Subject: Bendix SDP5 Software Update

Models Affected: Specific model year 2022 Freightliner Cascadia; and Western Star 49X vehicles manufactured January 4, 2021, through May 16, 2021.

General Information

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 SF639A to modify the vehicles mentioned above.

Certain vehicles built with the Bendix SDP5 module are showing incorrect or missing event data on the Safety Direct portal, due to a messaging error with the Common Telematics Platform (CTP) module.

The software for the Bendix SDP5 module will be updated to adapt the messaging of the CTP module.

There are approximately 2,400 vehicles involved in this campaign.

Additional Repairs

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

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

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

Work Instructions

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

Replacement Parts

No replacement parts are required for this repair.

If our records show your dealership has ordered any vehicle(s) involved in campaign number SF639A, a list of the customers and vehicle identification numbers will be available on DTNA Portal.

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 1 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
SF639A	BENDIX SOFTWARE DOWNLOAD, ONCE PER LAPTOP	0.4	996-F139A	12-Repair Recall/Campaign
	BENDIX SOFTWARE UPDATE, SDP5	0.4	996-F139B	12-Repair Recall/Campaign

Table 1

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location on the vehicle, and attach 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 (**SF639-A**).

- In the Primary Failed Part field, enter **25-SF639-000**.

- In the Parts section, enter the appropriate kit or 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 Important Campaign Information Letter posted on DTNAPortal.com.

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 DTNAPortal.com/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.

Copy of Notice to Owners

Subject: Bendix SDP5 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 SF639A to modify specific model year 2022 Freightliner Cascadia; and Western Star 49X vehicles manufactured January 4, 2021, through May 16, 2021.

Certain vehicles built with the Bendix SDP5 module are showing incorrect or missing event data on the Safety Direct portal, due to a messaging error in the Common Telematics Platform (CTP) module.

The software for the Bendix SDP5 module will be updated to adapt the messaging of the CTP module.

Please contact an authorized DTNA dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. The campaign will take approximately one hour and will be performed at no charge to you. To locate an authorized dealer, search online at 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.

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, if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: Bendix SDP5 Software Update

**Models Affected: Specific model year 2022 Freightliner Cascadia;
and Western Star 49X vehicles manufactured January 4, 2021,
through May 16, 2021.**

Software Download and Installation

1. Check the base label (Form WAR259) for a completion sticker for SF639 (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.

IMPORTANT: System administrative rights are required on the computer for installing the SDP5 Software Only Update Tool. Contact the local system administrator for assistance.

NOTE: The software has to be installed once on the computer; this can be used to update multiple vehicles.

2. To download the software, go to **http://dtna.info/BendixSDP5Software**.

3. Enter the requested information in the respective fields, then select 'Continue.' See **Fig. 1**.

Fig. 1, Entering the Requested Information

4.   Select the checkbox corresponding to the 'SDP5 Software Only U...' zip file, indicated by the larger file size than the other file. Select 'Download.' See **Fig. 2**.
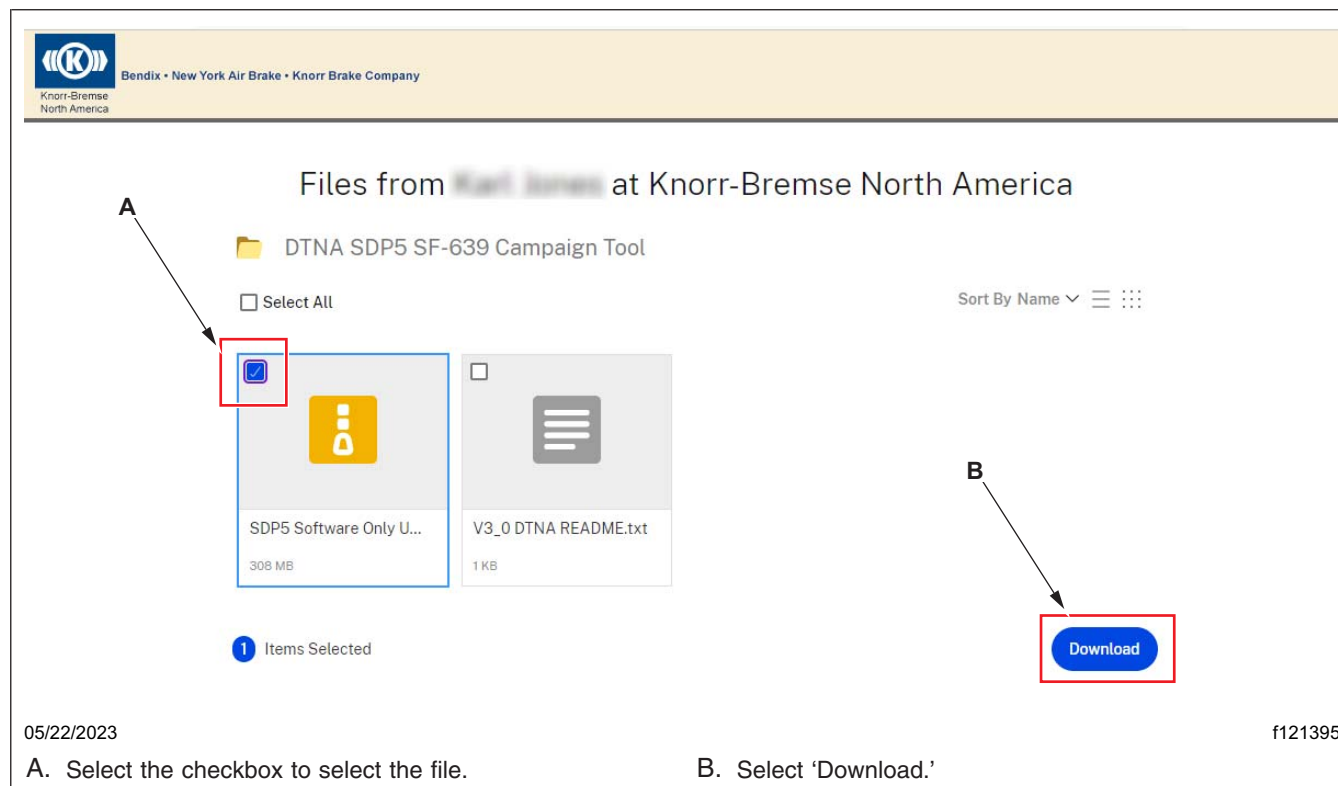

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A. Select the checkbox to select the file.   B. Select 'Download.'

Fig. 2, Starting Download

NOTE: Depending on the operating system and/or the browser, the laptop may either ask you to select a location to save, or automatically save the file in the 'Downloads' folder. Microsoft Edge was used as the default browser while taking these screenshots.

5.   A 'Downloads' box will appear in the upper-right corner of the browser window. Once the download is complete, select 'Open file' to see the contents of the downloaded zip file within the file explorer. See **Fig. 3**.
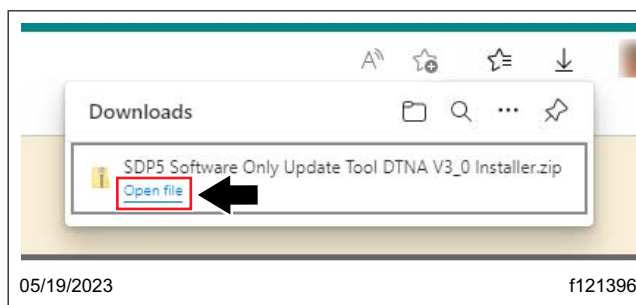

05/19/2023   f121396

Fig. 3, Opening the Downloaded File

6.   Select 'Extract all' in the top-right of the window to extract all the contents from the zip file. See **Fig. 4**.

05/19/2023   f121397
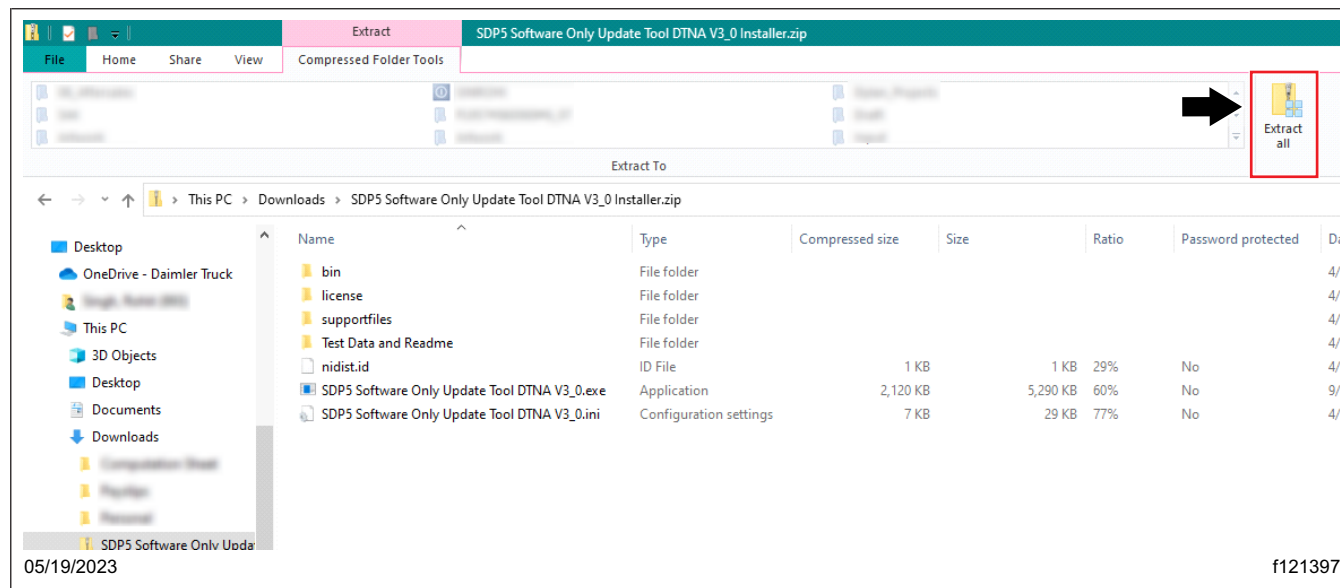
Fig. 4, Selecting Extract All

7.   The 'Extract Compressed (Zipped) Folders' appears. Make sure the checkbox next to 'Show extracted files when complete' is selected, then select 'Extract.' See **Fig. 5**.
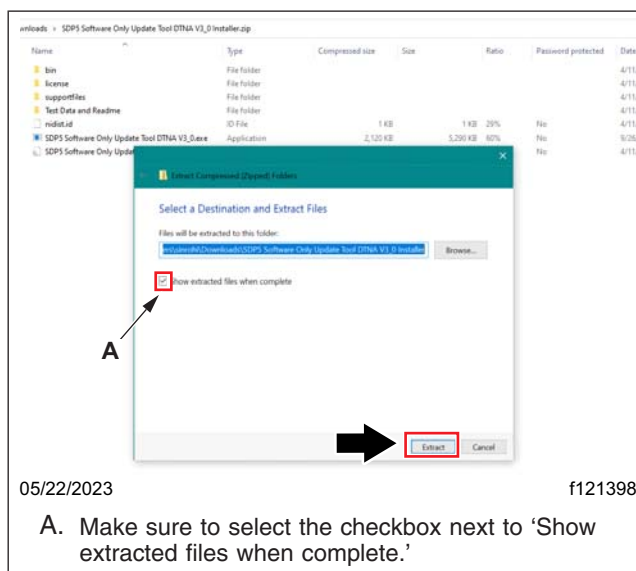

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A.   Make sure to select the checkbox next to 'Show extracted files when complete.'

Fig. 5, Extract Compressed (Zipped) Folders Window

8.   The files are extracted to the destination folder. See **Fig. 6**.
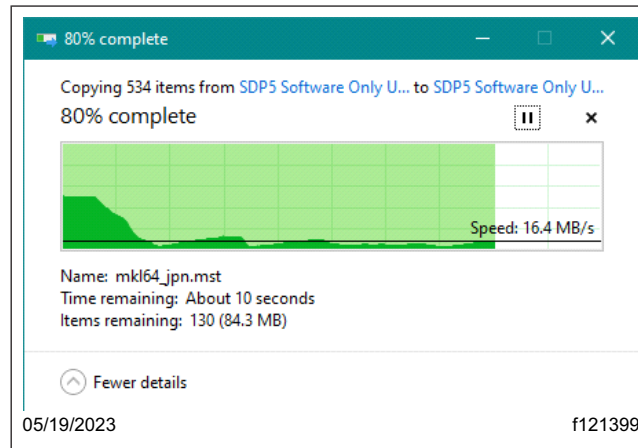
Fig. 6, Extracting the Files

9.   The extracted contents are shown in a new window. Double-click to run the 'SDP5 Software Only Update Tool DTNA V3.0.exe' application file. See **Fig. 7**.
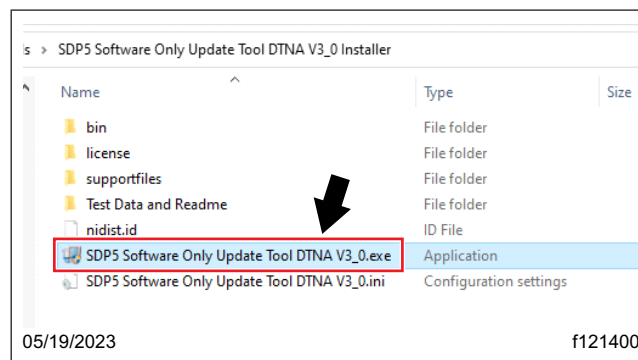

Fig. 7, Selecting and Running the Setup File

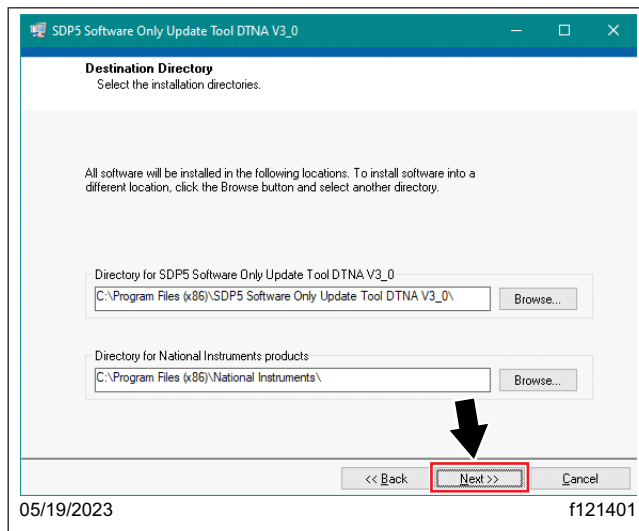10.   The software installation window pops-up. Select 'Next.' See **Fig. 8**.

Fig. 8, Selecting Next

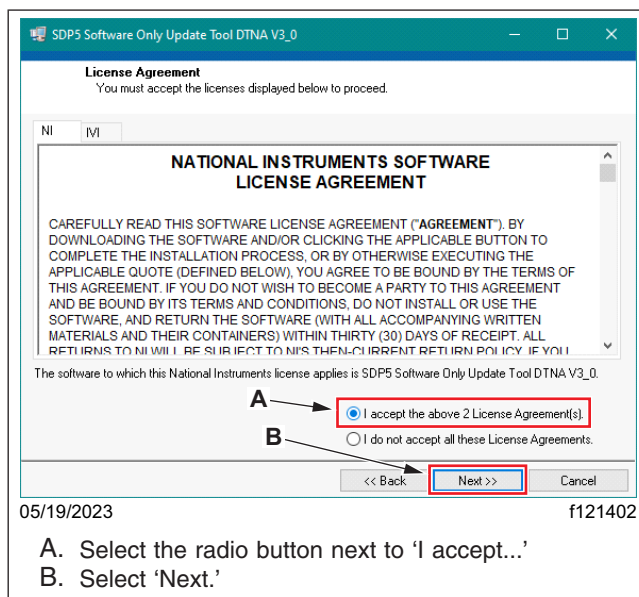11.   Select the radio button next to 'I accept the above 2 License Agreement(s).' Select 'Next.' See **Fig. 9**.

A. Select the radio button next to 'I accept...'
B. Select 'Next.'

Fig. 9, Accepting the License Agreements

12.   Select 'Next' to begin the installation. See **Fig. 10**.

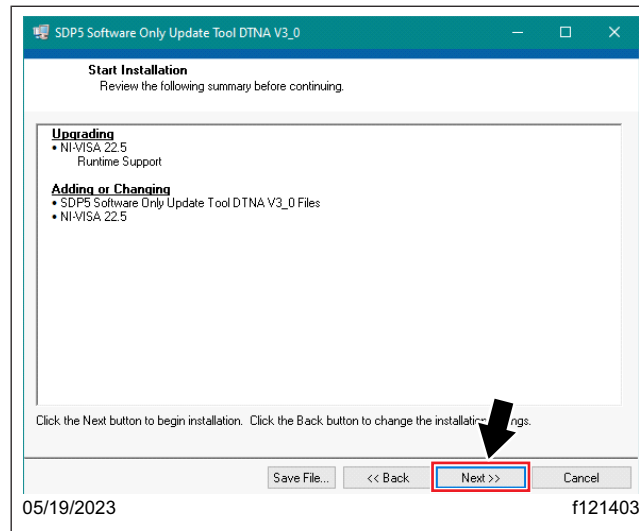05/19/2023   f121403

Fig. 10, Beginning the Installation Process

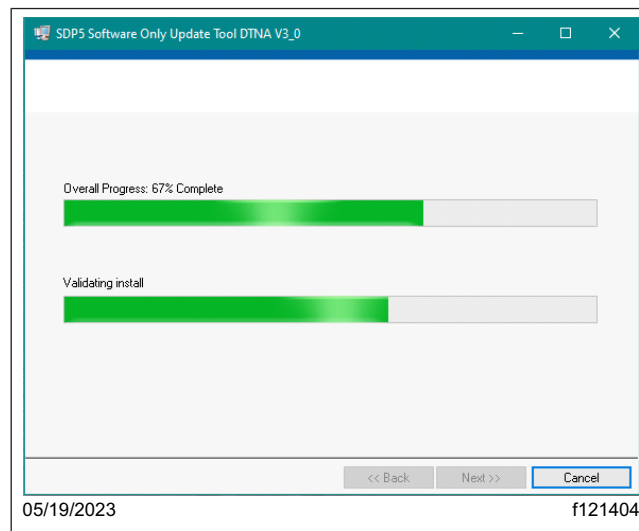13.   The software installation begins. See **Fig. 11**.

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Fig. 11, Software Installation in Progress

14. Once the installation is complete, select 'Finish.' See **Fig. 12**.

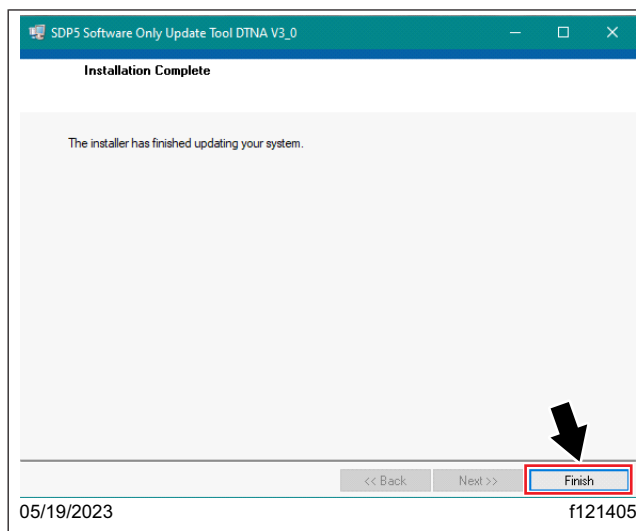05/19/2023   f121405

Fig. 12, Installation Completed

IMPORTANT: The computer must be restarted prior to using the software.

15. Select 'Restart' or 'Shut Down' to complete the installation process. See **Fig. 13**.

05/19/2023   f121406
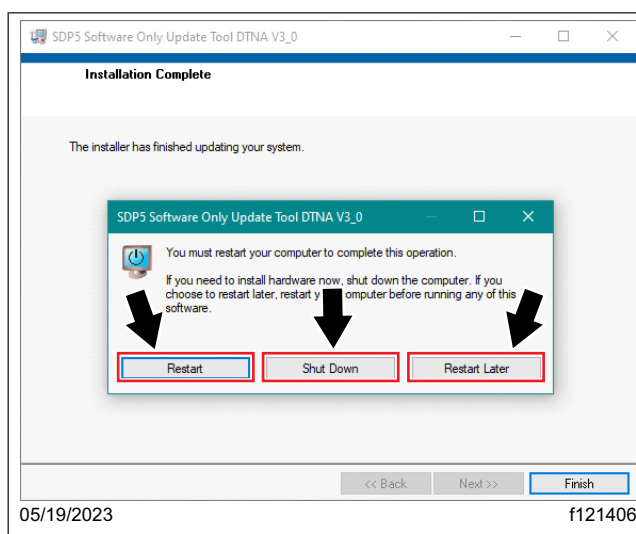
Fig. 13, Restarting the Computer

SDP5 Programming

IMPORTANT: A hard-wired connection with the SDP5 module is required for the software update. The SDP5 module is located in the center overhead console. The center overhead console must be removed to access the SDP5 module.

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

2. Turn the battery shut-off switch to the ON position, if so equipped.

3. Turn the ignition switch to the OFF position.

4. Remove the eighteen T25 screws in the order shown in **Fig. 14**. See **Fig. 15** for reference of the parts removed.

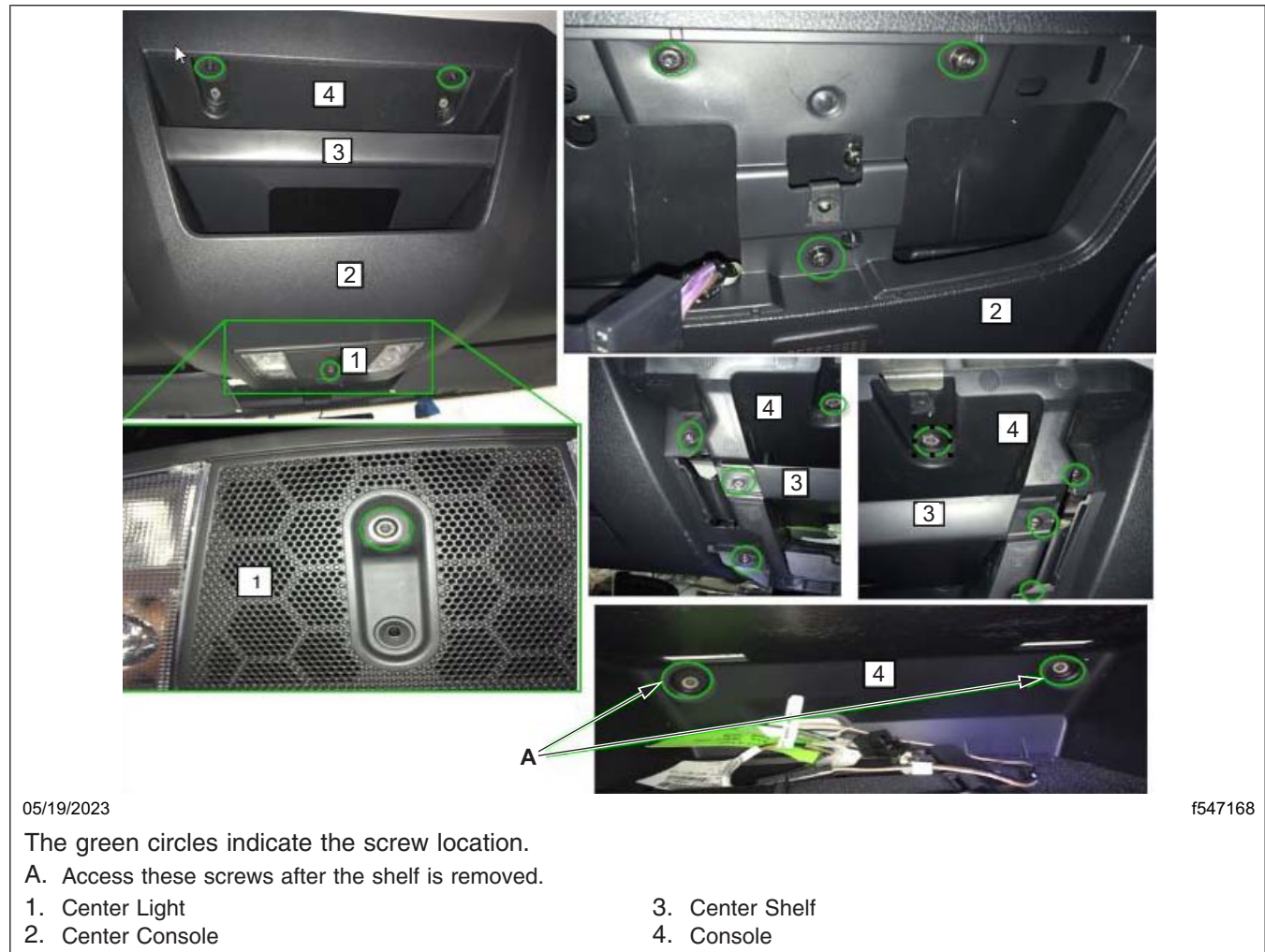05/19/2023   f547168

The green circles indicate the screw location.

A. Access these screws after the shelf is removed.
1. Center Light   3. Center Shelf
2. Center Console   4. Console

Fig. 14, Center Overhead Console Part Location

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The green circles indicate the screw location.

1. Center Light   3. Center Shelf
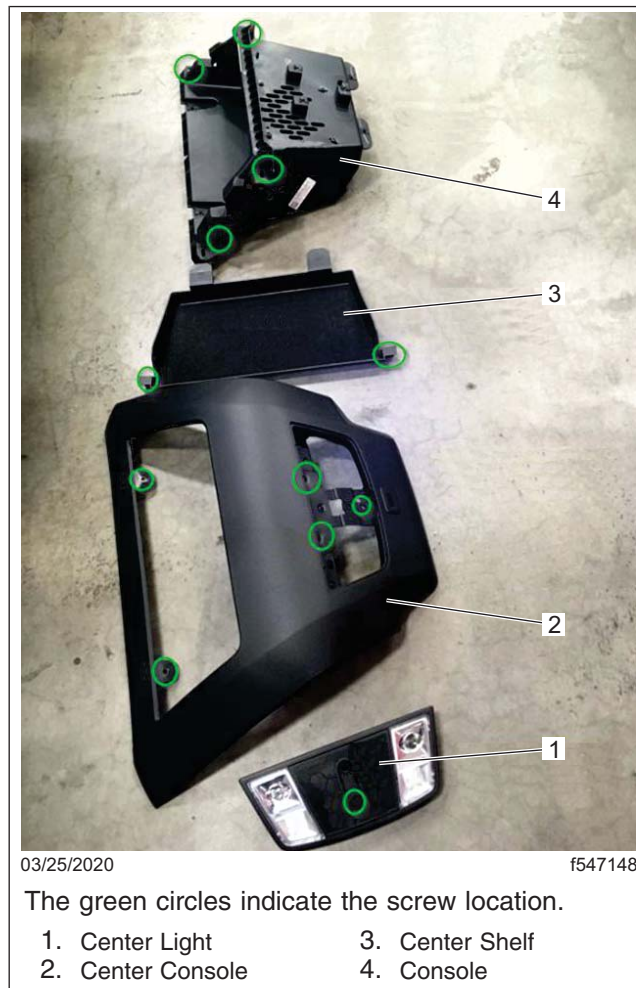2. Center Console   4. Console

Fig. 15, Center Overhead Console Parts Removed

5. After the overhead console is removed, the SDP5 module can be accessed. The SDP5 module is mounted on the passenger side of the overhead console.

6. The SDP5 module is secured to the mounting bracket using a hook-and-loop adhesive tape and a tie strap. Remove the SDP5 module from the mounting bracket to access the connector labeled 'CTP.'

    See **Fig. 16**, **Fig. 17**, and **Fig. 18**.

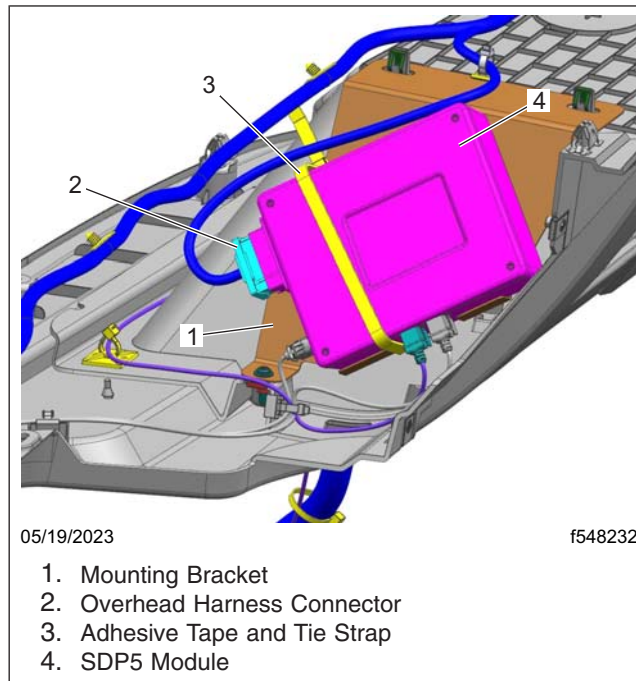   Cut and discard the tie strap; the hook-and-loop adhesive tape can be re-used.

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1. Mounting Bracket
2. Overhead Harness Connector
3. Adhesive Tape and Tie Strap
4. SDP5 Module

Fig. 16, SDP5 Module Removal

03/25/2020   f547152

1. Bendix FLC5 Camera
2. Tie Straps

3. Overhead Harness
4. Overhead Console
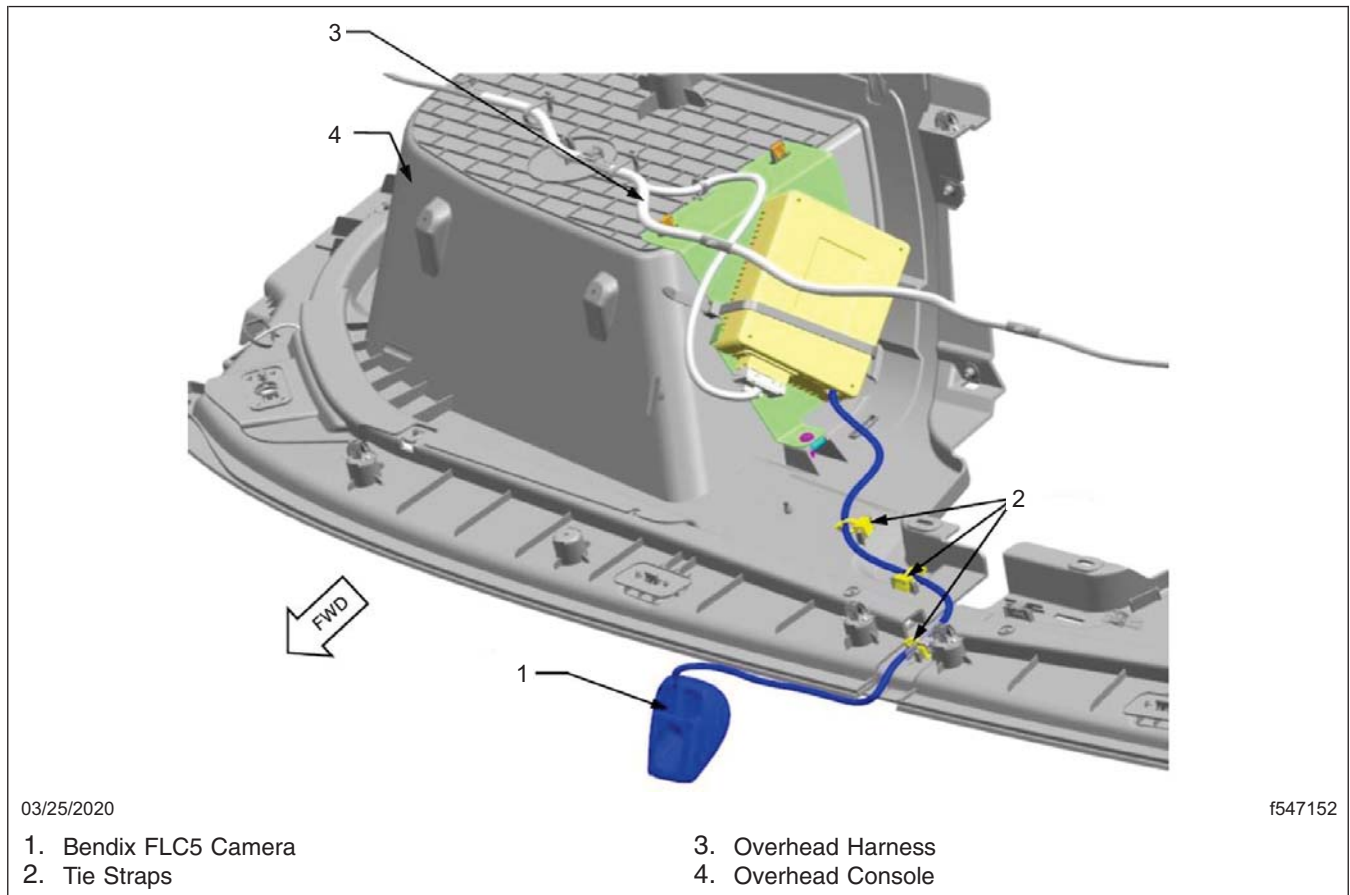
Fig. 17, Overhead Console Sub-Assembly

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A hard-wired connection will be used to program the SDP5. The black connection, labeled CTP, is removed and the USB mini-B port is used to program the SDP5. Once the programming is complete, the original connector is connected again.

1. CTP Connection   2. USB 3.0 Connection to Laptop   3. USB Mini-B Port
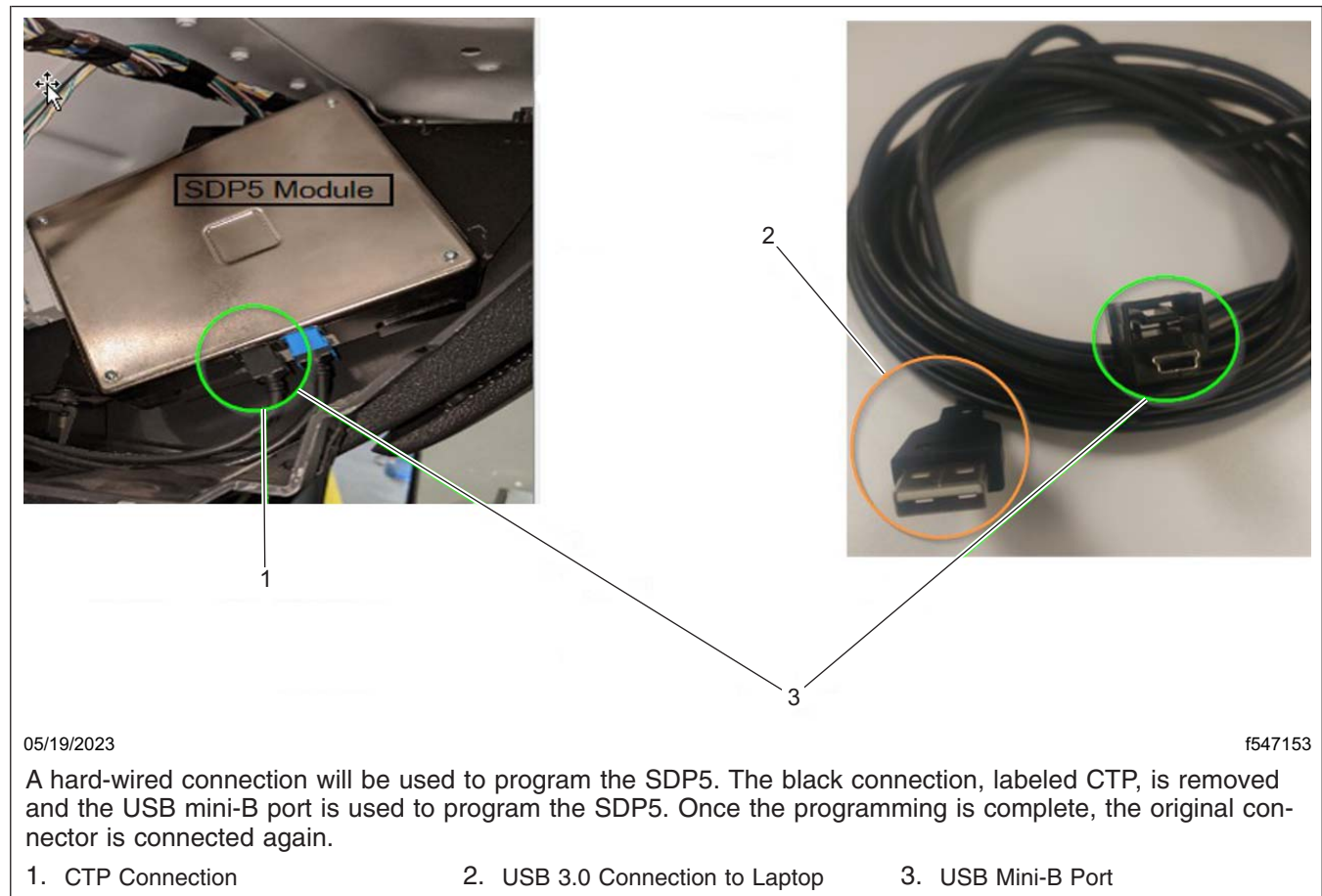
Fig. 18, Connecting to SDP5

NOTE: When programming the SDP5 module, the programming tool (laptop) must support a USB 3.0 connection. This type of connection is found on most newer laptops. The NEXIQ Technologies® Latching USB Cable (404032), that comes with the NEXIQ II device, can be used for the hard-wired connection.

7. Connect the hard-wired connection between the SDP5 module and the laptop. Open the laptop device manager, and verify that the 'Remote NDIS Compatible Device #2' is present under the 'Network adapters' dropdown. See **Fig. 19**.
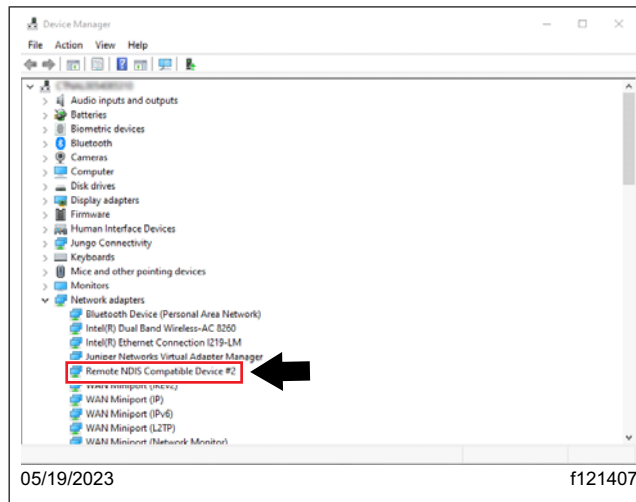
Fig. 19, Laptop Device Manager

7.1 If 'Remote NDIS Compatible Device #2' is not listed under 'Network adapters' even after waiting for approximately 5 minutes:

- disconnect the USB cable between the SDP5 module and the laptop,
- turn the vehicle ignition switch to the OFF position,
- verify the vehicle batteries are at 12.4 volts or higher,
- turn the vehicle ignition switch to the ON position, and
- connect the USB cable between SDP5 module and the laptop.

7.2 Check again for 'Remote NDIS Compatible Device #2' under 'Network Adapters.'

Is the 'Remote NDIS Compatible Device #2' now visible under 'Network Adapters' in the 'Device Manager' window?

YES → Proceed to step 8.

NO → The SDP5 module needs to be replaced. Submit a warranty campaigns WSC ticket for assistance in replacing the SDP5 module.

8. Double-click the 'SDP5 Software Only Update Tool DTNA V3_0' shortcut icon on the desktop to run the software update program. See **Fig. 20**.
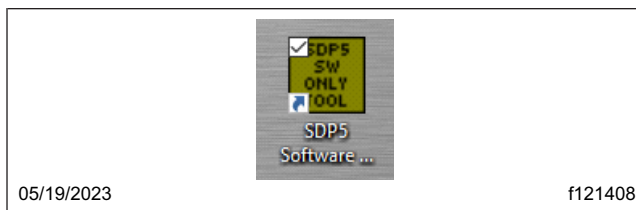
Fig. 20, SDP5 Software Only Update Tool DTNA V3_0 Shortcut Icon

IMPORTANT: In order to minimize the possibility of disruptions during SDP5 programming:

- The USB hard-wired connection must remain fully connected to the SDP5 module and the laptop.
- Vehicle power and ignition should remain ON.
- Vehicle batteries should maintain 12.4 volts or higher, or a battery charger should be connected.
- Laptop must not be unplugged from the SDP5 module.
- Laptop must not be allowed to go to sleep, or enter low-power mode.
- Laptop must not be used for any purpose other than programming the SDP5.

NOTE: If the SDP5 software update process stalls and is no longer making progress, possibly due to one of the disruptions listed above:

- close the SDP5 Software Only Update Tool,
- correct the disruption,
- disconnect the USB cable between the SDP5 module and the laptop,
- connect the USB cable between SDP5 module and the laptop again,
- run the SDP5 Software Only Update Tool again.

9.   The 'SDP5 Software Only Update Tool DTNA V3_0.vi' window appears. Select the white arrow in the upper-left corner to run the program. See **Fig. 21**.
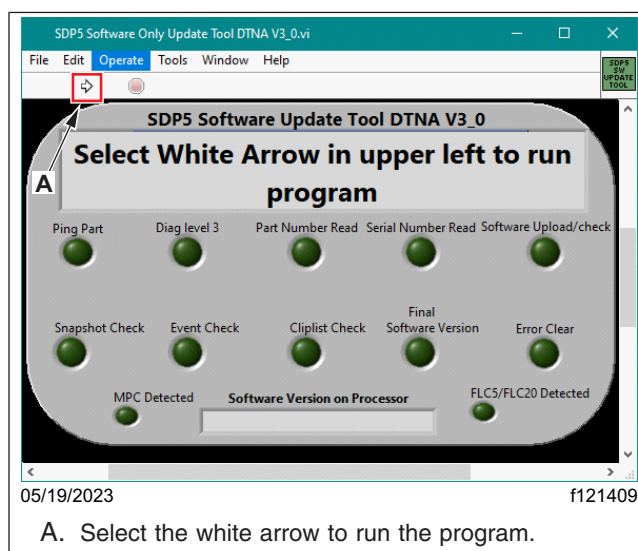

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A. Select the white arrow to run the program.

Fig. 21, Running the Program

10.   Select the 'OK' button to begin communication with the SDP5. See **Fig. 22**.

05/19/2023   f121410
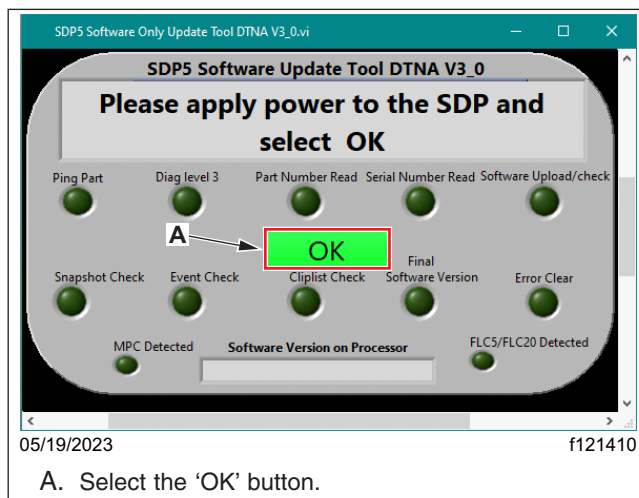
   A. Select the 'OK' button.

Fig. 22, Beginning to Communicate with the SDP5

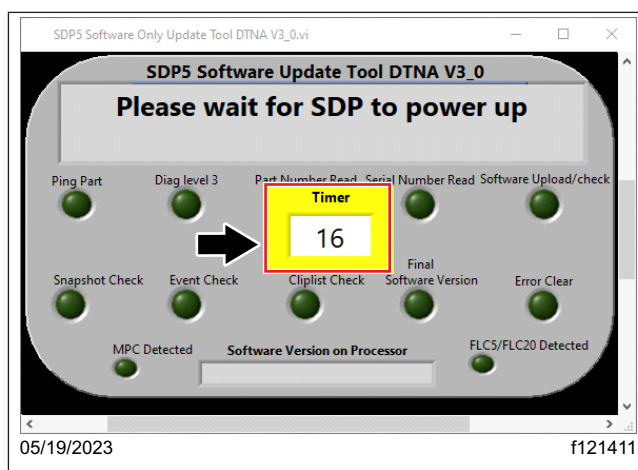11.   A timer is displayed on the screen while communication with SDP5 is being established. See **Fig. 23**.

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Fig. 23, Time Left for the Connection to Establish

NOTE: The software update process is automatic, and requires no user interaction.

12.   The SDP5 Software Only Update Tool status window opens to show the progress, and automatically closes when the update is complete. See **Fig. 24**.

The green status lights within the 'SDP 5 SW/Param Update Tool' window illuminate as each step is completed. Some green status lights may not illuminate on all vehicles. See **Fig. 25**.
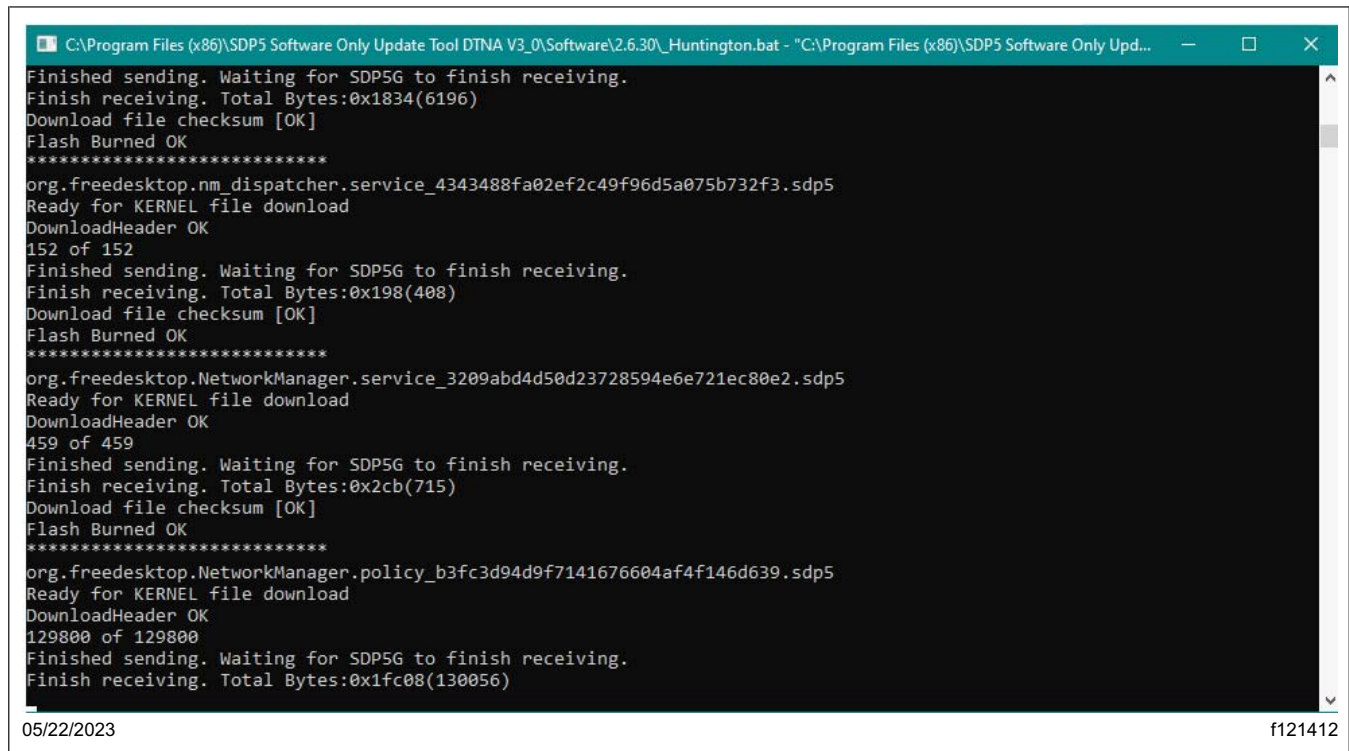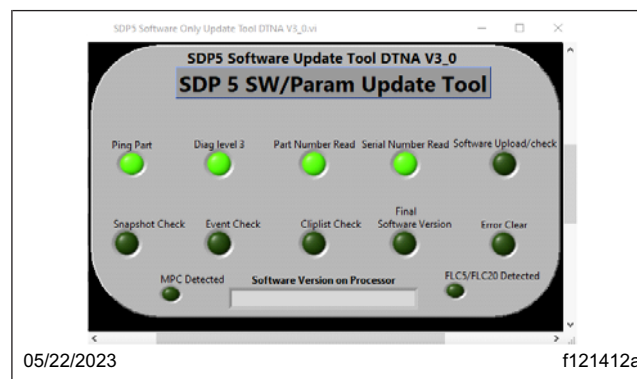

Fig. 24, SDP5 Software Only Update Tool Status Window

**Fig. 25, Green Status Lights Illuminating on
Completion of Each Step**

13. Once the software update is complete, a pop-up window saying 'Would you like to take a snapshot image?' appears. See **Fig. 26**.

Is the vehicle equipped with an FLC5 camera?

YES → Select 'YES.' A photo, which matches the view from the windshield of the vehicle looking forward, as shown in **Fig. 27**, is displayed in the pop-up window. Capture a screenshot of the photo, and retain with the repair order. If desired, another photo can be taken by selecting 'YES' otherwise, select 'NO.'
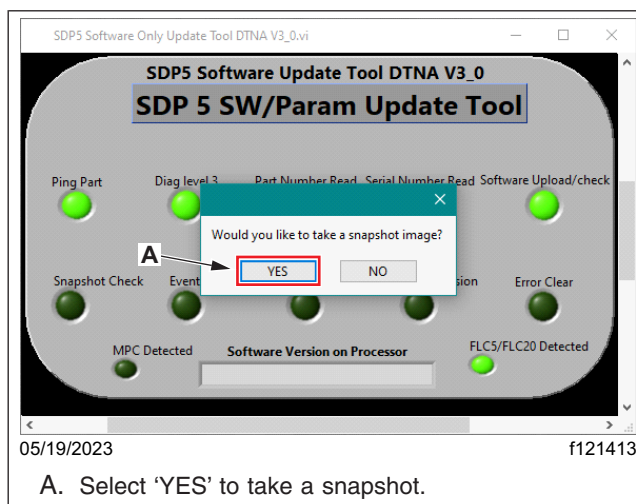
NO → Select 'NO.'

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A. Select 'YES' to take a snapshot.

Fig. 26, Taking a Snapshot with the FLC5 Camera

05/19/2023   f121414

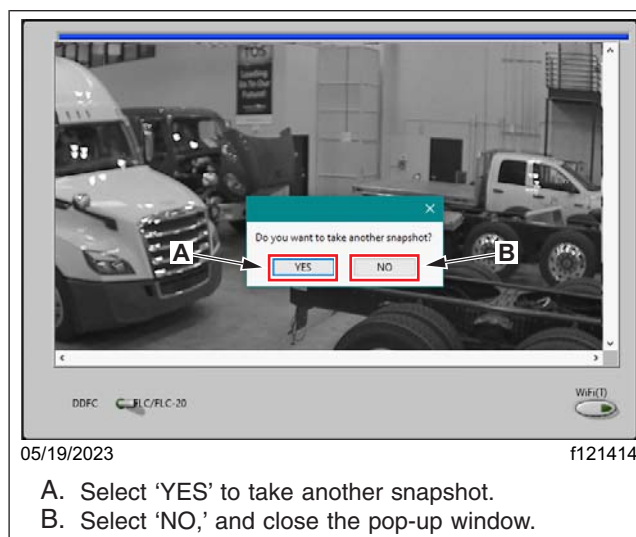A. Select 'YES' to take another snapshot.
B. Select 'NO,' and close the pop-up window.

Fig. 27, Captured Snapshot

14. If the SDP5 software is already updated to 2.6.30, the message 'No updates are required for this system.' is displayed, as shown in **Fig. 28**. Select 'OK,' and close the SDP5 Software Only Update Tool. Proceed to step 19.
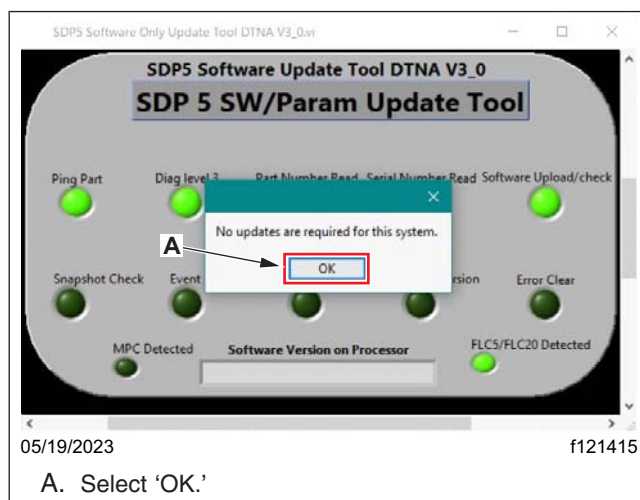

A. Select 'OK.'

Fig. 28, Software Already Updated

15. Some vehicles may have previously-recorded clips in the memory, and a pop-up saying 'This is currently the video clips in memory. Do you want to clear them?' appears. Select 'NO.' See **Fig. 29**.
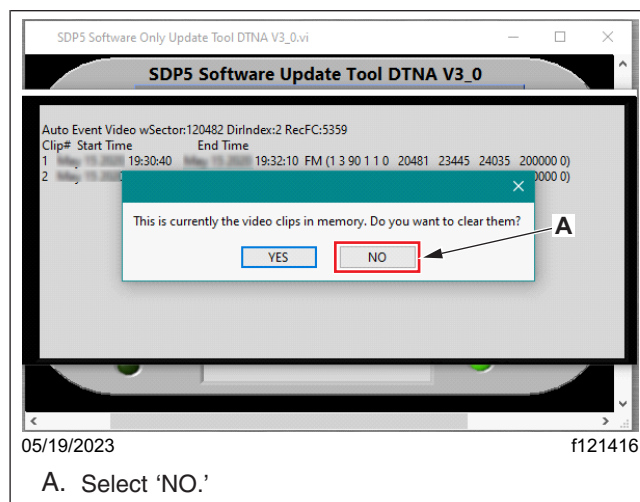

A. Select 'NO.'

Fig. 29, Clearing the Memory

16. A pop-up window saying 'The SDP upload has PASSED' appears. Select 'OK.' See **Fig. 30**.
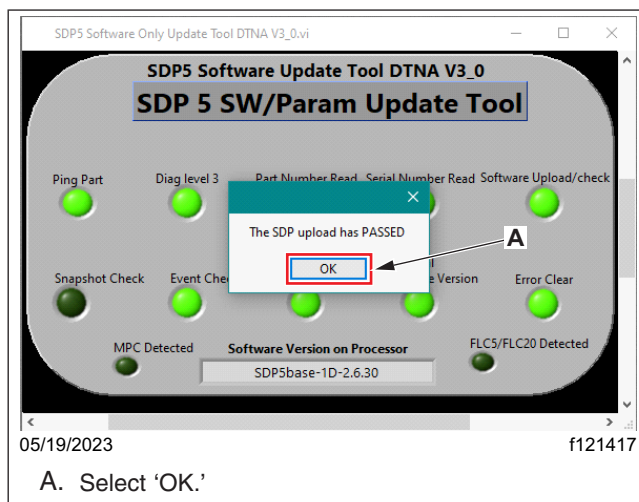

A. Select 'OK.'

Fig. 30, Software Upload Complete

17. The 'Software Version on Processor' panel now displays 'SDP5base-1D-2.6.30.' See **Fig. 31**.

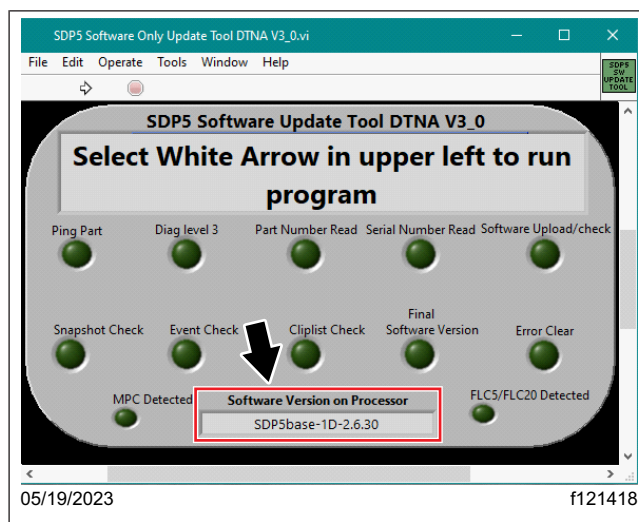**Fig. 31, Updated Software Version**

18.	Close the 'SDP5 Software Only Update Tool DTNA V3_0.vi' window.

19.	Disconnect the hard-wired connection between the SDP5 module and the laptop. Reconnect the original harness with the black connector to the SDP5 connection labeled CTP.

20.	Use the original hook-and-loop adhesive tape and a new tie strap to install and secure the SDP5 module on the mounting bracket. See **Fig. 16**.

21.	Install the overhead console. See **Fig. 14** and **Fig. 15**.

22.	Clean a spot on the base label (Form WAR259), write the campaign number SF639 on a blank gray completion sticker (Form WAR261), and attach it to the base label, indicating this work has been completed.