ATTENTION:

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

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

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![Subaru logo] **SUBARU**

QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY:	2016-18MY Legacy/Outback
	2016-18MY Impreza
	2016-18MY Crosstrek
	2016-18MY Forester
	2017-18MY WRX

NUMBER: 15-280-21R

DATE: 03/18/21

REVISED: 03/25/21

SUBJECT: Gen1 Telematics Reprogramming for 3G Sunset

APPLICABILITY:

Applicable Vehicle	Specification	MY
LEGACY / OUTBACK	Telematics equipped with active subscription	2016 – 18
IMPREZA	Telematics equipped with active subscription, except MT with Push-Button Start*	2016 - 18
CROSSTREK	Telematics equipped with active subscription	2016 - 18
FORESTER	Telematics equipped with active subscription	2016 - 18
WRX/STI	Telematics equipped with active subscription, except MT with Push-Button Start*	2017 - 18

*See Notes on Model Applicability below for important information.

Notes on Model Applicability:

- Vehicles equipped with manual transmission and push-button start will follow DCM replacement procedure as outlined in TSB **15-279-21**: **Gen1 Telematics DCM Replacement for 3G Sunset** which is applicable to manual transmission vehicles with push-button start ONLY.

- A vehicle which is part of the affected Gen1 Telematics population and **currently subscribed** to any STARLINK Telematics Services level is eligible for this no-charge DCM software update. **Unsubscribed vehicles are not included in this no-charge DCM reprogramming update. NEVER attempt this update on any unsubscribed vehicle.**

IMPORTANT: Vehicle Coverage and an active subscription for all affected cars must be confirmed using the Vehicle coverage Inquiry function on subarunet.com.

Continued...

OVERVIEW OF CUSTOMER CONSIDERATION:

NOTE: A copy of the Customer Letter is supplied for reference at the end of this bulletin.

IMPORTANT WARNINGS:

- **NEVER release the vehicle back to the customer until the GREEN Telematics LED is illuminated and the Telematics System passes all functional and operational checks.** The only exception to this requirement would be an external concern affecting DCM operation which the customer has been informed of but elects not to correct prior to receiving this update.

- **Any Technician or other retailer personnel who, despite service documentation and training to the contrary performs a DCM swap on a subscribed vehicle must NEVER release the vehicle back to the customer until proper operation of the Telematics system has been confirmed.**

Before Beginning the No-Charge DCM Reprograming Service:

Vehicles affected by this reprogramming service may also have an open Service Campaign WQZ-61R. If the Vehicle Inquiry indicates WQZ-61R is open, proceed as follows:

1. The vehicle is **currently subscribed** to Telematics: WQZ-61R and 3G Sunset reprogramming service are indicated as open, **perform this 3G Sunset reprogramming service ONLY**, and both the WQZ-61R campaign and the 3G Sunset service programs will close.

2. The vehicle is **not currently subscribed** to Telematics: WQZ-61R campaign and 3G Sunset reprogramming service are indicated as open, **perform WQZ-61R ONLY.** Refer to the WQZ-61R campaign bulletin for full details.

Reprogramming File Information:

Filename	Keyword	Starting DCM software version
86229DCM01-1.pak	4F3D5B8E	DCM_05.00.10 or 05.00.17
86229DCM01-2.pk2	3B7ED9D2	DCM_05.00.22 or 05.00.30
86229DCM02.pk2	D0F868F1	DCM_06.03.17_20191029

LED	Status	Situation
Solid Green	SOS ((i))	System is normal. A subscription to the SUBARU STARLINK service has been established*.
Solid Red	SOS ((i))	A system malfunction has occurred. Do not proceed with DCM software update until root cause is determined, and Telematics LED is GREEN
Flashing Green or Red	SOS ((i))	SUBARU STARLINK service is currently communicating (e.g. Voice call, Stolen Vehicle Recovery, etc.).
No Light	SOS ((i))	A subscription to the SUBARU STARLINK service has not been established. Vehicle not eligible for DCM software update until subscription verified.
Solid Green and Red	SOS ((i))	SUBARU STARLINK service is currently having communication problems Do not proceed with DCM software update until root cause is determined, and Telematics LED is GREEN

Continued...

SERVICE PROCEDURE FOR 3G SUNSET REFLASH:

NOTE: Flow Charts to support the procedures below are provided starting on pg. 34.

Vehicle Preparation:

1. Enter the vehicle and observe the Telematics LED status. (See chart above as reference).

   a) Is the STARLINK Telematics **GREEN** LED on?

      • **NO,** proceed to **Appendix B**: **TROUBLESHOOTING CONCERNS FOUND PRIOR TO UPGRADE** on page 31.

      • **YES**, continue to **Step 2** below.

2. <u>**Caution:**</u> Perform a functional check of the Telematics system by pushing the blue iButton. When the STARLINK operator answers, request the VIN and LOCATION of the vehicle.

   CHECK: Was the iButton call **Successful**?

      • **YES:** Proceed to **Step 3**.

      • **NO: STOP THE UPGRADE PROCESS.** The customer must be notified as this condition must be diagnosed and corrected before proceeding further.

NOTE: This step may need to be performed outside with a clear view of the sky. It also may require multiple attempts to connect to an operator depending on available cellular coverage.

NOTE: If the functional check of the Telematics system fails and the customer declines repairs, **STOP THE UPGRADE PROCESS.** Document the Technician's findings on the repair order before returning the vehicle to the customer.

3. Connect the SSM4 and continue to **Step 4**.

Continued...

4. Procedure to Verify DCM Software Version ID:

a. Click "Each System" on the left-hand menu.
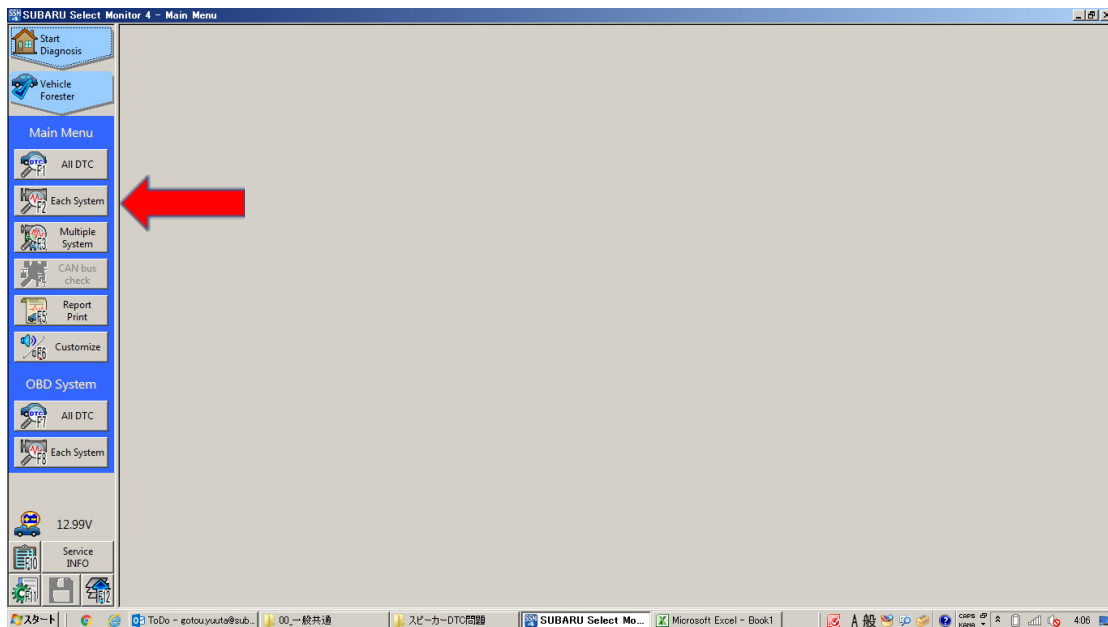
b. Select "Telematics" from the Systems List.
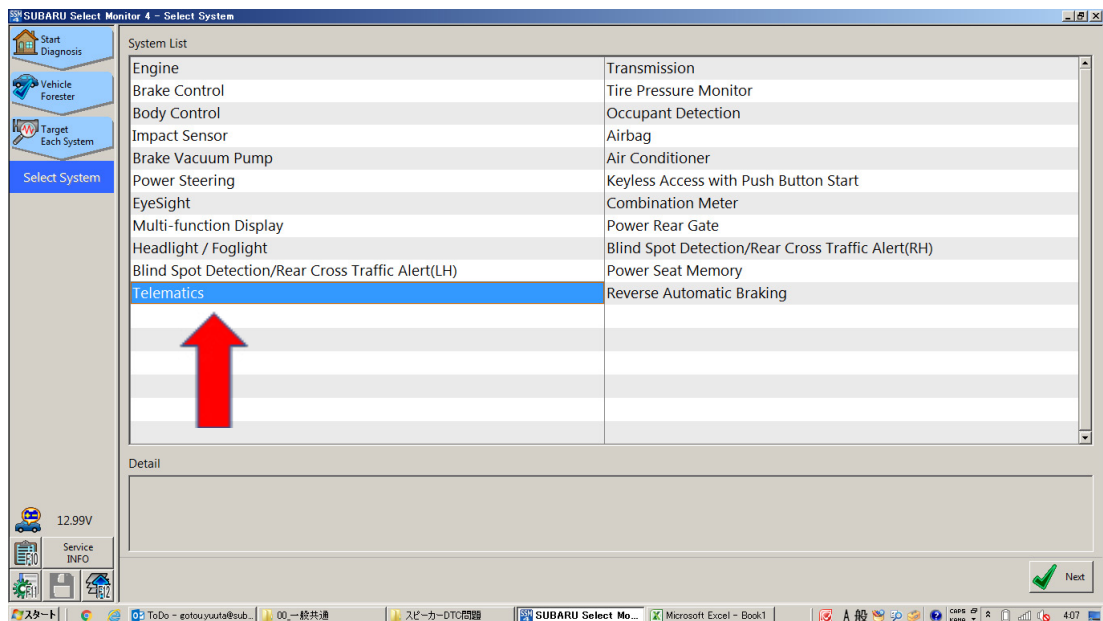
Continued...

c. Click "Work Support" on the left-hand menu.
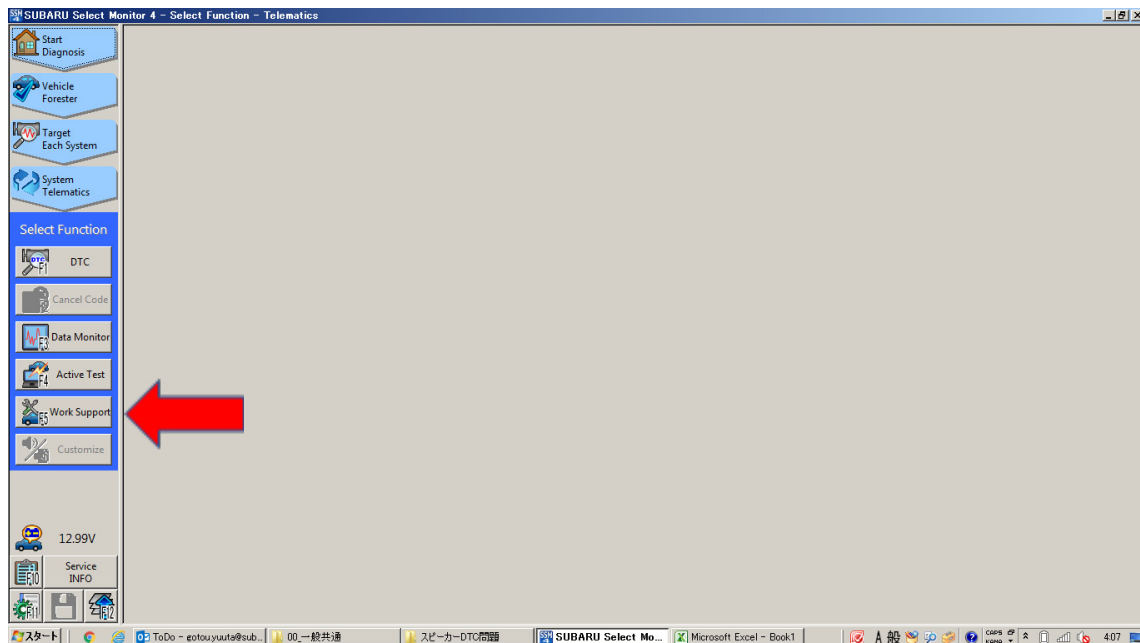
d. Select "Software Information" from the Work Support Items list.
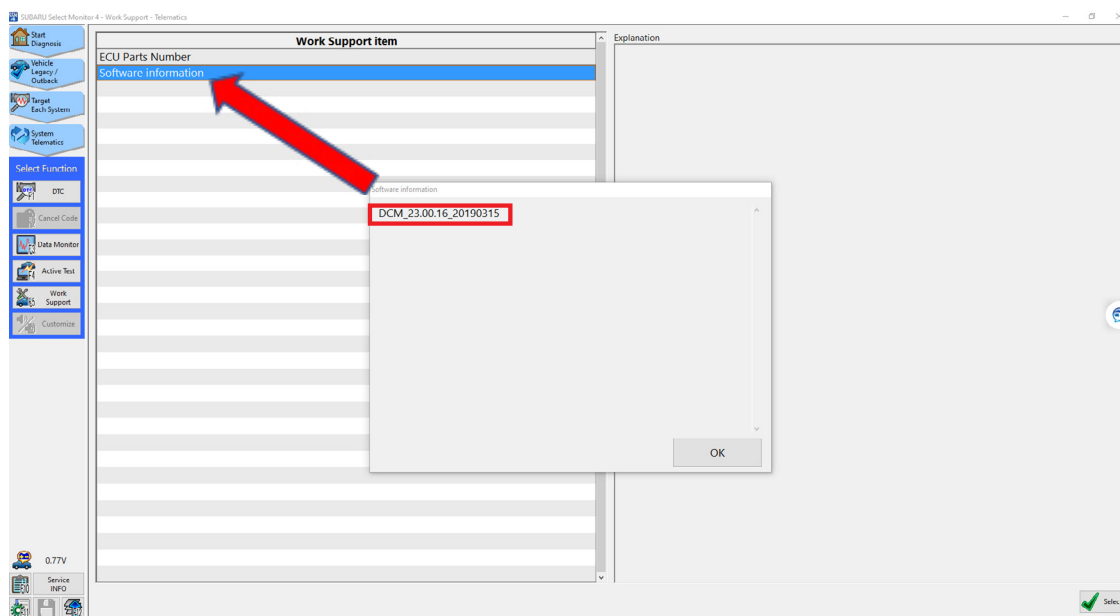
e. Record the current version of software on RO for reference.

The DCM version verification procedure is now complete. Proceed to **Step 5**.

5. If the current DCM software version is **DCM_06.00.17_20190816**, the vehicle already has the most recent software version installed. **STOP,** proceed to the **Claim Reimbursement, and Entry Procedures** section and process a Version Check Only claim.

Continued...

6. If the current DCM software version is other than **DCM_06.00.17_20190816**, disconnect the DSTi and continue to **Appendix A: 12V BATTERY / POWER SUPPLY PREPARATIONS** on page 29 to ensure the vehicle battery is connected to the required Midtronics charger set to Power Supply Mode.

7. With the vehicle connected to Midtronics charger in Power Supply mode and the battery voltage stabilized:

   a) If the current software version is **DCM_05-00-22 or 05-00-30** proceed to **Step 8**.

   b) If the current software version is **DCM_05-00-10 or 05-00-17**, proceed to **Step 9**.

   c) If the current software version is **DCM_06.03.17_20191029** proceed to **Step 10**.

8. If the current version of DCM software from **Step 6** above is 05.00.22 or 05.00.30, proceed to **Step 1**, Phase **1**: Flashing intermediate **86229DCM01-2.pk2** on Page 8.

   a) **WARNING:** **USING THE WRONG FILE FOR REFLASHING WILL IRREPARABLY DAMAGE THE DCM.** Always confirm the starting DCM software version and follow the corresponding upgrade path.

   b) If the update procedure fails at any time during the first reflash, move immediately to DCM replacement. Reference TSB **15-279-21**: Gen1 Telematics DCM Replacement for 3G Sunset, starting with **Step 4** of the DCM replacement procedure.

9. If the current version of DCM software from **Step 6** above is **05.00.10** or **05.00.17**, proceed to **Step 1** Phase **1**: Flashing intermediate **86229DCM01-1.pak** on Page 15.

   a) **WARNING:** **USING THE WRONG FILE FOR REFLASHING WILL IRREPARABLY DAMAGE THE DCM.** Always confirm the starting DCM software version and follow the corresponding upgrade path.

   b) **If the procedure fails at any time during the first reflash, move immediately to DCM replacement.** Reference TSB **15-279-21**: Gen1 Telematics DCM Replacement for 3G Sunset starting with **Step 4** for the DCM replacement procedure.

10. If the current DCM software version from **Step 6** above is **DCM_06.03.17_20191029**, Phase 1 flashing is complete. Proceed to **Phase2: Flashing Gen1 VoLTE 86229DCM02.pk2 on page 23.** (**NOTE:** It is unlikely a vehicle will present on arrival at the retailer with this software version. This version should be present after the Phase1 reflashing procedure only.)

    a) If the procedure fails during the first reflash of **86229DCM02.pk2**, a second reflash attempt should be performed.

    b) Before starting the second reflash, fully close out of FlashWrite.

    c) Turn the ignition OFF, **WAIT** 30 seconds then turn the ignition back ON.

    d) Start at the beginning of the procedure for **Phase2: Flashing Gen1 VoLTE 86229DCM02.pk2** to complete the upgrade.

Continued...

e) If the procedure fails for a second time, time (extremely RARE case), move immediately to DCM replacement. See the Parts Information section on page **32** of this bulletin for part number information on DCMs which already include this update. Reference TSB **15-279-21 Gen1 Telematics DCM Replacement for 3G Sunset** starting with **Step 4** of the DCM replacement procedure.

Continued...

Phase 1: Flashing intermediate **86229DCM01-2.pk2** (current software version of DCM is **05.00.22 or 05.00.30**):

WARNING: Ensure the Midtronics GR8 / Midtronics DCA-8000 set to Power Supply Mode is connected to the vehicle, the parking brake is engaged, ignition is in the "ON" position, the engine is OFF, the shift selector in NEUTRAL and the wheels are blocked. The reason this must be done is to ensure the power supplied to the DCM is not turned off. If this step is not performed, the CAN will power down the DCM during the reflash and the reflashing will fail resulting in irreparable damage to the DCM.

1. Connect the SDS Notebook and DSTi. Select **FlashWrite2** from the SDS Notebook GUI screen.

Continued...

2. Once FlashWrite 2 opens, select DCM from the VehicleSpec drop down.

    a) Complete entering the Vehicle Spec information.

    b) Click and select the PK2 file **86229DCM01-2.pk2** intermediate image in FlashWrite.
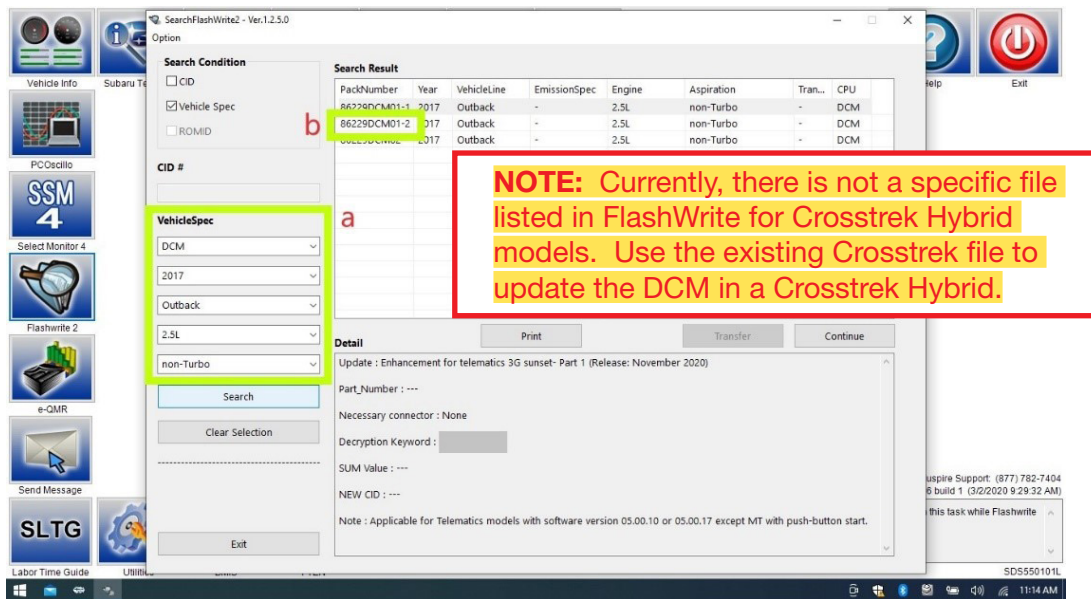
3. Enter the Decryption Keyword from the table above (3B7ED9D2) and click "**OK**."
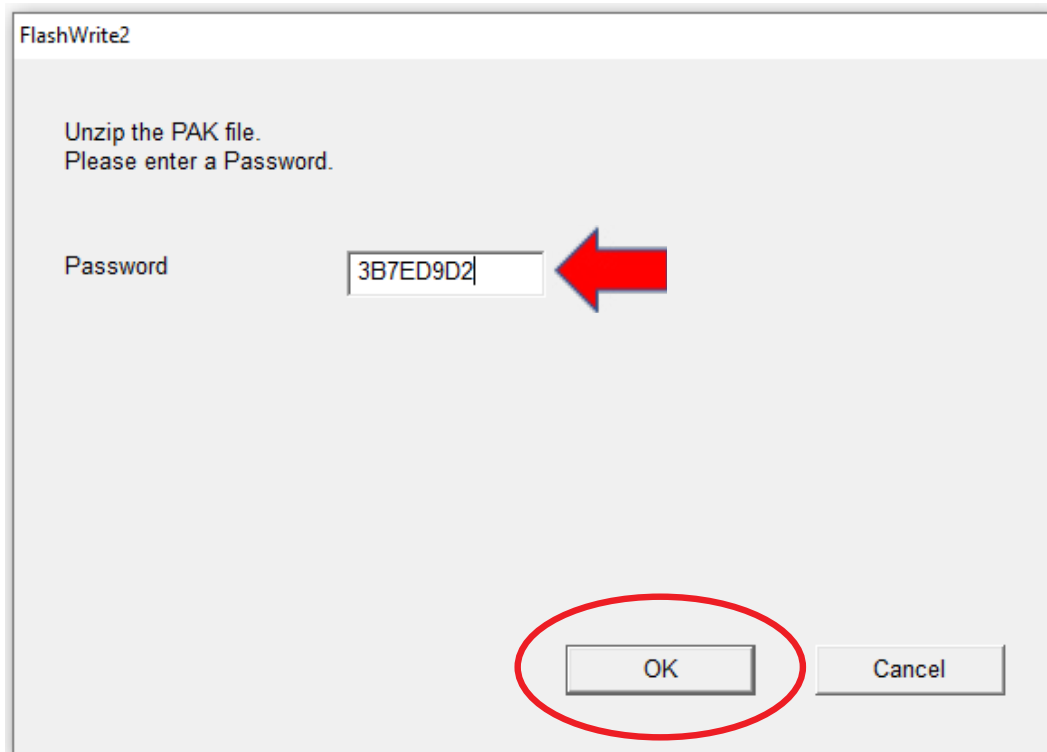
4. Turn the ignition ON and Click on '**OK**' to start the reprogram.
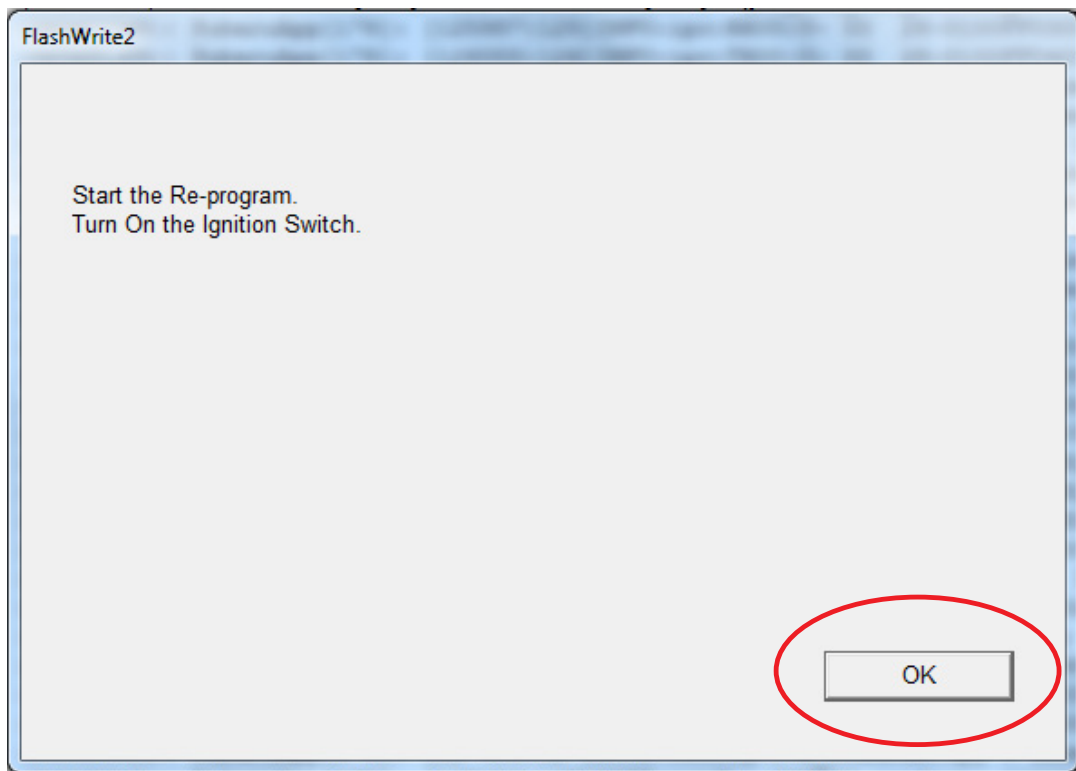
a) Part number before and after reflash will be displayed. Click '**OK**'.
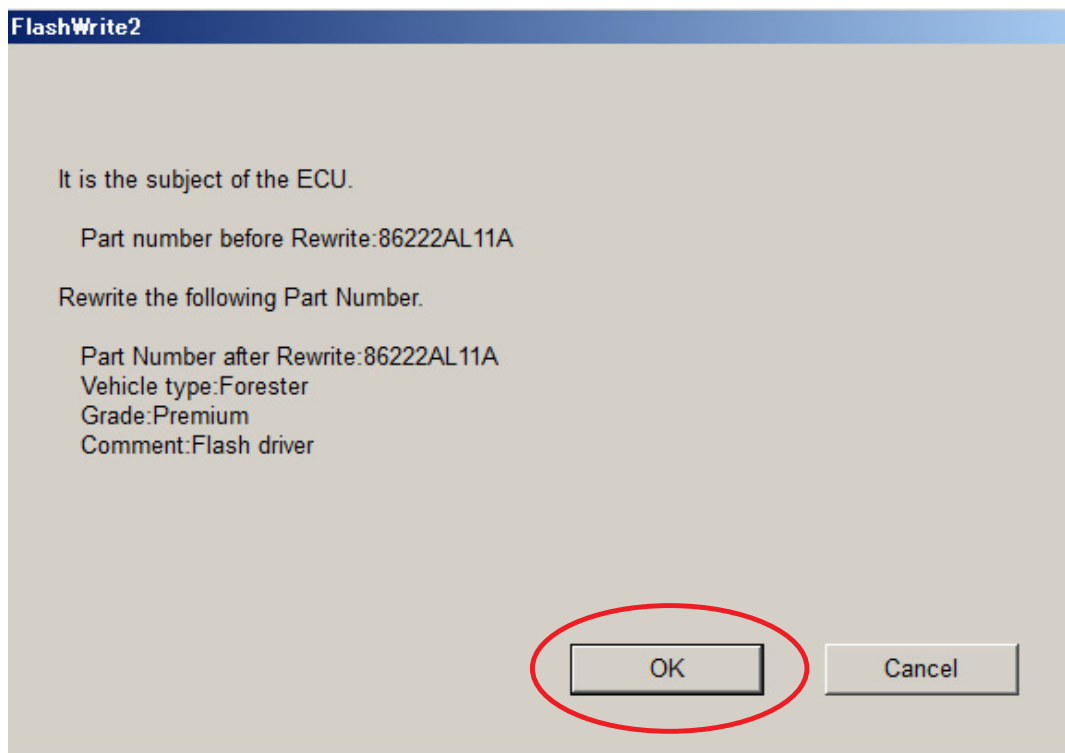
(NOTE: This screen image is an example and may not represent the installed part number. These values will be the same before and after any reflashing. The Screen will always indicate "Forester" no matter what model or model year is being reflashed.)

Continued...

b) A CAN flashing progression bar will appear and start incrementing toward 100%. The update may take up to 60 minutes to complete.
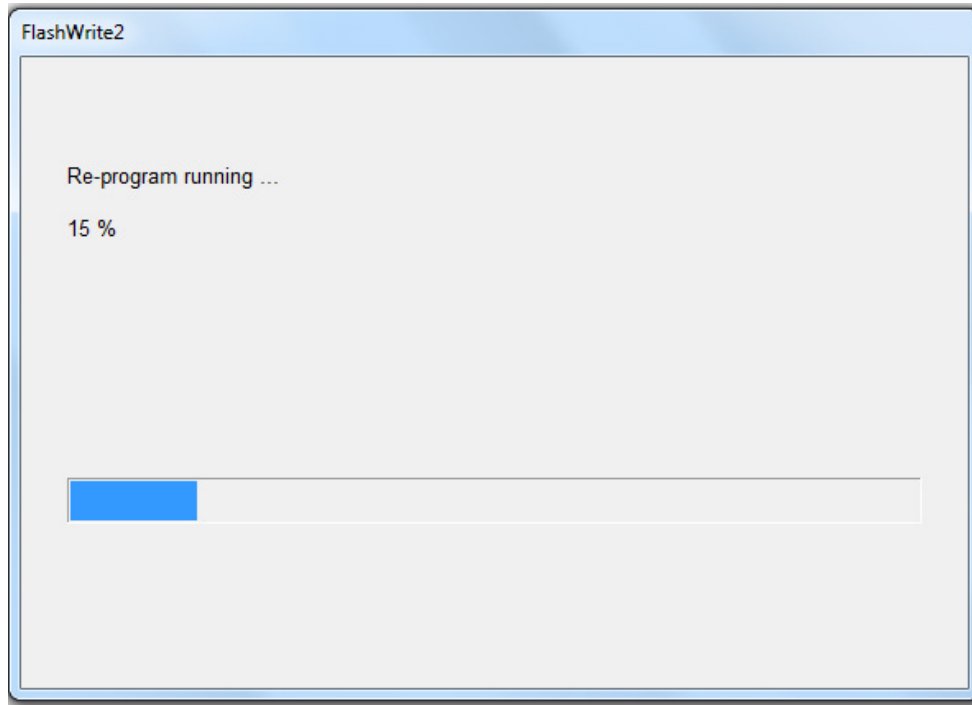
c) CRITICAL STEP: After the reprogramming is finished, always put a CVT equipped vehicle in PARK. A prompt for toggling the ignition to "OFF" will be displayed, click on '**OK**.'
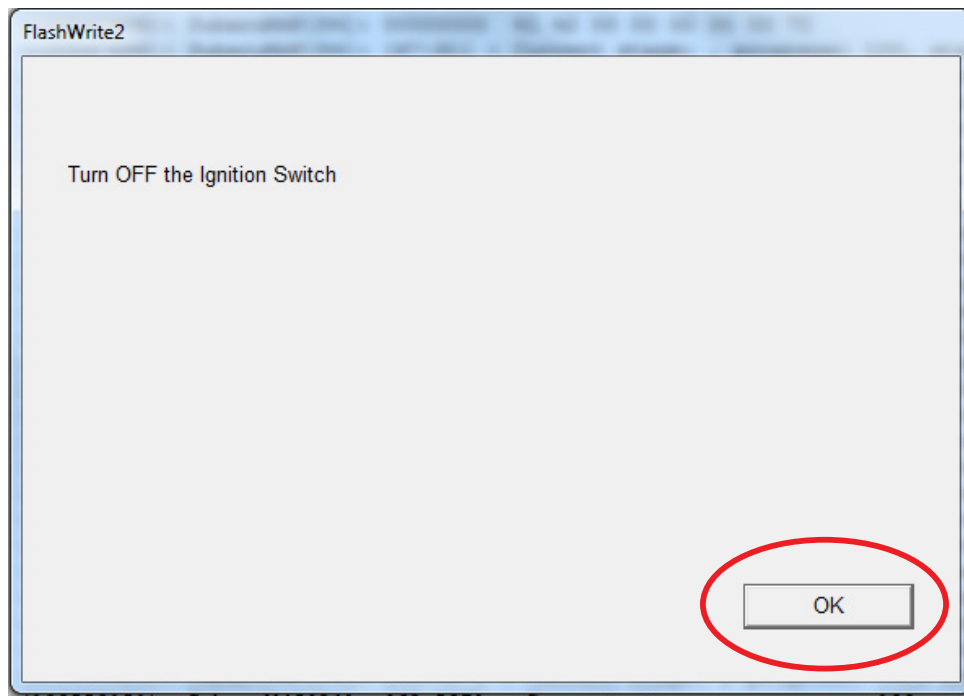
Continued...

d) CRITICAL STEP: FlashWrite will display the banner message "Please wait about 30 seconds until Unit turns off."
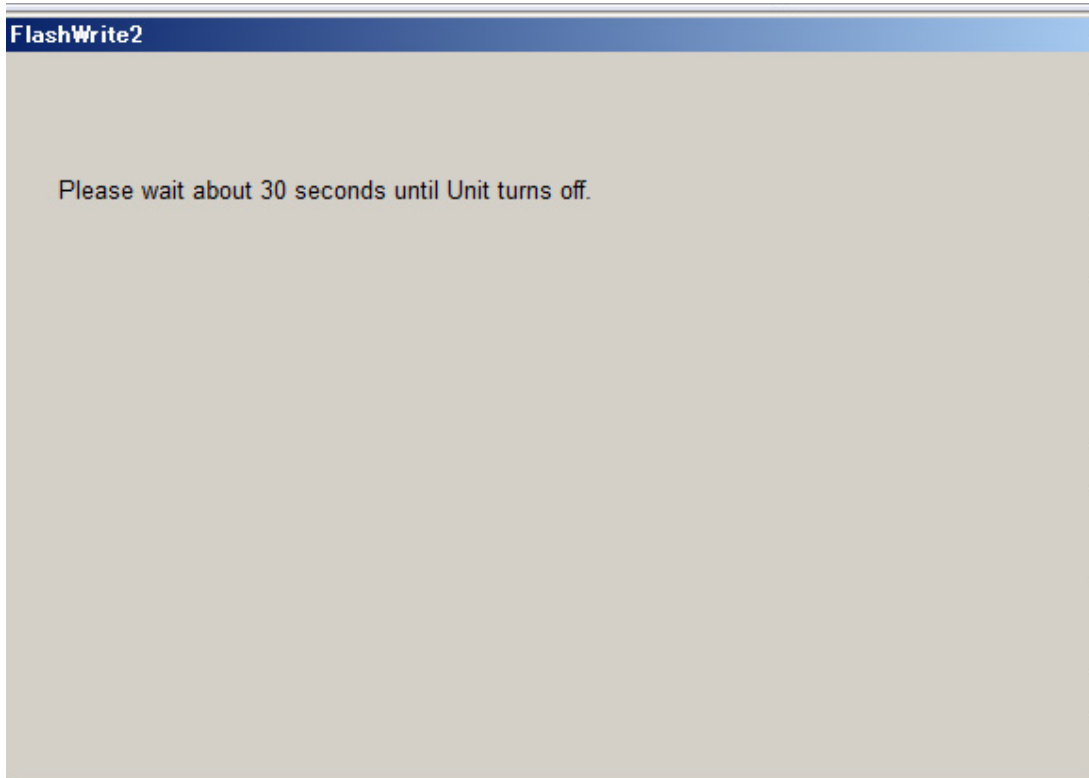
e) A prompt for toggling ignition to ON will be displayed. Click on '**OK**'

f) FlashWrite will display the banner message "Please wait a moment."
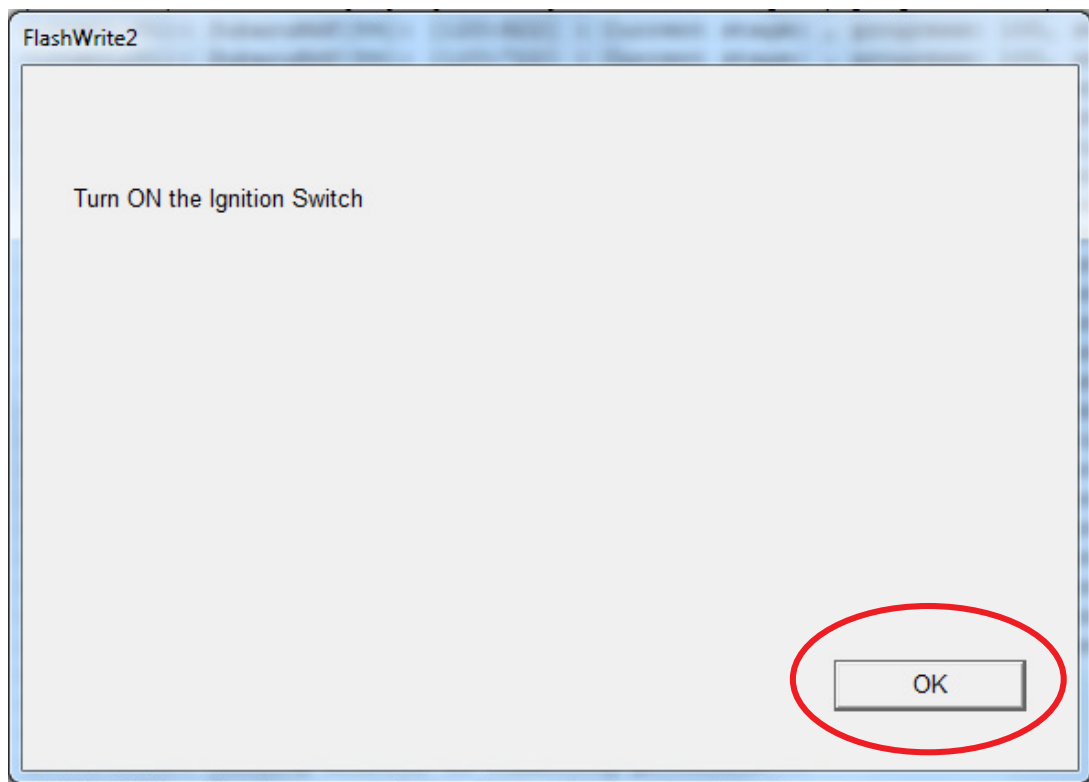
FlashWrite2

Please wait a moment

g) FlashWrite will display the banner message "Re-program was completed. Turn OFF the Ignition Switch."

FlashWrite2

Re-program was completed
Turn OFF the Ignition Switch

OK
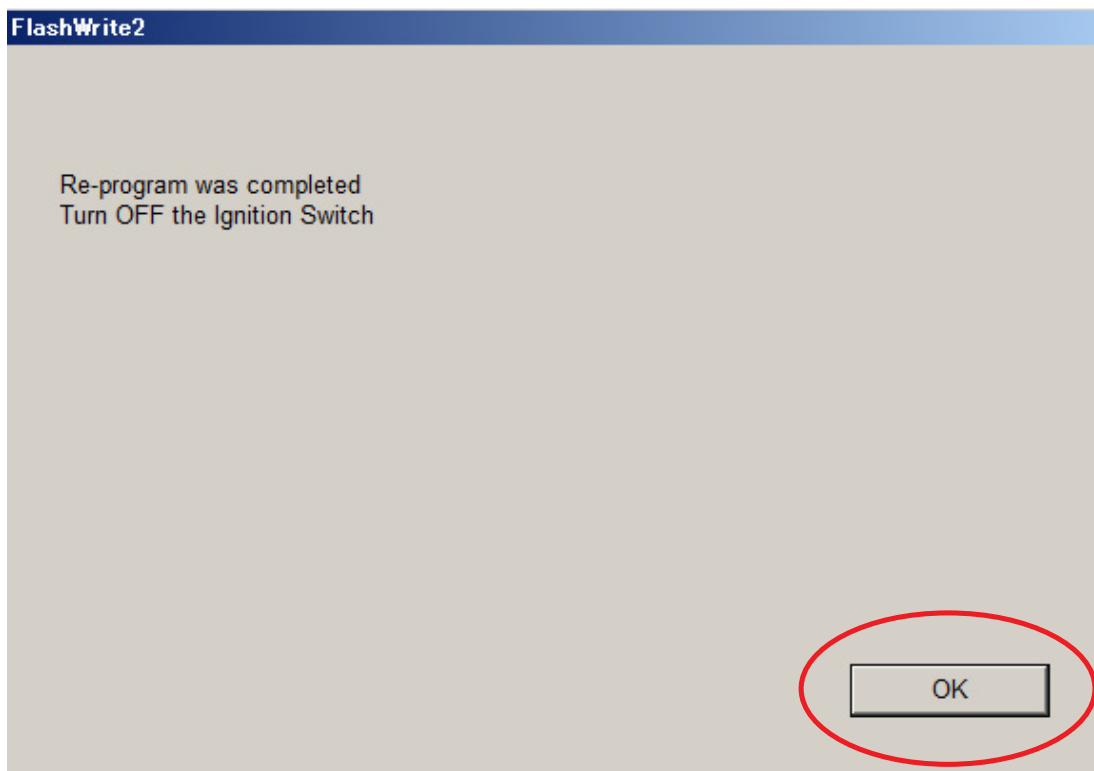
Continued...

5. Verify the new DCM software version:

    a) Confirm SSM4 and DCM communication by retrieving the current software version.

    b) Click "Each System" on the left-hand menu.

    c) Select "Telematics" from the Systems List.

    d) Click "Work Support" on the left-hand menu.

    e) Select "Software Information" from the Work Support Items List.

    f) Record the current version of software on the RO for reference.

        i. Successful retrieval of DCM software version? Proceed to **Step 7 below**.

        ii. If SSM4 cannot communicate with DCM, DCM has current DTC(s), or the DCM software version cannot be retrieved, contact Techline for assistance before proceeding.

Software information

DCM_06.03.17_20191029

OK
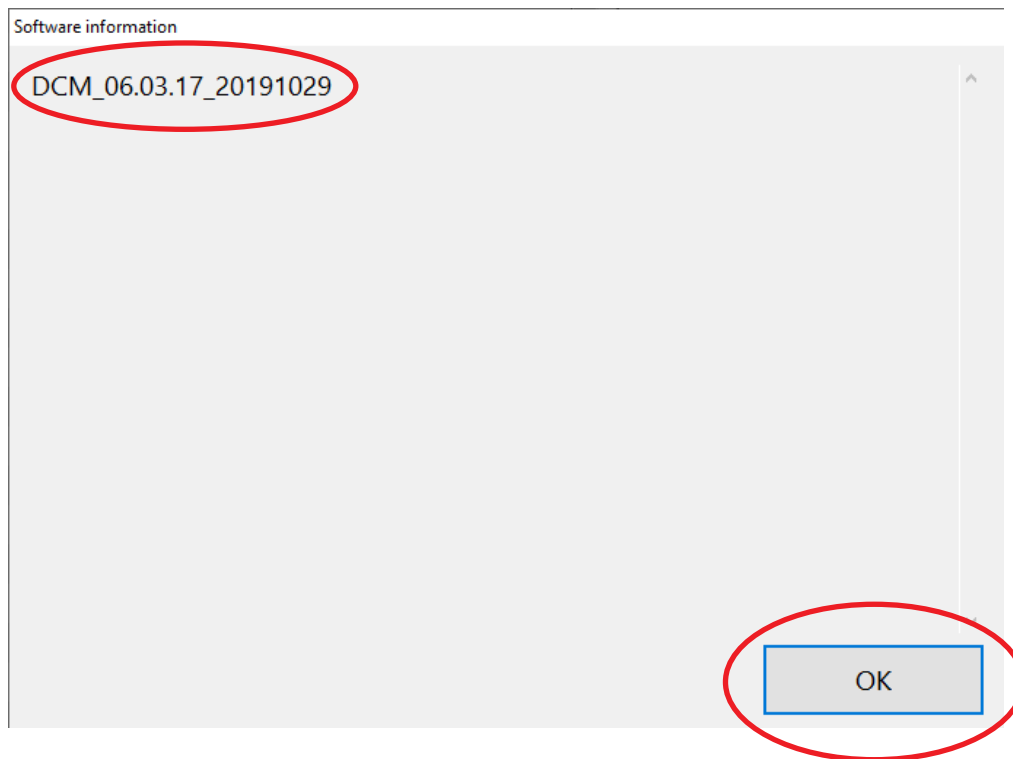
6. END OF PHASE 1 REFLASHING. Proceed to **Step 1**: **Phase 2**: Flashing Gen1 VoLTE **86229DCM02.pk2** on page 23.

Continued...

Phase 1: Flashing intermediate **86229DCM01-1.pak** (If the OE Software Version is **05.00.10** or **05.00.17**):

WARNING: Ensure the Midtronics GR8 / Midtronics DCA-8000 in Power Supply Mode is connected to the vehicle, the parking brake is engaged, ignition is in the "ON" position, the engine OFF, the shift selector in NEUTRAL and the wheels blocked. The reason this must be done is to ensure the power supplied to the DCM is not turned off. If this step is not performed, the CAN will power down the DCM during the reflash and the reflashing will fail resulting in irreparable damage to the DCM.

1. Connect the SDS Notebook and DSTi. Select **FlashWrite2** from the SDS Notebook GUI screen.

2. Once FlashWrite 2 opens, select DCM from the VehicleSpec drop down.

    a) Complete entering the Vehicle Spec information.

    b) Click and select the Pak file **86229DCM01-1.pak** intermediate image in FlashWrite.

> **NOTE:** Currently, there is not a specific file listed in FlashWrite for Crosstrek Hybrid models. Use the existing Crosstrek file to update the DCM in a Crosstrek Hybrid.

3. **CAUTIONS** will be displayed. Check the notices and click on "NEXT."

WARNING: In the screenshot above, the on-screen directions indicate to leave the vehicle in PARK, doing this will cause the reflash procedure to FAIL. The vehicle MUST BE LEFT IN **NEUTRAL** for the entire reflash procedure. Reference **Step 1** above for all the vehicle conditions required for reprogramming.

Continued...

4. Select the reprogramming device and click "**OK**".

5. Click on "Pass Thru."
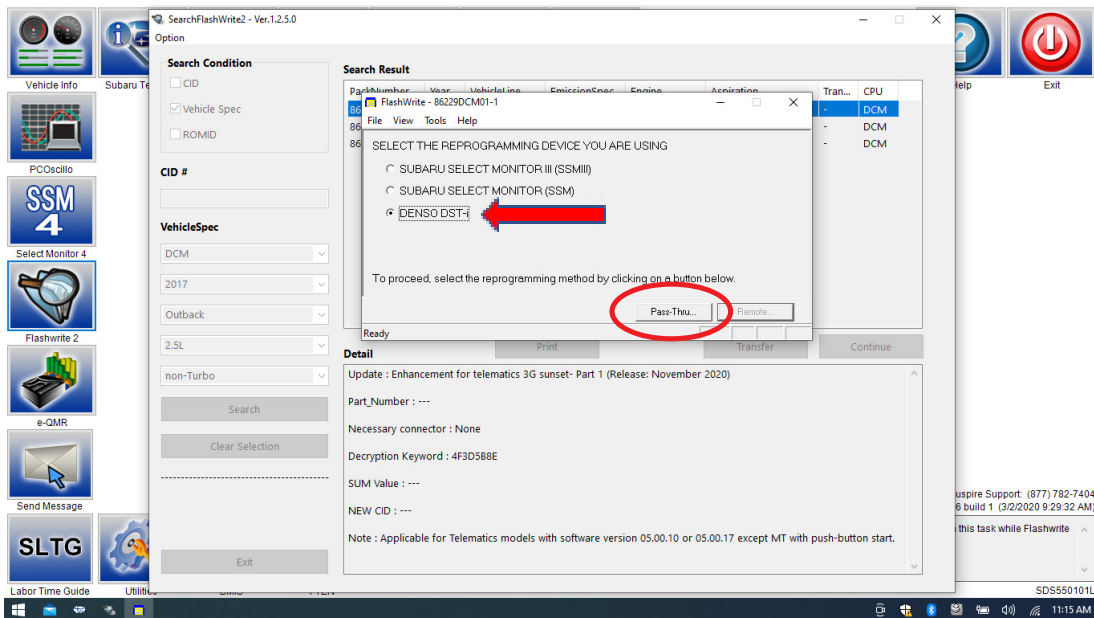
6. Confirm the ignition is "ON" and the shift selector is in **NEUTRAL**.

a) Turn on the ignition switch and click on 'Next'.
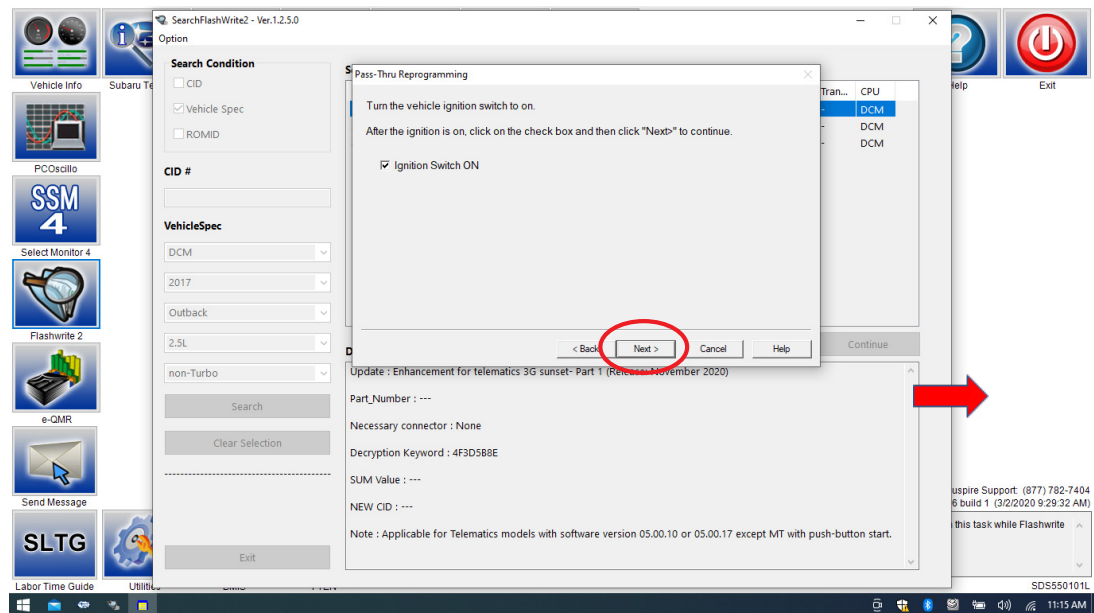
b) Pass-Thru preparation completed, click on Next to continue.
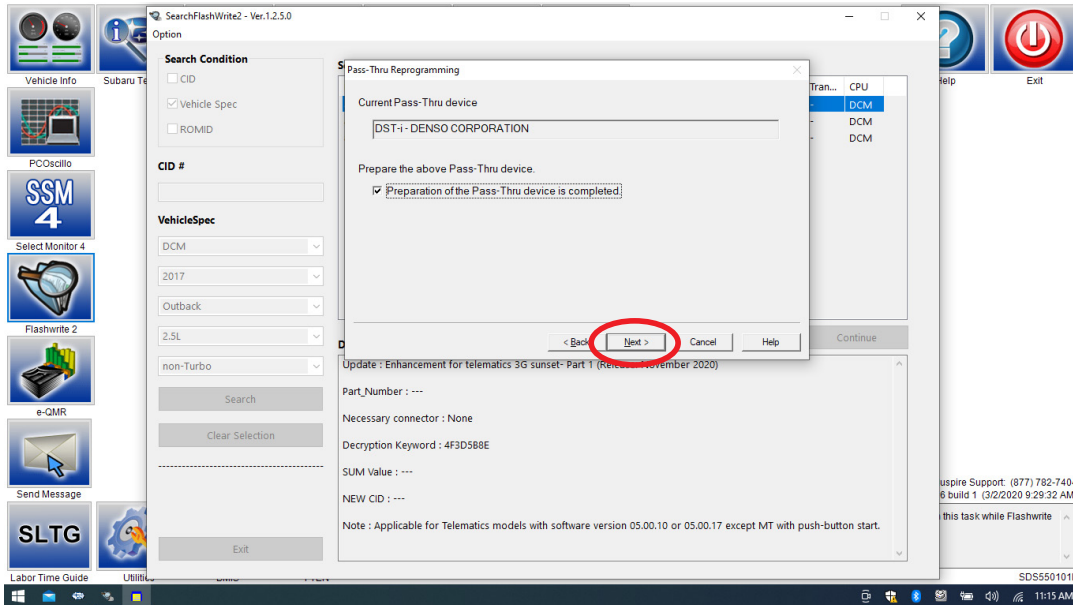
7. Enter the Decryption Keyword from the table above (4F3D5B8E) and click on "Next".
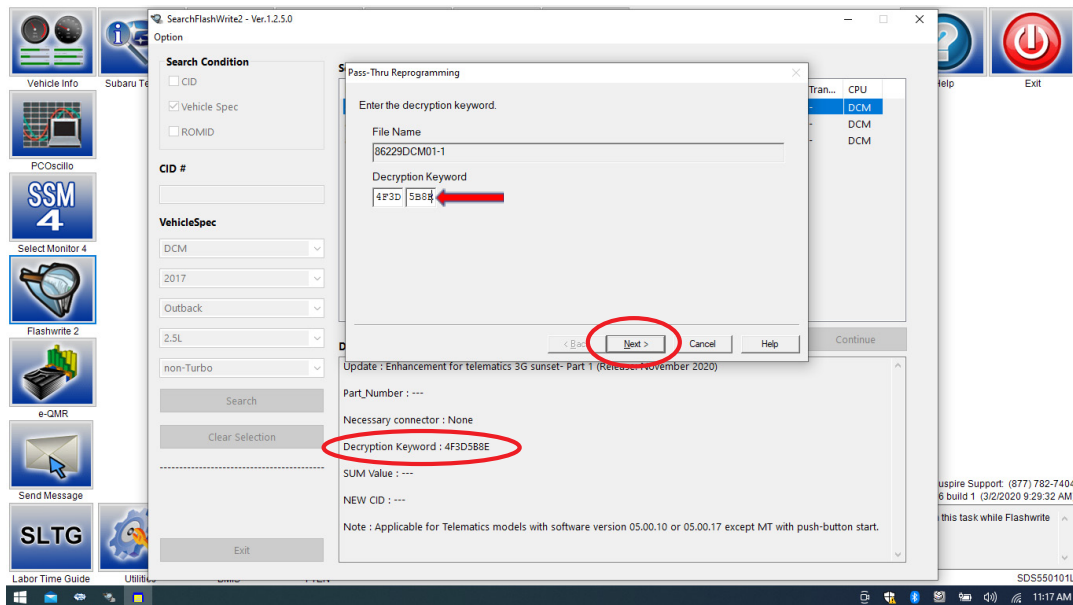
Continued...

8. Click on "Execute."
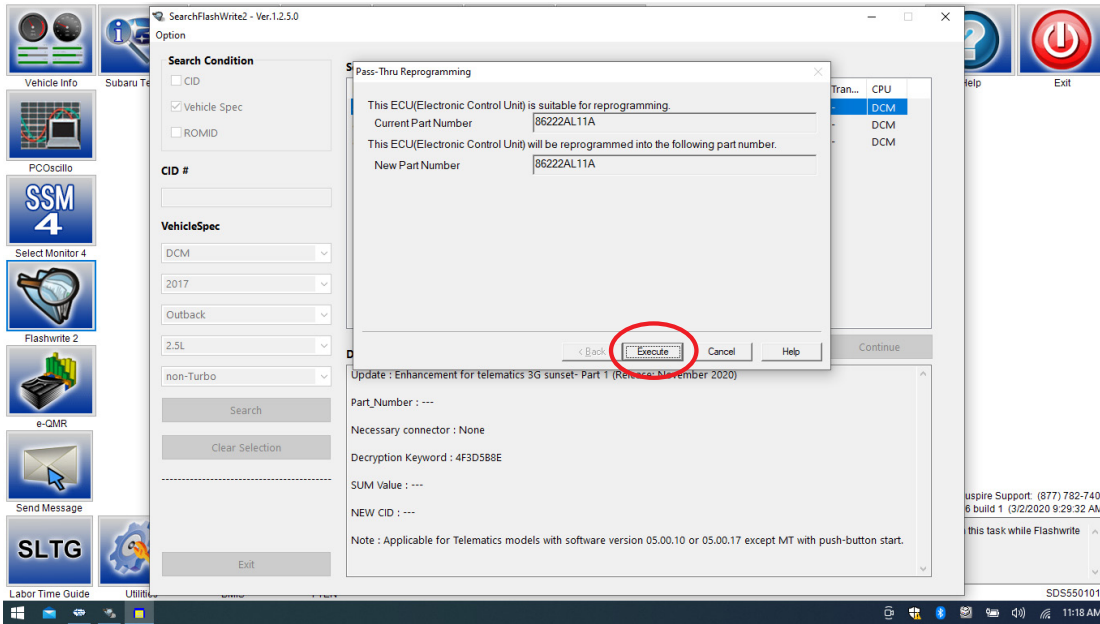
9. Reprogramming will begin. Please wait.
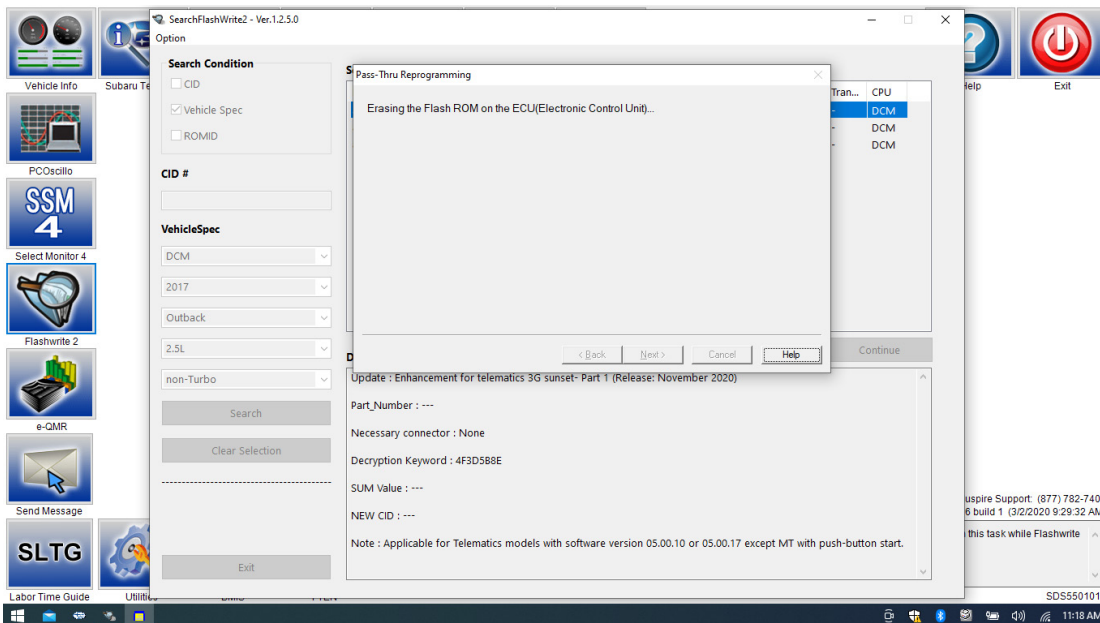
Continued...

NOTE: Pay close attention to the start of the status bar progression. Failures may occur at the beginning of the procedure. Once progress is at 5%, reprogramming should continue trouble-free until 100% complete. The update may take up to 60 minutes to complete.
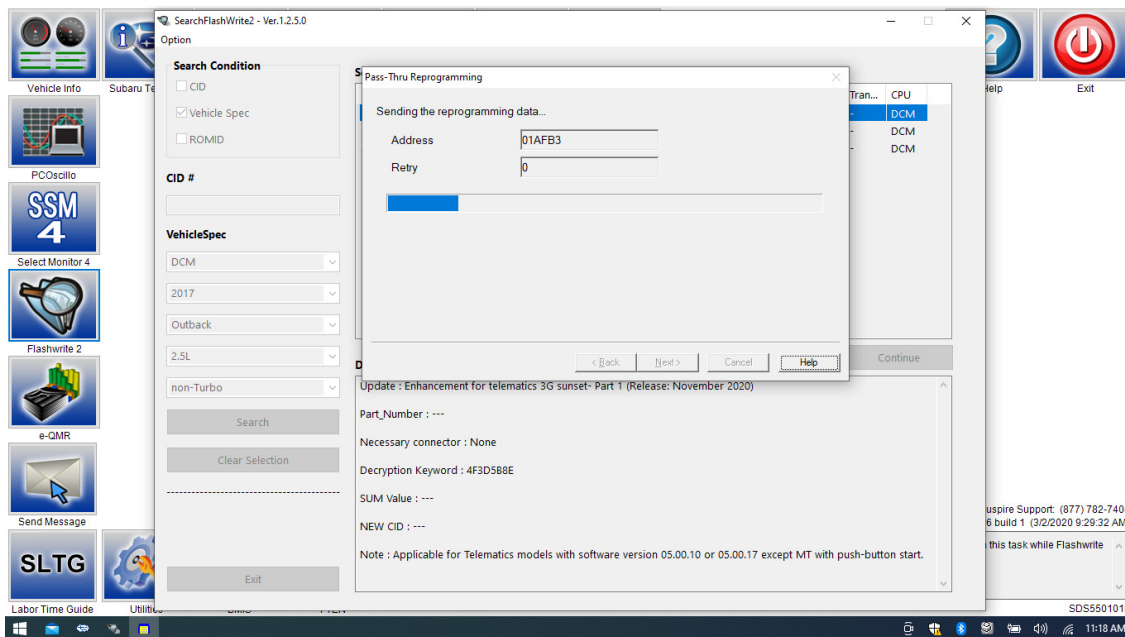
10. After finishing the reprogramming, always put a CVT equipped vehicle in PARK, turn the ignition switch OFF then click on "Next."
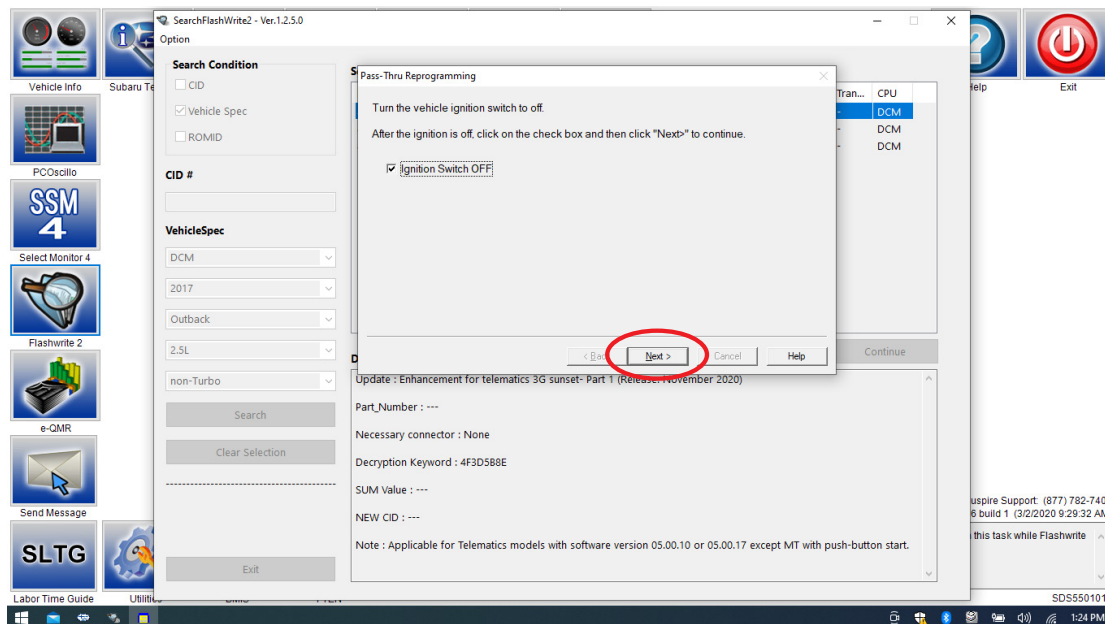
11. **CRITICAL STEP: WAIT 30 seconds**, cycle the ignition key or push-button start from OFF to ON then click "Next."
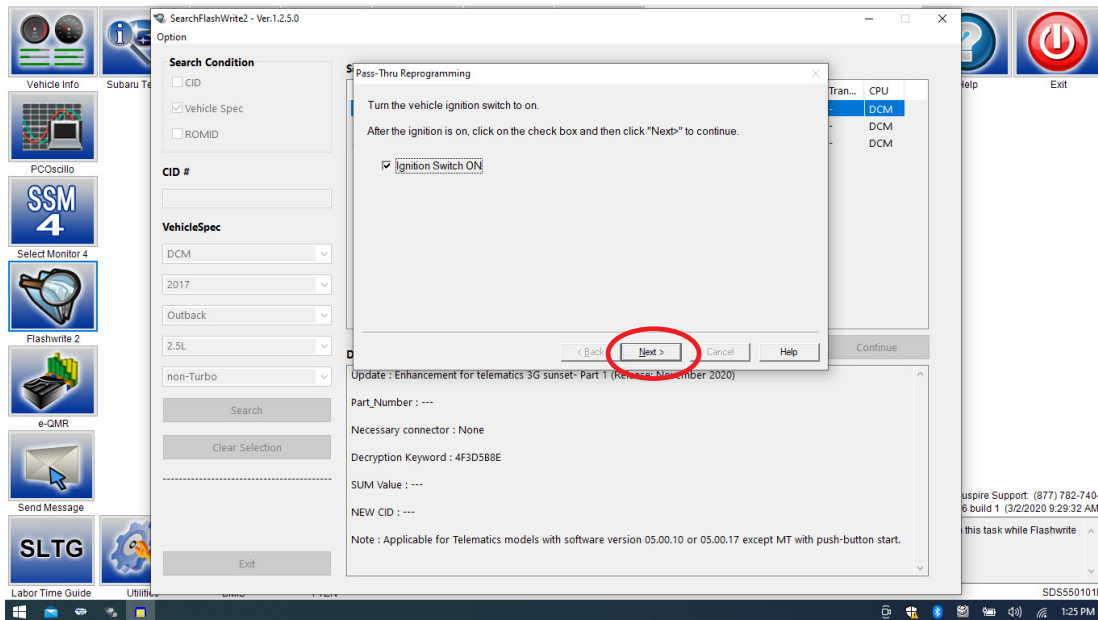
12. "Reprogramming is now complete" is displayed. Click on "Finish".
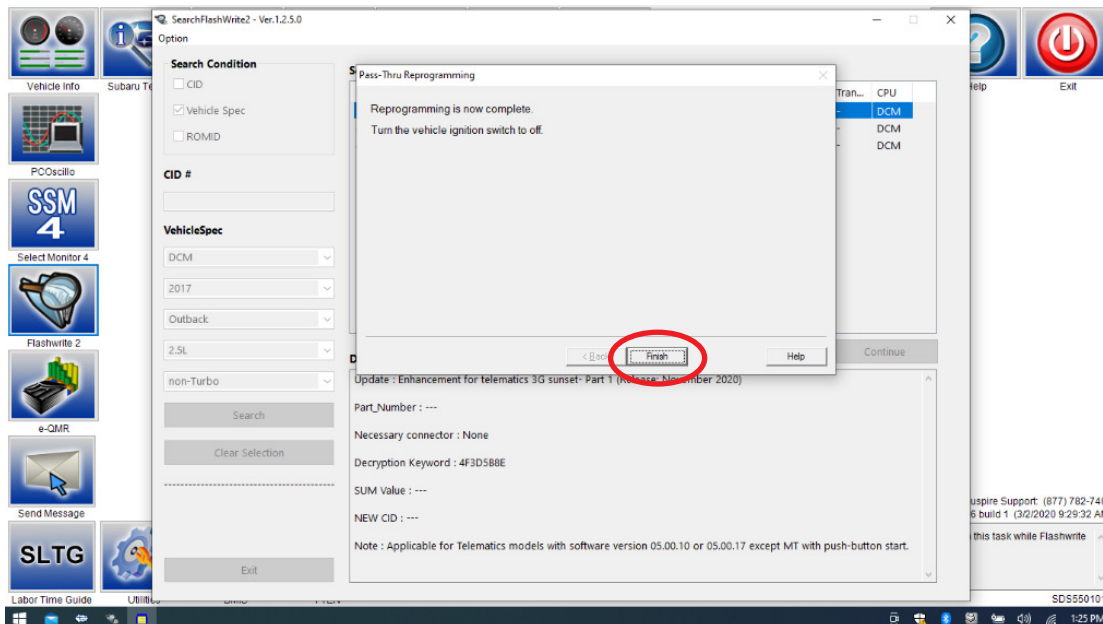
13. With the vehicle in Park and the ignition on:

   a) Confirm SSM4 and DCM communication by retrieving the current software version.

   b) Click "Each System" on the left-hand menu.

   c) Select "Telematics" from the Systems List.

   d) Click "Work Support" on the left-hand menu.

   e) Select "Software Information" from the Work Support Items List.

   f) Record the current version of software on RO for reference.

   i. After successful retrieval of the software version, proceed to **Step 14**.

   NOTE: If SSM4 cannot communicate with DCM, DCM DTCs are current, or the DCM software version cannot be retrieved, contact Techline for assistance before proceeding.

Software information

DCM_06.03.17_20191029

OK
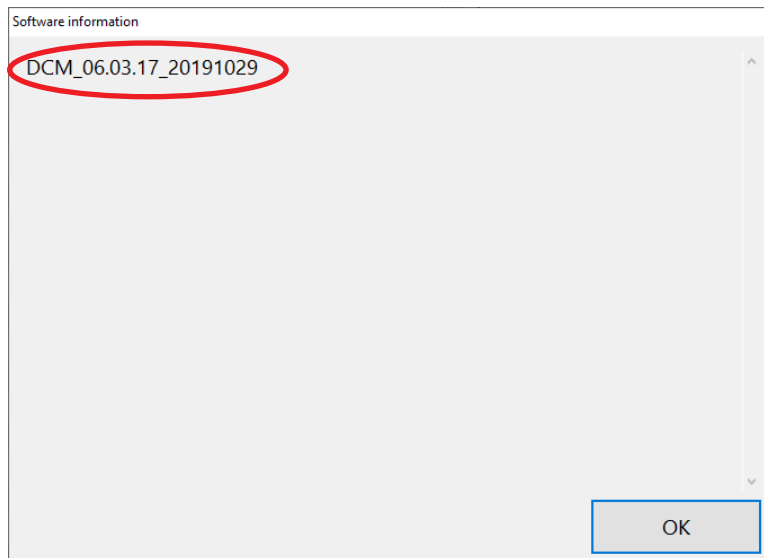
14. END OF PHASE 1 REFLASHING. Proceed to **Step 1: Phase 2:** Flashing Gen1 VoLTE **86229DCM02.pk2** on page 23.

Continued...

Phase 2: Flashing Gen1VoLTE **86229DCM02.pk2** (if intermediate flash DCM version is **DCM_06.03.17_20191029**):

WARNING: Ensure the Midtronics GR8 / Midtronics DCA-8000 in Power Supply Mode is connected to the vehicle, the parking brake is engaged, ignition is in the "ON" position, the engine OFF, the shift selector in NEUTRAL and the wheels blocked. The reason this must be done is to ensure the power supplied to the DCM is not turned off. If this step is not performed, the CAN will power down the DCM during the reflash, the update will fail and result in irreparable damage to the DCM.
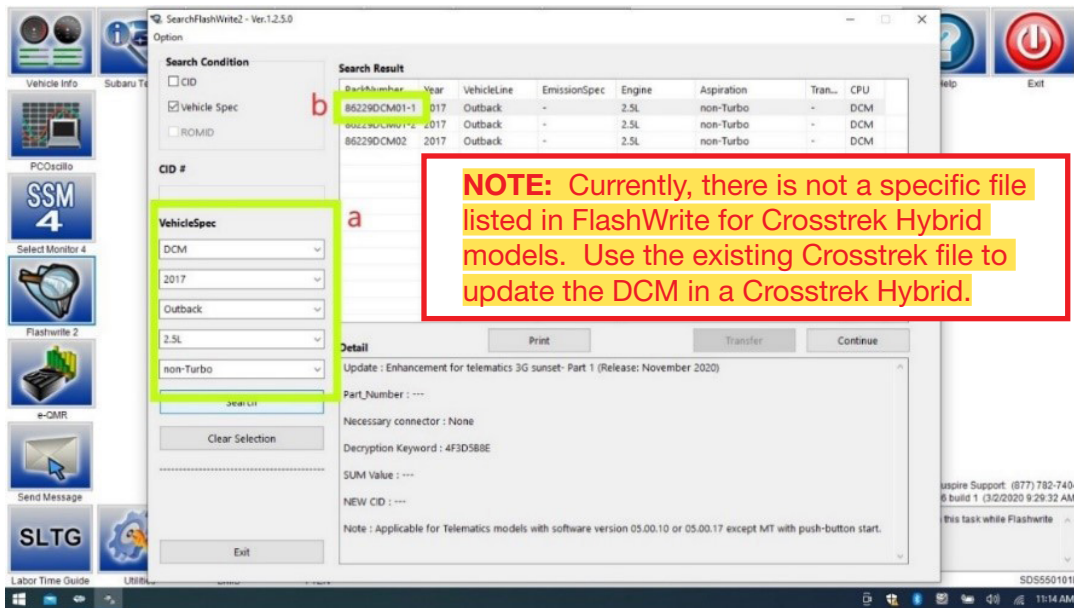
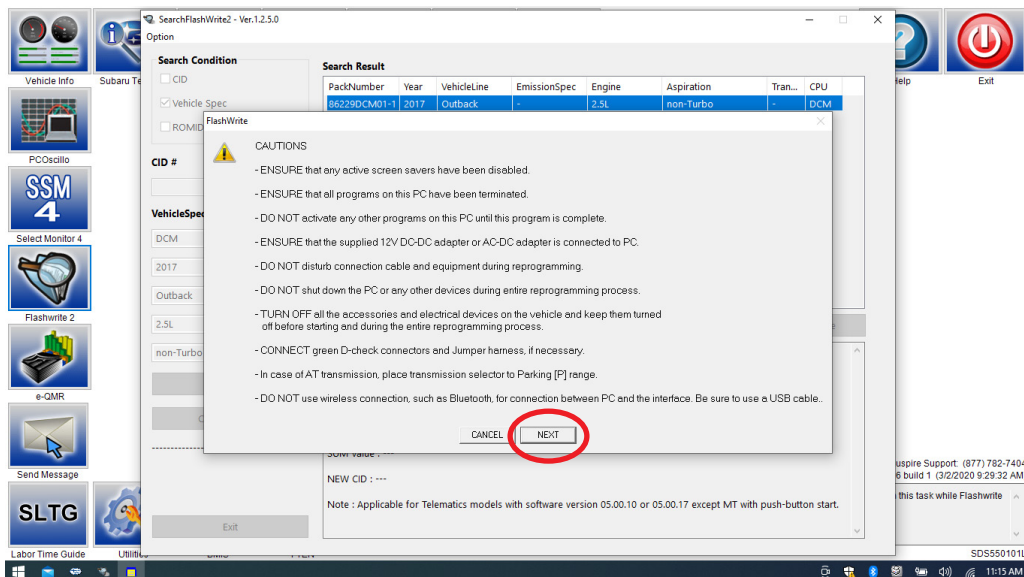1. Connect SDS Notebook and DSTi. Select **FlashWrite2** from the SDS Notebook GUI screen.

2. Once FlashWrite 2 opens, select DCM from the VehicleSpec drop down.

    a) Complete entering the Vehicle Spec information.

   b) Click and select the PK2 file **86229DCM02.pk2** intermediate image in FlashWrite.
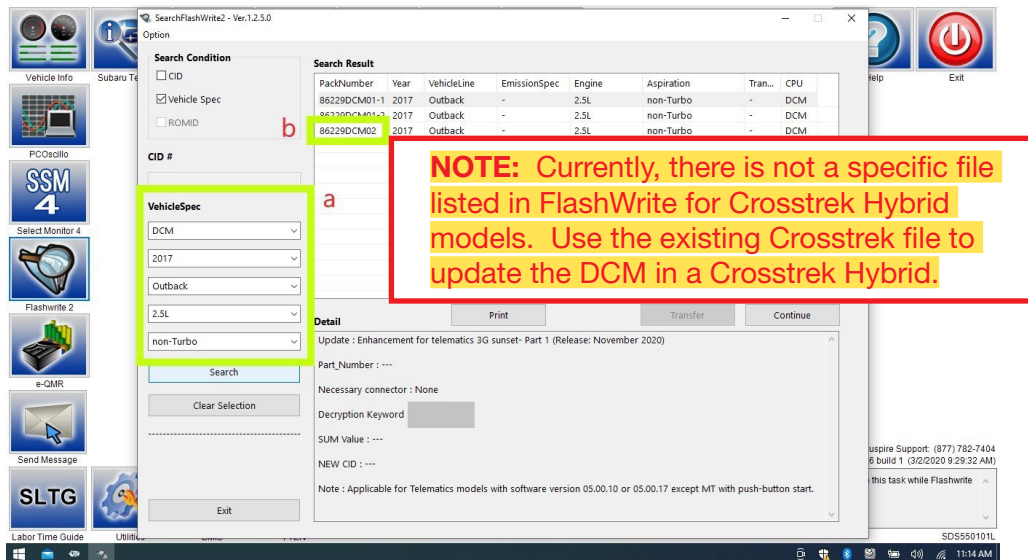
Continued...

3. Enter the Decryption Keyword from the table above (D0F868F1) and click "**OK**".
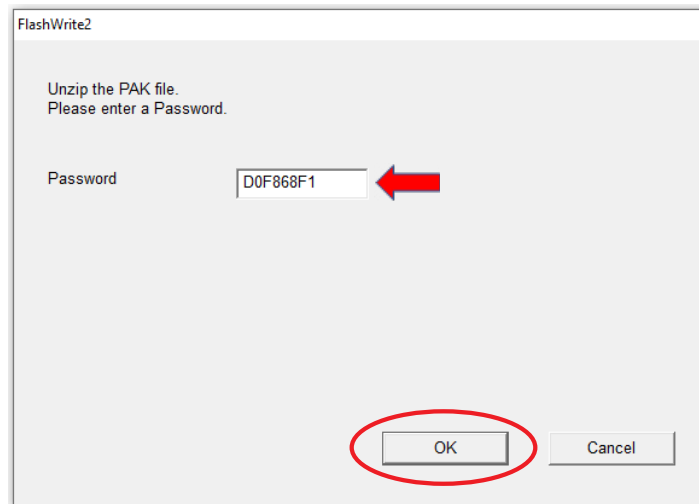
a) Turn the ignition switch ON and Click on '**OK**' to start the reprogram.
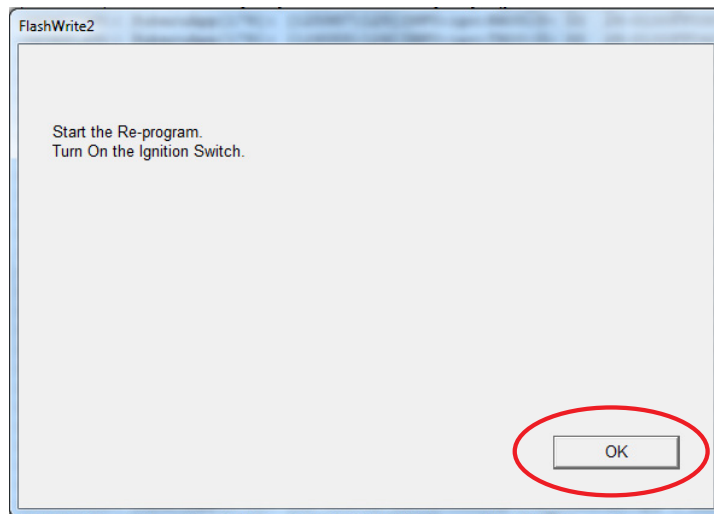
b) Part numbers before and after reflash will be displayed. Click '**OK**'
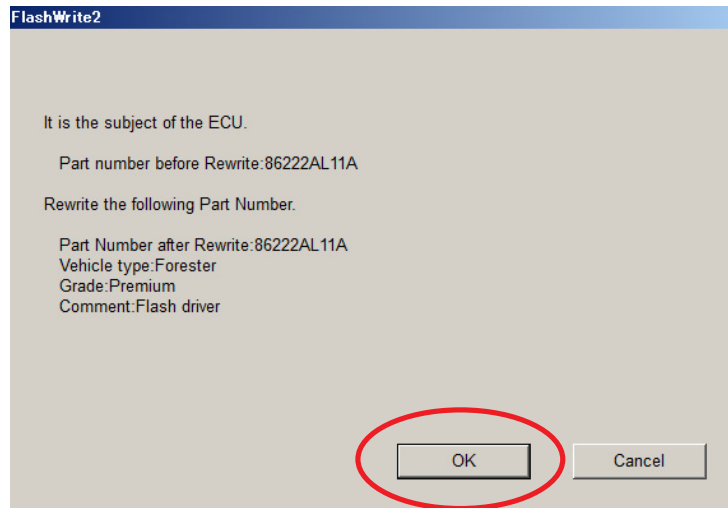
(NOTE: This screen image is an example and may not represent the installed part number. These values will be the same before and after any reflashing. The Screen will always indicate "Forester" no matter what model or model year is being reflashed.)

Continued...

A CAN flashing progression bar will appear and start incrementing toward 100%. The update may take up to 60 minutes to complete.
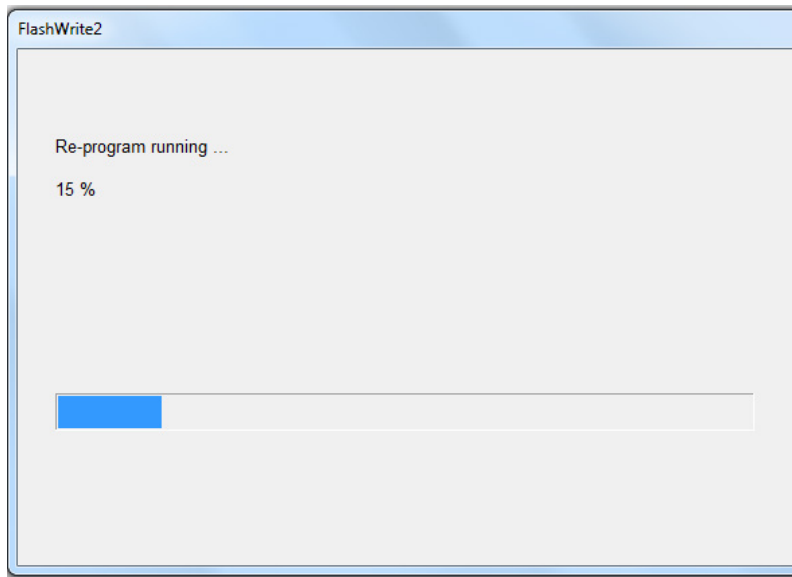
c) **CRITICAL STEP:** After finishing the reprogramming, always put a CVT equipped vehicle in PARK. A prompt for toggling the ignition to OFF will be displayed. Click '**OK**'.
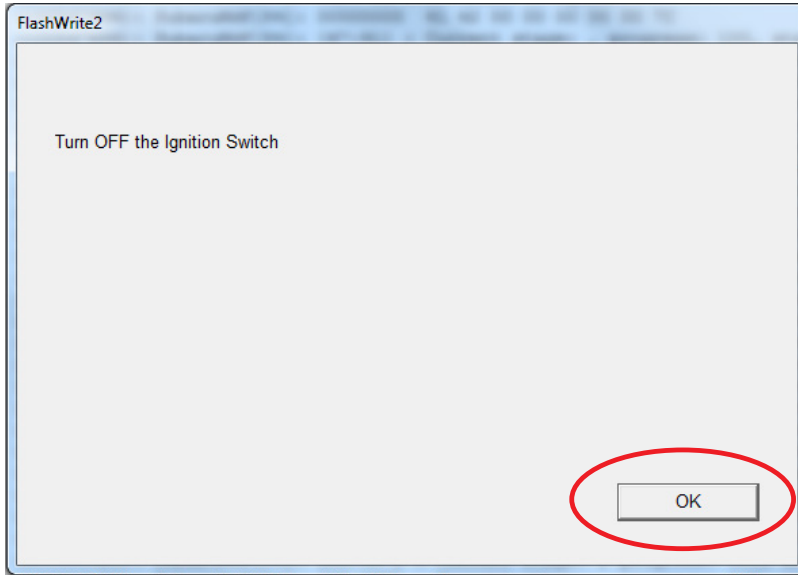
Continued...

d) CRITICAL STEP: FlashWrite will display the banner message "Please wait about 30 seconds until Unit turns off."

e) The prompt for toggling ignition to ON will be displayed. Click on '**OK**.'
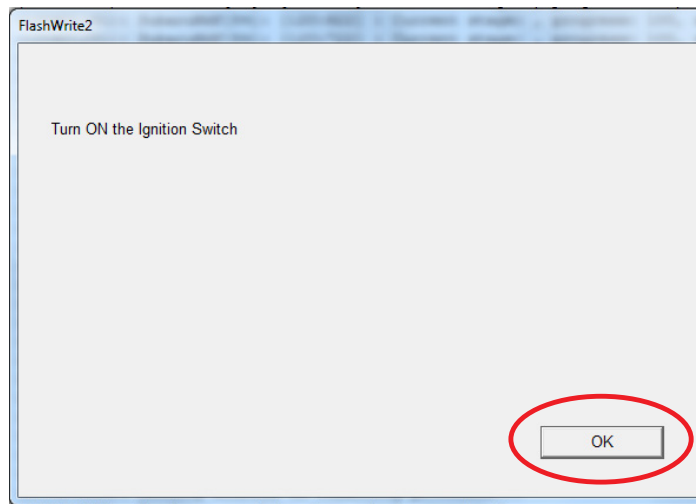
f) FlashWrite will display the banner message "Please wait a moment."
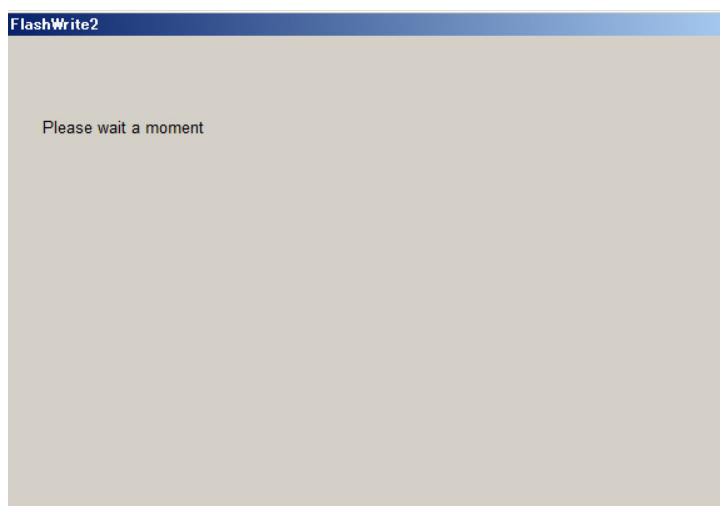
Continued...

g) FlashWrite will display the banner message "Re-program was completed. Turn OFF the Ignition Switch."
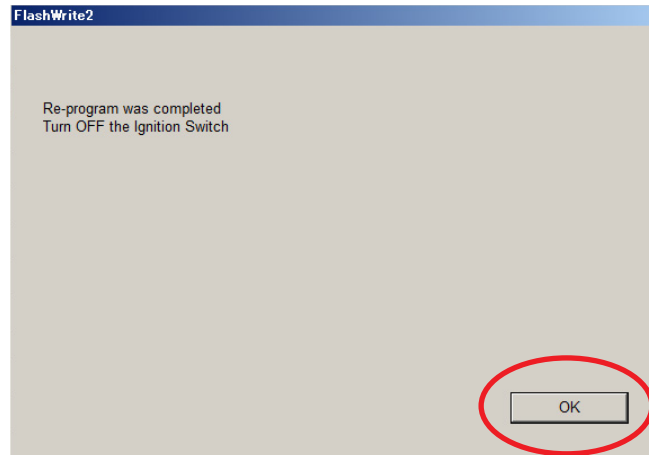
4. Verify the new DCM software version.

   a) Click "Each System" on the left-hand menu.

   b) Select "Telematics" from the Systems List.

   c) Click "Work Support" on the left-hand menu.

   d) Select "Software Information" from the Work Support Items List.

   e) Record the current version of software on the RO for reference.

       i. The final version of DCM software should be **DCM_06.00.17_20190816**.

           1. If the final version is correct, proceed to **Step 5**.

           2. If the final version is not correct, record the DCM software version and contact Techline.
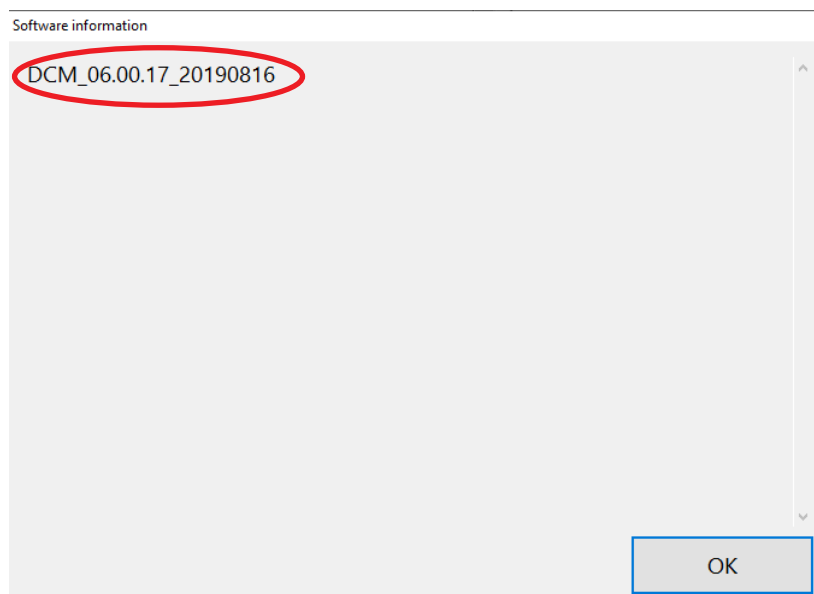
END OF PHASE 2 REFLASHING.

Continued...

5. Start the vehicle. Observe and confirm if the overhead console or stereo camera cover assembly's Telematics **GREEN** LED is illuminated. If the **GREEN** LED is illuminated, proceed to **Step 6**.

   a) The presence of a **RED** LED indicates a problem. **STOP** and do not proceed until the presence of current DTCs has been verified. Follow appropriate STIS, TSB, or TechTIPs information to resolve the **RED** Telematics LED. Contact the FSE or Techline for further assistance.

   b) The presence of **RED** and **GREEN** LEDs indicates a problem. **STOP** and do not proceed. Follow appropriate STIS, TSB, or TechTIPs information to resolve **RED** Telematics LED. Contact the FSE or Techline for further assistance.

6. **CAUTION:** For all vehicles perform a functional check of the Telematics system:

   a) Push the blue iButton and connect to the STARLINK call center. Have the operator confirm the VIN and location of the vehicle.

   NOTE: For Vehicles subscribed to **STARLINK Safety Plus**, there are no remote services to test with this level of service.

   i. iButton call **Successful**: Perform **Step 7** if the vehicle is subscribed to STARLINK Safety Plus and Security Plus as the function of remote services must be confirmed. Otherwise, the update process is complete.

   ii. iButton call **Unsuccessful**: Move the car to a new location and try again. If still unsuccessful in completing the iButton call and reaching an operator, collect at least 30 seconds of Telematics DCM data then contact Techline for additional support. Provide details of all steps followed to this point and the collected Telematics data. After diagnosis and repair, perform **Step 5** (and where applicable **Step 6**) as final confirmation of functionality.

NOTE: If the Telematics LED changes to **RED** after pushing the blue iButton, but the Technician was still able to reach an operator and confirm the vehicle's VIN and location, collect at least 30 seconds of Telematics DCM data and contact Techline for additional support. Provide details of all steps followed to this point and the collected Telematics data.

7. If the vehicle is equipped with a **STARLINK Safety Plus and Security Plus** subscription, have the customer verify remote services operation by performing a remote service request for a door unlock, or horn and light flash.

   a) Remote service request is **Successful:** Update is complete, and the vehicle can be released to the customer.

   b) Remote Service request is **NOT Successful:** Move the vehicle to a new location and try again. If still unsuccessful, contact Techline for additional support. Collect at least 30 seconds of Telematics DCM data and contact Techline for additional support. Provide details of all steps followed to this point and the collected Telematics data.

Continued...

APPENDIX A: 12V BATTERY / POWER SUPPLY PREPARATIONS:

CRITICAL: **USE of a DCA-8000 or GR8 -1100 charger in Power Supply Mode is required to maintain a stable battery float voltage during the reflash procedure. A battery in a condition where POWER SUPPLY MODE is insufficient to maintain the necessary level of battery voltage due to battery maintenance needs and / or charging is outside the scope of the reprogramming service. Customers must be informed immediately of the inability to perform the reprogramming service due to needed battery maintenance which is outside this reprogramming service's coverage scope and have repairs completed prior to attempting the update.**

- This information applies to the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System and GR8-1100 Diagnostic Battery Charger ONLY. It does not apply to any other brand/type of "generic" battery charger whatsoever. ONLY the DCA-8000 and GR8-1100 and their Power Supply Mode features have been tested and approved by SOA.

- Once the DCA-8000 or GR8-1100 is connected to the vehicle, it takes less than 3 minutes to boot-up the charger, select Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

- A battery in a condition where POWER SUPPLY MODE is insufficient to maintain the necessary level of battery voltage due to battery maintenance needs (Examples: presence of terminal corrosion, low electrolyte level, age, or any other factors preventing steady power supply) and / or extensive charging needed due to state of charge is outside the scope of the reprogramming service.

- If the battery cannot be recovered enough to proceed using power supply mode within a reasonable time, the customer must be informed immediately of the inability to perform the reprogramming service due to needed battery maintenance or charging which is outside this service program's coverage scope in order to have the condition resolved prior to attempting this update.

- Amperage will fluctuate based upon the vehicle's demand for power.

- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched to OFF before setting up the charger for Power Supply Mode.

- If using a DCA-8000 Dynamic Diagnostic Charging System, set the power supply voltage to 13.5 volts.

- Input the Cold Cranking Amperage (CCA), which matches the vehicle's battery.

- **NOTE:** OE and replacement batteries have different CCA ratings. Always confirm the battery's CCA rating before proceeding.

- Select the correct battery type (Flooded, EFB, Gel, AGM, or AGM Spiral).

- For more instructions on using the Power Supply Mode, reference the applicable User Manual for the Midtronics DCA-8000 Dynamic Diagnostic Charging System and / or the Midtronics GR8-1100 Diagnostic Battery Charger on STIS.

IMPORTANT NOTES:

- **NEVER** connect the DST-i until the Power Supply Mode function has completed its battery test mode and the Charging Voltage has dropped to a steady 13.5 Volts on the display.

- Once Power Supply Mode reaches a steady 13.5 volts, connect the DST-i to the OBD connector.

- **If the battery voltage rises above 14V while the reprogramming is in process, the procedure will abort.** Charging voltage above 14V can indicate a need to test or charge the vehicle battery before any further reprogramming attempt is made.

CRITICAL: Power Supply Mode voltage must be stabilized at **13.5** Volts before proceeding.

Return to page 6 **Step 7** only after the Midtronics equipment is connected in Power Supply Mode and the voltage has stabilized.

Continued...

APPENDIX B: TROUBLESHOOTING CONCERNS FOUND PRIOR TO UPGRADE:

1. If the Telematics LED is **RED**, **STOP THE UPGRADE PROCESS**. The customer must be notified of this condition before any work begins. DTC repair is not included in the scope of work for this no-charge upgrade. The reprogramming service cannot be attempted until the Telematics system is DTC free and the Telematics LED is **GREEN**.

2. If the Telematics LED is **RED** and Telematics a DTC(s) (other than B2A0E) is current: **STOP THE UPGRADE PROCESS**. The customer must be notified of this condition before any work begins. DTC repair is not included in the scope of work for this no-charge upgrade. The reprogramming service cannot be attempted until the Telematics system is DTC free and the Telematics LED is **GREEN**.

3. Telematics LED is NOT **GREEN** and no DTC(s) is current (other than B2A0E or B2A0C- See **NOTES:** above): **STOP THE UPGRADE PROCESS**. The customer must be notified of this condition before any work begins. DTC repair is not included in the scope of work for this no-charge upgrade. The reprogramming service cannot be attempted until the Telematics system is DTC free and the Telematics LED is **GREEN**.

NOTE: DTC EXCEPTION CASES:

DTC B2A0E: MUTE LINE CIRCUIT may be found in many older DCMs without a current hard fault. Clear the DTC B2A0E and see if it resets after an ignition cycle.

a. If DTC B2A0E resets as current, it should be considered a "hard" DTC. Follow **Step 2** above.

b. If B2A0E does not reset as current after an ignition cycle, it is not considered a hard fault. Proceed with **Step 2** on page 3.

4. If the customer approves needed repairs, the Telematics system now displays a **GREEN** LED and no other DTCs are present, proceed to **Step 2** on page 3.

5. If the customer declines needed repairs, **STOP THE UPGRADE PROCESS**. Document the Technician's findings on the repair order before returning the vehicle to the customer. **END OF PROCEDURE, RETURN CAR TO CUSTOMER.**

Continued...

PARTS INFORMATION (SUPPLIED FOR REFERENCE ONLY):

New TELEMATICS UNIT Part # (VOLTE)	Old TELEMATICS UNIT Part # (NON-VOLTE)
86229AL10B	86229AL00A 86229AL00B 86229AL00C 86229AL10A
86229AL11B	86229AL01A 86229AL01B 86229AL01C 86229AL11A
86229FL002	86229FL000 86229FL001
86229FL012	86229FL010 86229FL011
86229FL00C	86229FL00A 86229FL00B
86229FL01C	86229FL01A 86229FL01B
86229VA100	86229SG000 86229SG001 86229SG002
86229VA110	86229SG010 86229SG011 86229SG012

NOTE: The OLD part numbers listed above may not be an exact match to those installed in the vehicle as production part numbers are different from service/ repair part numbers. Always refer to the Electronic Parts Catalog (EPC) using the vehicle VIN to ensure the correct DCM replacement part is selected. Use the EPC part number and the chart above or RPM supersession to determine the correct NEW DCM part number to install only if DCM arrives failed or fails during update procedure. If DCM replacement is required, refer to the applicable Service Manual for procedures and bulletin **15-266-20R** for provisioning confirmation. Never install any of the OLD part numbers listed.

CLAIM REIMBURSEMENT AND ENTRY PROCEDURES:

Credit to perform this reprogramming service will be based on the submission of adequately completed repair order information.

IMPORTANT NOTE: IMPORTANT NOTES:

- All claims must be submitted using Policy Adjustment (PA) Claim Type ONLY. Submissions using any other Claim Type will be rejected.

- ONLY these Labor Operation numbers and Fail Code are to be used when submitting the claim for this reprogramming service.

- NEVER use the Labor Operation numbers and Fail Code from the Labor Time Guide.

- Alternate transportation reimbursement (rental / loaner) or towing expenses may not be claimed for this reprogramming service.

Labor Description	Labor Operation #	Labor Time	Fail Code	Claim Type
3G SUNSET VOLTE SOFTWARE VERSION CHECK ONLY	A067-938	0.2		
3G SUNSET VOLTE SOFTWARE DCM SOFTWARE UPDATE	A067-928*	1.9	ZTX-43	PA
3G SUNSET VOLTE SOFTWARE DCM SOFTWARE UPDATE FAILURE / DCM REPLACEMENT	A067-904*	2.3		

*Please note in the claim comments if the vehicle had an open WQZ-61R campaign and it will be closed with either of these submissions.

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released news 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...

Reflash Precheck Flow

Precheck Step 1:

Make note of the Telematics LED status.

Precheck Step 1:

Telematics LED is displaying solid **GREEN**.

Precheck Step 1:

Telematics LED is displaying solid **RED**, **RED** and **GREEN** Flashing or **RED** and **GREEN** LEDs are dark (no color visible).

Precheck Step 1:

1. **STOP** the upgrade.

2. Inform customer repairs outside the scope of upgrade reprogramming service may be needed.

Customer authorization for diagnosis is required prior to continuing.

Precheck Step 1:

Refer to TELEMATICS LED NOT GREEN APPENDIX on page 31.

Use SSM4 to check for the presence of any Telematics DTCs.

If B2A0C or B2A0E are in memory, this does not prevent completion of the reprogramming service.

Precheck Step 1:

Customer authorizes additional diagnosis and repair.

Telematics system is DTC free and Telematics LED is GREEN.

Precheck Step 1:

Customer declines diagnosis of repair condition.

STOP. End of Procedure until required diagnosis and repairs have been completed.

Document Technician findings on Repair Order.

Precheck Step 2:

Press the blue iButton to perform a functional check of Telematics confirming VIN and location once connected to a call center operator.

Precheck Step 3:

iButton push **SUCCESSFULLY** connects to an operator. VIN and Location **ARE** confirmed.

Precheck Step 3:

iButton push **FAILS** to make connection to an operator. **VIN** and Location **ARE NOT** confirmed.

Precheck Step 3 (continued):

1. **STOP** the upgrade.

2. Inform customer repairs needed are outside scope of upgrade reprogramming service.

Customer authorization decision on needed maintenance activity is required prior to continuation of reprogramming service.

Precheck Step 4:

Connect the SSM4 to the vehicle.

Precheck Step 3 (continued):

Customer approves / completes maintenance work.

Telematics system is now DTC free, **GREEN** LED and connecting to an operator.

Continue with reprogramming service.

Precheck Step 3 (continued):

Customer declines required maintenance work.

END of Procedure until required maintenance has been completed. Document Technician findings on Repair Order.

Precheck Step 6:

Verify Current DCM Software Version.

Follow Procedure to verify DCM Software Version ID in the TSB for help on performing this task.

Is DCM Software Version
05.00.10
05.00.17
05.00.22
05.00.30

YES - Proceed to connect the Midtronics to the vehicle in Power Supply Mode.

Precheck Step 5:

If the current version of DCM software is: **DCM_06.00.17_20190816**, the vehicle has the most recent version of software. **STOP**, take no further action and release the car back to the customer.

Proceed to the **Claim Reimbursement, and Entry Procedures** section and process a Version Check Only claim.

If the current version of DCM software is not one of the listed versions, **STOP.** Take no further action and verify the car is part of the target population before proceeding.

Precheck Step 6:

Open the hood and connect Midtronics GR8 / Midtronics DCA-8000 in **Power Supply Mode.**

Refer to 12V Battery / Power Supply Preparations Appendix on page BB for more information.

Precheck Step 7:

With the vehicle connected to the Midtronics equipment in Power Supply mode and battery voltage stabilized, continue procedure on Reflash Flashing Flowchart.

Continued...

Reflash Flashing Flow

Precheck Step 5:

If the current version of DCM software is **DCM_06.00.17_20190816,** the vehicle has already received the reflash or the DCM was replaced and is equipped with the most recent version of software. Take no further action. Proceed to the **Claim Reimbursement, and Entry Procedures** section and process a Version Check Only claim.

Precheck Step 7:

With Midtronics equipment connected, confirm DCM software is one of the following: **SW 05.00.10, 05.00.17, 05.00.22** or **05.00.30.**

If DCM version has not been confirmed in **Step 4,** perform **Procedure to verify DCM Software Version ID in the TSB before proceeding.**

Precheck Step 7c:

If the current version of DCM software is **DCM_06.03.17_20191029,** Phase 1 reflashing is complete proceed to **Phase 2: Flashing Gen1VoLTE 86229DCM02.pk2**

(NOTE: It is unlikely a vehicle will enter the repair facility with this version. This version should only be present after Phase1 reflashing procedure has been completed.)

Precheck Step 9:

Confirm DCM software version.

If current version of DCM software is **05.00.10** or **05.00.17,** proceed to **Step 1: Phase 1: Flashing intermediate 86229DCM01-1.pak.**

Precheck Step 8:

Confirm DCM software version.

If current version of DCM software is 05.00.22 or 05.00.30, proceed to **Step 1: Phase 1: Flashing intermediate 86229DCM01-2.pk2.**

Precheck Step 9:

Confirm DCM software version.

If current version of DCM software is **05.00.10** or **05.00.17,** proceed to **Step 1: Phase 1: Flashing intermediate 86229DCM01-1.pak.**

Follow Procedure on page 15:

Phase1: Flashing intermediate 86229DCM01-1.pak (If the OE SW Version is **05.00.10** or **05.00.17.**)

Follow Procedure on page 8:

Phase 1: Flashing intermediate 86229DCM01-2.pk2 (Current version of DCM software is **05.00.22** or **05.00.30.**)

Precheck Step 8b:

Reflash **FAILS** at any time in **Phase 1:**

If DCM reflash procedure fails while in progress of **Phase 1,** DCM replacement will be necessary to complete service campaign on eligible vehicle.

Precheck Step 9b (continued):

Reflash **FAILS** in mid-progress.

Reference **TSB 15-279-21:** **Gen1 Telematics DCM Replacement for 3G Sunset** starting with **Step 4** of the DCM replacement procedure.

Precheck Step 10:

If the current version of DCM software is **DCM_06.03.17_20191029,** Phase 1 flashing is complete proceed to **Phase 2: Flashing Gen1VoLTE 86229DCM02.pk2.**

(NOTE: It is unlikely a vehicle will enter the repair facility with this version. This version should only be present after Phase1 reflashing procedure has been completed.)

Precheck Step 8b (continued):

Reflash **FAILS** in mid-progress.

Refer to **TSB 15-279-21: Gen1 Telematics DCM Replacement for 3G Sunset** starting with **Step 4** of the DCM replacement procedure.

Follow Procedure on page 23:

Phase2: Flashing Gen1 VoLTE 86229DCM02.pk2

DCM software version is **DCM_06.03.17_20191029**

Precheck Step 10c:

Cycle ignition off for 30 secs then back to on.

Close Flashwrite

Start the **Phase 2** Flashing procedure from the beginning **Phase2:Flashing Gen1 VoLTE 86229DCM02. pk2.** on page 23.

Precheck Step 10a:

Reflash **FAILS** at any time in Phase 2.

If DCM reflash procedure fails while in progress during Phase 2, a **retry should be performed.**

Reflash is **SUCCESSFUL**:

Verify DCM is communicating by retrieving DCM software version number.

Proceed to Functional Check. of Telematics System.

Precheck Step 10e:

Reflash **FAILS** in mid-progress.

Reference **TSB 15-279-21: Gen1 Telematics DCM Replacement for 3G Sunset,** starting with Step 4 of the DCM replacement procedure.

Reflash is **SUCCESSFUL:**

Verify DCM is communicating by retrieving DCM software version number.

Proceed to Functional Check of Telematics System.

Reflash Complete:

Step 6 of Reflash procedure: **Phase2: Flashing Gen1 VoLTE 86229DCM02.pk2. on page 23.**

1.   Perform functional test of the Telematics system with blue i-Button push requesting VIN and location from an operator.

2.   If vehicle equipped with remote services, it is highly recommended to confirm operation by having customer perform remote horn honk.

Functional Check to Telematics System **SUCCESSFUL**:

Release vehicle back to customer.

Functional Check of Telematics System **FAILED:**

VEHICLE CANNOT BE RELEASED TO CUSTOMER! DIAGNOSIS AND REPAIR MUST BE PERFORMED TO RETURN VEHICLE TO OPERATIONAL STATE IT ARRIVED IN.

Refer to TSBs: **15-267-20** and **15-195-16R** for assistance in testing and operational compliance.

Continued...

SUBARU

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STARLINK
YOUR SUBARU CONNECTED

ATTENTION REQUIRED

Your vehicle is eligible for a complimentary STARLINK system update.

Hello Scott,

We're contacting you because your 2019 Forester will require an update to continue utilizing your STARLINK Safety and Security services. Effective February 2022, the current wireless provider has elected to retire the 3G network that connects your services such as Automatic Collision Notification, SOS Emergency Assistance, and remote vehicle features*. If your vehicle is not updated before the 3G network retirement date, your STARLINK Safety and Security subscription will be cancelled.

Beginning March 10, 2021, your Subaru Retailer[1] will offer a complimentary system update for vehicles like yours with an active STARLINK subscription[2]. This will ensure you can continue to access important STARLINK Safety and Security services. This service visit will take a minimum of two hours[3] and it may be necessary to leave your vehicle for a longer period of time to complete the necessary update. Please contact your Subaru Retailer for additional details and to schedule your complimentary system update.

READ THE FAQ

Your authorized Subaru Retailer:

Tonkin of the Gorge
2222 W 6th St,
The Dalles, OR 97058
(541) 296-2166
Go to website

Keeping you connected,
— Your friends at Subaru.

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