

March 2022  
SF644A-C

## Subject: FCCC XC Valor Tire Pressure Monitoring System (TPMS)

**Models Affected: Specific model year 2017-2022 Freightliner Custom Chassis XCM, XCP, XCR, and XCS models manufactured December 15, 2015, through July 22, 2021.**

### General Information

Daimler Truck North America LLC (DTNA), on behalf of its wholly-owned subsidiary, Freightliner Custom Chassis Corporation (FCCC), is initiating Field Service Campaign SF644A-C to modify the vehicles mentioned above.

On certain vehicles and under certain circumstances, the tire pressure monitoring system (TPMS) may display incorrect information such as maximum temperature and tire pressure, and/or a message that the tires are under or over-inflated.

The TPMS controller will be updated with new software, and certain units will require a longer antenna mounting bracket to extend the rear antenna downward.

There are approximately 3,106 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

**SF644 A and B (Gen 1 TPMS):** A flash cable is required to perform the software update. If you do not already have flash cable 110310000440, contact Cam Burton at SpartanLync. Email: C.burton@spartanlync.com, Phone: 734-634-3278. A flash cable will be provided by SpartanLync free of charge.

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 vehicle(s) involved in campaign number SF644, a list of the customers and vehicle identification numbers will be available on DTNAConnect. Please refer to this list when ordering parts for this campaign.

**Table 1** - Replacement Parts for SF644

Campaign Number	Part Number	Part Description	Qty. per VIN
SF644 A,C	NO PARTS	SOFTWARE UPDATE	N/A
SF644 B	06-09782-014	BRKT-MTG BATTERY CABLE	1 ea
ALL GROUPS	WAR261	BLANK COMPLETION STICKER	1 ea

**Table 1**

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## 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
SF644 A,C	Update TPMS Software	0.3	996-F126A	12-Repair Recall/Campaign
SF644 B	Update TPMS Software, Install Bracket	0.6	996-F126B	12-Repair Recall/Campaign

**Table 2**

### IMPORTANT - Before Beginning Work:

- Check OWL to ensure the vehicle is involved and the campaign has not previously been completed.
- Check the vehicle for a completion sticker.

### IMPORTANT - After Repair is Complete:

- Attach a gray completion sticker (Form WAR261) to the base completion label (Form WAR259). If the vehicle does not already have a base completion label, clean a spot on the appropriate location of the vehicle, and attach a base completion label, prior to installing the completion sticker.

## Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting a claim. Please reference the following information in OWL:

- All claims must be submitted within 30 days of the repair date.
- Claim type is **Field Service Campaign**.
- In the Campaign field, enter the campaign number and group code (**SF644-A, SF644-B, etc.**).
- In the Primary Failed Part field, enter **25-SF644-000**.
- In the Parts section, enter the appropriate part number 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 March 31, 2023**. Dealers will be notified of any changes to the termination date via an Important Campaign Information Letter (ICI) posted on DTNACconnect.com.

**Excess Inventory:** U.S. and Canadian dealers, following the conclusion of the campaign, within 90 days from the termination date, excess inventory in resalable condition may be returned to the appropriate PDC. U.S. dealers, submit a PAR to request return to the Memphis PDC. Canadian dealers, return inventory to your facing PDC. Export Distributors, excess inventory is not returnable.

**For Support:** Contact the Warranty Campaigns Department via the Warranty Support Center at DTNACconnect.com/WSC or the Customer Assistance Center at (800) 385-4357. Export distributors, submit a WSC ticket or contact your International Service Manager.

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## Copy of Notice to Owners

### Subject: FCCC XC Valor Tire Pressure Monitoring System (TPMS)

Daimler Truck North America LLC (DTNA), on behalf of its wholly-owned subsidiary, Freightliner Custom Chassis Corporation (FCCC), is initiating Field Service Campaign SF644A-C to modify specific model year 2017-2022 Freightliner Custom Chassis XCM, XCP, XCR, XCS models manufactured December 15, 2015, through July 22, 2021.

On certain vehicles and under certain circumstances, the tire pressure monitoring system (TPMS) may display incorrect information such as maximum temperature and tire pressure, and/or a message that the tires are under or over-inflated.

The TPMS controller will be updated with new software, and certain units will require a longer antenna mounting bracket to extend the rear antenna downward.

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/](http://NorthAmerica.DaimlerTruck.com/contact-us/). Scroll down to "Locate a Dealer," and select the appropriate brand.

This Field Service Campaign will **terminate on March 31, 2023**. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer's expense.

As stated in the terms of your express limited warranty, DTNA will not pay for any damage caused by failure to properly maintain your vehicle. DTNA considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

Contact the Warranty Campaigns Department at (800) 547-0712, e-mail address [DTNA.Warranty.Campaigns@Daimlertruck.com](mailto: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

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## Work Instructions

### Subject: FCCC XC Valor Tire Pressure Monitoring System (TPMS)

**Models Affected:** Specific model year 2017-2022 Freightliner Custom Chassis XCM, XCP, XCR, and XCS models manufactured December 15, 2015, through July 22, 2021.

**SF644 A and B (Gen 1 TPMS):** A flash cable is required to perform the software update. If you do not already have flash cable 110310000440, contact Cam Burton at SpartanLync. Email: C.burton@spartanlync.com, Phone: 734-634-3278. A flash cable will be provided by SpartanLync free of charge.

**SF644 C:** Instructions begin on page 13.

## SF644 A and B - Generation 1 Tire Pressure Monitoring System (TPMS) Electronic Control Unit (ECU) Software Update Software Download

NOTE: The configuration file only has to be downloaded once; this file can be used to update multiple vehicles.

1. Inspect the base label (Form WAR259) for a campaign completion sticker for SF644 (Form WAR261). If a sticker is present for SF644, no work is needed. If there is no sticker, proceed with the steps below.
2. On the laptop, go to the Spartanlync Wiki website <https://help.spartansense.com/PublicHome>.
3. Under 'Public Resources,' select 'Hardware.' See [Fig. 1](#).

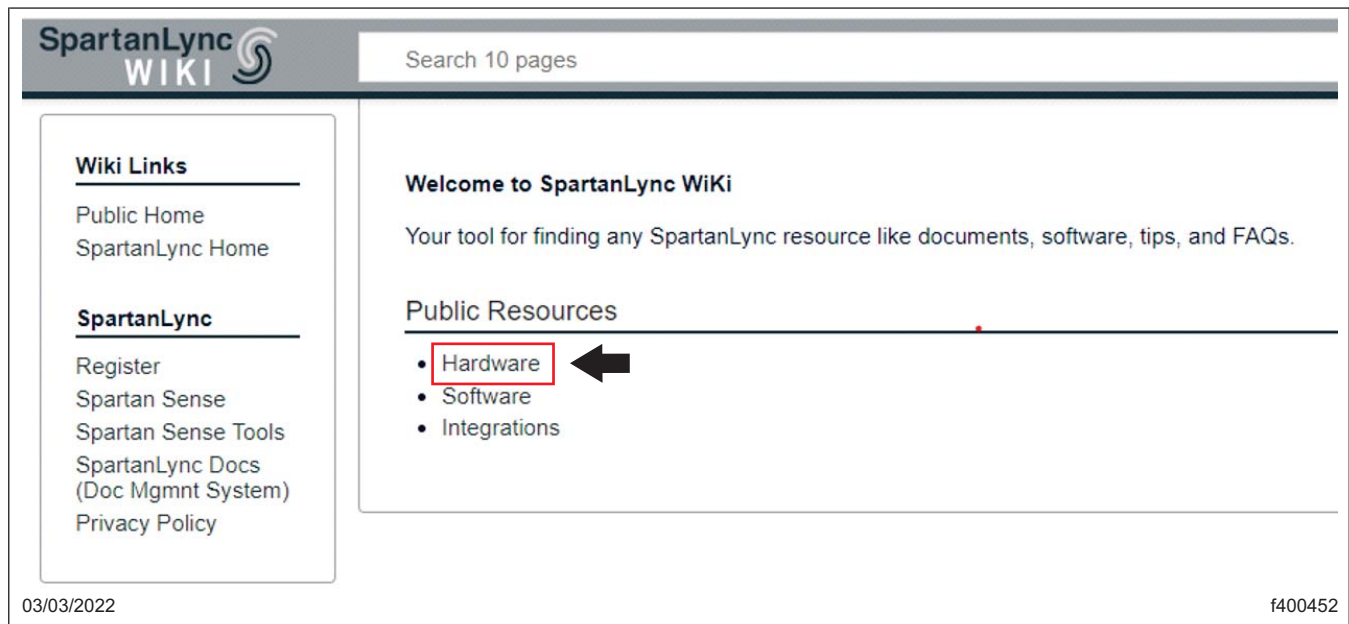
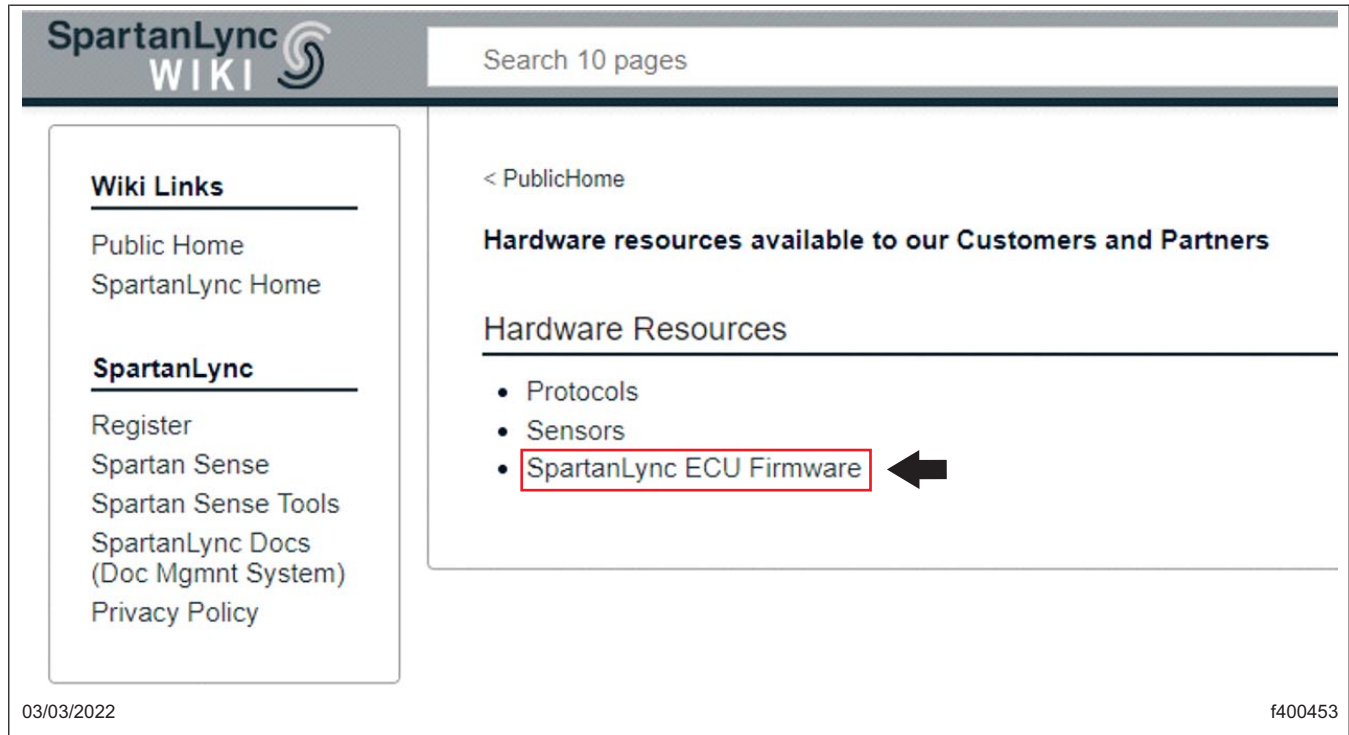


Fig. 1, Selecting Hardware

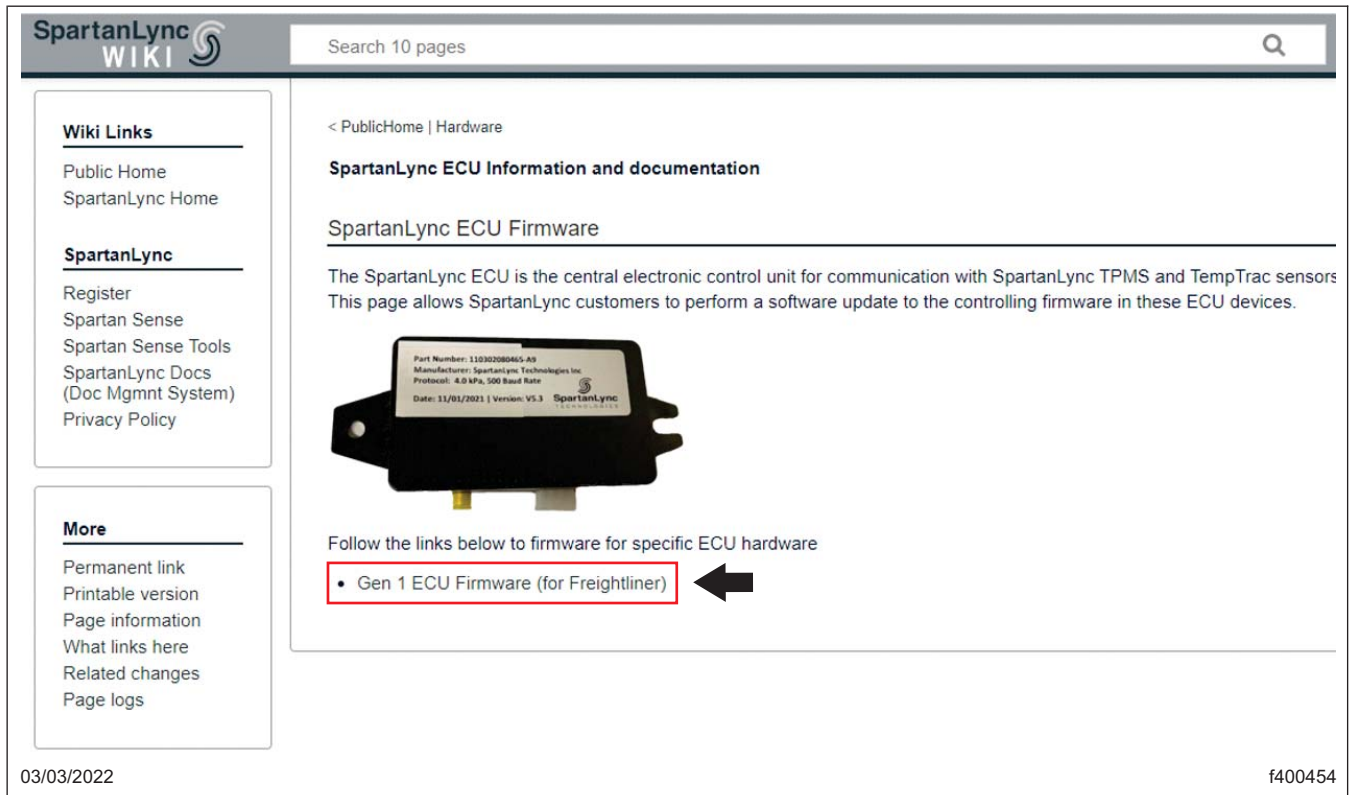
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4. Under 'Hardware Resources,' select 'SpartanLync ECU Firmware.' See **Fig. 2**



**Fig. 2, Selecting SpartanLync ECU Firmware**

5. Under 'SpartanLync ECU Firmware,' select 'Gen 1 ECU Firmware (for Freightliner).' See **Fig. 3**.

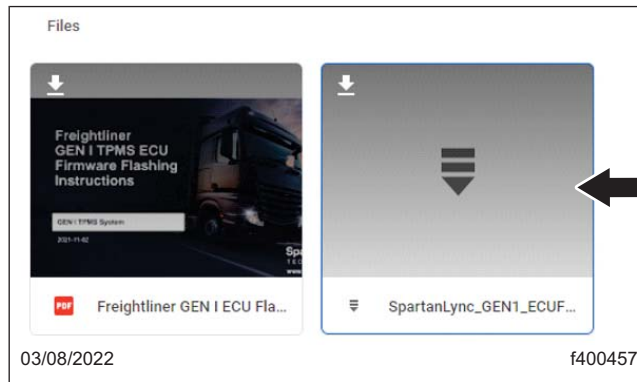


**Fig. 3, Selecting Gen 1 ECU Firmware**



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8. In the 'Freightliner' folder,' open the 'SpartanLync\_GEN1\_ECUFreightliner.zip' folder. See **Fig. 6**.



**Fig. 6, Opening the  
SpartanLync\_GEN1\_ECUFreightliner.zip Folder**

9. Download the 'SpartanLync\_GEN1\_ECUFreightliner.zip.' See **Fig.7**.

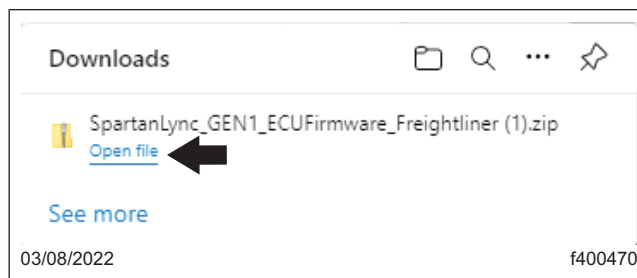


**Fig. 7, Downloading  
SpartanLync\_GEN1\_ECUFreightliner.zip Folder**

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 a default location.

If the operating system downloads the file to a default location, the user can open the compressed (zip) file using the link on the browser, then extract the files on the desktop.

10. A download box will appear in the upper right corner of the browser window. Once the download is complete, select 'Open file.' See **Fig. 8**.

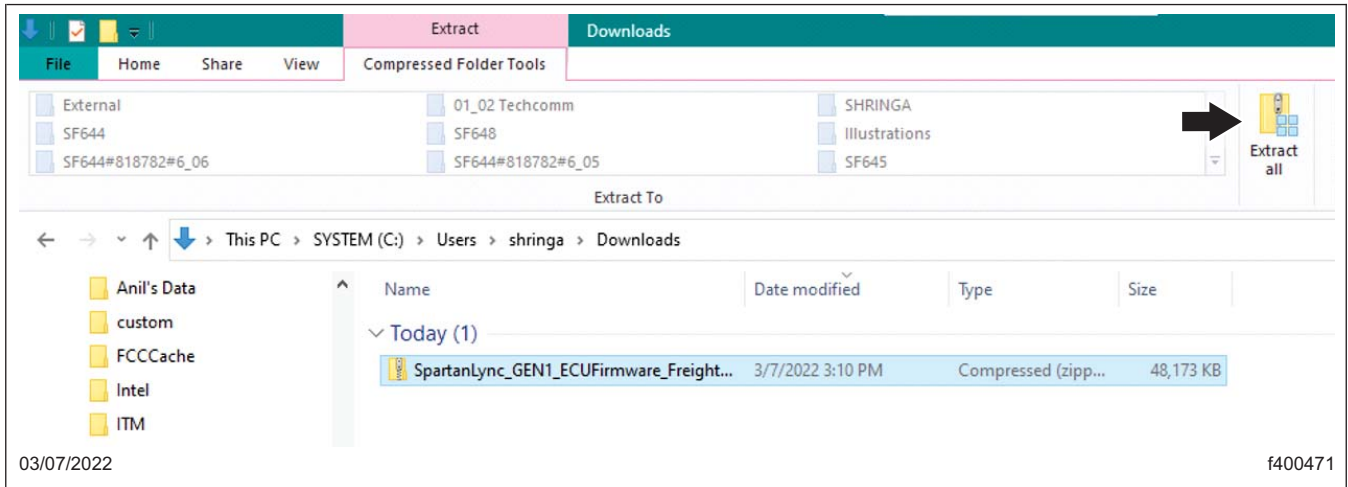


**Fig. 8, Link to Open the Downloaded File**



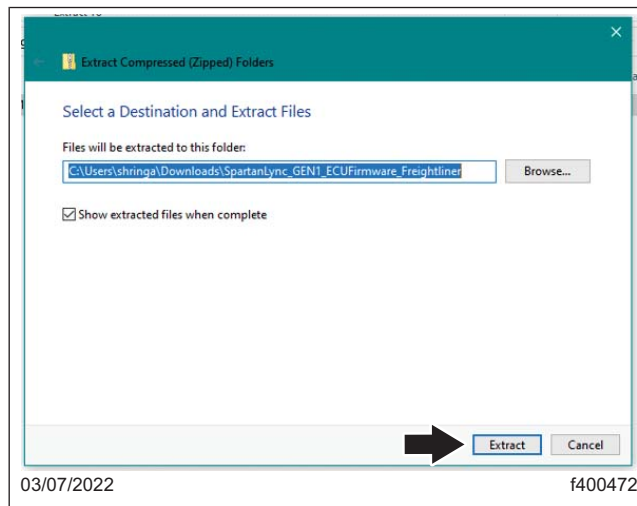
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11. Select the 'Extract all' button. See **Fig. 9**.



**Fig. 9, Extract All Button**

12. In the next screen, select the destination you want the files to be extracted to, then select 'Extract.'  
See **Fig. 10** and **Fig. 11**



**Fig. 10, Extract Compressed (zipped) Folders Window**



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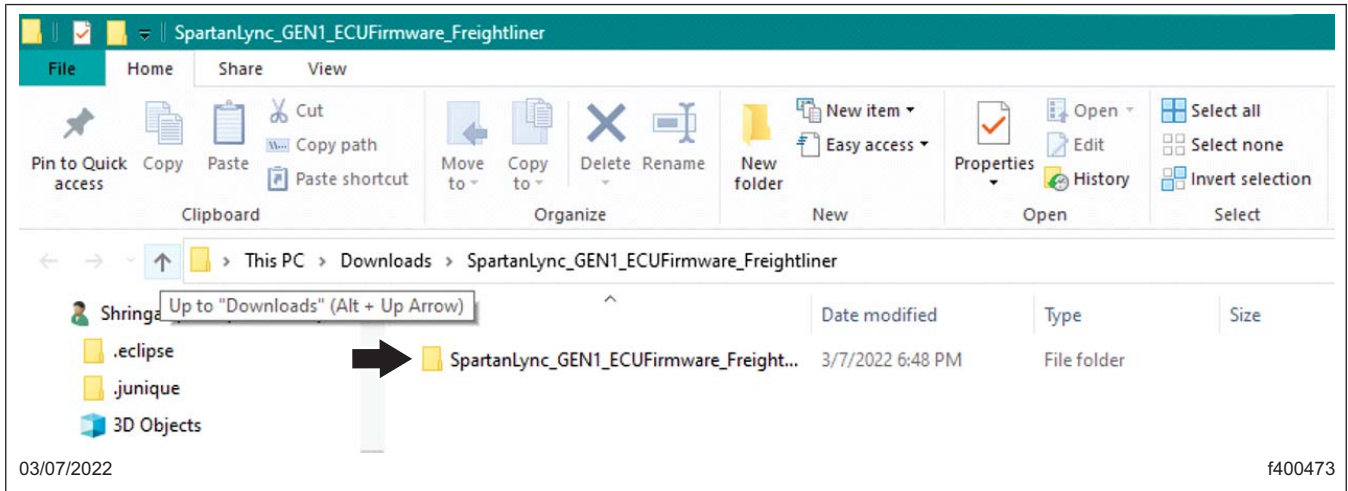


Fig. 11, Extracted Folder

- Open the extracted folder, then run the 'GEN\_I\_TPMS\_Firmware\_Flash\_UTILITY\_v1.0.exe' file to install. See Fig. 12

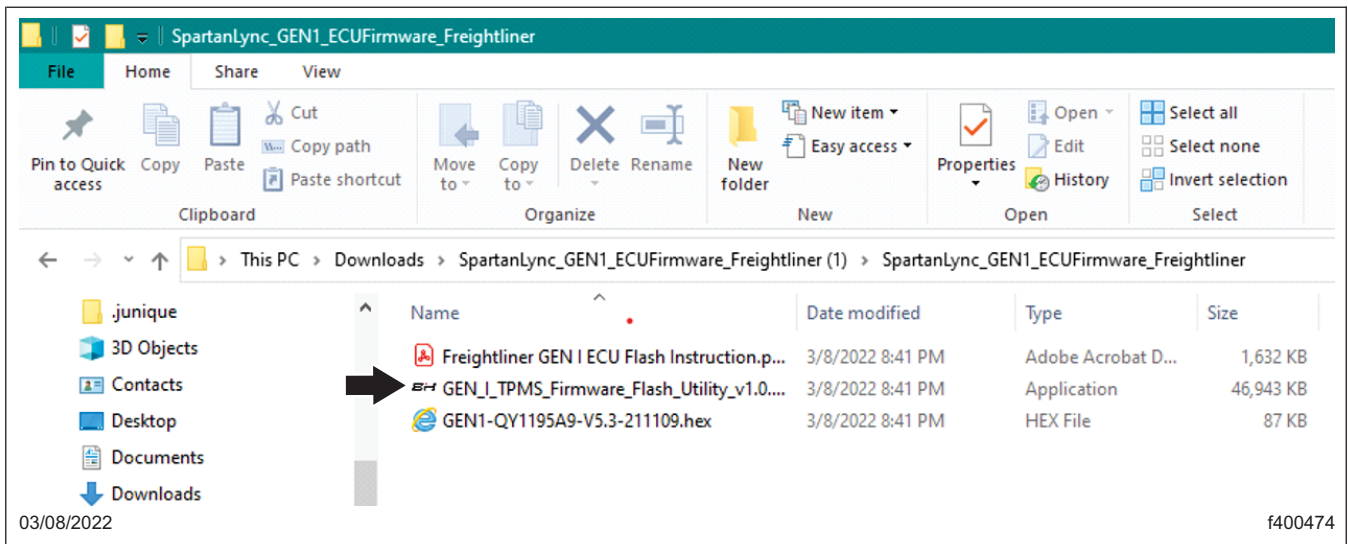
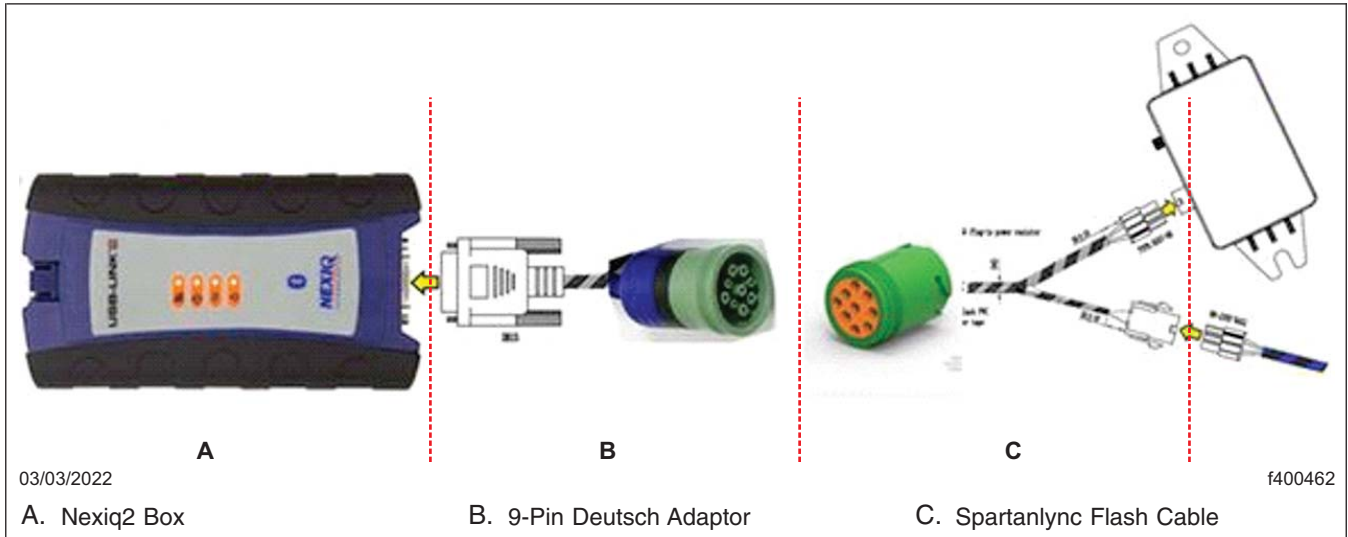


Fig. 12, GEN I TPMS Firmware Flash Utility v1.0.exe Setup File Location

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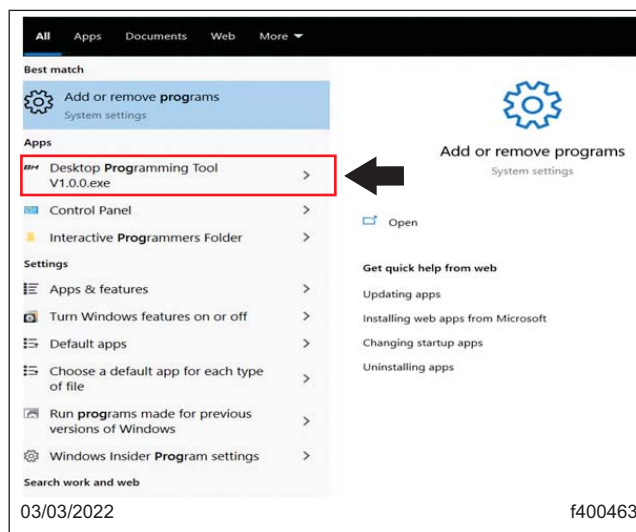
## TPMS ECU Software Update

1. Park the vehicle on a level surface, shut down the engine, and apply the parking brake. Chock the tires.
2. Disconnect the TPMS ECU electrical connector.
3. Connect the Nexiq2 box to the TPMS ECU, and to the TPMS dash electrical connector as shown in [Fig. 13](#).



**Fig. 13, Connecting the Nexiq2 Box to the TPMS ECU and to the TPMS Dash Electrical Connector**

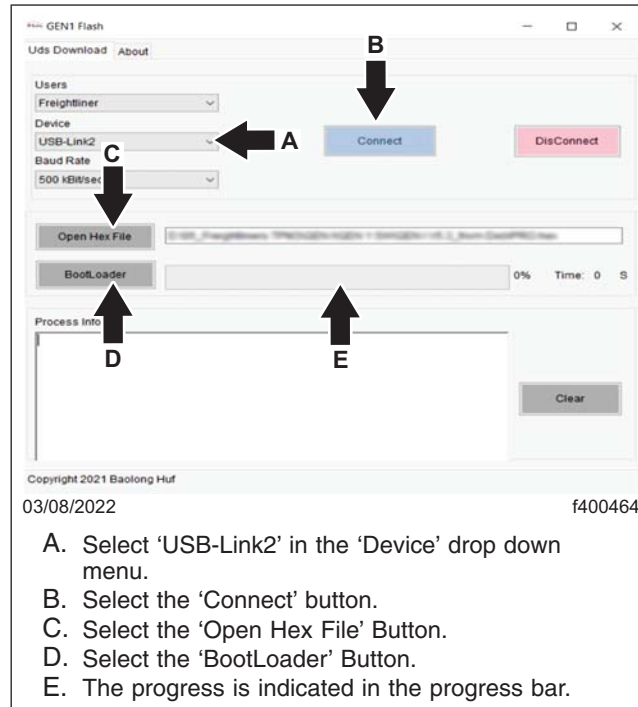
4. In the Windows search bar, search for 'Desktop Programming Tool.' In the search results that appear, select 'Desktop Programming Tool V1.0.0.exe.' See [Fig. 14](#).



**Fig. 14, Searching Desktop Programming Tool**

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- Once the 'Desktop Programming Tool' is launched, follow the substeps to perform the software update. See [Fig. 15](#).



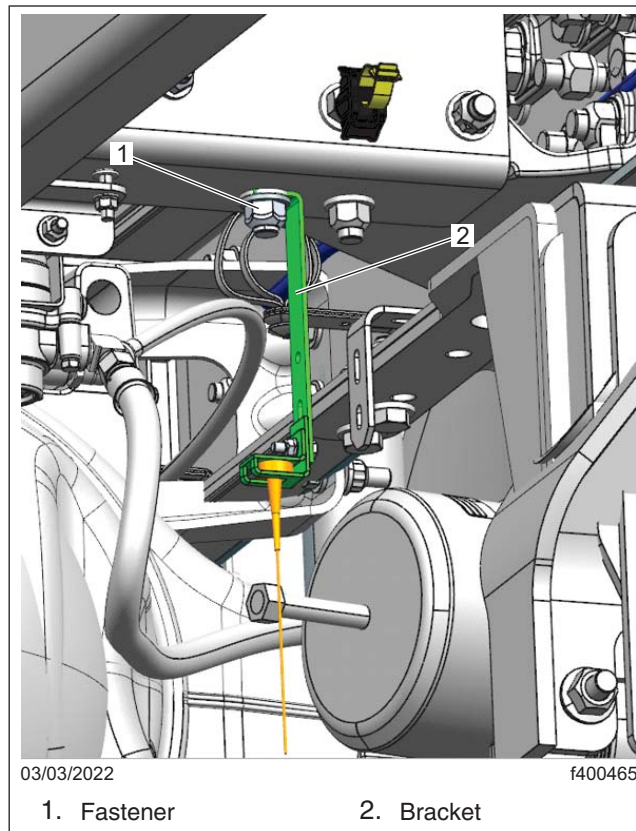
**Fig. 15, GEN1 Flash Window**

- In the 'Device' drop down menu, select 'USB-Link2,' then select the 'Connect' button. See [Fig. 15](#).
  - Select the 'Open Hex File,' then select the 'GEN1-QY1195A9-V5.X-XXXXXX.hex' file path. See [Fig. 15](#).
  - Select 'BootLoader' to start the software programming process. The software update progress will be indicated in the progress bar. See [Fig. 15](#).
- Once the software update is complete, disconnect the Spartanlync flash cable from the TPMS ECU and the TPMS dash electrical connector. See [Fig. 13](#).
  - Connect the TPMS dash electrical connector to the TPMS ECU.
  - SF644 B Only:** Go to SF644 B - TPMS Antenna Bracket Installation
  - Road test the vehicle to confirm the software update was successful.
  - SF644 A Only:** Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF644 (Form WAR261) indicating this work has been completed.

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## SF644 B - TPMS Antenna Bracket Installation

1. Under the crossmember above the drive axle, locate the inboard 15/16 inch nut and washer on the left-hand side of the vehicle. See [Fig. 16](#). Remove the nut and washer.



**Fig. 16, TPMS Antenna Bracket Installed**

2. Install the bracket 06-09782-014 on the bolt that the nut and washer were removed from, then install the washer and nut. See [Fig. 16](#). Tighten the nut 119 lbf·ft (161 N·m).
3. Remove the TPMS antenna from the midship crossmember above the drive axle.
4. Install the TPMS antenna on the bracket as shown in [Fig. 16](#).
5. Verify the TPMS antenna connection to the wheel sensors on the TPMS display.
6. Road test the vehicle to confirm the software update was successful.
7. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF644 (Form WAR261) indicating this work has been completed.

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## SF644 C - Generation 3 TPMS ECU Software Update Software Download

NOTE: The configuration file only has to be downloaded once; this file can be used to update multiple vehicles.

1. Inspect the base label (Form WAR259) for a campaign completion sticker for SF644 (Form WAR261). If a sticker is present for SF644, no work is needed. If there is no sticker, proceed with the steps below.
2. On the laptop, go to DTNA Connect, then select the three menu bars at the upper right-hand corner of the web page. See [Fig. 17](#).

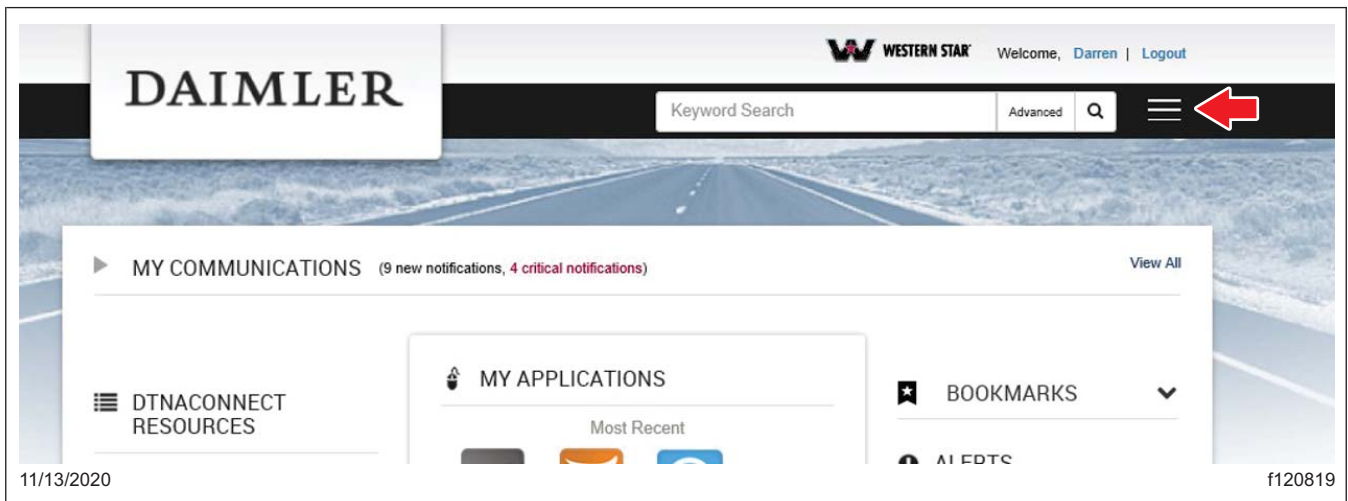


Fig. 17, DTNA Connect Home Screen

3. Select 'Support,' and then select 'Download Center.' See [Fig. 18](#).

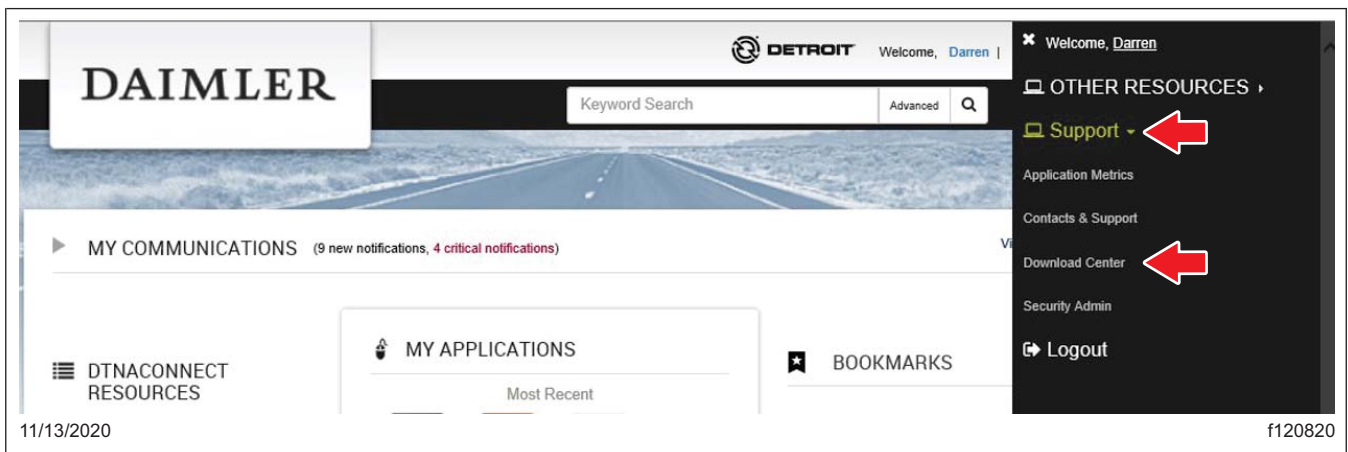
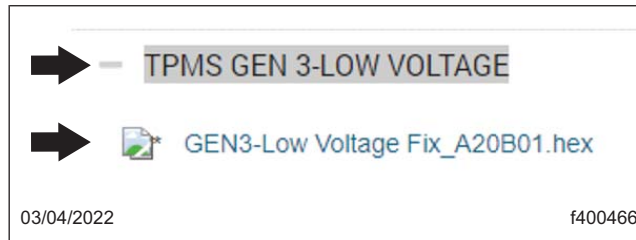


Fig. 18, Selecting Download Center

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4. Scroll down to 'TPMS GEN 3-LOW VOLTAGE,' then select the '+' symbol. Select 'GEN3-Low Voltage Fix\_A20B01.hex.' See [Fig. 19](#).



**Fig. 19, TPMS Gen 3-Low Voltage Software Download Link**

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 a default location.

If the operating system downloads the file to a default location, the user can open the compressed (zip) file using the link on the browser, then extract the files on the desktop.

5. A download box will appear in the upper right corner of the browser window. Once the download is complete, Select 'Open file.' See [Fig. 20](#).



**Fig. 20, Link to Open the Downloaded Software**

## Software Installation

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

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### NOTICE

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**To ensure good battery voltage during programming, it is recommended to connect an appropriate battery charger to the vehicle batteries. Failure to do so could permanently damage the controller.**

2. Turn the ignition key to the ON position, but make sure the engine is OFF.

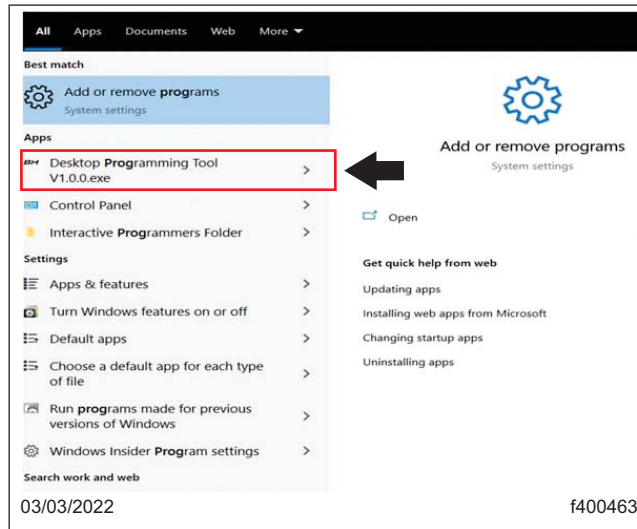
IMPORTANT: Do not turn the ignition OFF until the software is installed, and the system reboot is complete.

3. Connect the Nexiq2 box to the green diagnostic connector on the vehicle.
4. Connect the USB port on the Nexiq2 box to the laptop.



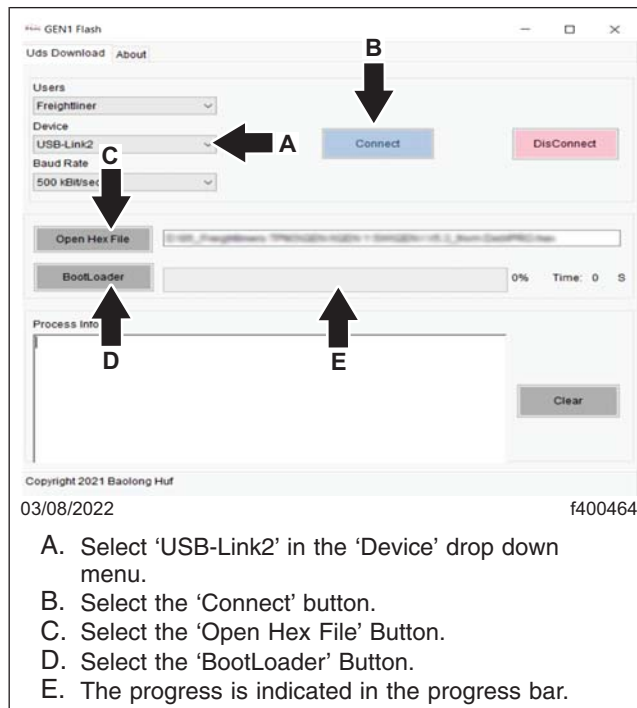
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5. In the Windows search bar, search for 'Desktop Programming Tool.' In the search results that appear, select 'Desktop Programming Tool V1.0.0.exe.' See [Fig. 21](#).



**Fig. 21, Searching Desktop Programming Tool**

6. Once the 'Desktop Programming Tool' is launched, follow the substeps to perform the software update. See [Fig. 22](#).



**Fig. 22, GEN3 Flash Window**

- 6.1 In the 'Device' drop down menu, select 'USB-Link2,' then select the 'Connect' button. See [Fig. 22](#).
- 6.2 Select the 'Open Hex File' then choose the 'GEN3-Low Voltage Fix\_A20B01.hex' file path. See [Fig. 22](#).



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- 6.3 Select 'BootLoader' to start the software programming process. The software update progress will be indicated in the progress bar. See [Fig. 22](#).
7. Once the software update is complete, disconnect the Nexiq2 box from the vehicle diagnostic port.
8. Road test the vehicle to confirm the software update was successful.
9. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF644 (Form WAR261) indicating this work has been completed.