off switch, if so equipped, are in the ON position.

IMPORTANT: Do not turn the ignition key or the battery cut-off switch to the OFF position until the software installation is complete. The vehicle batteries should maintain 12.4 volts or higher during the CTP software update If needed, a battery charger should be connected.

4. Connect an RP1210B-compliant vehicle diagnostic adaptor to the diagnostic connector on the vehicle.
5. Connect the other end of the RP1210B-compliant vehicle diagnostic adaptor to the laptop.
6. Open DiagnosticLink®.

IMPORTANT: Make sure that DiagnosticLink is updated to the latest version (8.17 SP1 at the time of publication, or newer) before programming the vehicle. To verify, from the menu bar, select ‘Help,’ then select ‘About.’ See **Fig. 4** and **Fig. 5**.

IMPORTANT: To reduce the possibility of disruption during programming, make sure DiagnosticLink is **connected to CTP01T only**.

IMPORTANT: CTP01T as displayed within DiagnosticLink represents the CTP ECU Device and not the type of CTP. Both CTP1 and CTP2 will display as CTP01T.

7. If other already-connected modules appear in the ‘Connections’ panel, right-click and select ‘Close Connections’ to remove all connected devices.

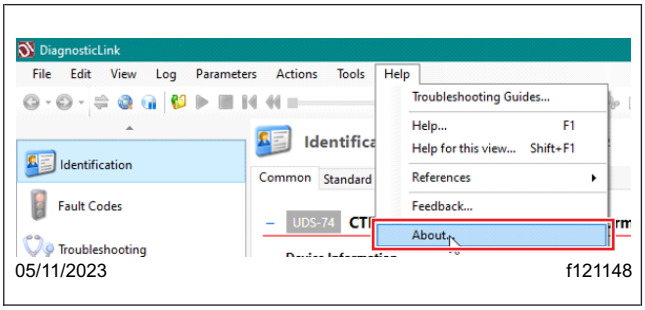


Fig. 4, Opening the About DiagnosticLink Window

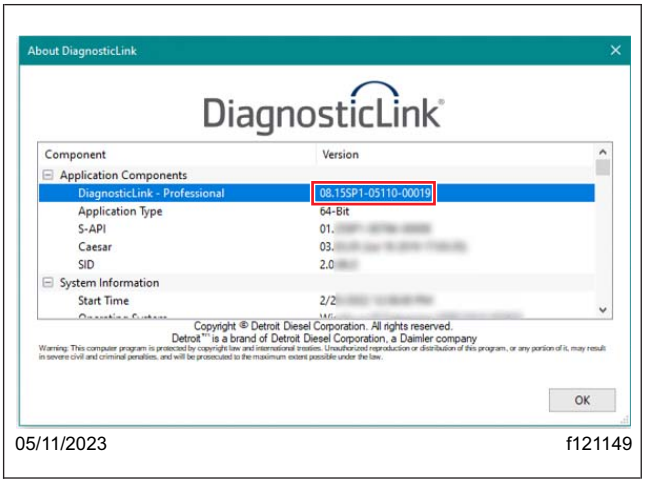
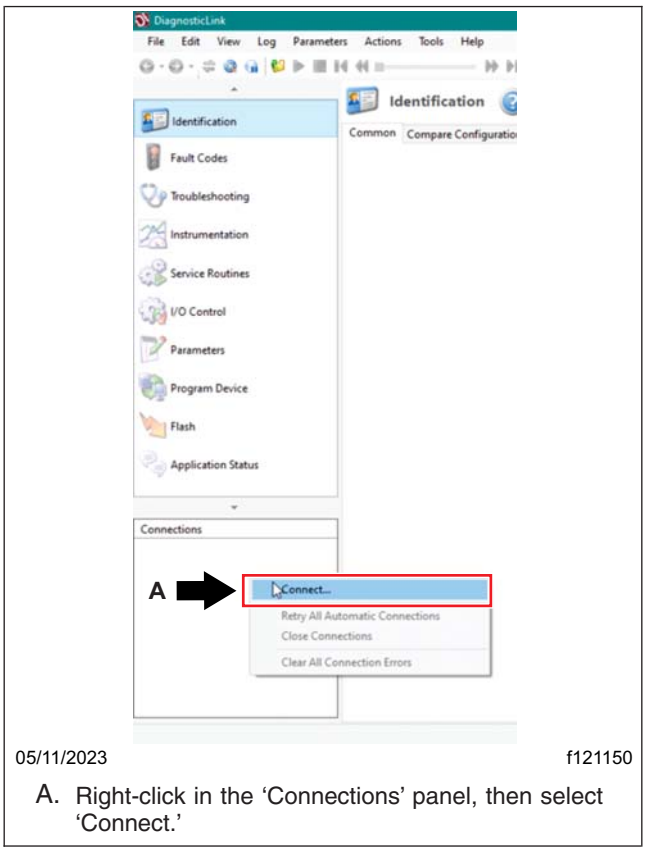


Fig. 5, DiagnosticLink Application Version

8. To manually establish the connection with CTP01T, right-click in the ‘Connections’ panel, and select ‘Connect. See **Fig. 6**.

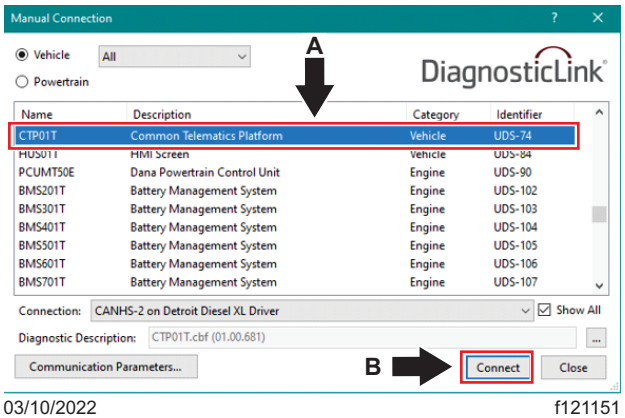


A. Right-click in the ‘Connections’ panel, then select ‘Connect.’

Fig. 6, Establishing Manual Connection

9. In the ‘Manual Connection’ window that appears, select ‘CTP01T,’ then select the ‘Connect’ button. **See Fig. 7**. Wait until the CTP01T connection turns green, as shown in **Fig. 8**.

   If the CTP01T does not connect, verify that the VPDM 5-amp fuse (F73) is installed and supplying 12V power to the CTP. Install the 5-amp fuse, or replace the fuse, if required. If the CTP01T still does not connect, contact Daimler Truck Technical Support at 1-855-253-0422, option 4, (5 AM to 4 PM, Pacific Time, M-F).



A. Select ‘CTP01T.’ B. Select ‘Connect.’

Fig. 7, Manual Connection Window

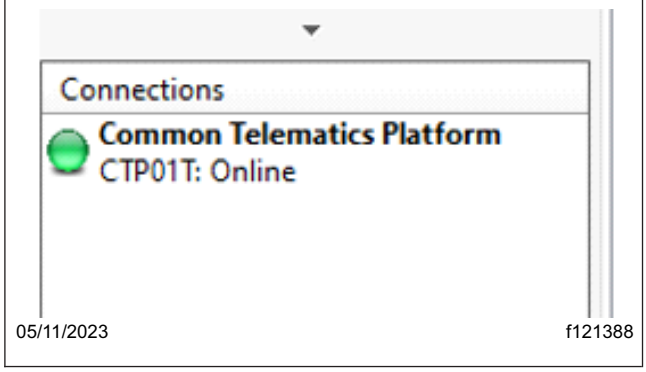


Fig. 8, CTP01T Connected

10. In the menu bar, go to ‘Actions,’ select ‘Telematics,’ then select ‘CTP USB Stick Flashing.’ See **Fig. 9**.

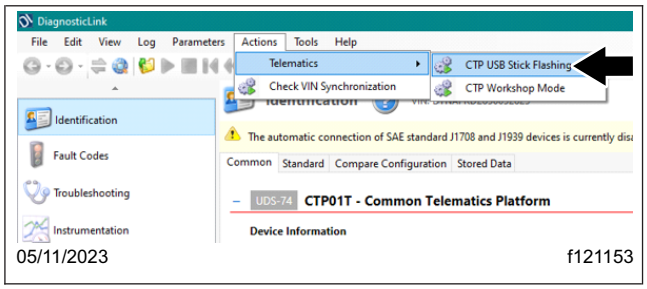
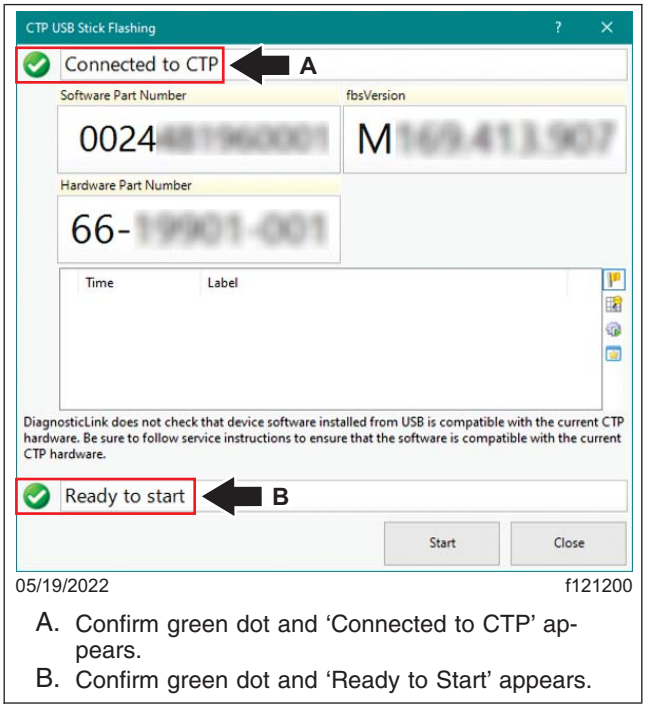


Fig. 9, Opening the CTP USB Stick Flashing Window

11. The ‘CTP USB Stick Flashing’ window appears. Verify that a green dot appears beside ‘Connected to CTP’ on the top-left, and beside ‘Ready to start’ at the bottom. See **Fig. 10**.

    If the green dot does not appear beside ‘Connected to CTP’ on the top, and ‘Ready to start,’ disconnect the CTP01T, close and restart DiagnosticLink. Repeat steps 6 through 11. If the issue still persists after a second attempt, contact Daimler Truck Technical Support at 1-855-253-0422, option 4, (5 AM to 4 PM, Pacific Time, Monday through Friday).



A. Confirm green dot and ‘Connected to CTP’ appears.
B. Confirm green dot and ‘Ready to Start’ appears.

Fig. 10, CTP USB Stick Flashing Window

12. Remove the electronics bay cover and the passenger-side lower dash cover. For instructions, see **Group 60** of the applicable workshop manual.

NOTICE

Make sure that the cab floor is clear of debris and tools. If the VPDM is lowered on to debris, especially metal objects, it could permanently damage the VPDM.

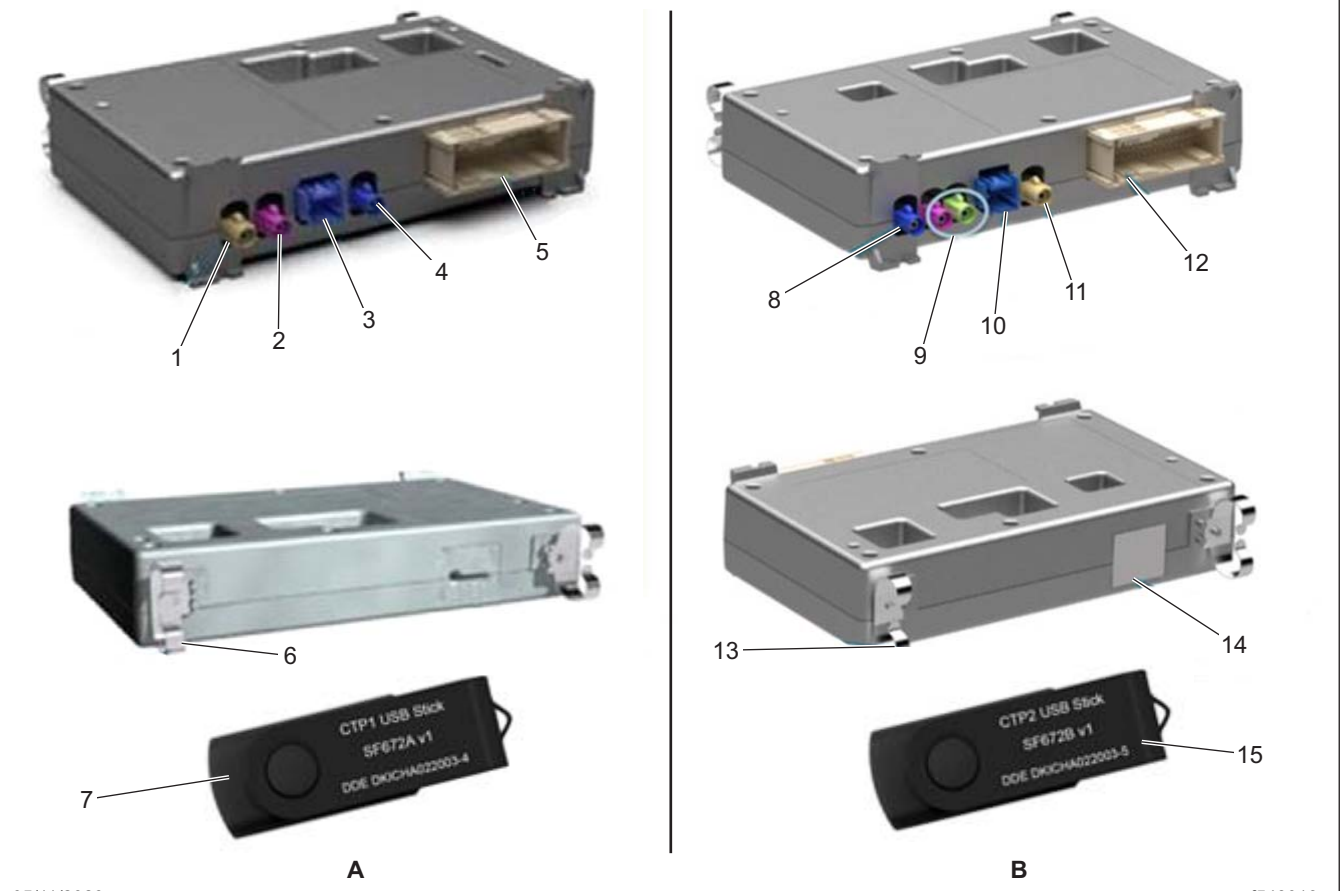
IMPORTANT: The VPDM is positioned on the mounting tabs to assist with retaining the VPDM in position while mounting fasteners are removed. Care should be taken so the VPDM does not fall to the floor after all four mounting fasteners have been removed.

13. Remove the four VPDM mounting fasteners, then gently lower the VPDM on to the cab floor. See **Fig. 11**.

Fig. 11, Lowering the VPDM to the Cab Floor

14. Locate the CTP1 on the upper shelf in the electronics bay. Use **Fig. 12** to confirm that a CTP1 is installed and can be updated using the SF672A/CTP1 USB stick (DDE DKICHA022003-4). Use a USB mini-to-USB A adaptor (DKICHA022003-1) to connect the SF672A/CTP1 USB stick (DDE DKICHA022003-4) containing the SF672A software to the CTP1 at the large blue USB mini connector. See **Fig. 13**.

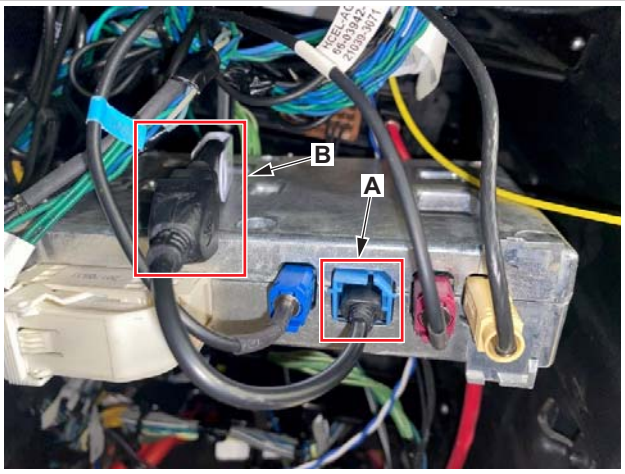
    Some vehicles may already have a harness connected at the large blue CTP connector which must be disconnected for this procedure. Make sure the USB adaptor and the USB stick are completely inserted.



A. CTP1
1. Wi-Fi/Bluetooth Antenna
2. Cellular Antenna
3. USB
4. GNSS Antenna
5. Main Connector
6. eVault Mounting Springs
7. CTP1 USB Stick
8. GNSS Antenna

B. CTP2
9. 2x Cellular Antenna
10. USB
11. Wi-Fi/Bluetooth Antenna
12. Main Connector
13. eVault Mounting Springs
14. Anti-Tamper Tape
15. CTP2 USB Stick

Fig. 12, CPT1 and CTP2 Connections



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A. Connect the USB-mini end of the USB adaptor to the CTP ECU USB connector.
B. Connect the USB stick that contains the SF672A software to the USB-A female connector of the CTP adaptor.

Fig. 13, USB Stick Connected to CTP1

In order to minimize the possibility of disruptions during the CTP flashing procedure, ensure the following:

- The USB flash drive stick and the mini USB adaptor must remain fully connected to the CTP1.
- Vehicle power and ignition key should remain ON.
- Vehicle batteries should maintain 12.4 volts or higher, or a battery charger should be connected.
- Laptop must not be disconnected from the vehicle.
- Laptop must not be allowed to go to sleep.
- Laptop must not be used for any purpose other than flashing the CTP01T.

15. After the USB stick and adaptor are connected to the CTP, select the 'Start' button in the 'CTP USB Stick Flashing' window to begin the flashing process. See **Fig. 10**. Make a note of the time when the flashing process starts.

NOTE: The flashing process is automated and requires no interaction with the panel throughout the process. The CTP will shut down and go offline before installing the update. The message 'Waiting for CTP to Reset' will now appear and remain at the bottom of the 'CTP USB Stick Flashing' window while the CTP is offline for approximately 30 minutes until the new software is installed and activated. The message 'Flashing Complete' may also appear at the bottom of the 'CTP USB Stick Flashing' window. See **Fig. 14** and **Fig. 15**.

16. As the flashing process continues, check if the message 'FAILED: FLASH FAILED' is displayed in the 'CTP USB Stick Flashing' window. See **Fig. 16**.

    Is the message 'FAILED: FLASH FAILED' displayed at the bottom of the 'CTP USB Stick Flashing' window?

    YES → The CTP connection may have been disrupted. Follow substeps 16.1 through 16.4 to re-attempt the flashing process. If the message is still displayed after re-attempting the flashing process, go to the **CTP Replacement** procedure on page 25.

    NO → Go to step 17.

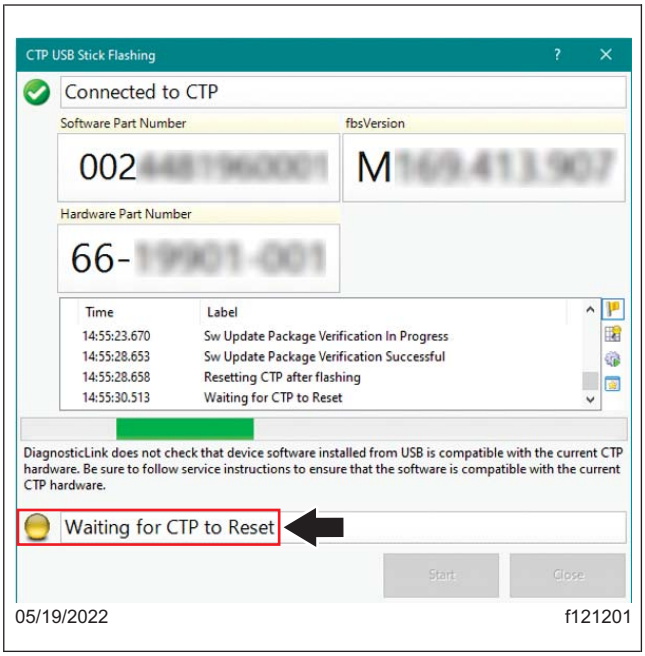


Fig. 14, Waiting for CTP to Reset Status Message

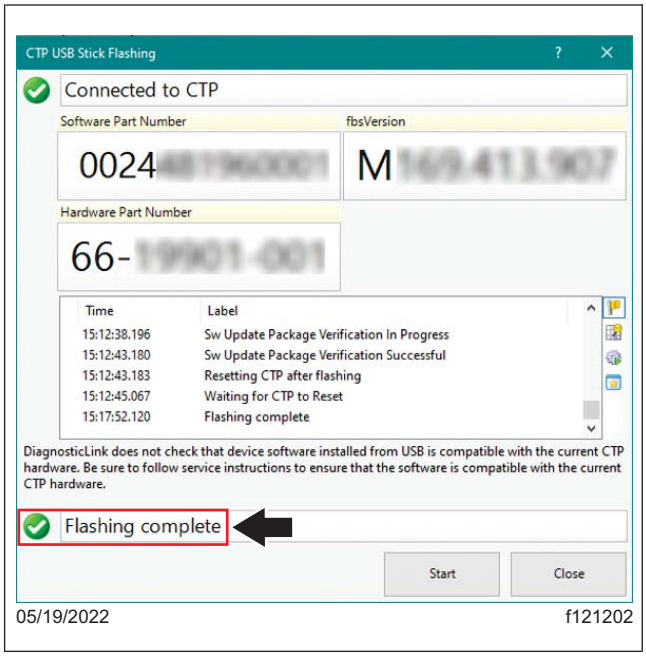


Fig. 15, Flashing Complete Status Message

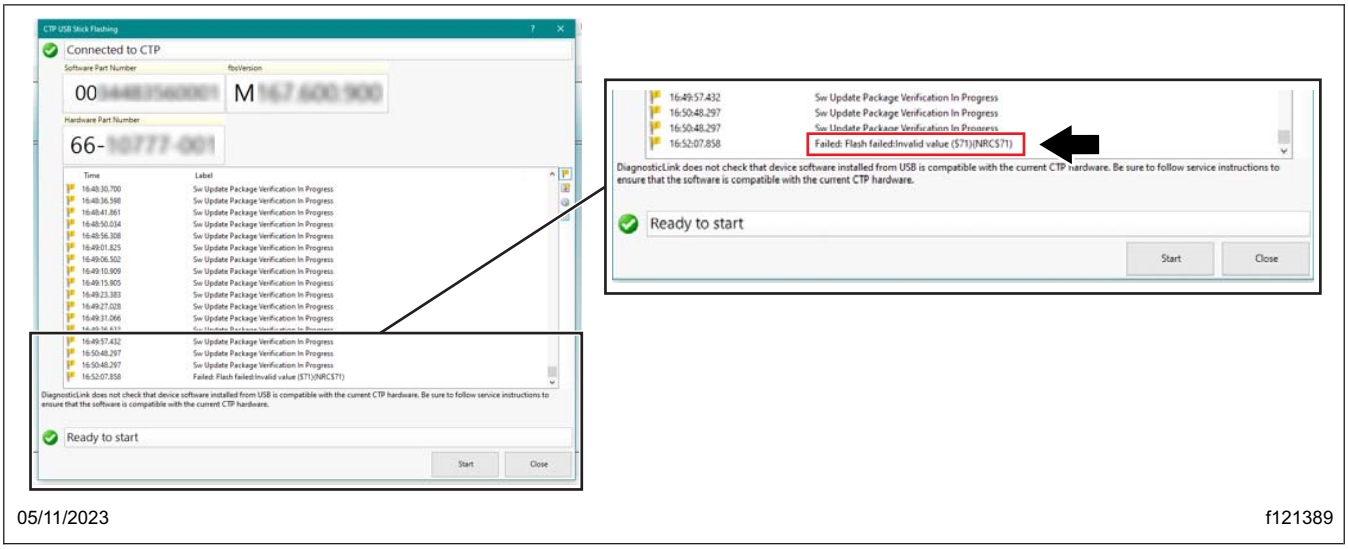


Fig. 16, Flash Failed Message

16.1 Verify that the vehicle batteries maintain 12.4 volts or higher.

16.2 Close and restart DiagnosticLink.

16.3 Make sure the SF672A/CTP1 USB stick (DDE DKICHA022003-4) containing the SF672A software and the adaptor (DKICHA022003-1) are completely inserted in to the CTP.

16.4 Repeat the steps 6 through 11.

17. Approximately 30 minutes after starting the CTP USB stick flashing process, or after the ‘Flashing Complete’ message is displayed, close the ‘CTP USB Stick Flashing’ window, then connect DiagnosticLink to CTP01T. See steps 7 through 9. If the CTP01T does not connect, the software update may still be in progress and may not respond. Wait for an additional 10 minutes between attempting to connect with CTP01T.

    Is the connection with CTP01T successful?

    YES → Go to step 18.

    NO → If CTP01T still does not connect to DiagnosticLink even after 40 minutes from the start time noted in step 15, disconnect DiagnosticLink from the vehicle, verify the battery voltage of 12.4 volts or higher is maintained, close and restart DiagnosticLink, and once again attempt to connect with CTP01T. If the connection still cannot be made with CTP01T, go to the **CTP Replacement** procedure on page 25.

18. Once the CTP01T connection turns green in the ‘Connections’ window, go to ‘Actions’ in the menu bar, select ‘Telematics’, then select ‘CTP USB Stick Flashing.’ Verify the ‘fbsVersion’ is ‘167.721.900.’ See Fig. 17. If the ‘fbsVersion’ does not match updated version ‘167.721.900,’ disconnect the CTP01T and connect again. Then verify the ‘fbsVersion’ again.

    The ‘fbsVersion’ can also be found in the ‘Identification’ panel, under ‘Stored Data’ tab. The ‘FBS Sw Version’ should match the ‘fbsVersion’ displayed in the ‘CTP USB Stick Flashing’ window. See Fig. 18.

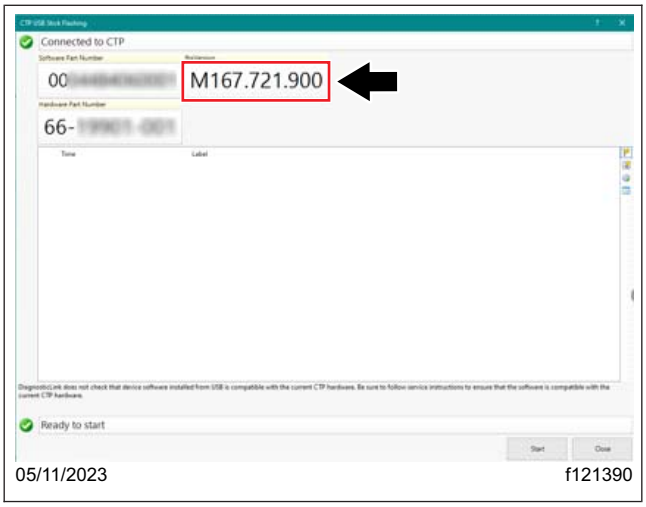
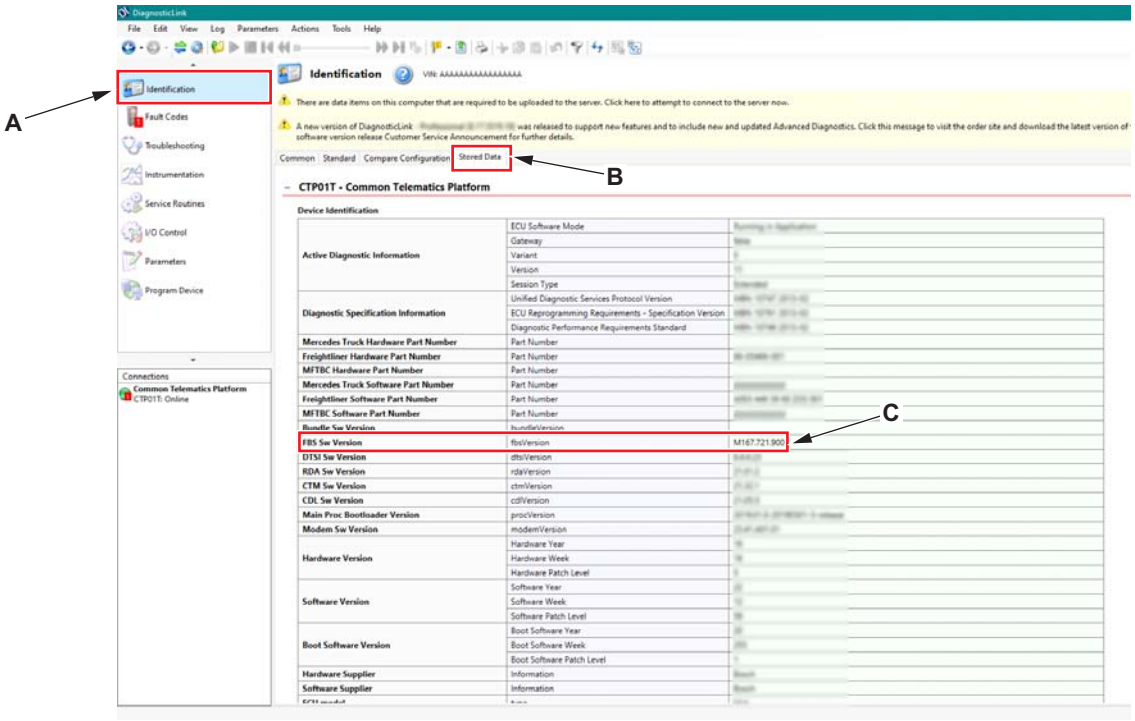


Fig. 17, Verifying the fbsVersion in the CTP USB Stick Flashing Window



A. Go to the 'Identification' tab.
B. Select the 'Stored Data' tab.
C. Verify the 'FBS Sw Version.'

Fig. 18, Verifying the FBS Sw Version in the Identification Tab

19. Verify the CTP is activated and enabled to communicate with the Daimler network.

    19.1 Wait for 10 minutes to give the CTP ample time to establish a network connection.

    19.2 Go to 'Instrumentation' tab, select 'Chart,' then select the 'Real Time Data: Real Time Value' check-box. Verify 'Activation OK' is displayed under 'Value,' as shown in **Fig. 19**.

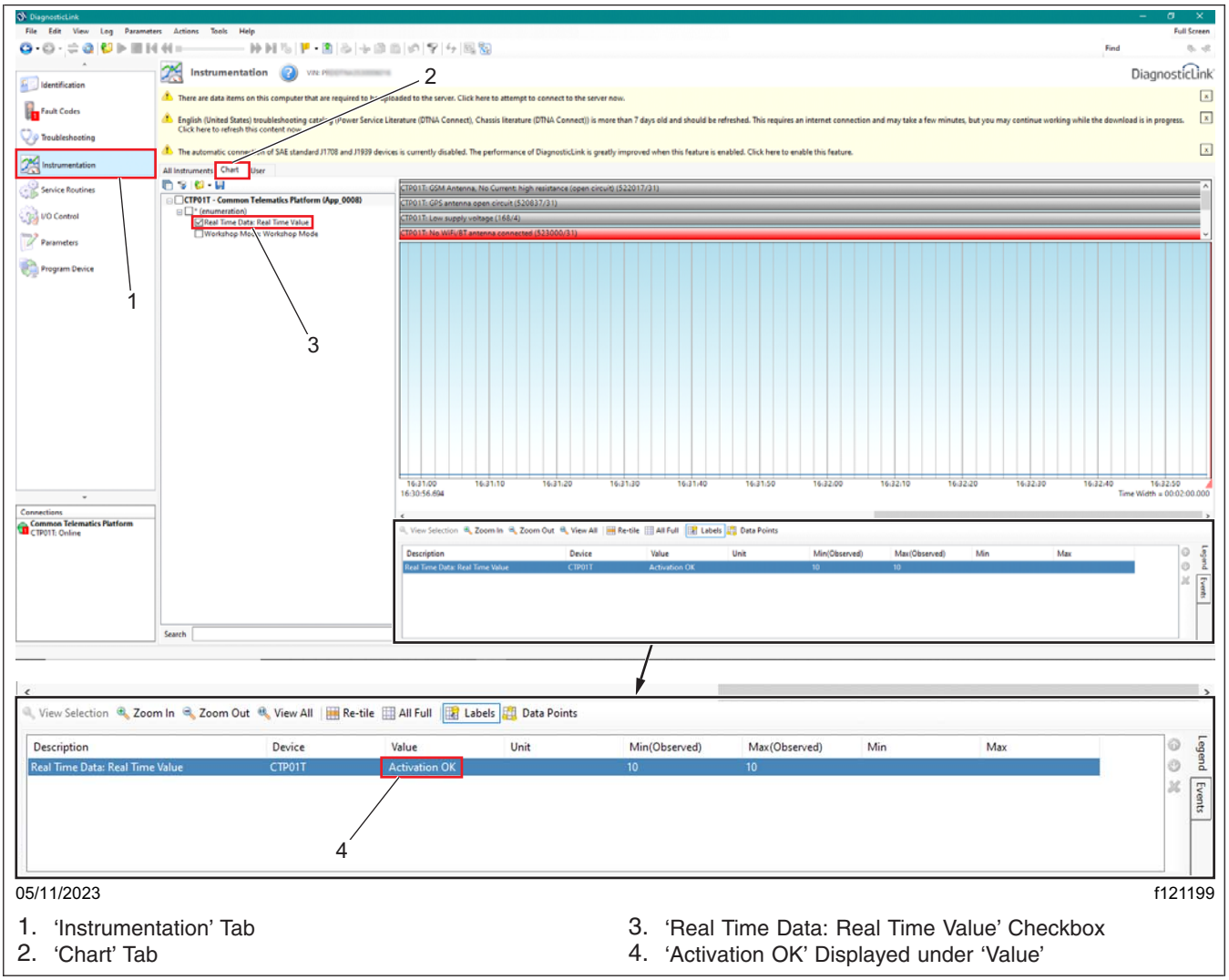
    Is 'Activation OK' displayed under 'Value'?

    YES → The CTP01T software update is successful. Capture a screenshot that shows 'Activation OK,' and save the screenshot along with the repair order. Go to step 21.

    NO → Attempt to establish the network connection again. Follow the substeps 19.3 and 19.4.

    19.3 Disconnect the DiagnosticLink from the CTP, and wait for 5 minutes before reconnecting.

    19.4 Wait for an additional 10 minutes for the CTP to re-attempt establishing the network connection. If the CTP does not connect to the network, and if 'Activation OK' is not displayed under 'Value,' as shown in **Fig. 19**, even after 10 minutes, go to the **CTP Replacement** procedure on page 25.



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1. 'Instrumentation' Tab
2. 'Chart' Tab
3. 'Real Time Data: Real Time Value' Checkbox
4. 'Activation OK' Displayed under 'Value'

Fig. 19, CTP Software Update Successful

20. Remove the USB mini-to-USB A adaptor and the USB stick (DKICHA022003-4) from the CTP1 at the large blue USB mini connector. If the vehicle had a harness connected at the large blue CTP connector, reconnect the harness.
21. Using the four mounting fasteners, install the VPDM.
22. Install the passenger-side lower dash cover and the electronics bay cover. For instructions, see **Group 60** of the applicable workshop manual.
23. Close DiagnosticLink, and disconnect the RP1210B-compliant vehicle diagnostic adaptor from the diagnostic connector on the vehicle.
24. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF672 (Form WAR261), indicating this work has been completed.

SF672 B - CTP2 Software Update

1. Check the base label (Form WAR259) for a completion sticker for SF672AB (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.
3. Make sure the ignition key and battery cut-off switch, if so equipped, are in the ON position.

IMPORTANT: Do not turn the ignition key or the battery cut-off switch to the OFF position until the software installation is complete. The vehicle batteries should maintain 12.4 volts or higher during the CTP software update. If needed, a battery charger should be connected.

4. Connect an RP1210B-compliant vehicle diagnostic adaptor to the diagnostic connector on the vehicle.
5. Connect the other end of the RP1210B-compliant vehicle diagnostic adaptor to the laptop.
6. Open DiagnosticLink®.

IMPORTANT: Make sure that DiagnosticLink is updated to the latest version (8.17 SP1 at the time of publication, or newer) before programming the vehicle. To verify, from the menu bar, select ‘Help,’ then select ‘About.’ See **Fig. 20** and **Fig. 21**.

IMPORTANT: To reduce the possibility of disruption during programming, make sure DiagnosticLink is **connected to CTP01T only**.

7. If other already-connected modules appear in the ‘Connections’ panel, right-click and select ‘Close Connections’ to remove all connected devices.
8. To manually establish the connection with CTP01T, right-click in the ‘Connections’ panel, and select ‘Connect.’ See **Fig. 22**.

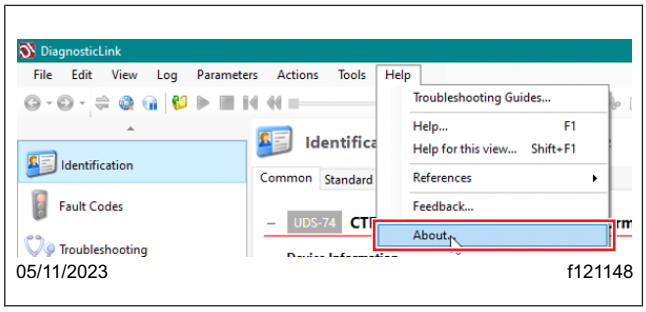


Fig. 20, Opening the About DiagnosticLink Window

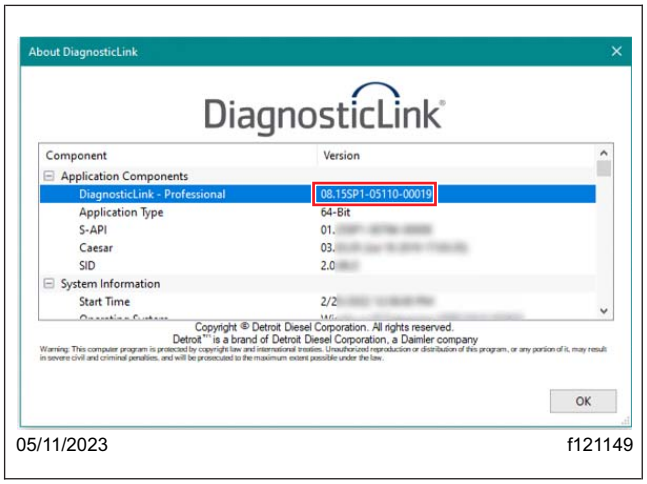
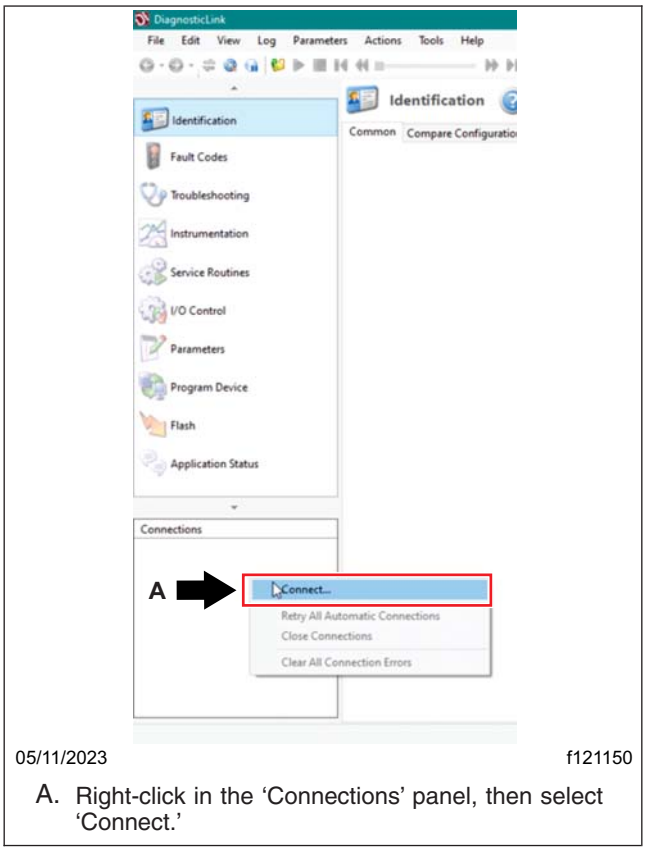


Fig. 21, DiagnosticLink Application Version

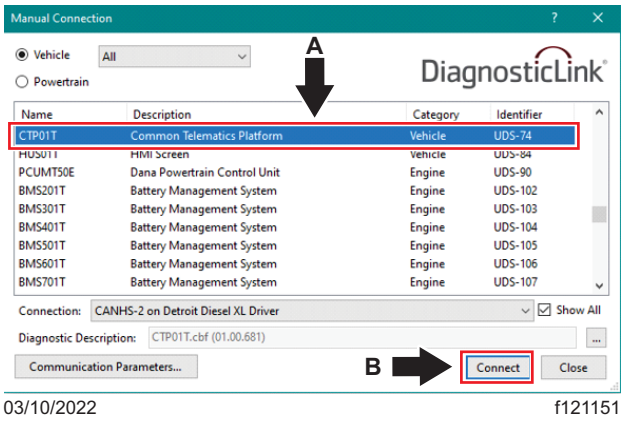


A. Right-click in the 'Connections' panel, then select 'Connect.'

Fig. 22, Establishing Manual Connection

9. In the 'Manual Connection' window that appears, select 'CTP01T,' then select the 'Connect' button. **See Fig. 23**. Wait until the CTP01T connection turns green, as shown in **Fig. 24**.

   If the CTP01T does not connect, verify that the VPDM 5-amp fuse (F73) is installed and supplying 12V power to the CTP. Install the 5-amp fuse, or replace the fuse, if required. If the CTP01T still does not connect, contact Daimler Truck Technical Support at 1-855-253-0422, option 4, (5 AM to 4 PM Pacific Time, Monday through Friday).



A. Select 'CTP01T.' B. Select 'Connect.'

Fig. 23, Manual Connection Window

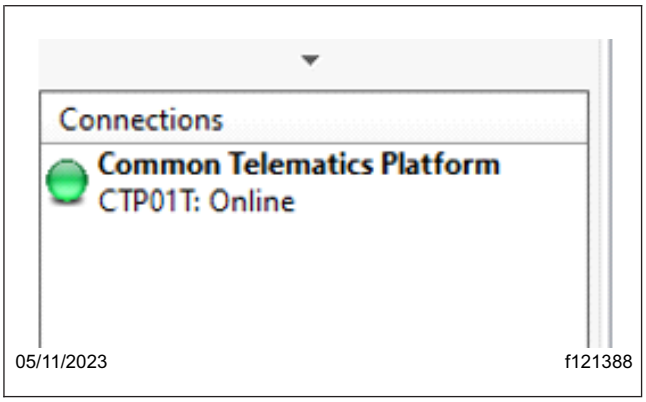


Fig. 24, CTP01T Connected

10. In the menu bar, go to ‘Actions,’ select ‘Telematics,’ then select ‘CTP USB Stick Flashing.’ See **Fig. 25**.

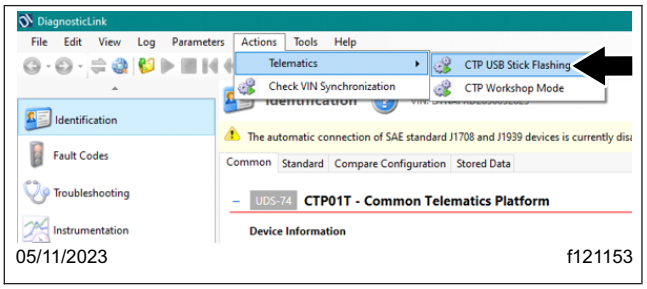
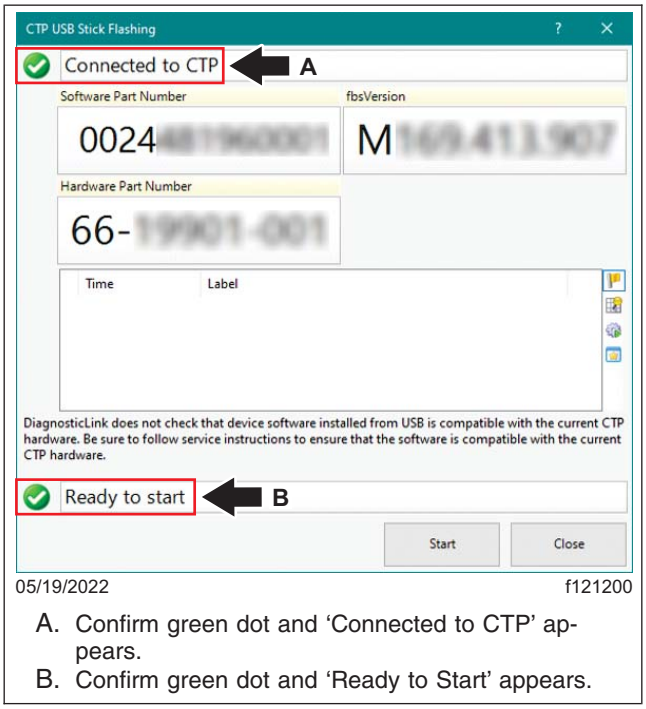


Fig. 25, Opening the CTP USB Stick Flashing Window

11. The ‘CTP USB Stick Flashing’ window appears. Verify that a green dot appears beside ‘Connected to CTP’ on the top-left, and beside ‘Ready to start’ at the bottom. See **Fig. 26**.

    If the green dot does not appear beside ‘Connected to CTP’ on the top, and ‘Ready to start,’ disconnect the CTP01T, close and restart DiagnosticLink. Repeat steps 6 through 11. If the issue still persists after a second attempt, contact Daimler Truck Technical Support at 1-855-253-0422, option 4, (5 AM to 4 PM, Pacific time, Monday through Friday).



A. Confirm green dot and ‘Connected to CTP’ appears.
B. Confirm green dot and ‘Ready to Start’ appears.

Fig. 26, CTP USB Stick Flashing Window

12. Remove the electronics bay cover and the passenger-side lower dash cover. For instructions, see **Group 60** of the applicable workshop manual.

NOTICE

Make sure that the cab floor is clear of debris and tools. If the VPDM is lowered on to debris, especially metal objects, it could permanently damage the VPDM.

IMPORTANT: The VPDM is positioned on the mounting tabs to assist with retaining the VPDM in position while mounting fasteners are removed. Care should be taken so the VPDM does not fall to the floor after all four mounting fasteners have been removed.

13. Remove the four VPDM mounting fasteners, then gently lower the VPDM on to the cab floor. See **Fig. 27**.

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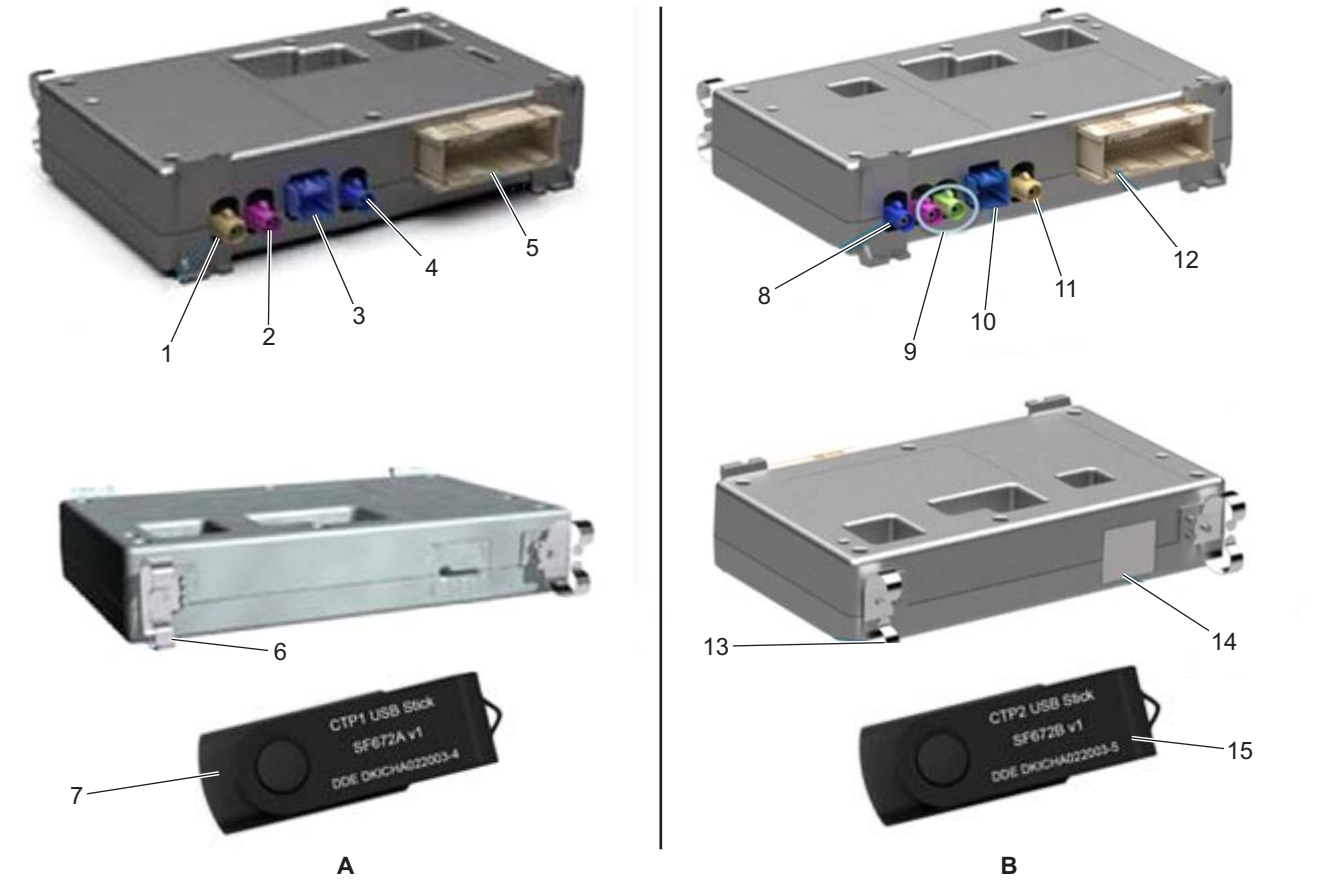
Fig. 27, Lowering the VPDM to the Cab Floor

14. Locate the CTP2 on the upper shelf in the electronics bay. Use **Fig. 28** to confirm that a CTP2 is installed and can be updated using the SF672B/CTP2 USB stick (DDE DKICHA022003-5). Use a USB mini-to-USB A adaptor (DKICHA022003-1) to connect the SF672B/CTP2 USB stick (DDE DKICHA022003-5) containing the SF672B software to the CTP2 at the large blue USB mini connector. See **Fig. 29**.

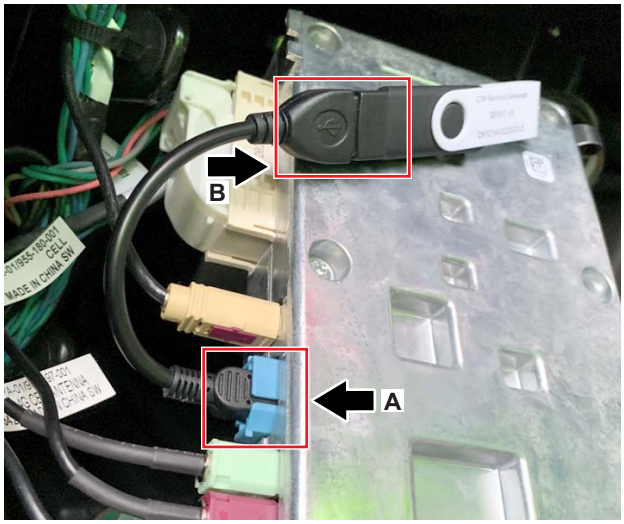
    Some vehicles may already have a harness connected at the large blue CTP connector, which must be disconnected for this procedure. Make sure the USB adaptor and the USB stick are completely inserted.



A. CTP1
1. Wi-Fi/Bluetooth Antenna
2. Cellular Antenna
3. USB
4. GNSS Antenna
5. Main Connector
6. eVault Mounting Springs
7. CTP1 USB Stick
8. GNSS Antenna

B. CTP2
9. 2x Cellular Antenna
10. USB
11. Wi-Fi/Bluetooth Antenna
12. Main Connector
13. eVault Mounting Springs
14. Anti-Tamper Tape
15. CTP2 USB Stick

Fig. 28, CPT1 and CTP2 Connections



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A. Connect the USB-mini end of the USB adaptor to the CTP ECU USB connector.
B. Connect the USB stick that contains the SF672B software to the USB-A female connector of the CTP adaptor.

Fig. 29, USB Stick Connected to CTP2

In order to minimize the possibility of disruptions during the CTP flashing procedure, ensure the following:

- The USB flash drive stick and the mini USB adaptor must remain fully connected to the CTP2.
- Vehicle power and ignition key should remain ON.
- Vehicle batteries should maintain 12.4 volts or higher, or a battery charger should be connected.
- Laptop must not be disconnected from the vehicle.
- Laptop must not be allowed to go to sleep.
- Laptop must not be used for any purpose other than flashing the CTP01T.

15. After the USB stick and adaptor are connected to the CTP, select the ‘Start’ button in the ‘CTP USB Stick Flashing’ window to begin the flashing process. See **Fig. 26**. Make a note of the time when the flashing process starts.

NOTE: The flashing process is automated and requires no interaction with the panel throughout the process. The CTP will shut down and go offline before installing the update. The message ‘Waiting for CTP to Reset’ will now appear and remain at the bottom of the ‘CTP USB Stick Flashing’ window while the CTP is offline for approximately 20 minutes until the new software is installed and activated. The message ‘Flashing Complete’ may also appear at the bottom of the ‘CTP USB Stick Flashing’ window. See **Fig. 30** and **Fig. 31**.

16. As the flashing process continues, check if the message ‘FAILED: FLASH FAILED’ is displayed in the ‘CTP USB Stick Flashing’ window. See **Fig. 32**.

    Is the message ‘FAILED: FLASH FAILED’ displayed at the bottom of the ‘CTP USB Stick Flashing’ window?

    YES → The CTP connection may have been disrupted. Follow the substeps 16.1 through 16.4 to re-attempt the flashing process. If the message is still displayed after re-attempting the flashing process, go to the **CTP Replacement** procedure on page 25.

    NO → Go to step 17.

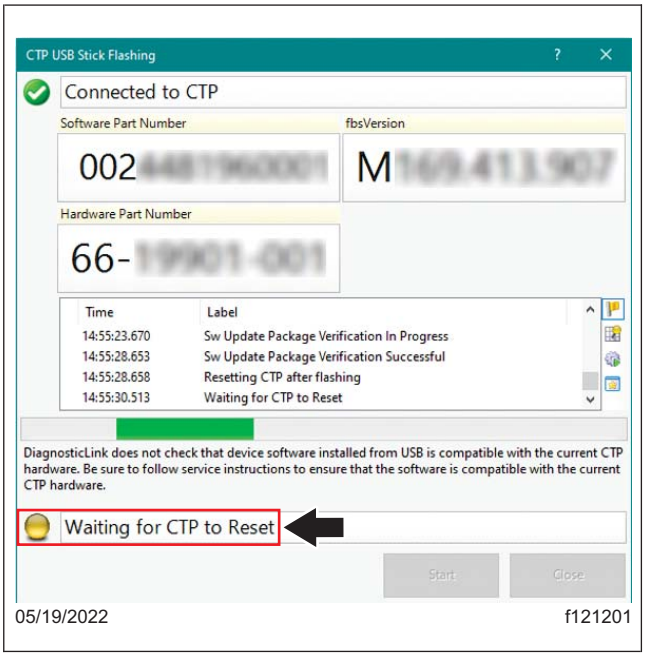


Fig. 30, Waiting for CTP to Reset Status Message

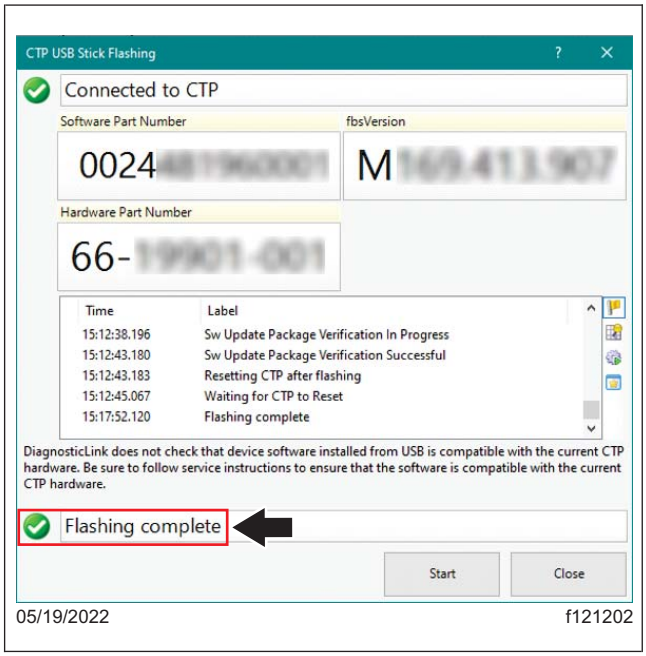


Fig. 31, Flashing Complete Status Message

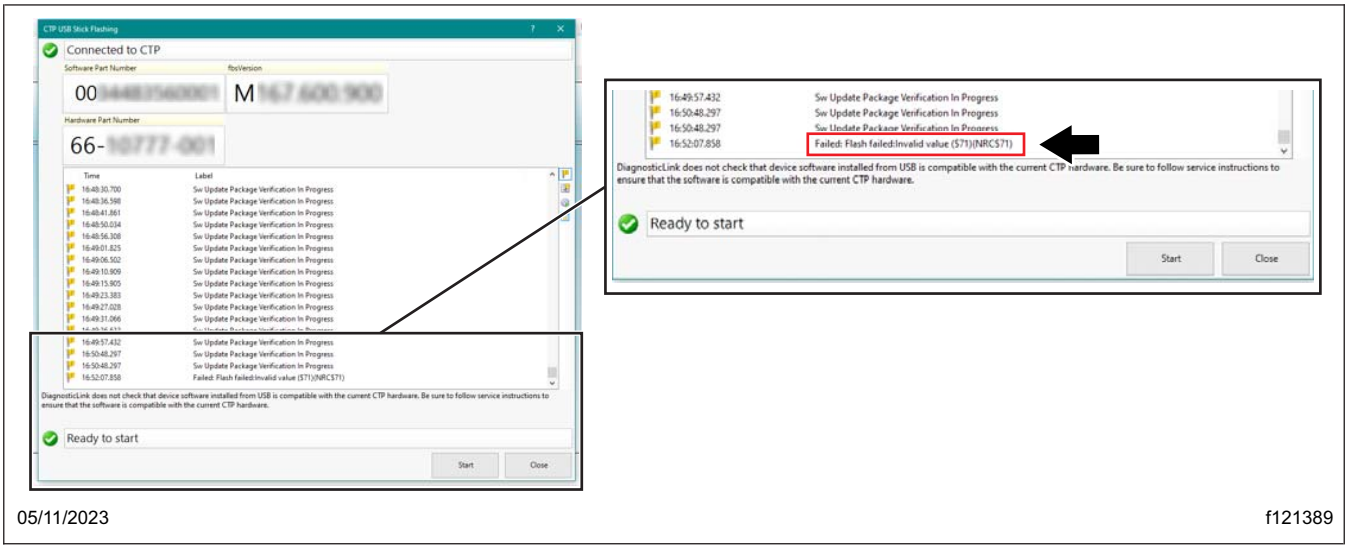


Fig. 32, Flash Failed Message

16.1 Verify that the vehicle batteries maintain 12.4 volts or higher.

16.2 Close and restart DiagnosticLink.

16.3 Make sure the SF672B/CTP2 USB stick (DDE DKICHA022003-5) containing the SF672B software and the adaptor (DKICHA022003-1) are completely inserted in to the CTP.

16.4 Repeat the steps 6 through 11.

17. Approximately 20 minutes after starting the CTP USB stick flashing process, or after the 'Flashing Complete' message is displayed, close the 'CTP USB Stick Flashing' window, then connect DiagnosticLink to CTP01T. See steps 7 through 9. If the CTP01T does not connect, the software update may still be in progress and may not respond. Wait for an additional 10 minutes between attempting to connect with CTP01T.

    Is the connection with CTP01T successful?

    YES → Go to step 18.

    NO → If CTP01T still does not connect to DiagnosticLink even after 30 minutes from the start time noted in step 15, disconnect DiagnosticLink from the vehicle, verify the battery voltage of 12.4 volts or higher is maintained, close and restart DiagnosticLink, and once again attempt to connect with CTP01T. If the connection still cannot be made with CTP01T, go to the **CTP Replacement** procedure on page 25.

18. Once the CTP01T connection turns green in the 'Connections' window, go to 'Actions' in the menu bar, select 'Telematics', then select 'CTP USB Stick Flashing.' Verify the 'fbsVersion' is '169.721.907.' **See Fig. 33**. If the 'fbsVersion' does not match updated version '169.721.907,' disconnect the CTP01T and connect again. Then verify the 'fbsVersion' again.

    The 'fbsVersion' can also be found in the 'Identification' panel, under 'Stored Data' tab. The 'FBS Sw Version' should match the 'fbsVersion' displayed in the 'CTP USB Stick Flashing' window. See **Fig. 34**.

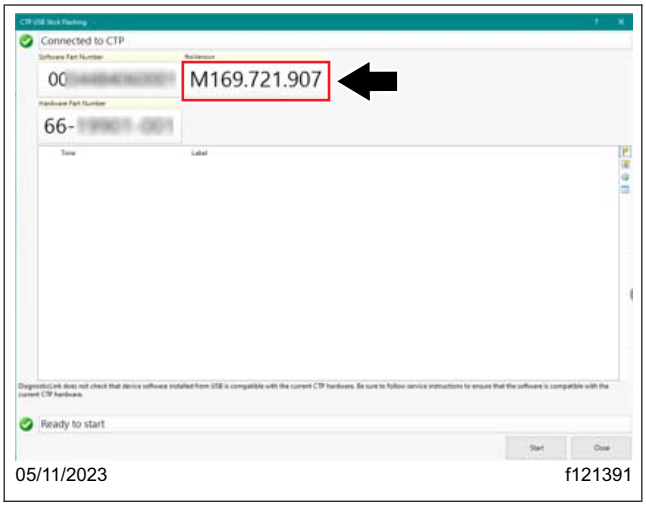
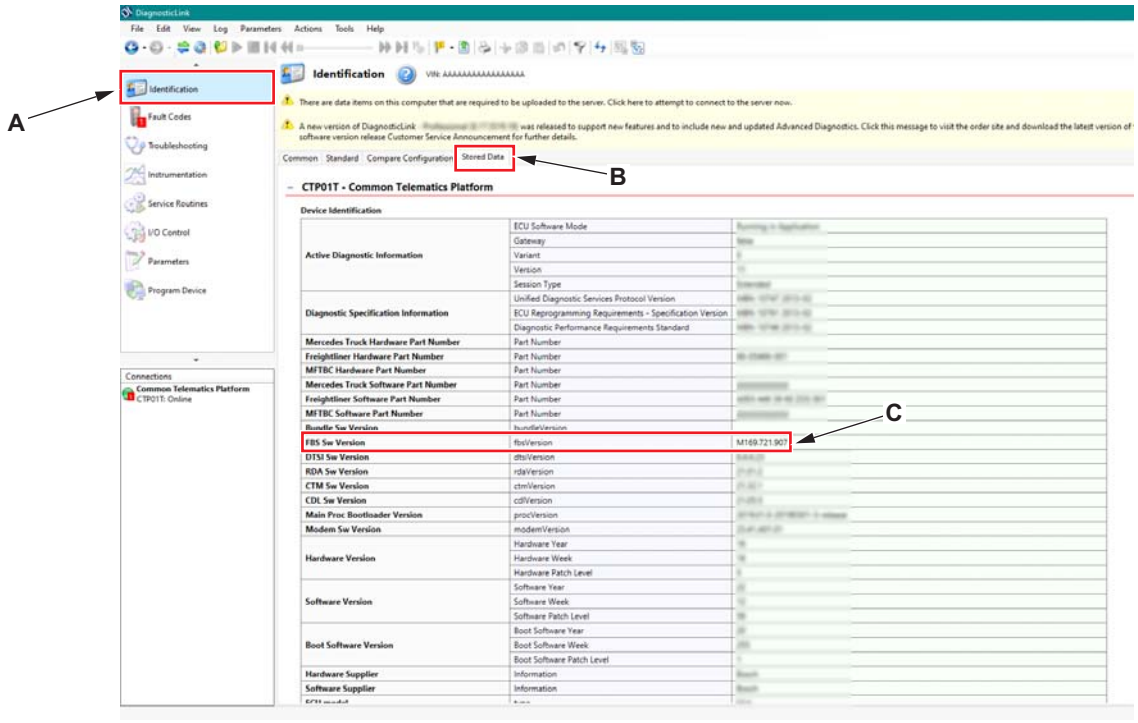


Fig. 33, Verifying the fbsVersion in the CTP USB Stick Flashing Window



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A. Go to the 'Identification' tab.
B. Select the 'Stored Data' tab.
C. Verify the 'FBS Sw Version.'

Fig. 34, Verifying the FBS Sw Version in the Identification Tab

19. Verify the CTP is activated and enabled to communicate with the Daimler network.

    19.1 Wait for 10 minutes to give the CTP ample time to establish a network connection.

    19.2 Go to 'Instrumentation' tab, select 'Chart,' then select the 'Real Time Data: Real Time Value' check-box. Verify 'Activation OK' is displayed under 'Value,' as shown in **Fig. 35**.

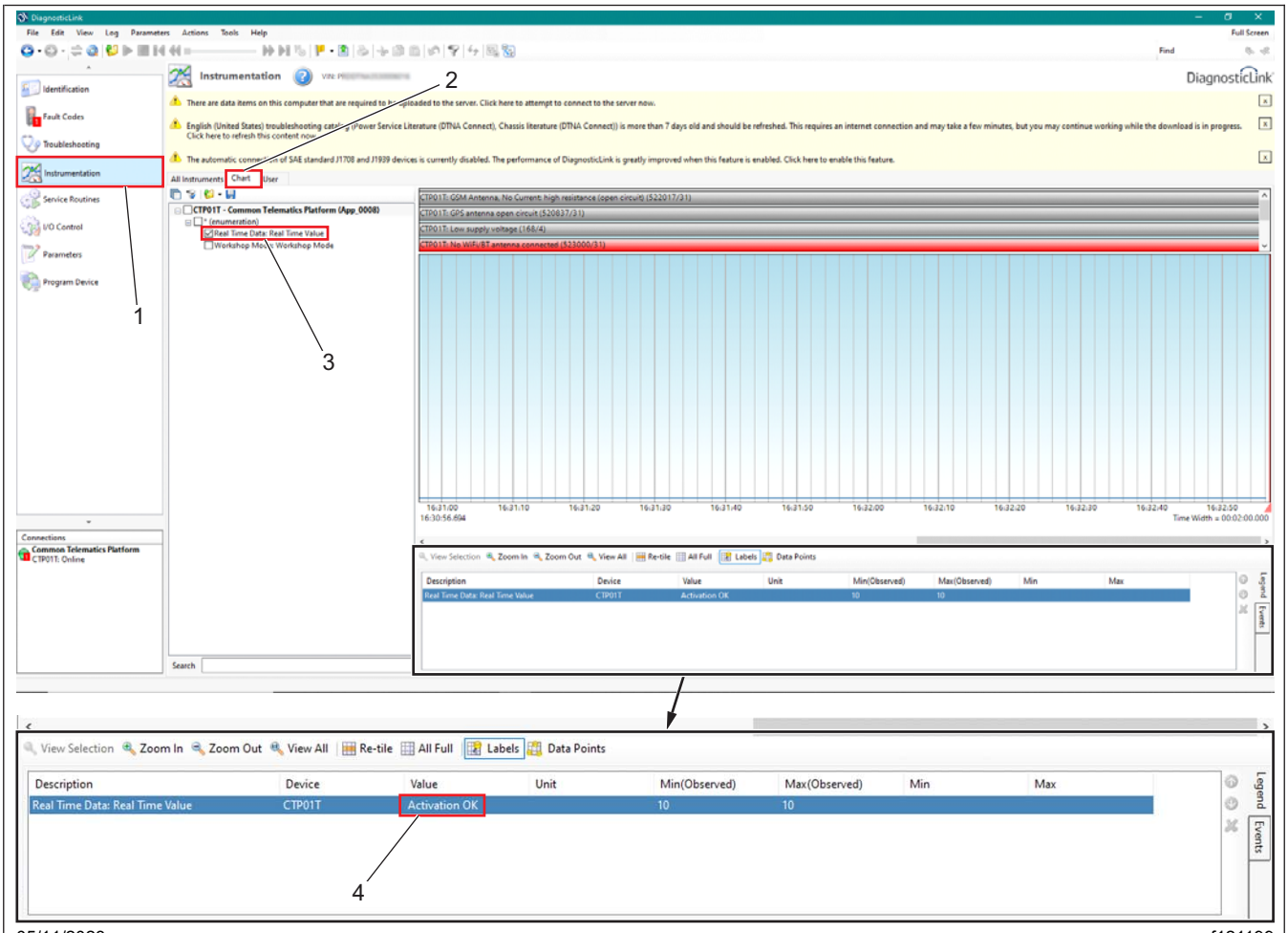
    Is 'Activation OK' displayed under 'Value'?

    YES → The CTP01T software update is successful. Capture a screenshot that shows 'Activation OK,' and save the screenshot along with the repair order. Go to step 21.

    NO → Attempt to establish the network connection again. Follow the substeps 19.3 and 19.4.

    19.3 Disconnect the DiagnosticLink from the CTP, and wait for 5 minutes before reconnecting.

19.4 Wait for an additional 10 minutes for the CTP to re-attempt establishing the network connection. If the CTP does not connect to the network, and if 'Activation OK' is not displayed under 'Value,' as shown in **Fig. 35**, even after 10 minutes, go to the **CTP Replacement** procedure on page 25.



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1. 'Instrumentation' Tab
2. 'Chart' Tab
3. 'Real Time Data: Real Time Value' Checkbox
4. 'Activation OK' Displayed under 'Value'

Fig. 35, CTP Software Update Successful

20. Remove the USB mini-to-USB A adaptor and the USB stick (DKICHA022003-5) from the CTP2 at the large blue USB mini connector. If the vehicle had a harness connected at the large blue CTP connector, reconnect the harness.
21. Using the four mounting fasteners, install the VPDM.
22. Install the passenger-side lower dash cover and the electronics bay cover. For instructions, see **Group 60** of the applicable workshop manual.
23. Close DiagnosticLink, and disconnect the RP1210B-compliant vehicle diagnostic adaptor from the diagnostic connector on the vehicle.
24. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF672 (Form WAR261), indicating this work has been completed.

SF672 A and SF672 B - CTP Replacement (When Software Updates/Flashing Attempts have Failed)

IMPORTANT: Only proceed with CTP replacement if authorized by Daimler Truck Technical Support at 1-855-253-0422.

CTP replacement is required only after USB Stick flashing attempts have failed and only when the SF672 work instructions have indicated that CTP replacement is needed. The correct CTP replacement part(s) for SF672 A and SF672 B are different and will depend on the part number of the failed CTP being replaced.

1. Disconnect the connectors from the CTP ECU, located on the top shelf of the vehicle electronics bay.
2. Press the CTP ECU firmly towards the back of the electronics bay to release the ECU from the forward-mounting slots, and lift the ECU.
3. Remove the CTP ECU from the vehicle.
4. After the CTP ECU is removed, mark an **X** on the CTP label to identify it as old and to eliminate any chance of installing the ECU on another vehicle.
5. Follow the substeps to determine the correct replacement CTP to be installed.

   5.1 **SF672 A (CTP1)** → Using the part number of the removed (failed) CTP, see **Table 3** for the new CTP part number updating to CTP2, and for the antennas needed for the upgrade.

Parts List			
CTP Part Number Being Replaced	**Supporting Parts to Remove**	**Supporting Parts to Add**	**CTP Replacement Part Number**
66-05463-001 (CTP1, 3G)	66-03942-001 ANTENNA-GSM/ GNSS,INTERIOR MT	66-11663-000 ANTENNA-4G CELL	A66-19900-506 (Submit WSC Ticket if Part Not Available.)
		66-03942-002 ANTENNA-GSM/ GNSS,INTR MT,4G	
		A66-12157-000 ANTENNA-CABLE,WIFI/BT,INT	
66-05466-001 (CTP1 3G)	66-03942-001 (ANTENNA-GSM/ GNSS,INTERIOR MT)	66-03942-002 (ANTENNA-GSM/ GNSS,INTR MT,4G)	
		66-11663-000 (ANTENNA-4G CELL)	
66-10777-001 (CTP1,4G)		66-11663-000 (ANTENNA-4G CELL)	
66-13928-001 (CTP1,4G)		66-11663-000 (ANTENNA-4G CELL)	

Table 3, Parts List

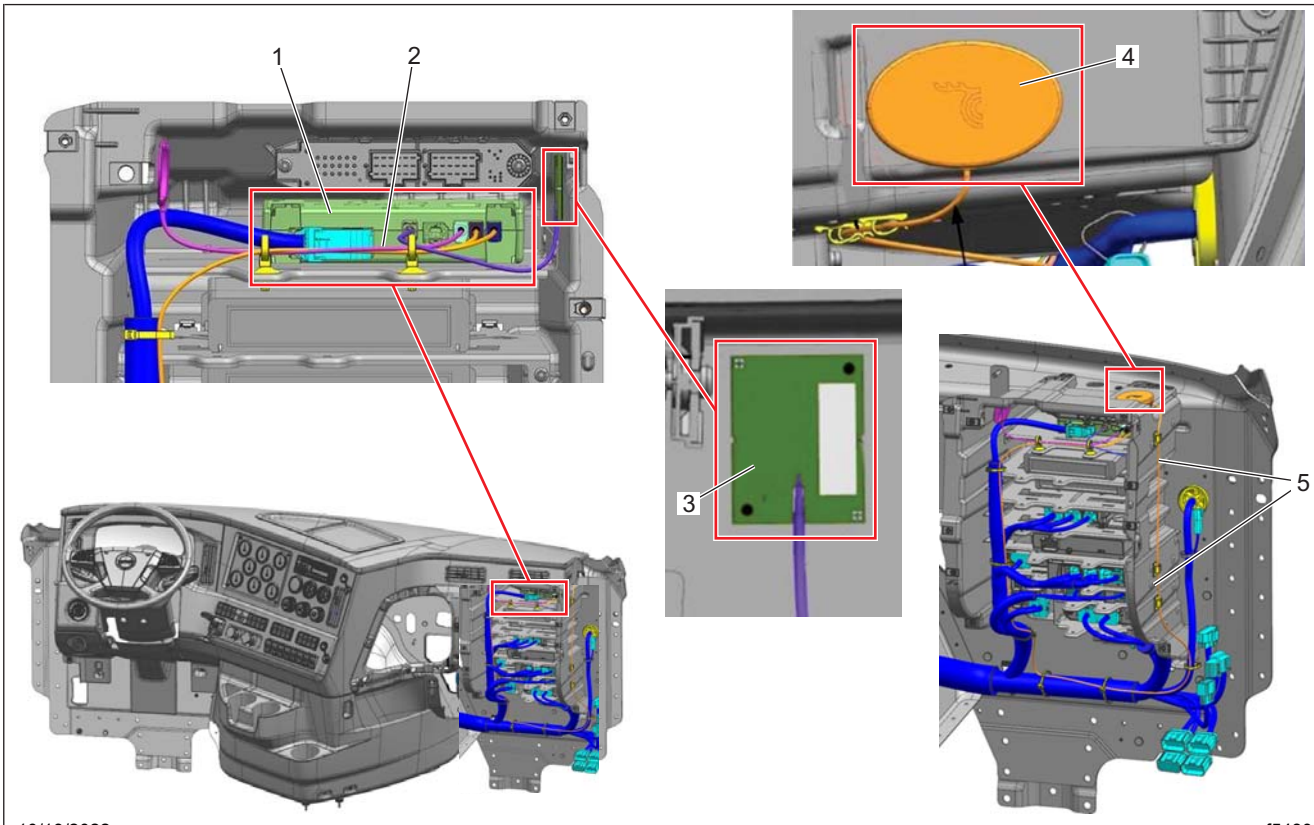
   5.2 **SF672 B (CTP2)** → Using the part number of the removed (failed) CTP, enter the part number in to the Daimler parts look up/parts ordering system and determine the latest/newest part number in the 'Supersession Chain.' The correct replacement CTP is the latest/newest CTP2 part number. No antenna changes are needed for SF672 B.

6. Position the new CTP ECU in the electronics bay, and press the ECU firmly towards the back of the shelf. Lower the front of the ECU on to the surface of the shelf, and adjust its position horizontally until the tabs on the ECU are fully seated in the mounting slots.

7. Connect the CTP antennas to the matching color connector on the CTP.

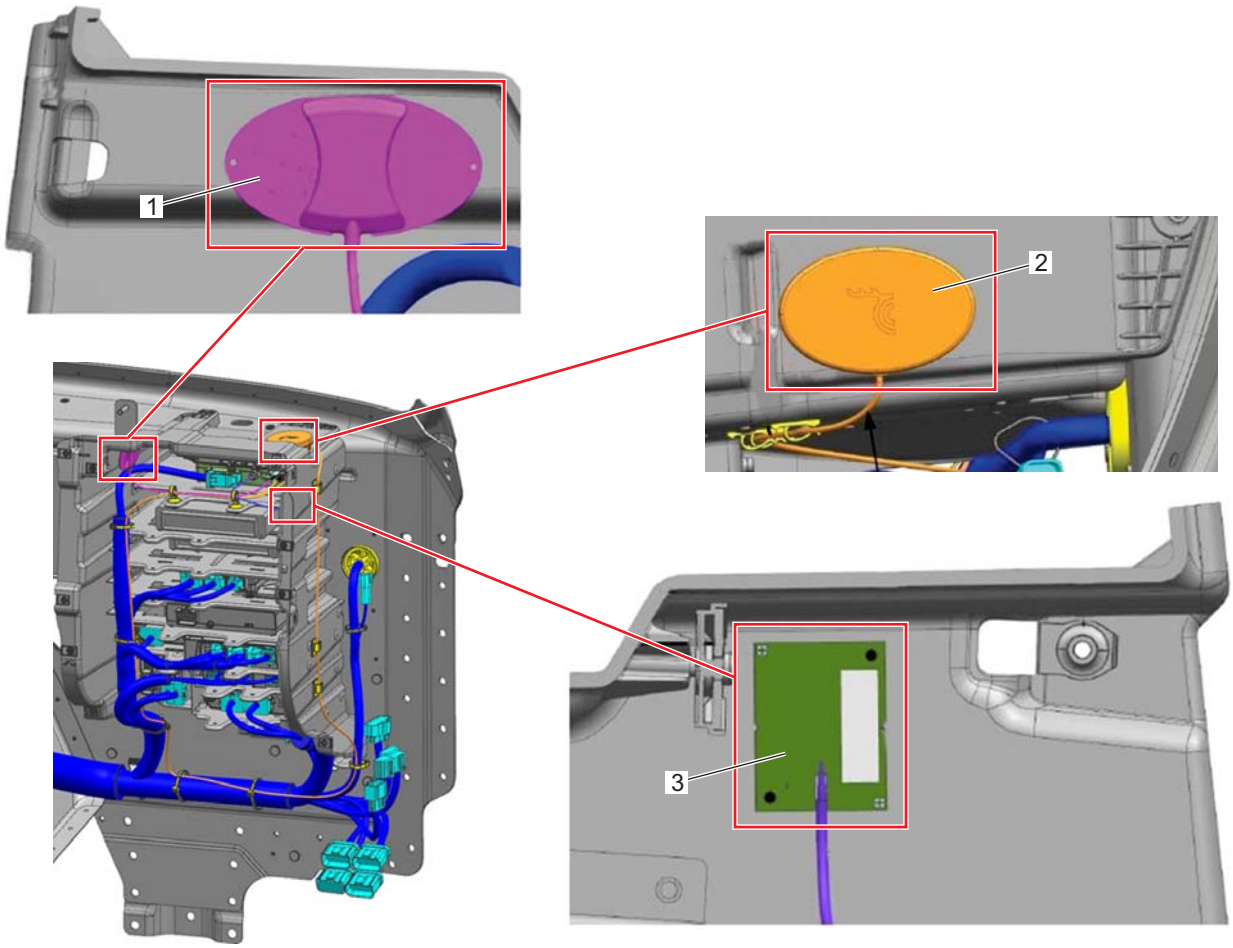
   7.1 SF672 A → Identify and replace the antenna(s) listed in **Table 3**. Route the cable for each of the antenna using **Fig. 36** as a reference. Mounting locations for each antenna being replaced is identified in **Fig. 37**. Before installation, clean the antenna mounting area using isopropyl alcohol. Make sure the mounting surface is completely dry before using the included adhesive foam tape.

   Figure 38, **Fig. 39**, and **Fig. 40** identify each antenna type.



1. CTP2
2. Cable Routing
3. Wi-Fi/Bluetooth Antenna
4. Antenna GSM/GNSS, INTR MT
5. GSM/GNSS Antenna Cable Routing

Fig. 36, CTP2 Component Mounting Locations



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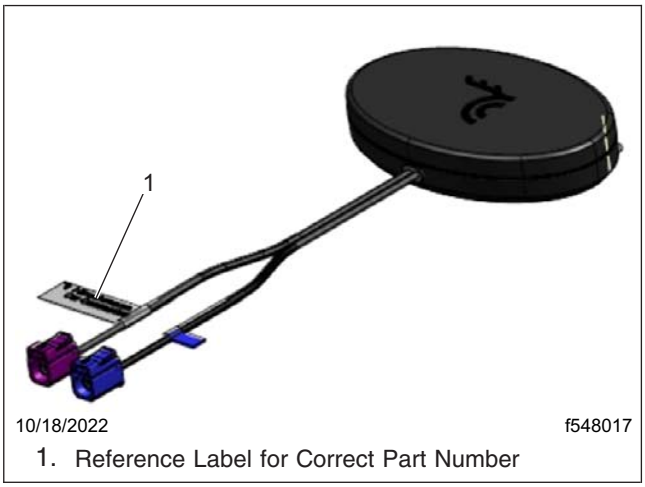
1. 4G Cell Antenna
2. GSM/GNSS Antenna
3. Wi-Fi/Bluetooth Antenna

Fig. 37, Antenna Mounting



1. Reference Label for Correct Part Number

Fig. 38, GSM/GNSS Antenna

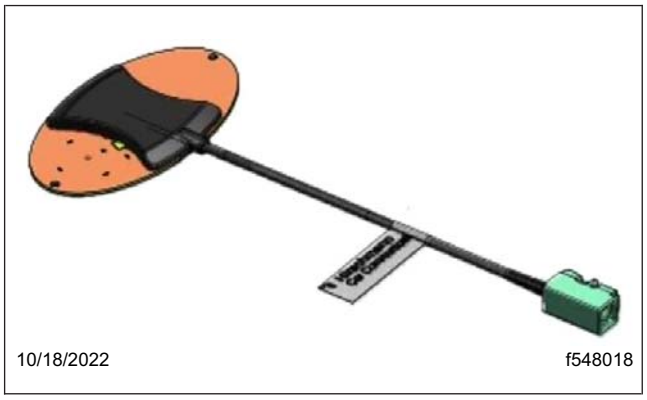


Fig. 39, 4G Cellular Antenna

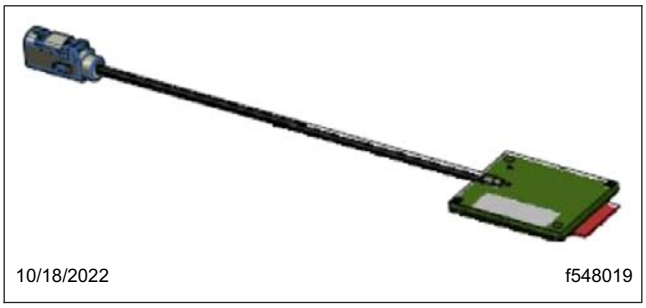
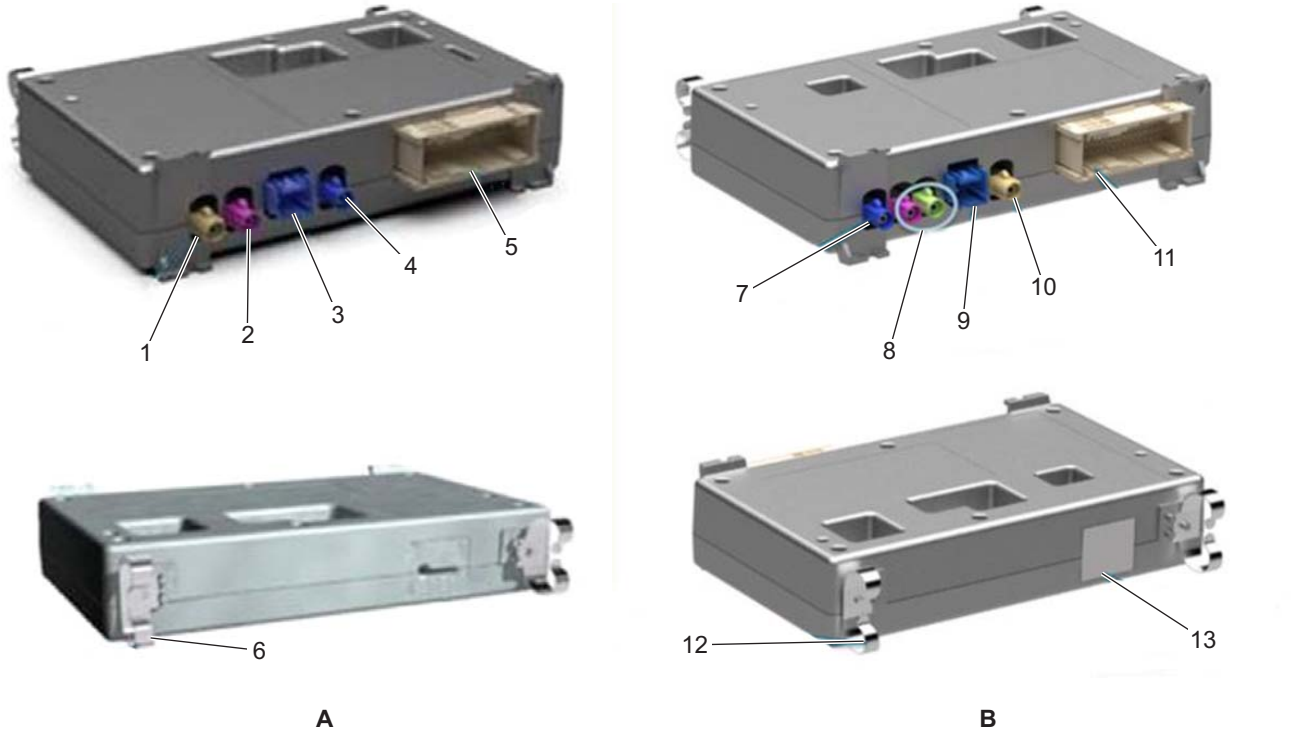


Fig. 40, Wi-Fi/Bluetooth Antenna

7.2 After mounting antennas, as needed, and routing/securing cables, connect each of the antenna ends to the CTP2 shown in **Fig. 41**. Each antenna connector will match the color on the CTP2.



A. CPT1
1. Wi-Fi/Bluetooth Antenna
2. Cellular Antenna
3. USB
4. GNSS Antenna
5. Main Connector
6. eVault Mounting Springs
7. GNSS Antenna

B. CPT2
8. 2x Cellular Antenna
9. USB
10. Wi-Fi/Bluetooth Antenna
11. Main Connector
12. eVault Mounting Springs
13. Anti-Tamper Tape

Fig. 41, CPT1 and CTP2 Connection Locations

8. Connect the 54-pin CTP harness connector.
9. Install the VPDM. For instructions, see **Group 54** of the applicable workshop manual.
10. Install the electronics bay cover, passenger-side lower dash cover, and top dash cover. For instructions, see **Group 60** of the applicable workshop manual.
11. Turn the ignition switch to the ON position.
12. Connect the vehicle to DiagnosticLink 8.17 SP1 or later.
13. Allow all automatic connections to complete.
14. Right-click in the ‘Connections’ window, and select ‘Close Connections.’ If any failed device connections remain (shown with a red indicator), right-click and select ‘Clear All Connection Errors.’

15. From the menu bar, select ‘File,’ then select ‘Connect.’ In the ‘Manual Connection’ window that appears, select the following devices, one at a time, to manually connect to them.
    - ICUC01T
    - CGW04T
    - CTP01T

IMPORTANT: Any other devices connected to DiagnosticLink (other than the three listed above) may cause the initialization process to fail.

16. Wait until all three controllers are fully connected and the connection indicators turn green. See **Fig. 42**.

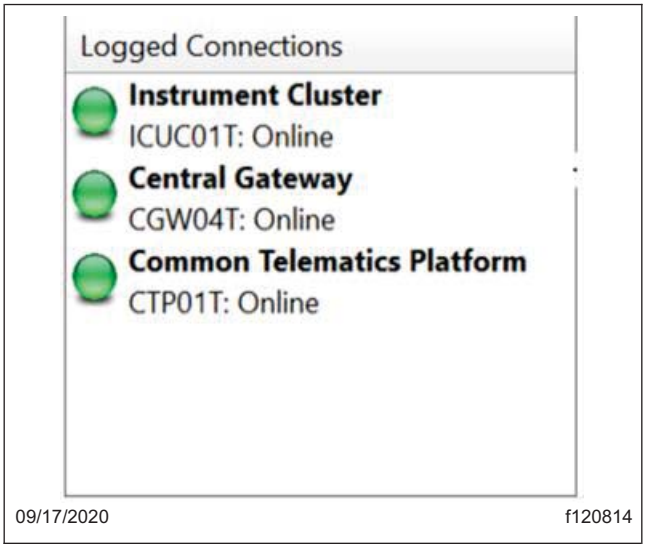
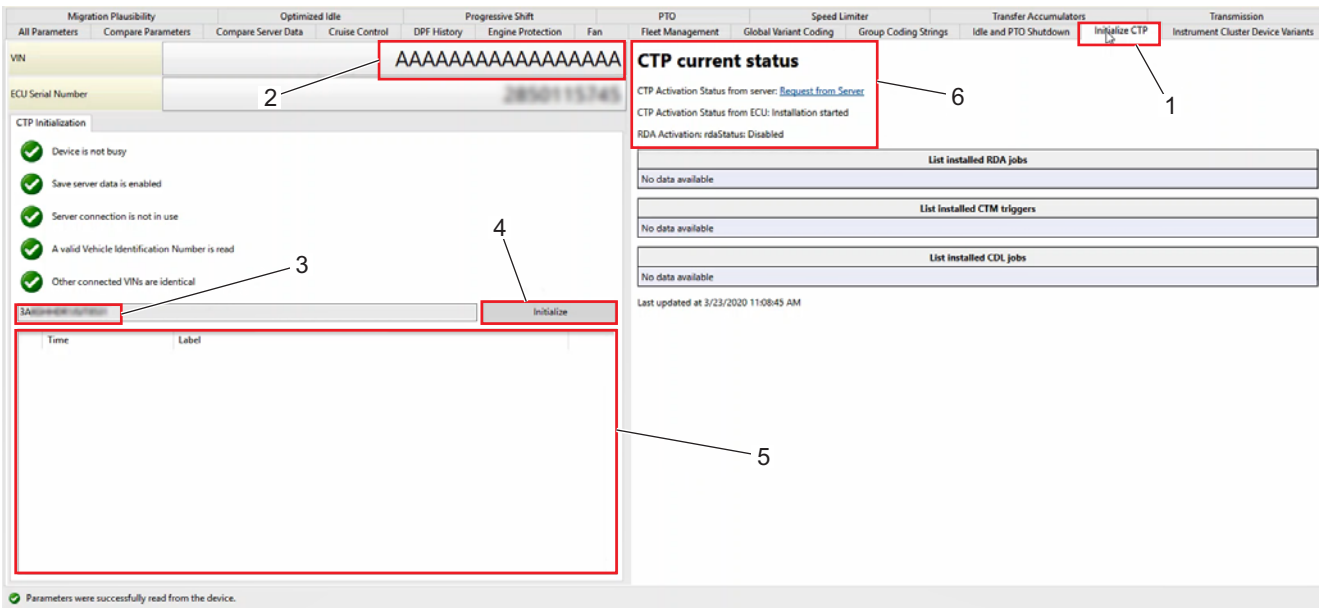


Fig. 42, DiagnosticLink Logged Connections Panel

17. Go to the ‘Parameters’ tab. DiagnosticLink will read the parameters of the connected ECUs. Wait until the ‘Reading parameters’ bar indicates this process is complete.
18. Select the ‘Initialize CTP’ tab. Verify the vehicle identification number (VIN) from the new CTP2 reads the default AAAAAAAAAAAAAAAA, or the VIN from the connected vehicle. See **Fig. 43**. If not, remove the CTP, and install a new CTP.
19. Select ‘Initialize’ to run the initialization process.



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1. ‘Initialize CTP’ Tab
2. VIN from CTP
3. VIN from Connected Vehicle
4. ‘Initialize’ Button
5. Initialize Progress Text Field
6. CTP Current Status

Fig. 43, CTP Initialization

20. If prompted, enter your credentials to connect DiagnosticLink to the server.
21. Wait until the initialization process is complete, and the last line in the initialization progress text field reads, ‘Vin written to device and required data was sent to server.’
22. Monitor the ‘CTP Activation Status from ECU,’ shown in the ‘CTP current status’ panel. Within 10 minutes from the end of the initialization process, the ‘CTP Activation Status from ECU’ should change and display ‘Active OK.’

    Is ‘Active OK’ displayed under the status?

    YES → Go to the next step.

    NO → Contact the Detroit Connect® Operations Support team via email DetroitConnect@daimlertruck.com, or call 1-855-253-0420, option 2.

23. With the 'Initialize CTP' tab still selected, select the 'Full Screen' button on the upper-right corner of the window. See **Fig. 44**.

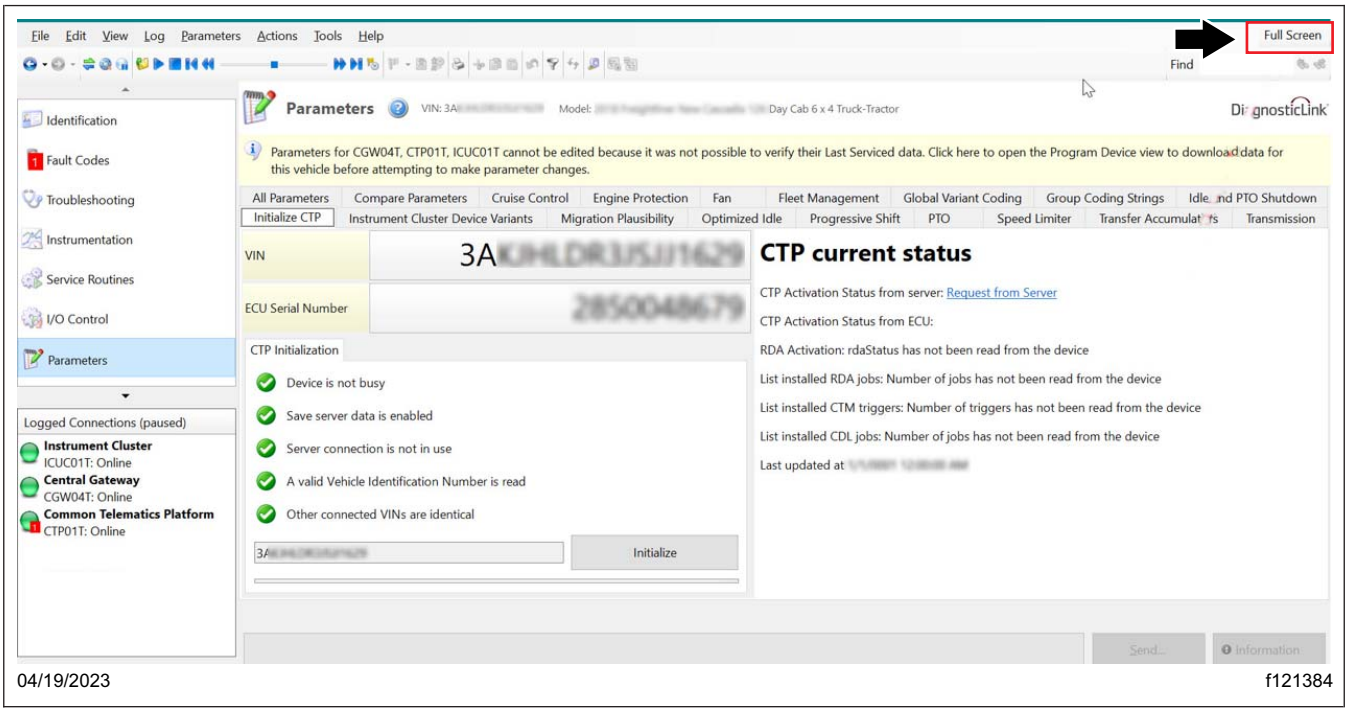
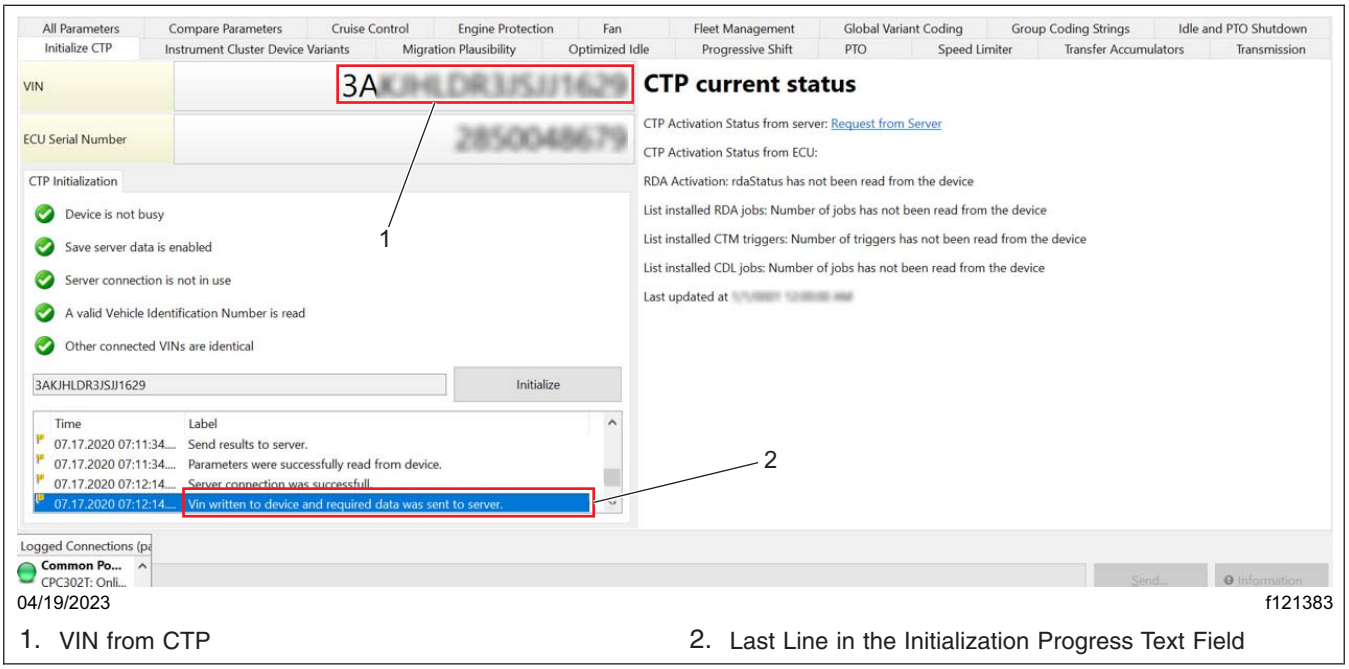


Fig. 44, Switching to Full Screen Display

24. For validation that the CTP2 was properly initialized and for the dealership records, take a screenshot of the DiagnosticLink window while making sure the VIN and the last line in the initialization progress text field are visible, as shown in **Fig. 45**. Keep the image as part of the work order.



1. VIN from CTP
2. Last Line in the Initialization Progress Text Field

Fig. 45, Screenshot of DiagnosticLink

25. Select the ‘Full Screen’ button again to return to the normal view.
26. Close DiagnosticLink, and remove the RP1210B-compliant vehicle diagnostic adaptor from the diagnostic connector on the vehicle.
27. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF672 (Form WAR261), indicating this work has been completed.