

**ATTENTION:**

GENERAL MANAGER ☐  
PARTS MANAGER ☐  
CLAIMS PERSONNEL ☐  
SERVICE MANAGER ☐

IMPORTANT - All  
Service Personnel  
Should Read and  
Initial in the boxes  
provided, right.

© 2023 Subaru of America, Inc. All rights reserved.




QUALITY DRIVEN® SERVICE

## SERVICE PROGRAM BULLETIN

**APPLICABILITY:** 2023 MY Solterra

**NUMBER:** WRG-23

**SUBJECT:** Reprogramming of the Forward  
Recognition Camera

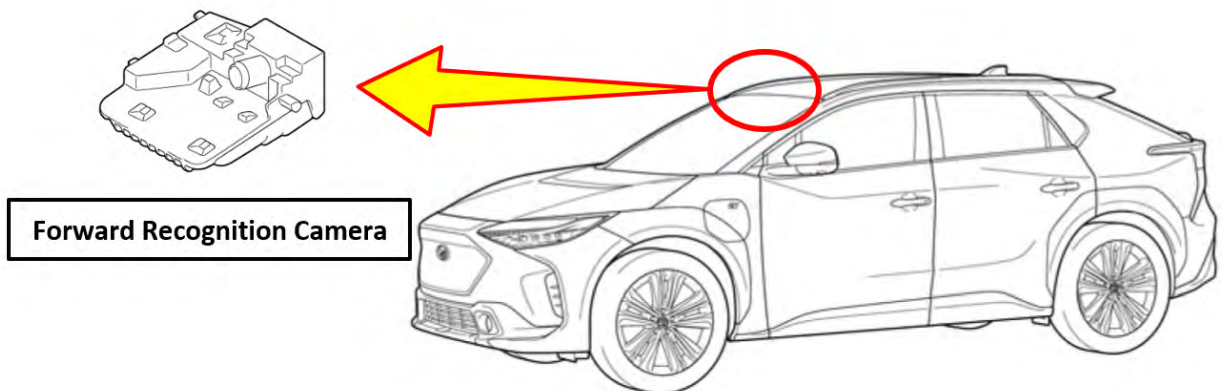
**DATE:** 09/26/23

### INTRODUCTION:

In the interest of customer satisfaction, Subaru of America, Inc. (Subaru) is initiating a service program to update the forward recognition camera software on certain 2023 model year Solterra vehicles.

### REASON FOR THIS SERVICE PROGRAM:

Due to the programming of the software within the forward recognition camera, there is a possibility that under certain conditions, EyeSight® driver assist functions could become inoperative for approximately four seconds before rebooting and becoming operational again.



### REMEDY:

Subaru retailers will update the forward recognition camera software at no cost to the customer.

**CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD  
RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.**

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

**Subaru of America, Inc. is  
ISO 14001 Compliant**

ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

*Continued...*

## AFFECTED VEHICLES:

A total of 2,769 U.S. vehicles will be included in this service program as listed below.

Model Year	Carline	Production Date Range
2023	Solterra	March 29, 2022 – December 26, 2022

Not all vehicles in the production range listed above are affected by this service program. Coverage must be confirmed by using the Vehicle Coverage Inquiry function on [subarunet.com](http://subarunet.com) prior to repair. This information is now available.

## RETAILER RESPONSIBILITY:

Any vehicles listed in any recall or campaign that are in retailer stock must be:

- Immediately identified
- Tagged or otherwise marked to prevent their delivery or use prior to repair
- Repaired in accordance with the repair procedures outlined in the bulletin

Retailers are to promptly perform the applicable service procedures, to correct all affected vehicles in their inventory (new, used, demo & SSLP). Additionally, whenever a vehicle subject to this service program is taken into inventory or in for service, necessary steps should be taken to ensure the repair has been made before selling or releasing the vehicle.

## OWNER NOTIFICATION:

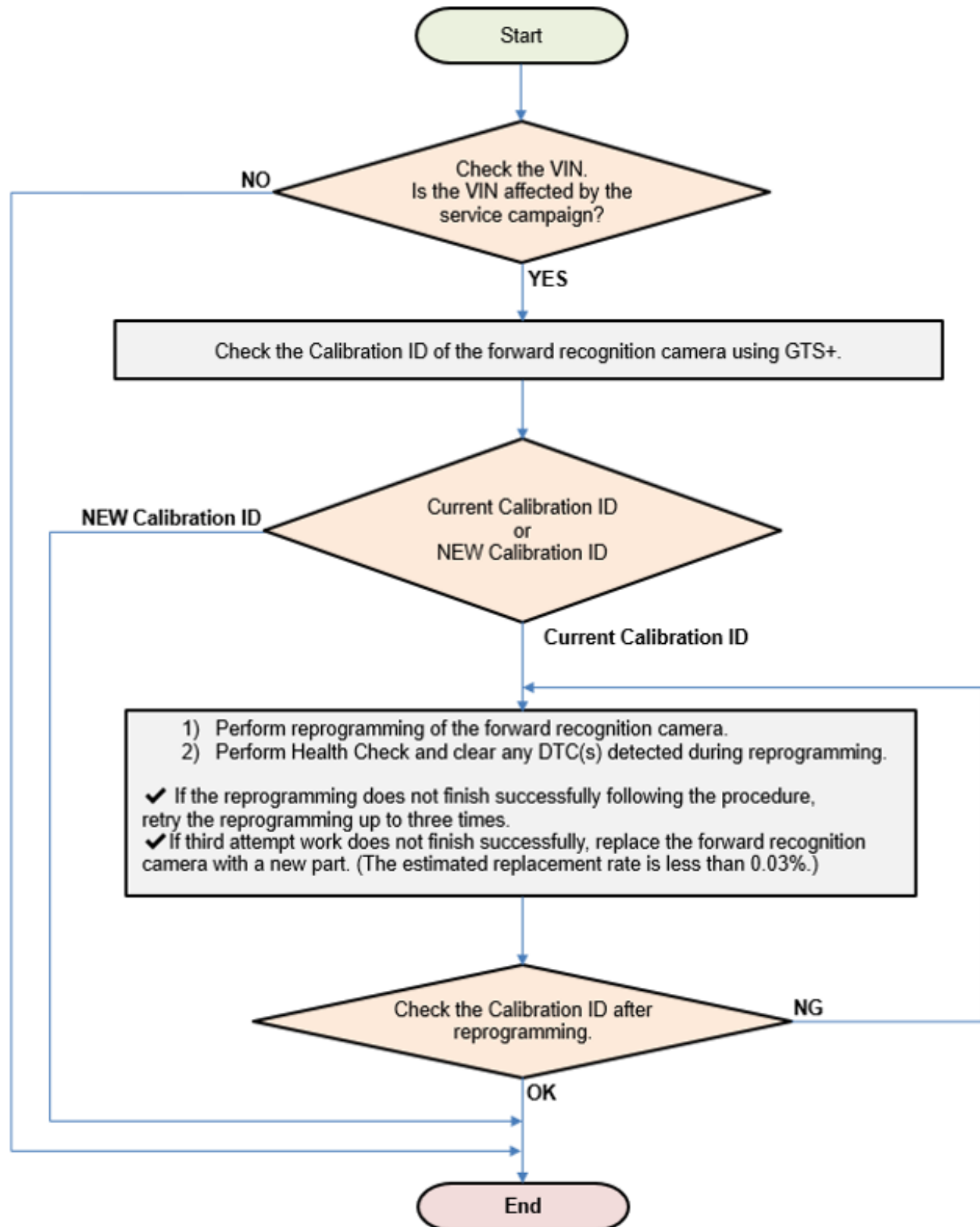
Subaru will notify affected vehicle owners by first class mail on October 5th, 2023.

## CUW FILE INFORMATION:

File Description	Current Calibration ID	NEW Calibration ID
8646F4206200_8646F4206400.cuw	8646F4206200	8646F4206400
8646F4206300_8646F4206400.cuw	8646F4206300	

*Continued...*

## SERVICE PROCEDURE FLOWCHART:




*Continued...*

## SERVICE PROCEDURE INFORMATION:

**STEP 1:** Turn off vehicle electrical systems to reduce electrical load.

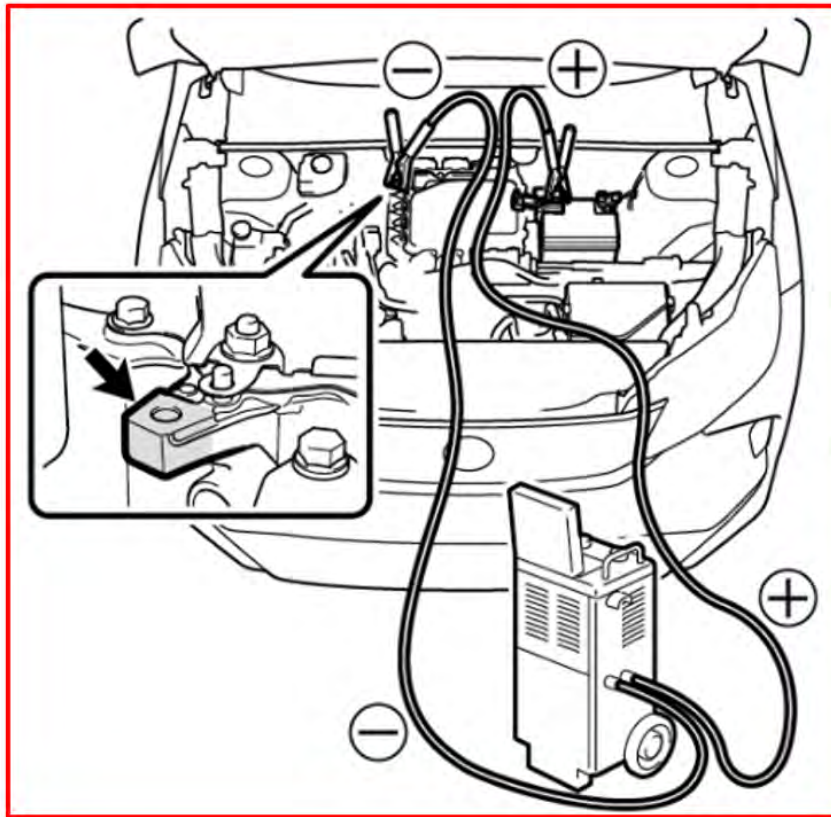
- Turn off all electrical accessories (i.e., climate control, audio-navigation system, etc.).
- Set headlight switch to DRL OFF position.
- Set windshield wiper switch to OFF position.
- Set driver easy exit seat slide function to OFF position.
- Confirm all exterior lighting systems are off.
- Turn off interior lighting systems (confirm that no light comes on even if a door is opened)
- Disable the seat belt warning system (this can be turned off via the buckle switch).
- Turn off the seat heaters and/or ventilation system (only for the vehicle to which it is equipped).
- Disable the rain sensing function (only for the vehicle to which it is equipped).
- Confirm the rear defogger system is off.
- Confirm the steering wheel heater is off (only for the vehicle to which it is equipped).
- Disable any additional/aftermarket accessories (security system, etc.).

**STEP 2:** Inspect vehicle 12v auxiliary battery condition and connect power supply.

Push the power switch  **without** pressing brake pedal (Power-ON), wait at least 1 minute then confirm battery voltage is at least 12.0 Volts. If the battery is below 12.0 Volts, charge the battery before performing reprogramming. Subaru of America, Inc. (SOA) highly recommends utilizing the Subaru Midtronics DCA8000 Dynamic Diagnostic Charging System. Once the DCA8000 is connected and the battery is fully charged, restart the charger and select Power Supply Mode. The battery voltage will be stabilized and ready for reprogramming.

*Continued...*

## BATTERY CHARGER NOTES:



- For instructions on using the Power Supply Mode, reference the applicable User Manual for the Midtronics DCA-8000 Dynamic Diagnostic Charging on STIS.
- Select the correct battery type (Enhanced Flooded, Flooded, Gel, AGM, or AGM Spiral).
- Input the CCA which matches the vehicle's battery.
- If using a DCA-8000 Dynamic Diagnostic Charging System, set the power supply voltage to 13.5 Volts.
- DO NOT connect the GTS+ until the Power Supply mode function has completed its battery test mode and the Charging Voltage has dropped to and shows a steady 13.5 Volts on the display.
- Once Power Supply Mode reaches a steady 13.5 Volts, connect the GTS+ to the OBD connector and proceed with initiating the normal reprogramming process.
- Amperage will fluctuate based upon the vehicle's demand for power. **NOTE:** If the voltage rises beyond 14 Volts while programming is in process, the procedure will abort. This can indicate a need to test or charge the vehicle battery before any further attempt at programming is made.
- ALWAYS set the power supply voltage to 13.5 Volts when using Power Supply Mode. NEVER turn the ignition switch on when charging at voltages 15 Volts or higher.
- Control module failures resulting from battery discharge during reprogramming are not a matter for warranty. Should any DTCs reset after the reprogramming update is performed, diagnose per the procedure outlined in the applicable Service Manual.

*Continued...*

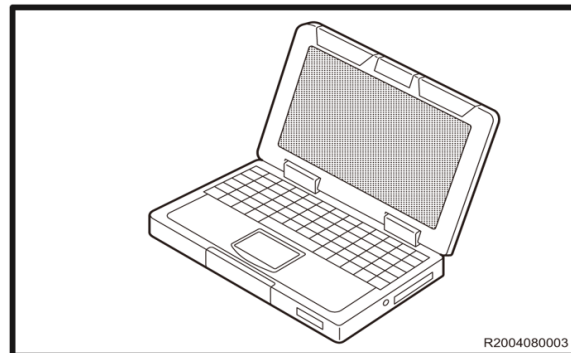
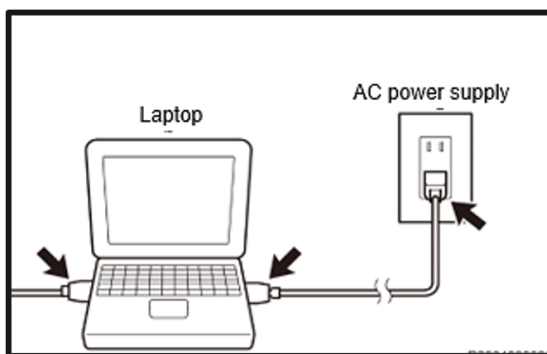
**REMINDER:** If the DCA-8000 indicates the vehicle's battery must be charged, charge the battery fully before proceeding to reprogram the vehicle while using the Power Supply Mode.

**STEP 3:** Stabilize the power supply to Global TechStream Plus (GTS+).

- A. ALWAYS** connect the GTS laptop to an external AC power supply.
- B.** Turn off the screen saver and power saving mode of the laptop for continuous power supply to the HDD/SSD.

**CAUTIONS:**


- If the screen saver or power saving mode starts while reprogramming, the communication may be disconnected, resulting in the damage of the ECU.
- The ECU may be damaged if the battery voltage of the laptop drops while reprogramming.

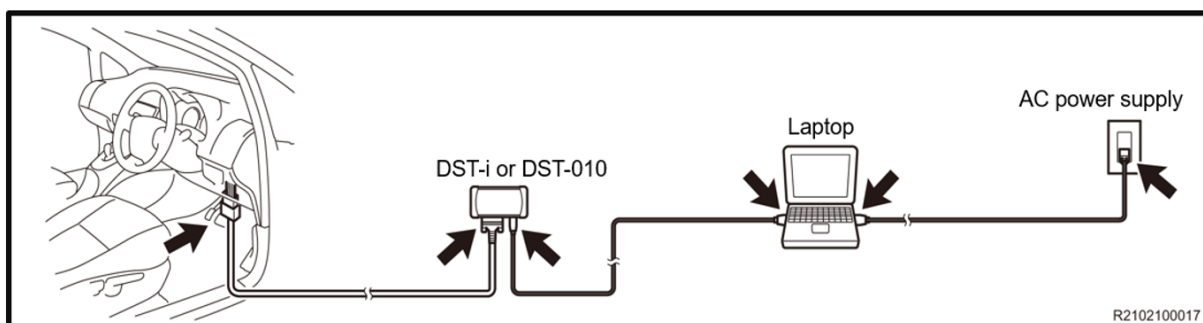


- **DO NOT** block the ventilation opening for the fan of the laptop. If the ventilation opening for the fan is blocked, the laptop may overheat, causing the laptop to stop and may damage the ECU as a result.



**STEP 4:** Secure the connection the of cables.

Confirm the power switch  is in the OFF position and connect the laptop to the vehicle.



*Continued...*



**STEP 5:** Starting the GTS+ application.

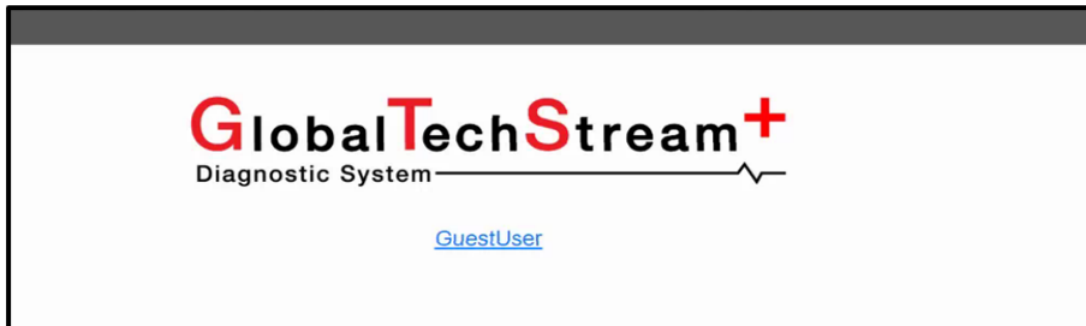
- A.** Click the GTS+ icon to start the GTS+ application.



- B.** SSM will automatically close and the GTS+ browser will open. Set the GTS+ application region to “United States” and set the lower box to “USA” then click the Server Login link.

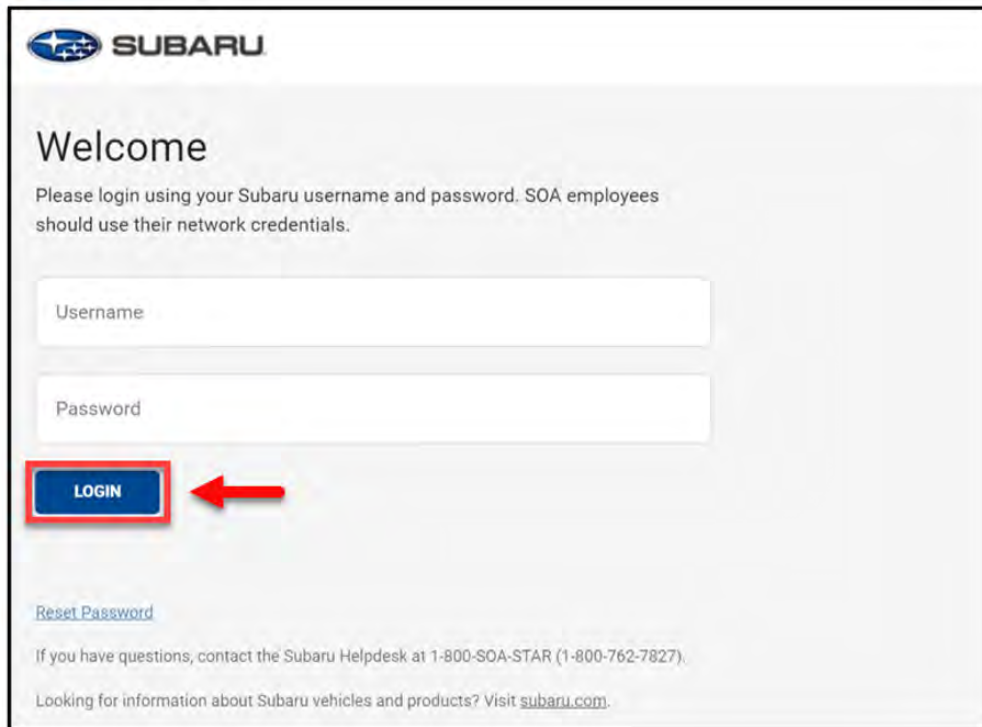


**NOTE:** In some instances, a user may have logged in previously. In these cases, if the PC has not been restarted, the screen below may appear when clicking on the GTS+ icon (Step 5-A). This is normal operation. Click the “GuestUser” link to directly login to GTS+.



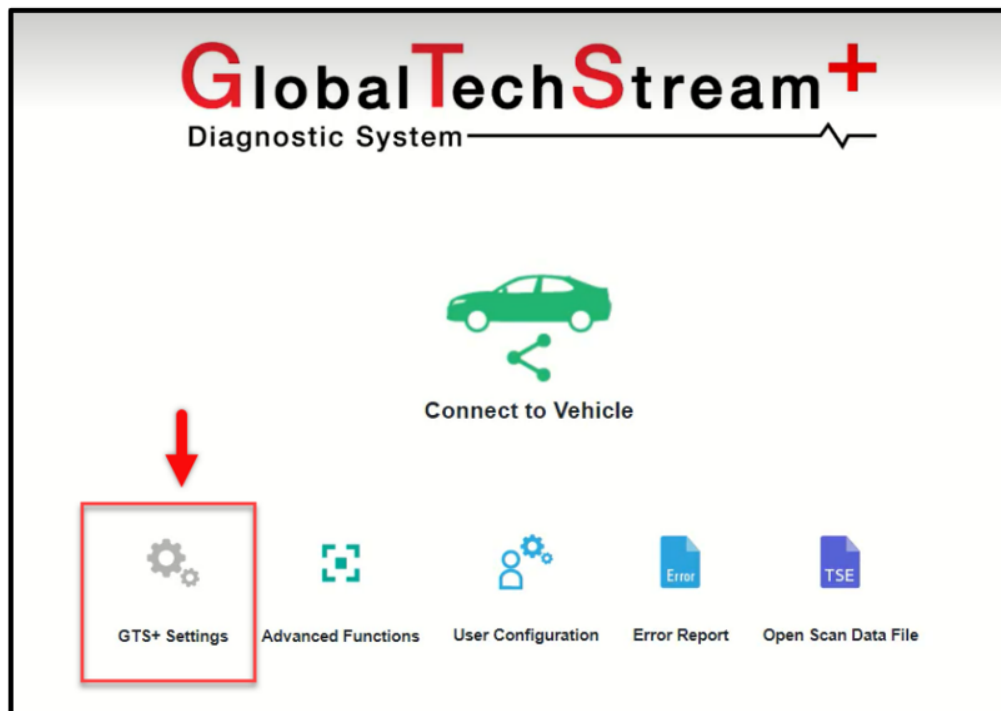
*Continued...*

- C. A second pop-up window browser will open. Right click on the white area of the window and select “Translate to English.”



The image shows a Subaru login page. At the top is the Subaru logo and the word "SUBARU". Below that is a "Welcome" heading. A message states: "Please login using your Subaru username and password. SOA employees should use their network credentials." There are two input fields: "Username" and "Password". Below these is a blue "LOGIN" button, which is highlighted with a red rectangle and a red arrow pointing to it from the right. Below the button is a link for "Reset Password". At the bottom, there is contact information for the Subaru Helpdesk and a link to "subaru.com".

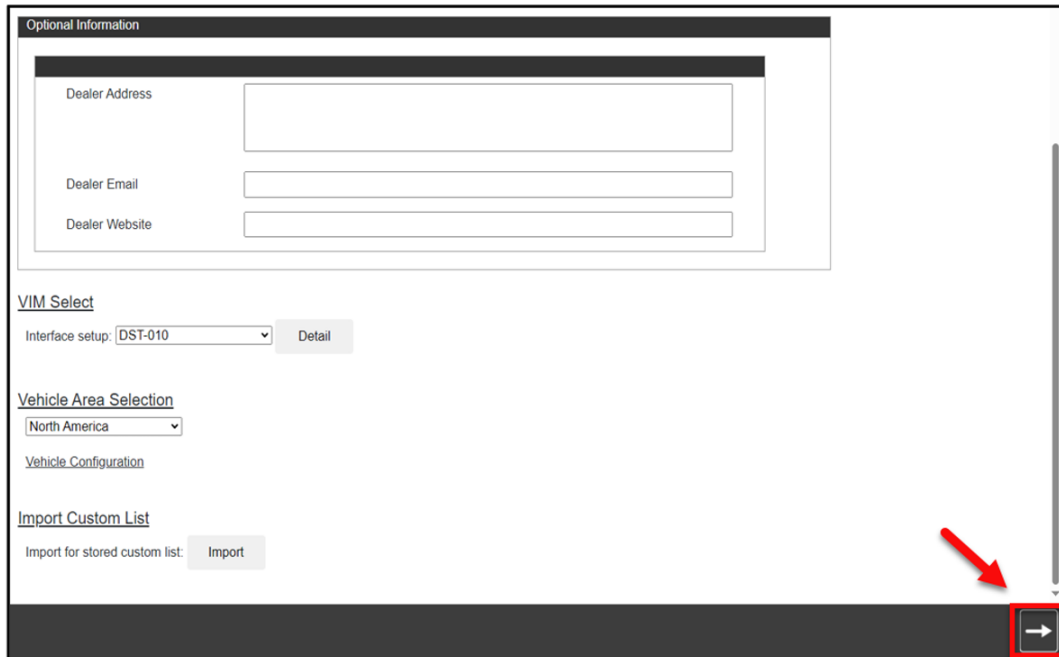
- D. Turn the power switch  to the ON position **WITHOUT** depressing the brake pedal. Click the “GTS+ Settings” button.



*Continued...*



- E. In the lower portion of the GTS+ Settings page, select the appropriate Vehicle Interface Module (VIM) such as DTS-i or DST-010. Set the “Vehicle Area” selection to North America. Click the arrow in the right corner when complete.



Optional Information

Dealer Address

Dealer Email

Dealer Website

VIM Select

Interface setup:

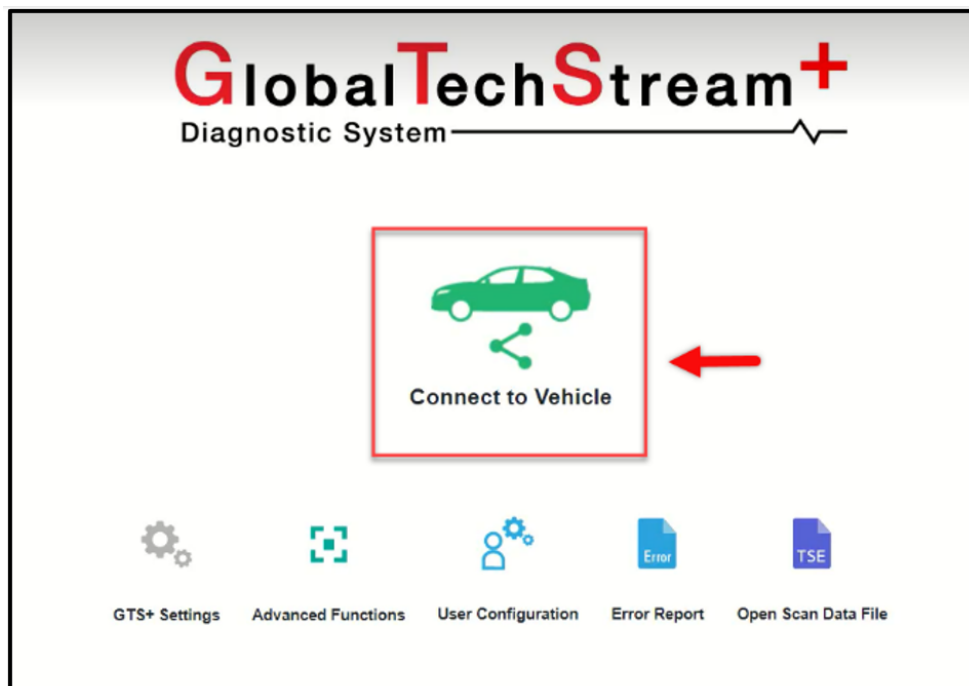
Vehicle Area Selection

Vehicle Configuration

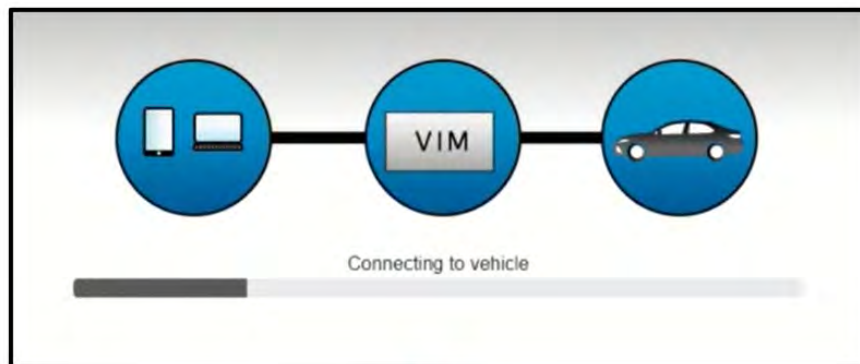
Import Custom List

Import for stored custom list:

- F. Click the “Connect to Vehicle” button. Confirm the target VIN information and continue by clicking the “Next” button.



*Continued...*



**Vehicle Connection**

Confirm the information and press Next  
Required information

VIN:  VIN reacquisition VIN manual input

Division:

Model:

Model Year:

Engine:

**STEP 6:** Click “Health Check” button located in the Main Menu.



**STEP 7:** Allow time for the Health Check to start.

**Health Check Result**

2023 Solterra EV JTMABABA4PA000999 5344.63km Battery 12.1V

07/26/2023 13:58:47 Compensation Pressure [kPa(abs)]

Front:

Rear:

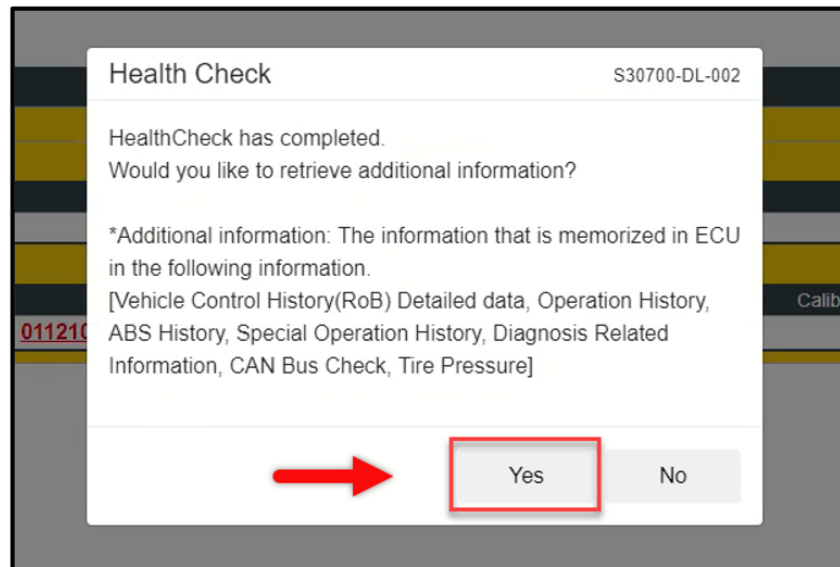
Caution

Enhanced Generic Checking - System 25 of 38

System	Monitor Status	Configure	Roll	DTC
EV	-	No	16	0
Motor Generator	-	No	-	0
Rear Motor Generator	-	No	-	0
EV Battery	-	No	0	0
Plug-In Control	-	No	1	0
Brake/EPB	-	No	6	0
Brake Booster	-	No	1	0
Tire Pressure Monitor	-	No	2	0
EMPS	-	No	1	0
Front Recognition Camera	-	No	16	0
Circumference Monitoring Camera Control Module	-	No	11	0
Steering Angle Sensor	-	No	0	0
Rear Camera	-	No	-	0
Air Conditioner	-	No	0	0
SRS Airbag	-	No	2	0
Main Body	-	No	12	0
Central Gateway	-	No	0	0
Back Door	-	No	2	0
Driver Seat	-	No	-	0
Master Switch	-	No	-	0
Sliding Roof	-	No	-	0

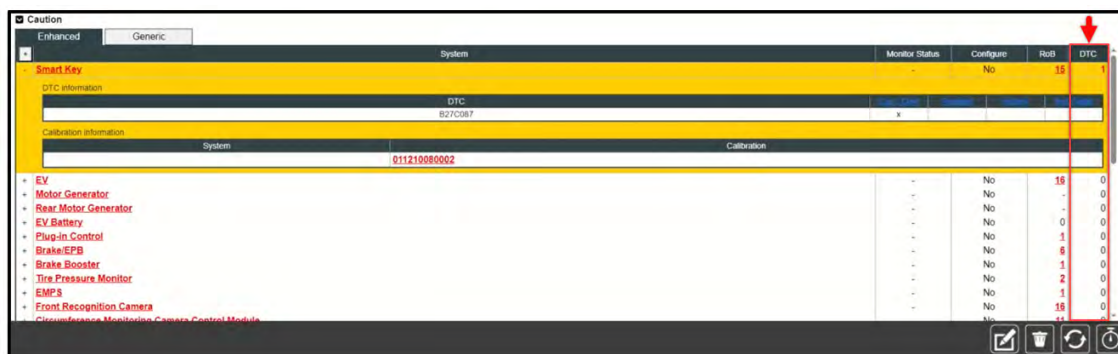
*Continued...*

**STEP 8:** While the Health Check is being performed, a pop-up will be displayed asking if you would like additional information retrieved. Click the “Yes” button to continue.



**NOTE:** Allow time for the Health Check retrieve the stored data. This may take up to five minutes.

**STEP 9:** Once the Health Check is completed, check the results for any stored DTC(s).

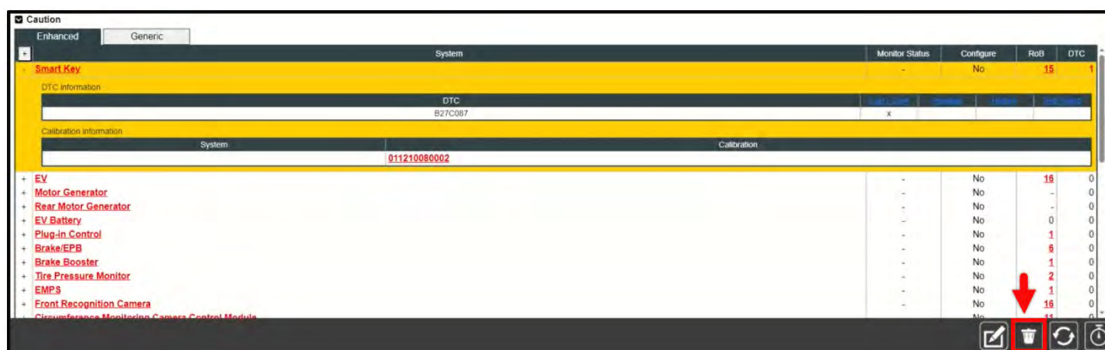


**Are any DTC(s) stored?**

**YES:** Proceed to Step 10.

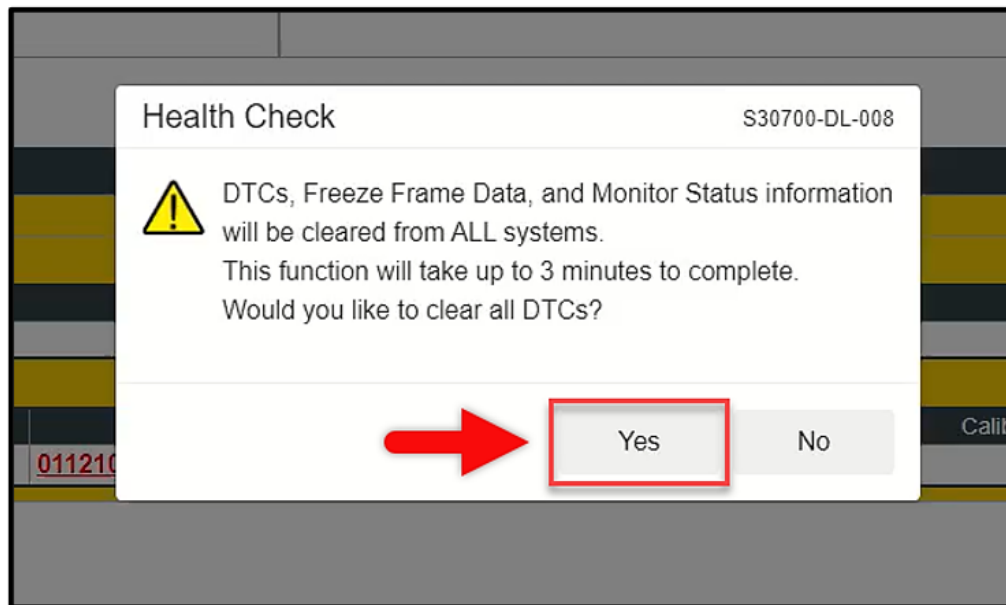
**NO:** Proceed to Step 11.

**STEP 10:** Clear all DTC(s) by clicking the “Erase” button.



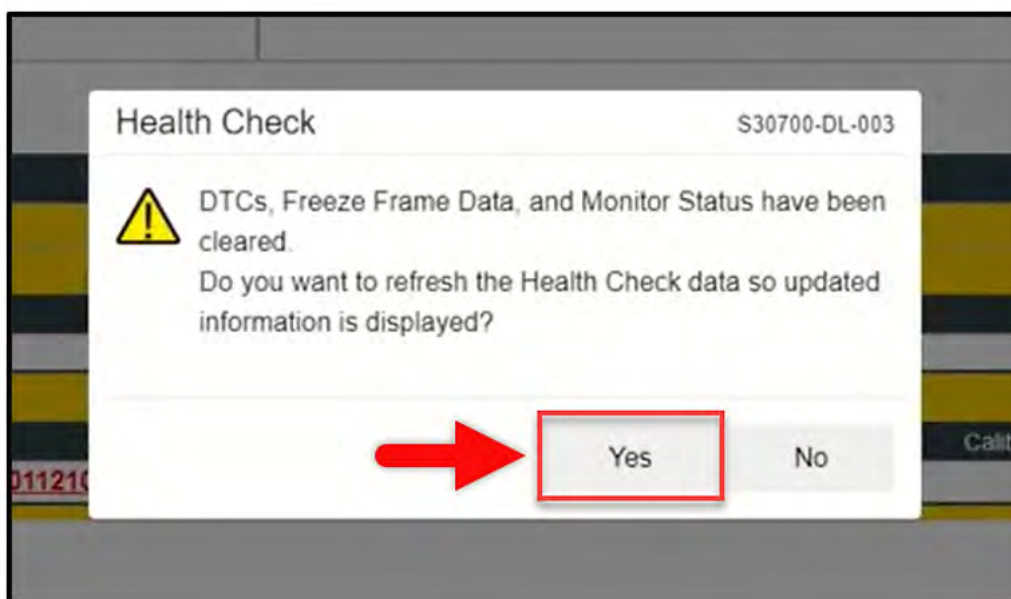
*Continued...*

A pop-up will display reminding all Freeze Frame and Monitor Data will be cleared. Click the “Yes” button to continue.



Once the clearing is complete, a second pop-up will display asking to refresh the Health Check to the updated status. Click the “Yes” button to continue. Proceed to Step 11 when no DTC(s) are detected.

**IMPORTANT:** If any DTC(s) continue to be stored, diagnose and repair as per the applicable Service Manual. Confirm the faults can be cleared prior to proceeding. If the DTC(s) are not cleared, the GTS+ cannot enter the reprogramming mode.



*Continued...*

**STEP 11:** Click on the “Plus” symbol next to Front Recognition Camera to expand the system information. Confirm the Forward Recognition Camera calibration ID displayed is 8648F4206200 or 8646F4206300. In a rare case of 8646F4206400 being displayed, there would be no need for further action.



**STEP 12:** Prepare the Forward Recognition Camera CUW file. Select the Subaru Desktop from the lower taskbar. Select The TechStream Files icon. Open the ECU Data folder.

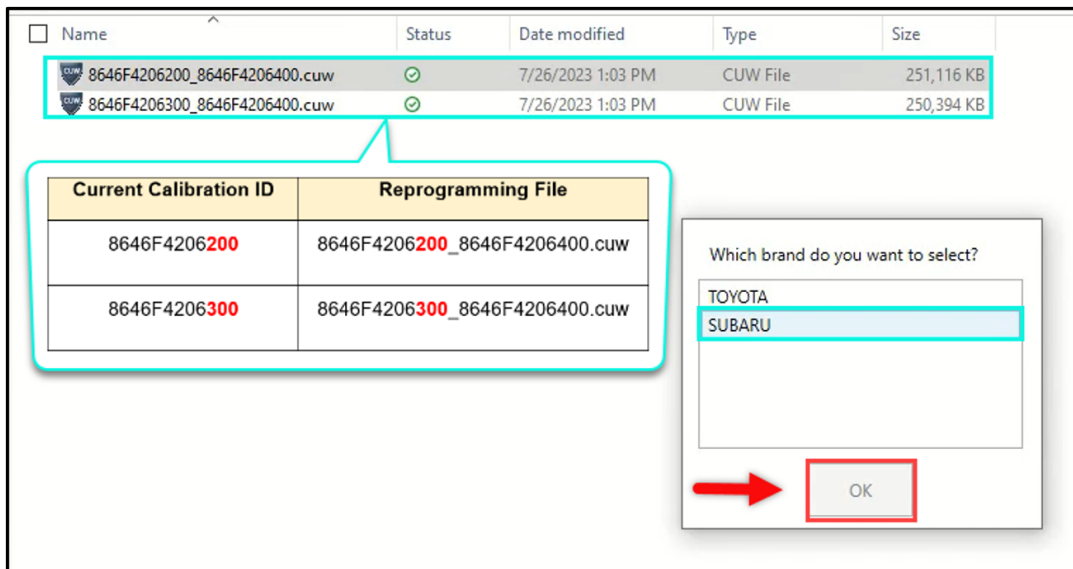


*Continued...*

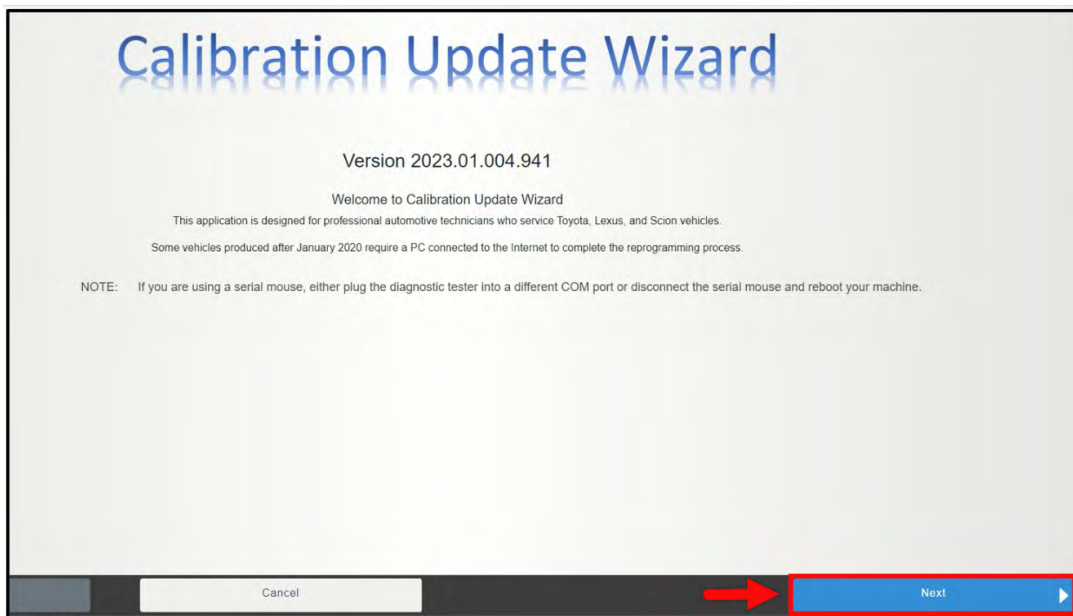
## CAUTIONS:

- **ALWAYS** stay near the vehicle and **DO NOT** allow any others to operate the vehicle or GTS+.
- Never change the power switch position other than when instructed by GTS+. Unauthorized cycles of the power switch during reprogramming may cause control module failure.
- Pressing the “Cancel” button or the “X” button on the top will cancel reprogramming and could damage the ECU while reprogramming.
- Be sure to press “Retry” to continue reprogramming if the event of an error.

**STEP 13:** Double-click the applicable CUW file icon. A pop-up will display requesting a manufacturer to be selected. Select “Subaru” and click the “OK” button to continue.



**STEP 14:** After double-clicking the file icon, the Calibration Update Wizard program is launched, and a new window will appear. Select the “Next” button to continue.



*Continued...*



**STEP 15:** Confirm the pass-through device currently being used. Select the “Next” button to continue.

**Connect to Vehicle**


Connect the device as described by the component manufacturer.

Please confirm:

1. J2534 device is connected to PC via a wired communication
2. J2534 device is connected to the DLC3(U1962).
3. Key ON, Engine OFF
4. Select J2534 device tool: DENSO CORPORATION DST-I
5. PC is connected to the internet. (In the case a vehicle needs Signature Request when the Reprogramming starts)

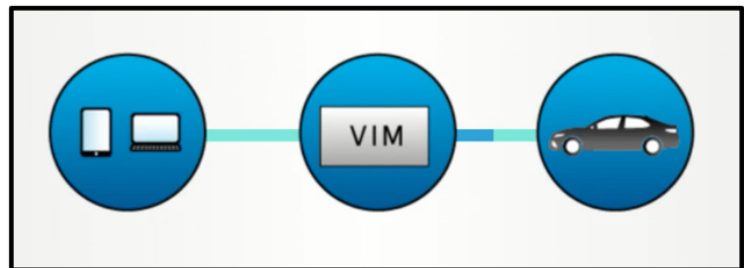
**Caution!**

Any unsupported device may negatively affect reprogramming performance and potentially damage the ECU.  
Please use designated devices of Toyota Motor Company.



Cancel Next

**NOTE:** A Progress bar will be displayed. **DO NOT** operate the power switch while the bar is shown.



**STEP 17:** The Calibration Selection Confirmation window will appear. Confirm the applicable Current Cal ID and the New Cal ID. Click the “Next” button to continue.

**Calibration Selection Confirmation**

Issue Date	1/10/2023
Year	23
Model Name	SOLTERRA
Engine Type	1YM
Vehicle Type	YEAM15

System	Current Cal ID	New Cal ID
Front Recognition Camera	8646F4206200	8646F4206400

Selected Calibration file is authorized to update this vehicle.  
Press NEXT to continue.


NOTE: Refer the applicable TSB for calibration file information.

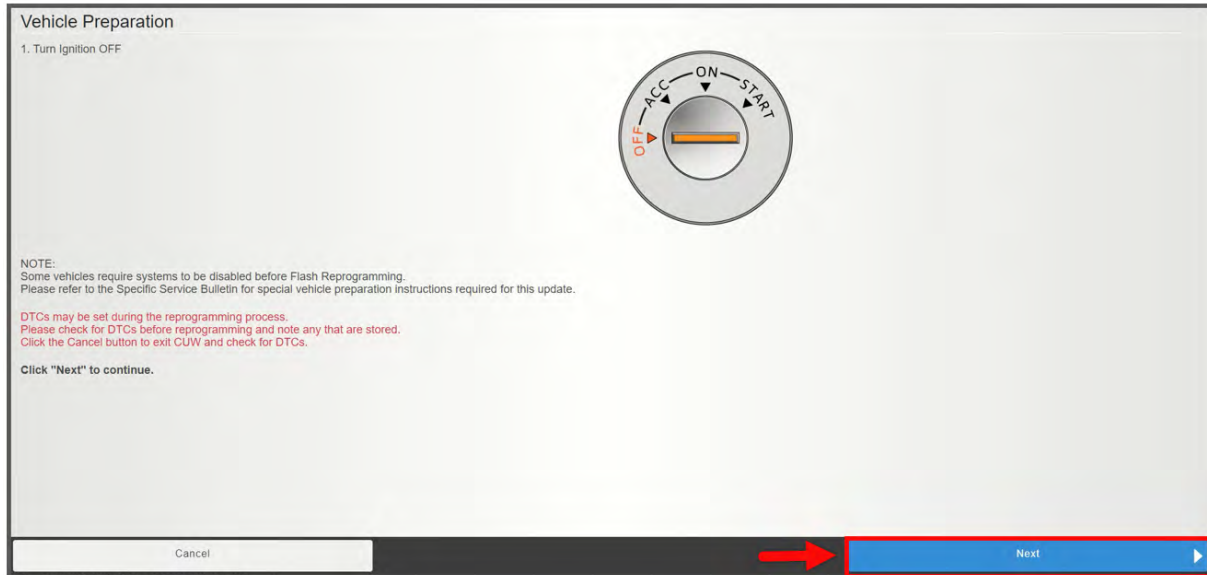
Current Cal ID	New Cal ID
8646F4206200	8646F4206200_8646F4206400.cuw
8646F4206300	8646F4206300_8646F4206400.cuw

Cancel Select New Cal. Next

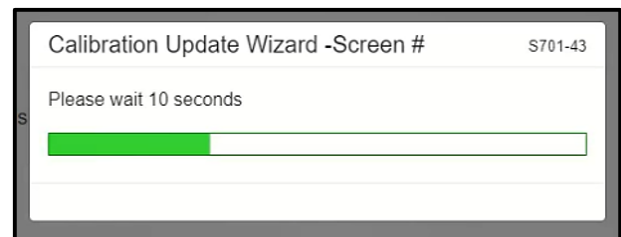
*Continued...*




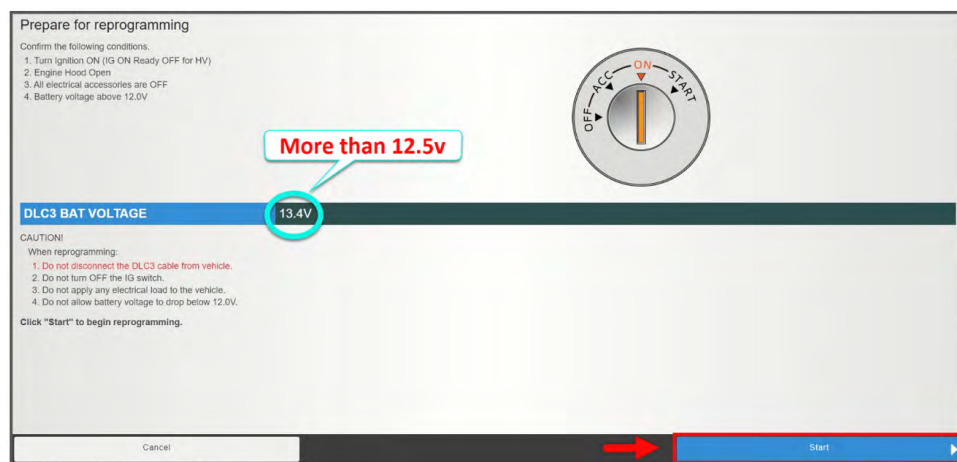
**STEP 18:** Review the CAUTIONS listed. Follow the on-screen instruction, turn the power switch to the OFF position. Select the “Start” to continue. 



**NOTE:** A Progress bar will be displayed. **DO NOT** operate the power switch while the bar is shown.



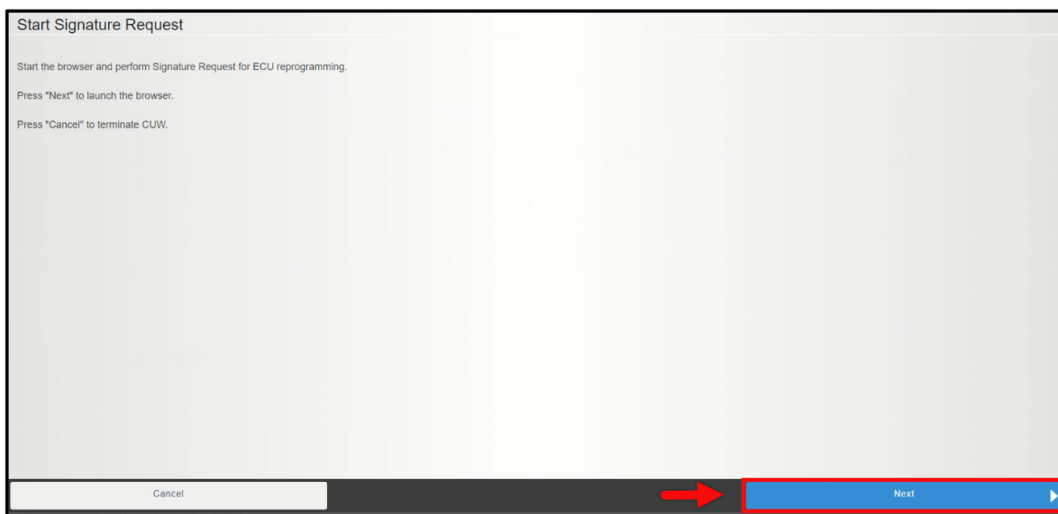
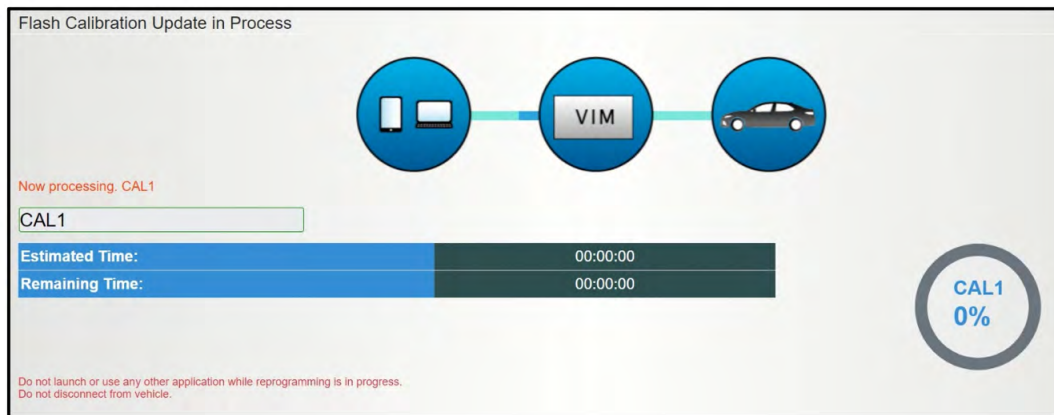
**STEP 19:** Review the CAUTIONS listed. Follow the on-screen instruction, turn the power switch to the ON position **WITHOUT** depressing the brake pedal. Confirm the 12v auxiliary battery voltage is more than 12.5 volts. Select the “Start” to begin the reprogramming process. 



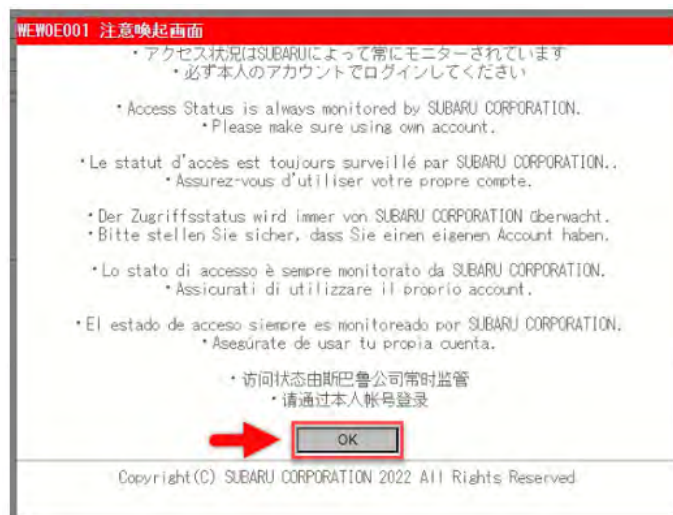
**STEP 20:** Once the “Flash Calibration Update” window is shown, allow the “Toyota Service Information” browser to be displayed. Select the “Next” button to continue.

*Continued...*

**NOTE:** The signature is acquired in future steps, once acquired, the signature is to be pasted into the “Signature” box.



**STEP 21:** Once the browser is started, a pop-up will display. Click the “OK” button to continue.



*Continued...*

**STEP 22:** Select the “Request Signature” button. This will populate in the lower window.

WEWOE012 Repro Signature Publication

Repro Key Signature Request

VIN JTMABABA4PA000999

Click “Request Signature” button, copy the characters in “Signature” box below and paste it in GTS signature box.

Request Signature

Request Number R01A20230727031650000224

Result 0 (Normal End)

Signature

Signature Copy

**STEP 23:** Select the “Copy Signature” button then minimize the window.

WEWOE012 Repro Signature Publication

Repro Key Signature Request

VIN JTMABABA4PA000999

Click “Request Signature” button, copy the characters in “Signature” box below and paste it in GTS signature box.

Request Signature

Request Number R01A20230727031650000224

Result 0 (Normal End)

Signature

Signature Copy

**STEP 24:** Return to “Calibration Update Wizard” display. Paste the signature using the right click method or using Ctrl+V on the keyboard. Once the signature is successfully pasted, click the “Next” button to continue.

Paste a Signature

Paste the retrieved Signature from the browser.

Signature:

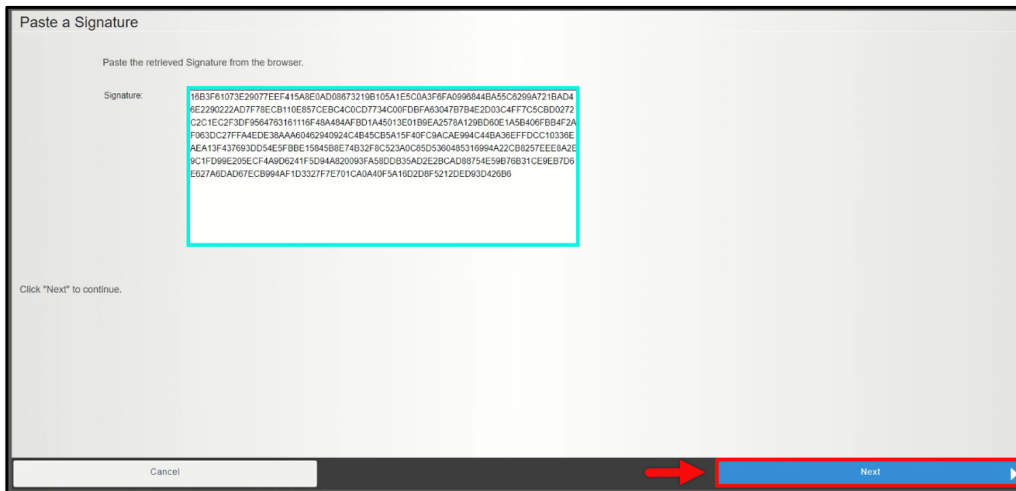
Paste Here

Click “Next” to continue.

Cancel Next

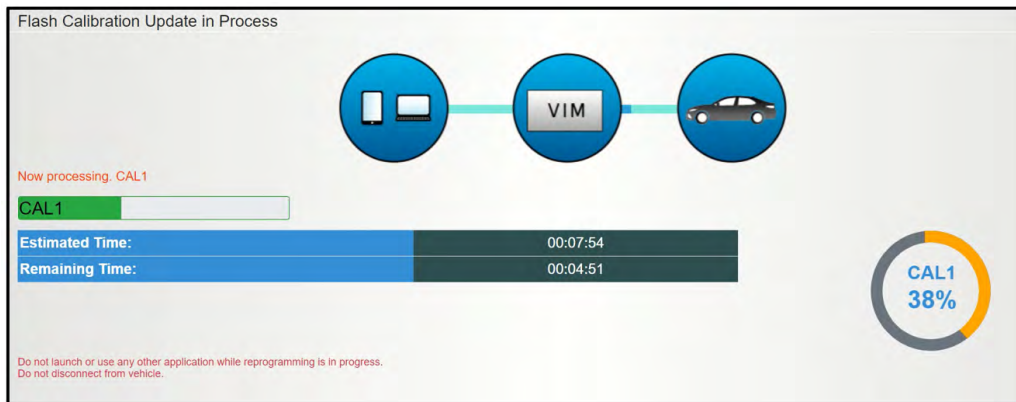


*Continued...*



**STEP 25:** While the vehicle is reprogramming, the progress window is displayed. **ALWAYS** remain near the vehicle during reprogramming in order to monitor the progress.

**NOTE:** The headlamps may operate during this procedure.



**STEP 26:** When the reprogramming procedure is successfully completed, the “Finish” window will be displayed. Press any key to continue. **IMPORTANT NOTE:** If the reprogramming procedure is unsuccessful, an error window is displayed. If no error window is displayed, proceed to Step 27.



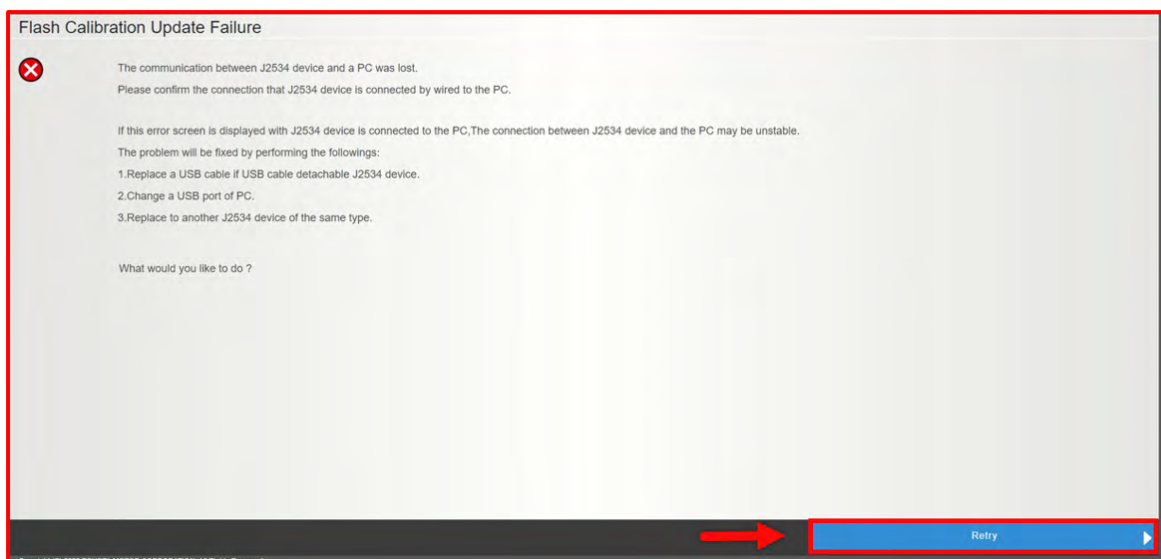
*Continued...*

**IMPORTANT NOTE:** If the reprogramming procedure is unsuccessful, an error window is displayed. If no error window is displayed, proceed to Step 27.

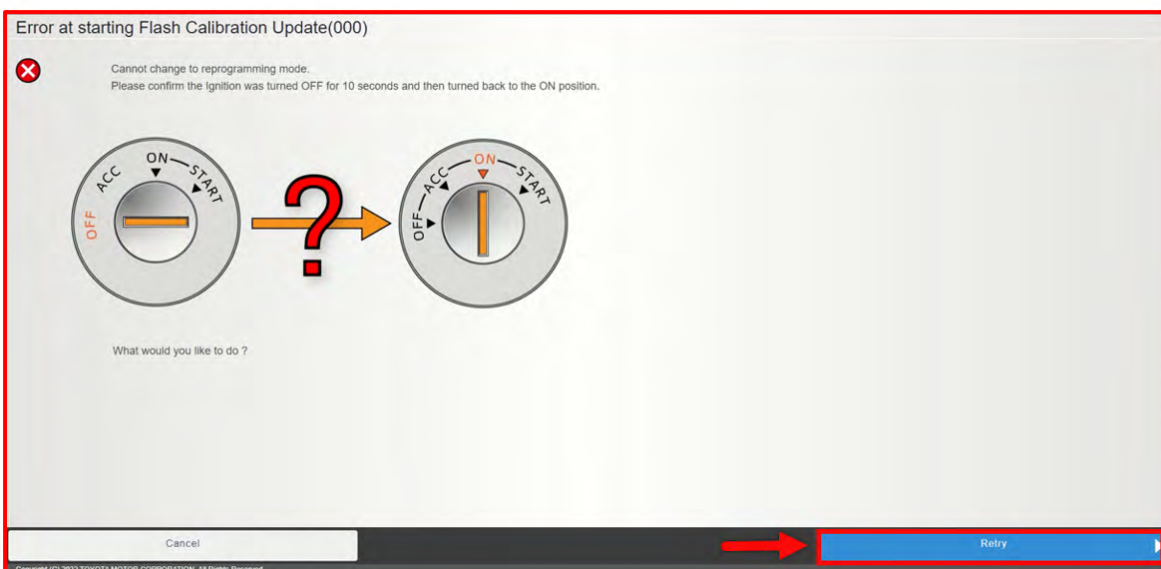
- DO NOT press the cancel button.
- DO NOT close the CUW+ window.

Attempt to restart the reprogramming procedure by clicking the “Retry” button **AFTER** the following prerequisites are met:


- Inspect the USB cables and connections and confirm they are in working condition.
- Confirm the 12V battery has sufficient charge.
- Confirm the battery charger is operating as desired.
- Confirm the battery cables are securely connected.

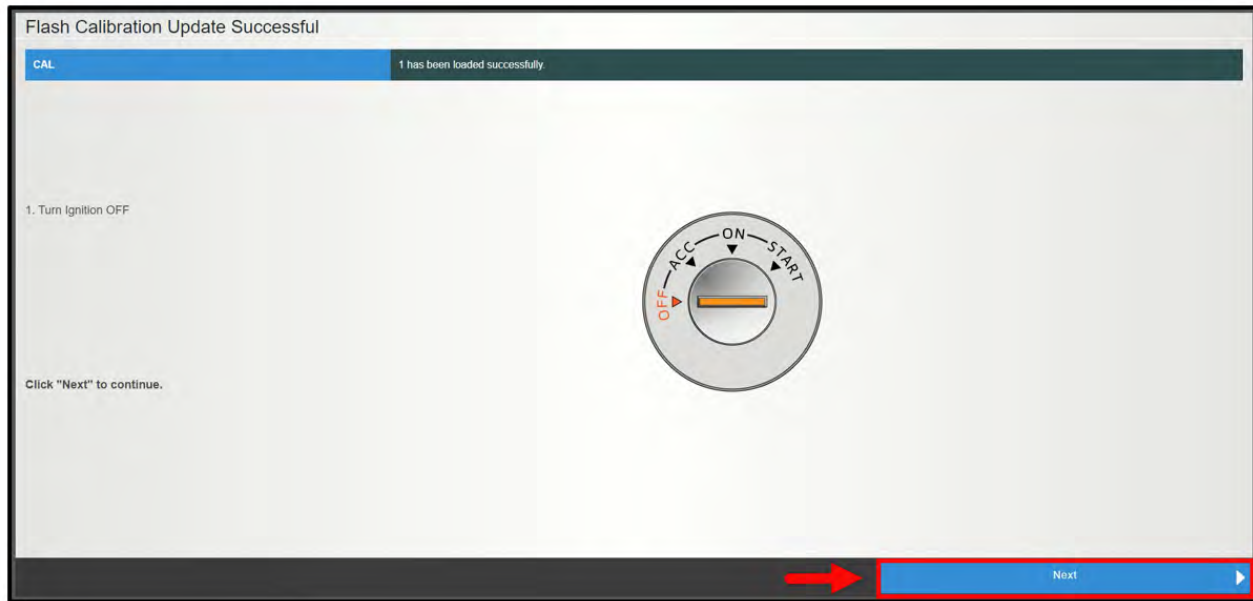


Cycle the power switch  as per the GTS+ and click the “Retry” button to continue.

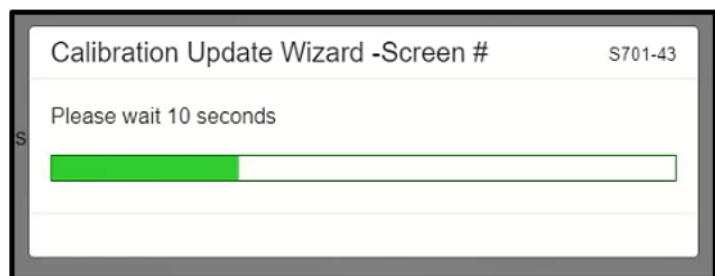



*Continued...*

**STEP 27:** The “Flash Calibration Update Successful” window will display. Turn the power switch  to the OFF position. Click the “Next” button to continue.



**NOTE:** A Progress bar will be displayed.  
**DO NOT** operate the power switch while the bar is shown.



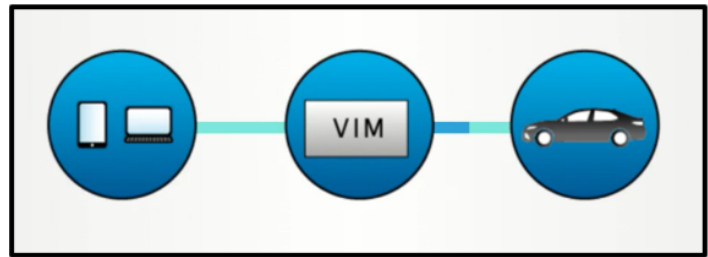
**STEP 28:** Follow the on-screen instruction. Turn the power switch  to the ON position. Select the “Next” button to continue.



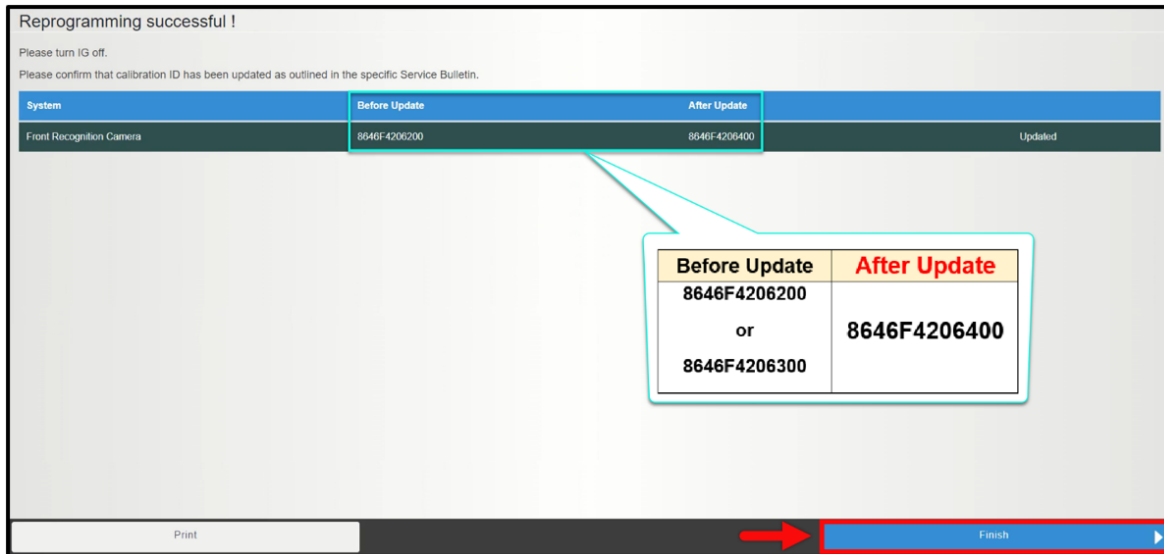
*Continued...*



**NOTE:** A Progress bar will be displayed.  
**DO NOT** operate the power switch while the bar is shown.

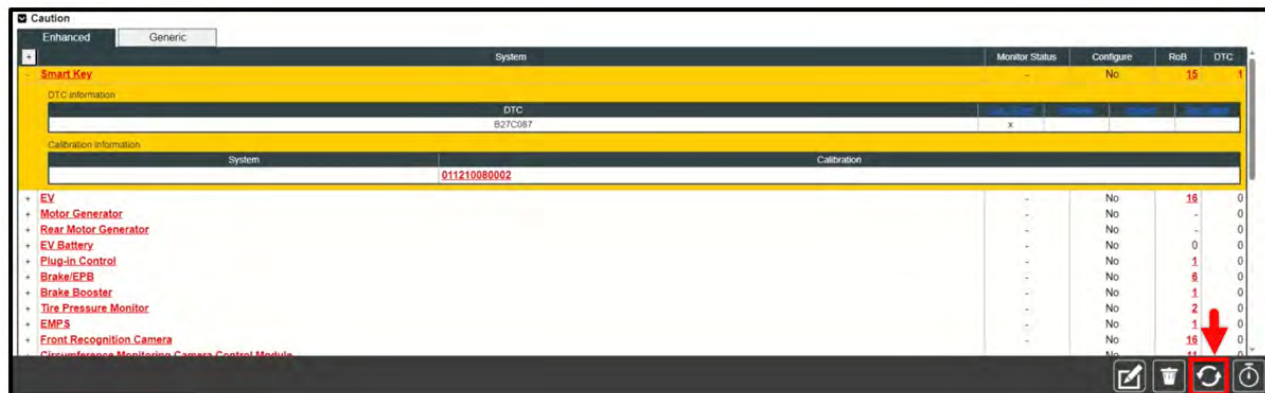


**STEP 27:** Confirm the “AFTER UPDATE” calibration ID is 8646F4206400. Click the “Finish” button.



**IMPORTANT:** If the reprogramming procedure does not complete successfully, reattempt reprogramming up to two more times. If the third attempt does not complete successfully, replace the forward recognition camera.

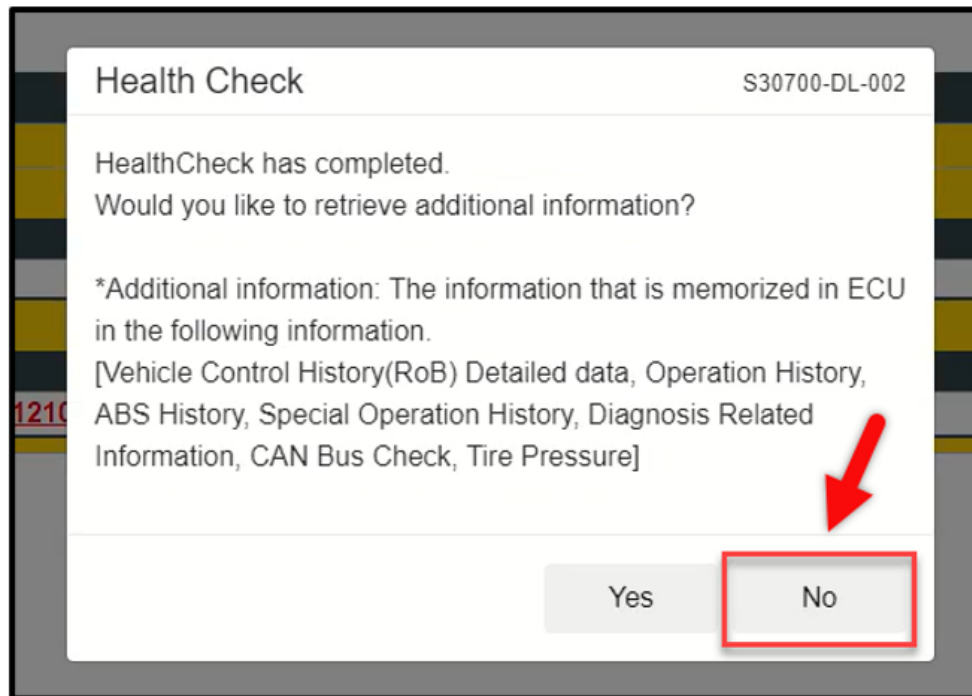
**STEP 27:** Return to the GTS+ window. Perform the “Health Check” a second time by selecting the button in the lower right corner of the Stared Data tab window.



*Continued...*



While the Health Check is being performed, a pop-up will be displayed asking if you would like additional information retrieved. Click the “No” button to continue.



**STEP 28:** Clear any DTC(s) that may have been detected during reprogramming. If no DTC(s) are detected, the procedure is complete.

#### **SERVICE PROGRAM IDENTIFICATION LABEL:**

Type or print the necessary information on a Campaign Identification Label. The completed label should be attached to the vehicle’s left side radiator support bracket located behind the driver side headlamp. Additional labels are available through normal parts ordering channels. The part number is MSA6P1302, which comes as one sheet of 20 labels.

Part Number	Applicability	Description	Order Quantity
MSA6P1302	All Models	Campaign Completion Labels (contains one sheet of 20 labels)	1

<b>SUBARU</b>
Campaign Code
<b>WRG-23</b>
COMPLETED
DIST./DEALER NO.
SERIAL NO.
<b>DO NOT REMOVE</b>

*Continued...*

## CLAIM REIMBURSEMENT AND ENTRY PROCEDURES:

Credit to perform this service program will be based on properly completed repair order information. Retailers may submit claims through [Subarunet.com](http://Subarunet.com).

Labor Description	Labor Operation #	Labor Time	Recall Code
FORWARD CAMERA SOFTWARE INSPECTION ONLY	A167-730	0.2H	WRG-23
FORWARD CAMERA REPROGRAMMING	A167-731	0.8h	

**IMPORTANT:** Always note the original Calibration ID the vehicle came in with on the repair order **before** reprogramming and, make sure to list the **NEW** Calibration ID for any newly installed programming (as confirmed from the actual control module **AFTER** installation). The **NEW** Calibration ID must also be noted on the repair order as this information is required for entry in the Miscellaneous Detail field during claim submission.

## IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.

*Continued...*

**This notice applies to the VIN identified in the address section printed below**



PO Box 9103  
Camden, NJ 08101-9877  
844-373-6614  
www.subaru.com

**Subaru Service Program WRG-23  
October 2023**

**Dear Subaru Owner:**

We would like to thank you for your selection of a Subaru vehicle. We take pride in our products and are committed to your continued satisfaction.

Subaru of America, Inc. (Subaru) is initiating a service program to update the forward recognition camera software on certain 2023 model year Solterra vehicles. You have received this notice because our records indicate that you currently own one of these vehicles.

**REASON FOR THIS SERVICE PROGRAM**

Due to the programming of the software within the forward recognition camera, there is a possibility that under certain conditions, EyeSight® **driver assist** functions could become inoperative for approximately four seconds before rebooting and becoming operational again.

**REPAIR**

Your Subaru retailer (dealer) will update the forward recognition camera software at no cost to you.

**WHAT YOU SHOULD DO**

Please contact your Subaru retailer for an appointment to have this repair performed.

**HOW LONG WILL THE REPAIR TAKE?**

The actual time to perform this repair is less than one hour. Your retailer can provide you with a better estimate of the overall time for this service visit, as it may be necessary to make your vehicle available for a longer period of time for scheduling purposes.

**CHANGED YOUR ADDRESS OR SOLD YOUR SUBARU?**

If you have moved or sold your vehicle, please go to <https://www.subaru.com/support/customer-support.html> to send us your information.

**IF YOU NEED FURTHER ASSISTANCE:**

To locate the nearest Subaru retailer, you can access our website at [www.subaru.com](http://www.subaru.com) and select 'Find a Retailer.'

For additional information, please go to: <http://www.wrg23.service-campaign.com>.

If you need additional assistance, please contact us directly:

- By e-mail: Go to [www.subaru.com](http://www.subaru.com), Customer Support and select 'Contact Us'
- By telephone: 1-844-373-6614  
Monday through Friday between 8:00 a.m. and 7:00 p.m. ET
- By U.S. Postal mail: Write us at Subaru of America, Inc.,  
Attn: Customer Advocacy Department,  
P.O. Box 9103, Camden, NJ 08101-9877

Please contact us immediately if the Subaru retailer fails or is unable to make the necessary repairs free of charge.

Your continued satisfaction with your Subaru is important to us. Please understand that we have taken this action in the interest of your vehicle's proper operation. We sincerely apologize for any inconvenience this matter may cause and urge you to schedule an appointment as soon as possible to have this repair performed.

Sincerely,

Subaru of America, Inc.

A subsidiary of SUBARU CORPORATION