

May 2020
SF604A

Subject: FCCC MT45G/MT55G Engine Controller Calibration Update

Models Affected: Specific Model Year 2018-2020 Freightliner Custom Chassis MT45G and MT55G model chassis, manufactured January 15, 2018, through March 18, 2019.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its wholly-owned subsidiary Freightliner Custom Chassis Corporation, is initiating Field Service Campaign SF604A to modify the vehicles mentioned above.

The current engine control module (ECM) software must be updated.

The engine control module (ECM) software will be updated using Power Solutions International (PSI) proprietary software.

There are approximately 7,260 vehicles involved.

Additional Repairs

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

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

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

Work Instructions

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

Replacement Parts

No replacement parts are required as this repair only involves a software update.

If our records show your dealership has ordered any vehicle(s) involved in campaign number SF604, a list of the customers and vehicle identification numbers will be available on DTNACconnect. Please refer to this list when ordering parts for this campaign.

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
SF604A	Update ECM Calibration	0.3	996-F063A	12-Repair Recall/Campaign

Table 1

May 2020
SF604A

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 (**SF604-A**).
- In the Primary Failed Part field, enter **25-SF604-000**.
- No parts are required as this repair only involves a software update.
- 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 May 31, 2021**. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on DTNACConnect.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 DTNACConnect.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.

May 2020
SF604A

Copy of Notice to Owners

Subject: FCCC MT45G/MT55G Engine Controller Calibration Update

Daimler Trucks North America LLC (DTNA), on behalf of its wholly-owned subsidiary Freightliner Custom Chassis Corporation, is initiating Field Service Campaign SF604A to modify specific Model Year 2018-2020 Freightliner Custom Chassis MT45G and MT55G model chassis, manufactured January 15, 2018, through March 18, 2019.

The current engine control module (ECM) software must be updated.

The engine control module (ECM) software will be updated using Power Solutions International (PSI) proprietary software.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. To locate an authorized dealer, go to Daimler-TrucksNorthAmerica.com/Contact-Us/. Scroll down to "Locate a Dealer," and select the appropriate brand. The campaign will take approximately one hour and will be performed at no charge to you.

This Field Service Campaign will **terminate on May 31, 2021**. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer's expense.

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

Contact the Warranty Campaigns Department at (800) 547-0712, from 7 a.m. to 4 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357, if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

May 2020
SF604A

Work Instructions

Subject: FCCC MT45G/MT55G Engine Controller Calibration Update

Models Affected: Specific Model Year 2018-2020 Freightliner Custom Chassis MT45G and MT55G model chassis, manufactured January 15, 2018, through March 18, 2019.

General Information

The Power Solutions International (PSI) Field Programmer is a cloud connected utility tool used for updating vehicle calibration. The tool minimizes the time gap between a calibration release and getting it programmed into the electronic control unit (ECU) of a vehicle, making it instantaneous. When a calibration goes live on PSI servers, all associated vehicles in the field may be updated with the new calibration. The tool programs only through the cloud and requires an internet connection. Calibration ID and engine serial number are necessary to carry out any programming.

Primary programming for vehicle parameters is done through J1939; calibration is done through concurrent constraint programming (CCP). The tool includes User Defined System (UDS) programming functionality for instances where CCP is unavailable, allowing calibration to be programmed through J1939. Boot mode programming is also live in this tool and can only be programmed through CCP. Boot mode only becomes functional when it is detected by the tool.

PSI Field Programmer Installation

1. Inspect the base label (Form WAR259) for a campaign completion sticker for SF604 (Form WAR261). If a sticker is present for campaign SF604, no work is needed. If there is no sticker, proceed with the steps below.

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

IMPORTANT: An internet connection is required throughout the entire engine controller calibration update.

3. Go to www.DTNAConnect.com

4. In the upper right-hand corner, select the menu icon. See **Fig. 1**, ref. A.

5. Select 'Support,' then select 'Download Center.' See **Fig. 1** ref. B and ref. C.

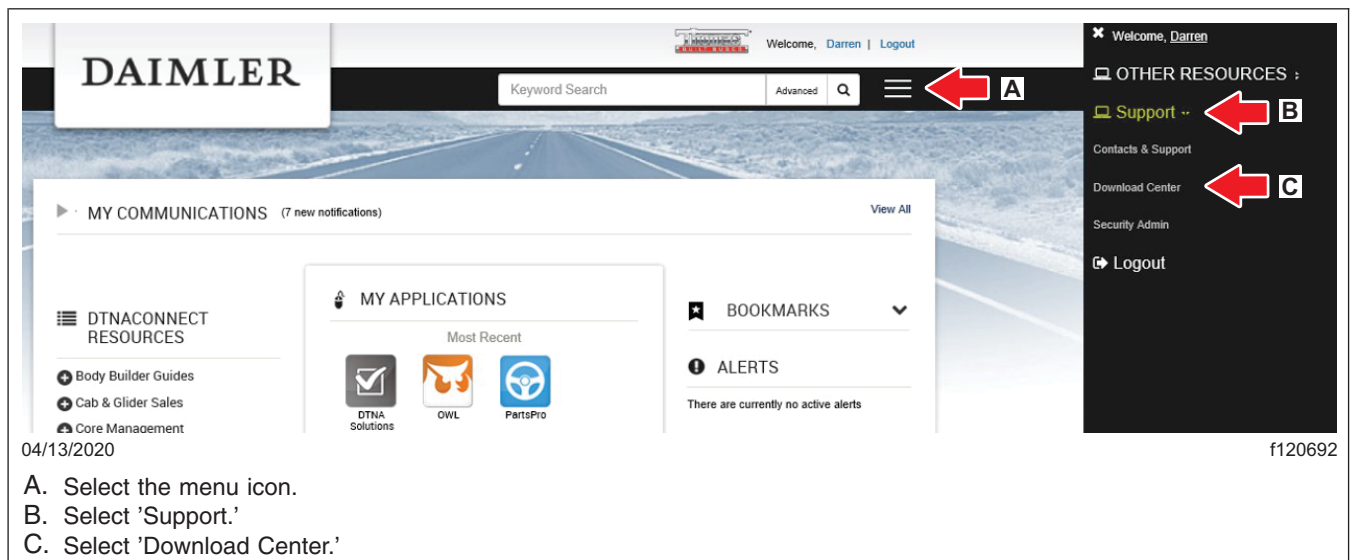


Fig. 1, DTNAConnect Screen

May 2020
SF604A

- A list will appear on the screen. Select 'FCCC MT45G/MT55G Engine Controller Calibration Update.' See [Fig. 2](#).
- Double click the link to download the program software. See [Fig. 3](#).

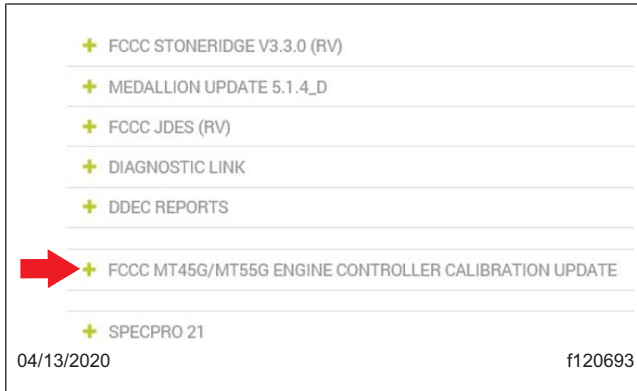


Fig. 2, Selecting FCCC MT45G/MT55G Engine Controller Calibration Update



Fig. 3, Link to Download the Program Software

- Then select 'Run' at the bottom of the screen. See [Fig. 4](#).

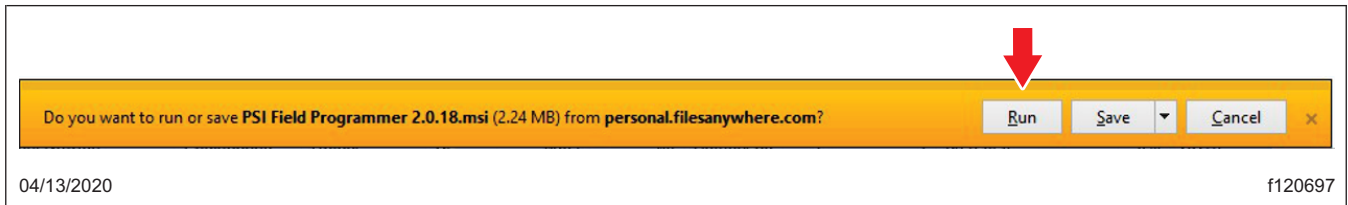


Fig. 4, Selecting Run

- Select 'Next' to start the installation. See [Fig. 5](#).



Fig. 5, Selecting Next

May 2020
SF604A

10. Read the End User License Agreement, then select the accept terms box and select 'Next.' See [Fig. 6](#).
11. Once the installation is complete, select 'Finish.' See [Fig. 7](#).

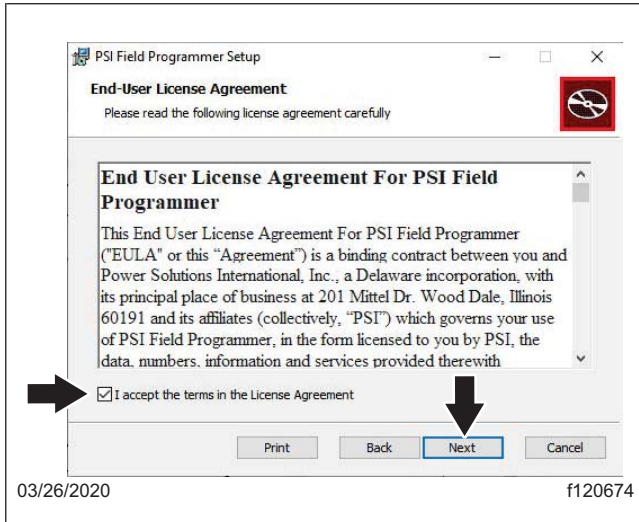


Fig. 6, Accepting the License Agreement and Selecting Next

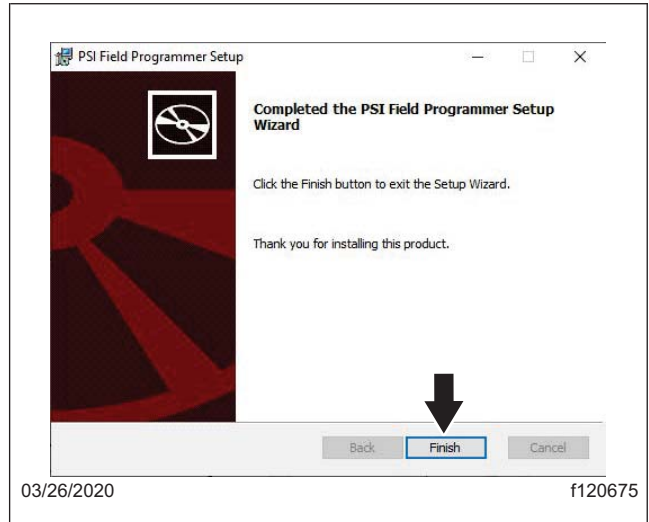


Fig. 7, Selecting Finish

Registration

The PSI Field Programmer application has functionality that only becomes available after a successful registration of the product. Use the steps below to register.

1. Once the PSI Field Programmer is open, select 'Registration.' See [Fig. 8](#).
2. Fill out all of the fields in the registration window, then select 'Submit.' See [Fig. 9](#).

When the registration is completed successfully, a window should open notifying the user of the status of their registration.

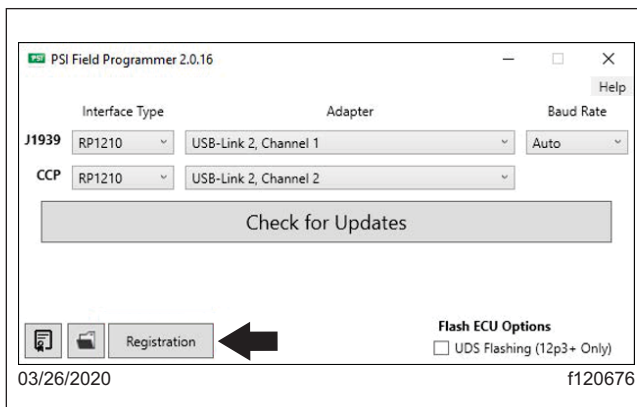
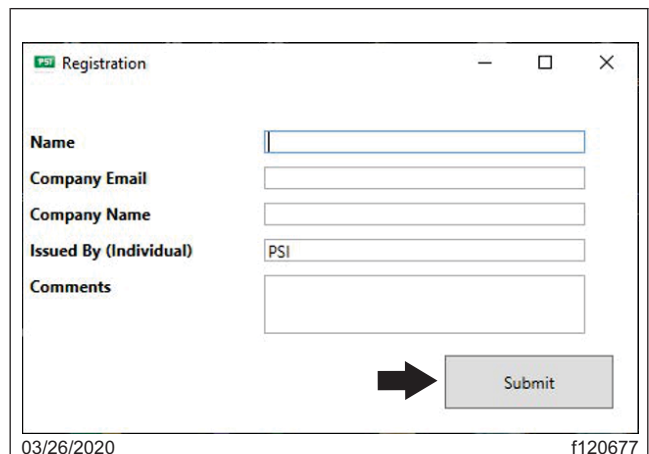


Fig. 8, Selecting Registration



Fill out all of the fields in the registration window, then select 'Submit.'

Fig. 9, Registration Form

May 2020
SF604A

Interface Selection

The PSI Field Programmer has an interface selection method integrated into the tool. It is used to select the programming hardware interface cable for programming the engine controller. It accepts the interface hardware shown in [Table 2](#).

Programming Hardware Information		
Interface	Description	Speed
RP1210	Noregon DLA+ Nexiq (USB Link Series)	Slow
Kvaser	Leaf Lite Single Channel	Fast

Table 2, Programming Hardware Information

Prior to initial setup, download the associated driver software for the interface being used. Once the driver for the interface is installed, you can proceed to programming.

NOTE: Kvaser can only flash a calibration in one instance.

Ensure that the laptop screen saver and sleep settings are turned off or set to a minimum of one hour.

See [Fig. 10](#) for cable connections.

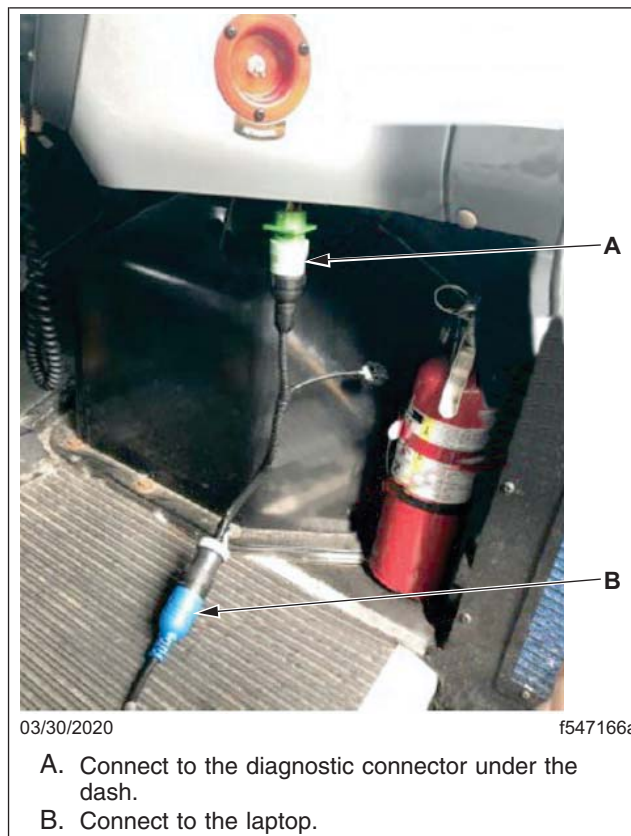


Fig. 10, Programming Cable Connections

May 2020
SF604A

Use the steps below to setup the interface hardware.

1. Once the PSI Field Programmer opens, select the CAN Interface Type, Adapter, and Baud Rate. The baud rate should always be 500k for MY 2020 or later (vehicle models). See [Fig. 11](#).

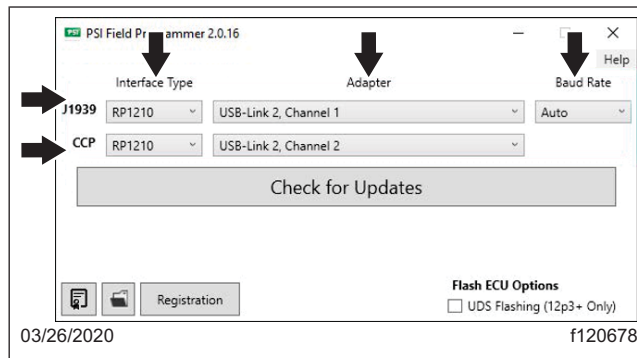


Fig. 11, Selecting the Interface Type, Adapter, and Baud Rate

2. Once the correct interface properties are selected, you can proceed with the steps for engine ECM programming in the *Programming Software or Calibration* section.

Programming Software or Calibration

The PSI Field Programmer pulls data from the cloud and loads it onto the ECU. It looks at the engine serial number and calibration that is currently installed in the ECU and checks for an update available in the PSI cloud. If any update is available in the PSI cloud, the software will update the ECU.

1. To start the programming process, select 'Check for Updates.' See [Fig. 12](#).

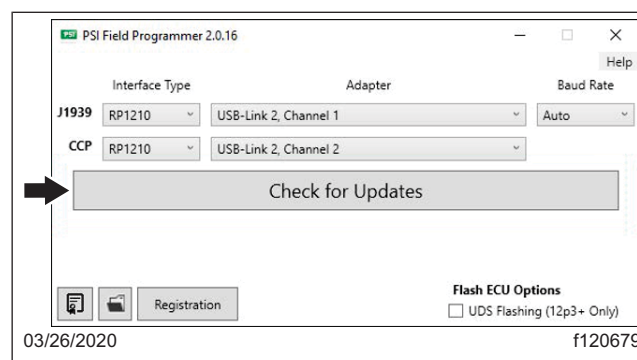


Fig. 12, Selecting Check for Updates.

May 2020
SF604A

IMPORTANT: In the following step, select 'Available Cal ID' only. **Do not** select the VEPS checkbox.

2. Make sure you have a secure connection—key is ON, sufficient power supply, and the cable is installed—then select 'Next' and the window shown in **Fig. 13** should appear.

The current calibration on the ECU and any updates to it will be displayed here. To update the calibration from the cloud, select the checkbox next to 'Available Cal ID' and select update. If the calibration is up-to-date, the screen shown in **Fig. 14** will appear.

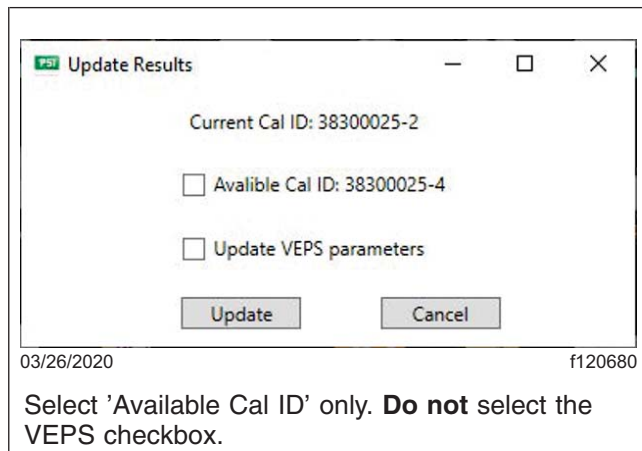


Fig. 13, Update Results, Window 1

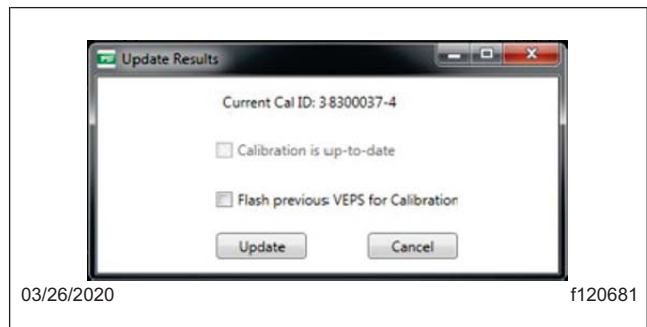


Fig. 14, Update Results, Window 2

3. When 'Available Cal ID' is selected, the tool will check compatibility and then start programming. Once programming is completed, a 25 second timer will appear. When the timer expires, programming will finish. See **Fig. 15**.

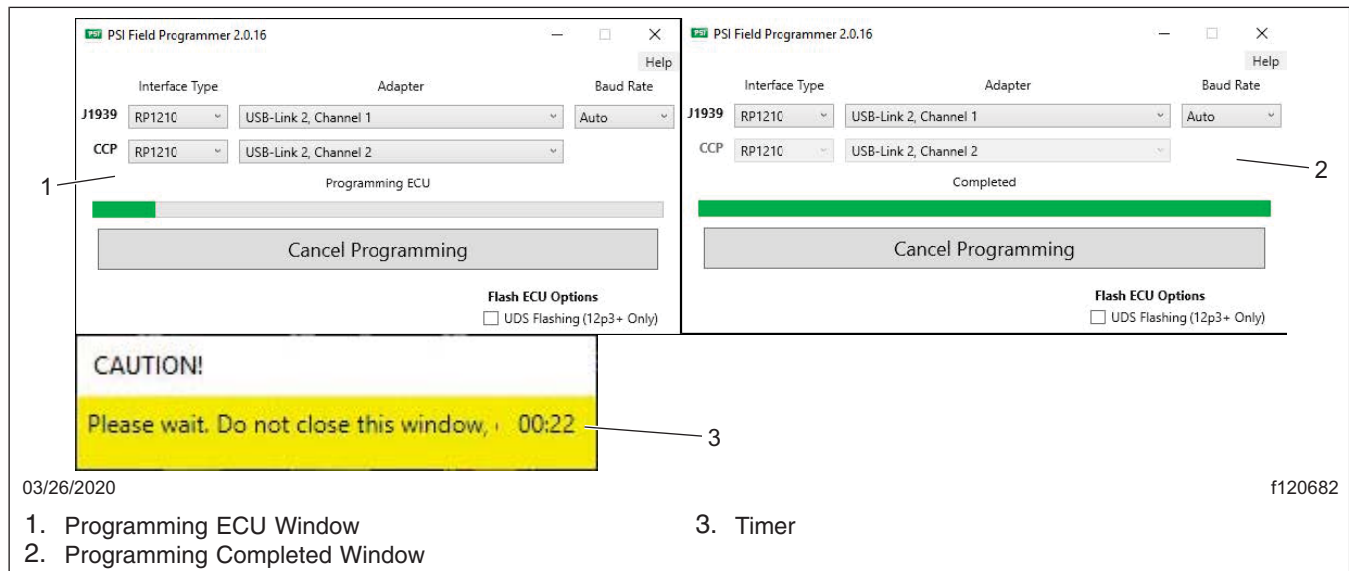


Fig. 15, Programming in Process

4. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF604 (Form WAR261) indicating this work has been completed.

May 2020
SF604A

Programming With the Engine Serial Number in and out of Boot Mode

NOTE: 'Programming With the Engine Serial Number in and out of Boot Mode' and 'User Defined System (UDS) Flashing' are only used in rare cases. If the engine controller calibration update was successful, disregard these sections.

Boot Mode occurs when there is an issue that causes the ECU programming to be interrupted, for example the key being turned off in the middle of programming. ECU Boot Mode is available for ECUs with a UDS boot loader on them. Recovering them requires a manual engine serial entry. Boot Mode is auto-detected by the tool.

1. If Boot Mode is detected by the PSI Field Programmer, the window shown in [Fig. 16](#) will appear. Enter the engine serial number and select 'Submit' to recover the ECU and continue programming.

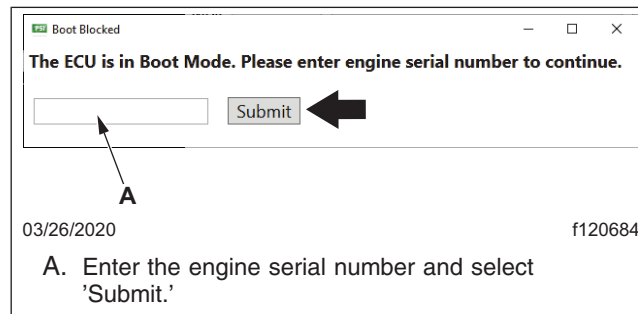


Fig. 16, Entering the Engine Serial Number in the Boot Blocked Window

2. The software will ask the user to update the ECU. If 'No' is selected, nothing will happen. If 'Yes' is selected, the PSI Field Programmer will proceed to program and recover the ECU out of the boot block mode. The windows shown in [Fig. 15](#) will appear.

In cases where the ECU is not boot blocked and also does not have calibration ID or engine serial number, the user will be asked to manually enter the engine serial number. See [Fig. 17](#).

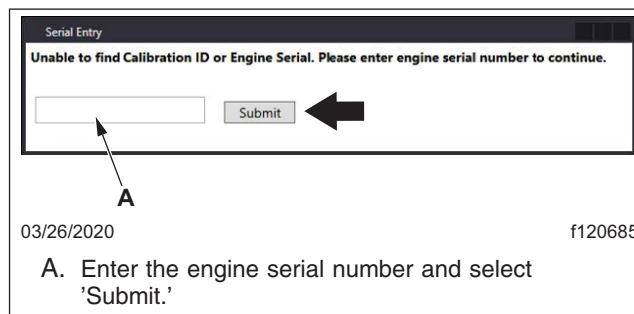


Fig. 17, Serial Entry Window

3. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for SF604 (Form WAR261) indicating this work has been completed.

User Defined System (UDS) Flashing

UDS Flashing can be used in cases where CCP is not available. It programs the ECU through the J1939 databus. This is only functional for calibrations that are 12p3 and above level software.

1. In order to start the UDS Flash process, the 'UDS Flashing (12p3+ Only)' check box must be selected. See **Fig. 18**.

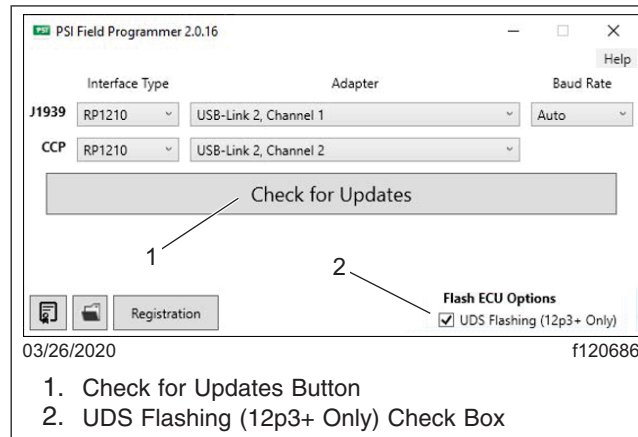


Fig. 18, UDS Flashing (12p3+ Only) Check Box Screen

2. Select 'Check for Updates,' and the programming process will begin. Once the correct J1939 channel is selected, the process is the same as the *Programming Software or Calibration* section.