

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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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

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

NUMBER: 15-316-24
DATE: 02/27/24

SUBJECT: Gen1 Telematics DCM Reprogramming for 3G Sunset

INTRODUCTION:

This bulletin announces the procedures required to reprogram the DCM (Data Communication Module) in Gen1 Subaru vehicles in response to the 3G network sunsetting. The reprogramming enables enrollment in Starlink Telematics remote services. If a customer requests Starlink enrollment in a Gen1/3G equipped vehicle, refer to the information outlined in this bulletin.

IMPORTANT: The following vehicles **DO NOT** require reprogramming to enroll in Starlink Telematics. The DCM will require replacement on the following models.

- Impreza MT with Push-Button Start
- WRX/STI MT with Push-Button Start

Refer to the applicable Service Manual regarding DCM replacement: ENTERTAINMENT & MONITORING > Data Communication Module

PAK FILE APPLICABILITY:

Starting DCM Software Version	File Description	Decryption Keyword
DCM_05.00.10 or 05.00.17	86229DCM01-1.pak	4F3D5B8E
DCM_05.00.22 or 05.00.30	86229DCM01-2.pk2	3B7ED9D2
DCM_06.03.17_20191029	86229DCM02.pk2	D0F868F1

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.

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SERVICE PROCEDURE / INFORMATION:

IMPORTANT: Confirm the following prior to proceeding with any reprogramming.

- Confirm Subaru Select Monitor (SSM) has communication with the DCM and no DTCs are present in the Telematics system.
- Review the information supplied in the Appendix A section of this bulletin prior to proceeding with any reprogramming.
- Record the subscription status information prior to proceeding with any reprogramming. This information is required when reprogramming is completed.

SOFTWARE VERSION VERIFICATION:

Using the SSM, verify and record the current DCM software status. Using the work support function, read the “Software Information” data monitor.

Is the current software version DCM_06.00.17_20190816?

YES- The DCM has the latest version. Reprogramming is not required.

NO- Confirm the next course of action and applicable software file by referring to the table below.

Current DCM Software Version	Next Step	Applicable Software File
DCM_05.00.10 or 05.00.17	Proceed to Step 1 of Phase 1.	86229DCM01-1.pak
DCM_05.00.22 or 05.00.30	Proceed to Step 1 of Phase 2.	86229DCM01-2.pk2
DCM_06.03.17_20191029 (Rare Cases)	Phase 1 and 2 reprogramming is complete. Proceed to Step 1 of Phase 3.	86229DCM02.pk2

Follow the specific instructions for Phase 1 -3 reprogramming based on the starting DCM software version. Each phase involves selecting the appropriate file and initiating the reprogramming process through the SSM tool.

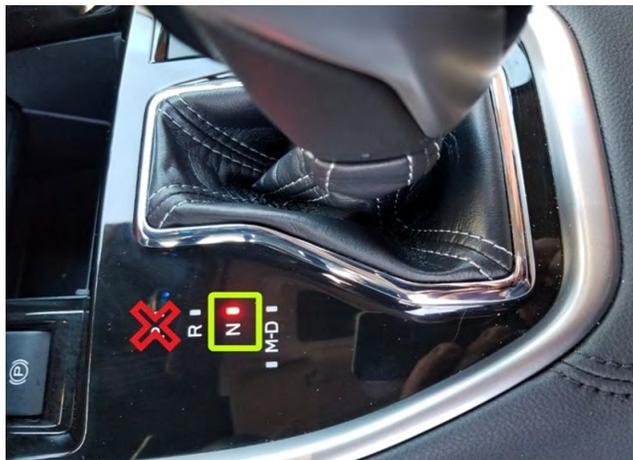
CAUTION: Installing the incorrect file will damage the DCM and void all Warranty. ALWAYS confirm the software version and follow the correct course of action.

Continued...

PHASE 1: REPROGRAMMING INTERMEDIATE 86229DCM01-1.PAK (IF THE CURRENT SOFTWARE VERSION IS 05.00.10 OR 05.00.17):

IMPORTANT: Due to the duration of each reprogramming procedure and consecutive reprogramming file transfers required to complete this 3G Sunset reprogramming update, a Subaru-approved Denso SSM cable is **STRONGLY** recommended. Cables from other manufacturers may not meet data transfer rate and interference shielding requirements to ensure error-free data transmission during reprogramming.

CAUTION: 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. This must be done 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 reprogramming will fail, resulting in irreparable damage.



FOR KEY START VEHICLES:

- Turn the ignition key ON (engine OFF).
- Depress the brake pedal and move the Shift Lever into NEUTRAL.
- Leave the ignition ON.

FOR VEHICLES EQUIPPED WITH KEYLESS ACCESS AND PUSH-BUTTON START:

- Without touching the brake pedal, press the Push Button Ignition Switch twice to put the ignition system in IG ON mode (Engine OFF).
- Depress the brake pedal and move the Shift Lever into NEUTRAL.
- Leave the ignition ON.

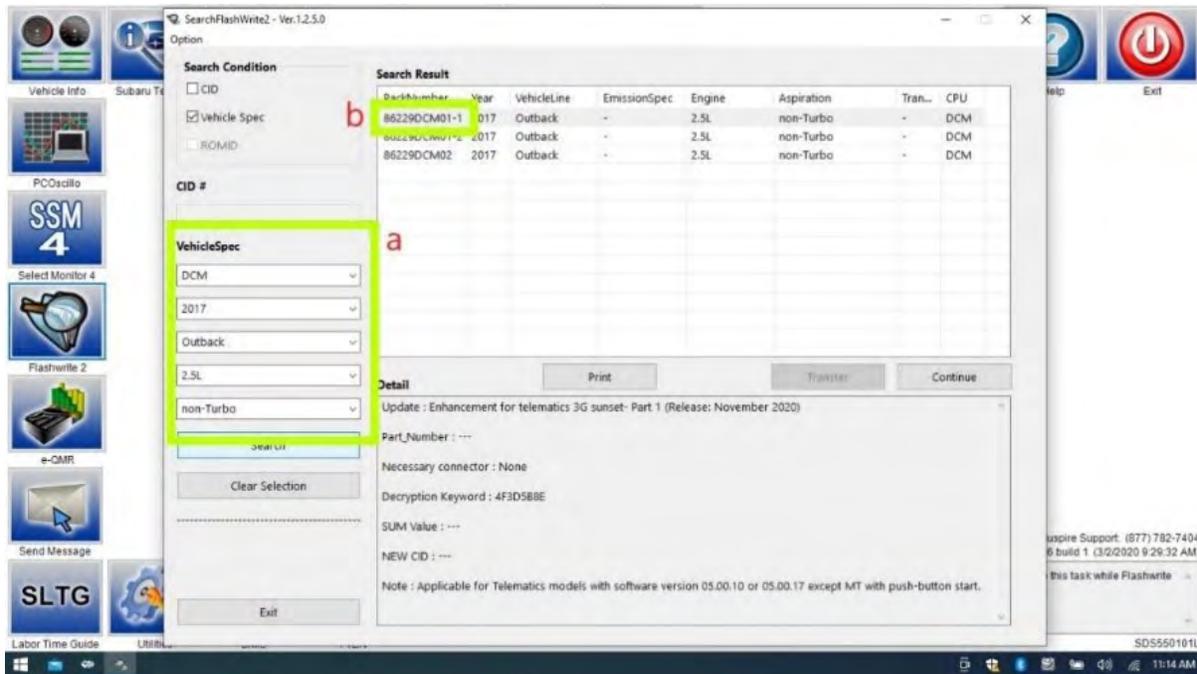
CRITICAL: DO NOT leave the vehicle in park! Doing so will damage the DCM requiring replacement.

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

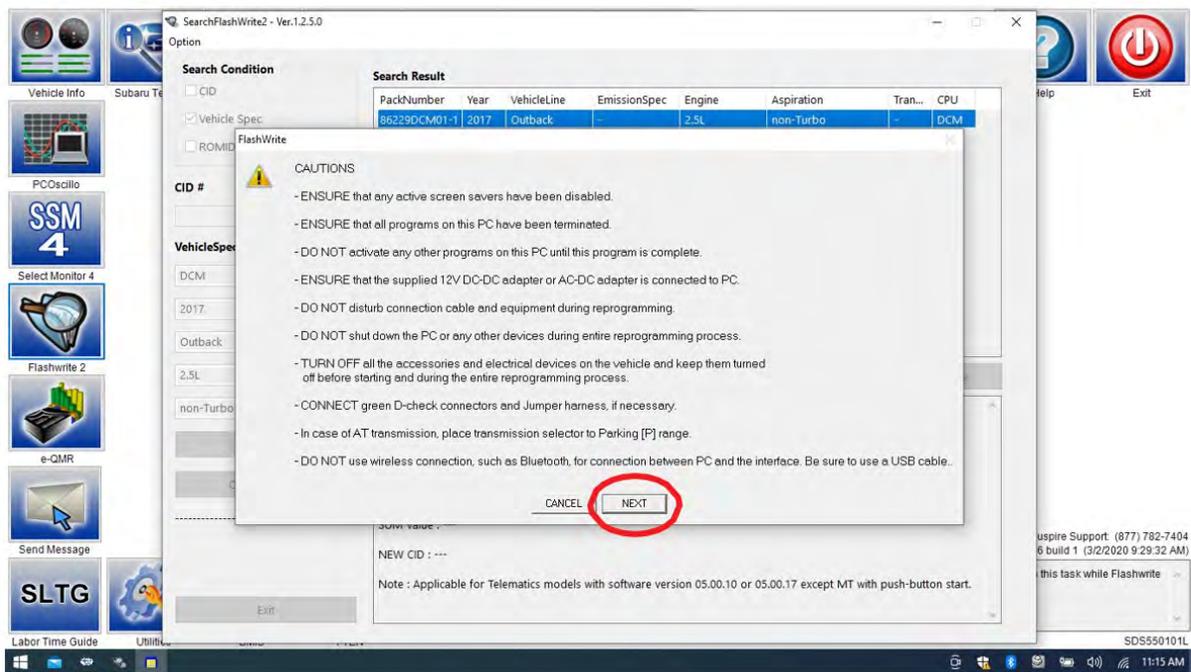


2. Once FlashWrite 2 opens, select DCM from the Vehicle Spec drop-down.
 - a) Complete entering the Vehicle Spec information.
 - b) Click and select the Pak file **86229DCM01-1.pak** intermediate image in FlashWrite.



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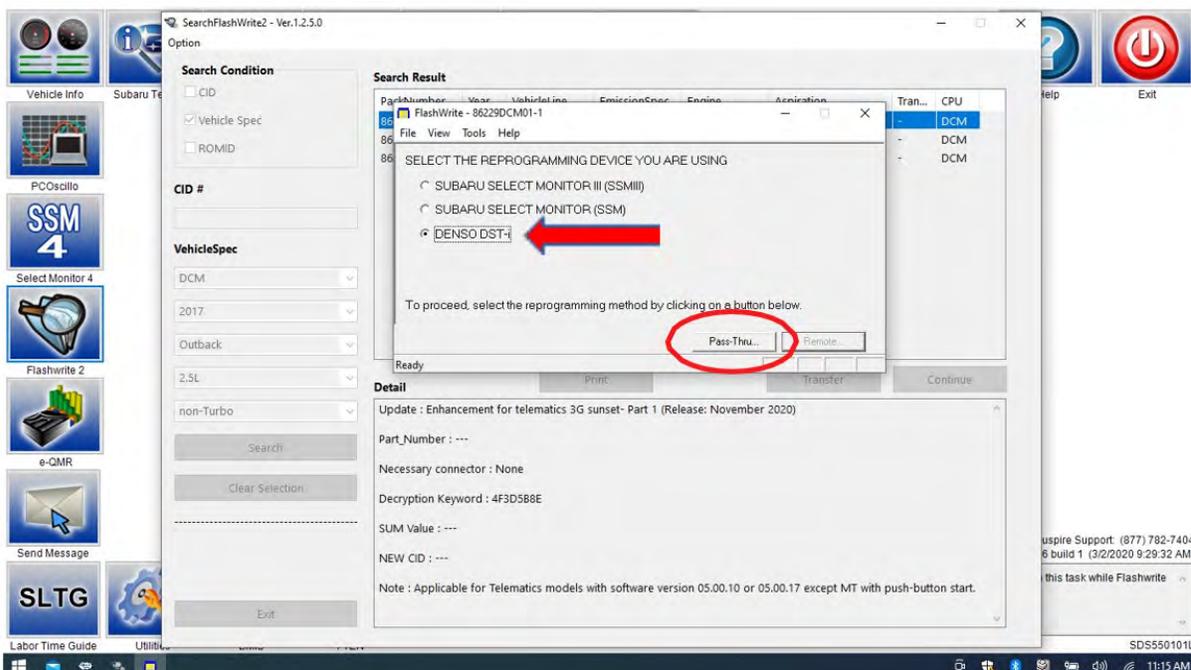
3. CAUTIONS will be displayed. Check the notices and click on “NEXT.”



CAUTION: In the screenshot above, the on-screen directions indicate leaving 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 page #3 above for all the vehicle conditions required for reprogramming.

4. Select the reprogramming device and click “OK.”

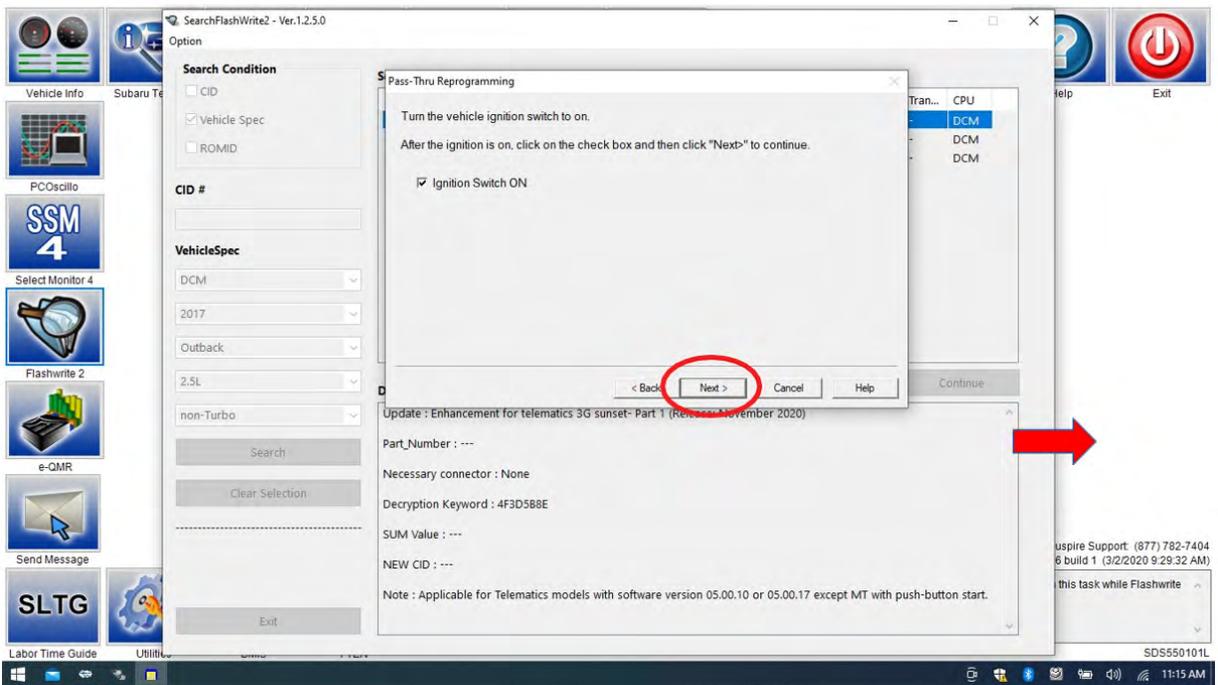
5. Click on “Pass Thru.”



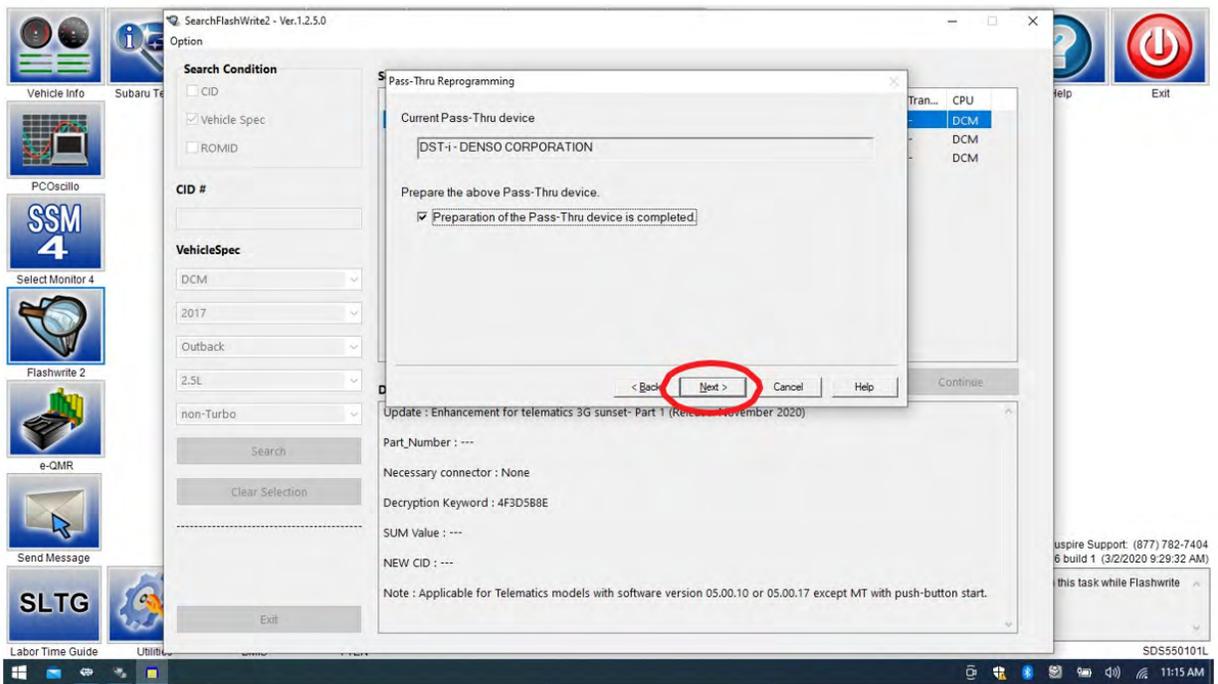
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6. Confirm the ignition is “ON” and the shift selector is **NEUTRAL**.

a) Turn on the ignition switch and click on ‘Next.’

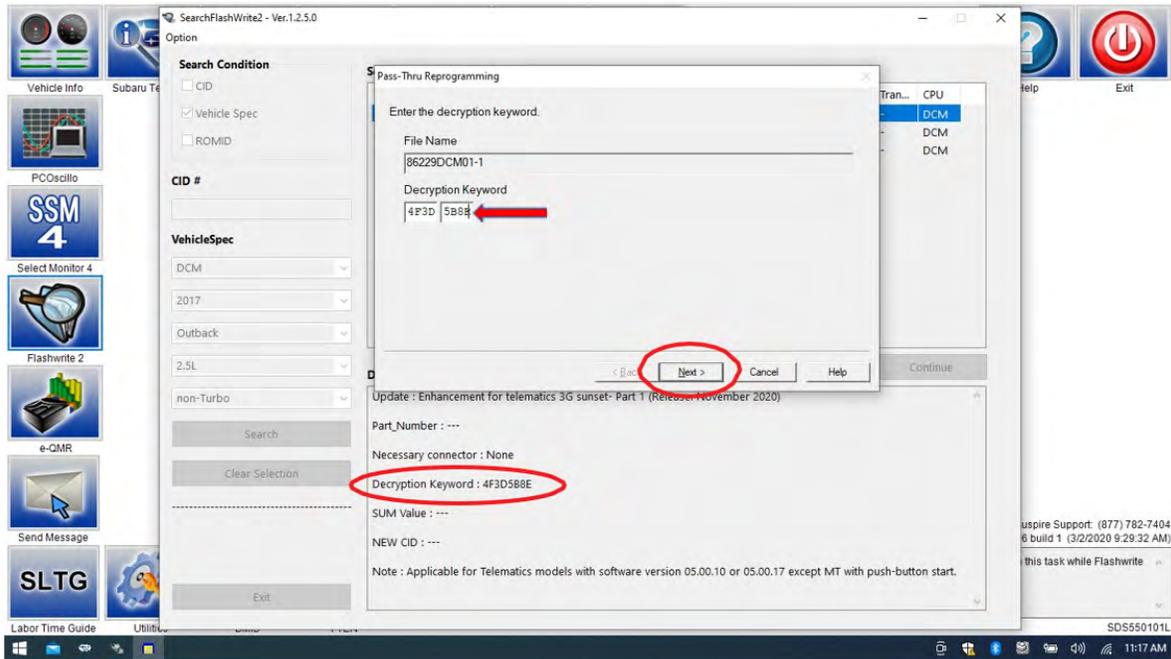


b) Pass-through preparation is completed; click on Next to continue.

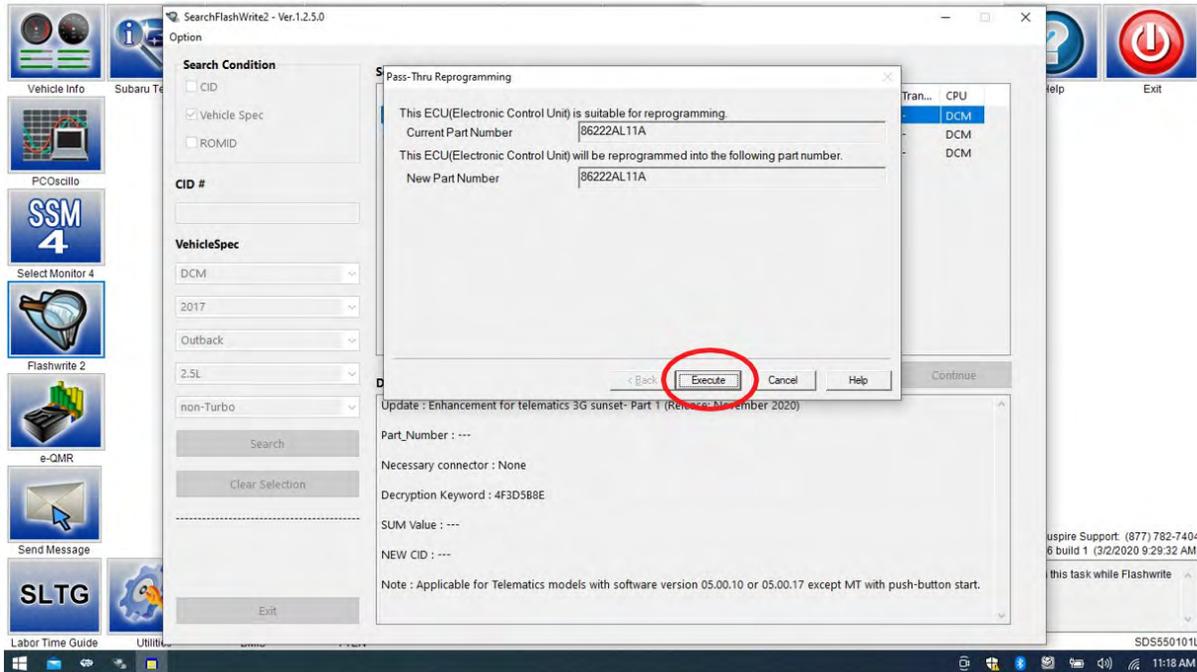


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7. Enter the Decryption Keyword from the table above (4F3D5B8E) and click “Next.”

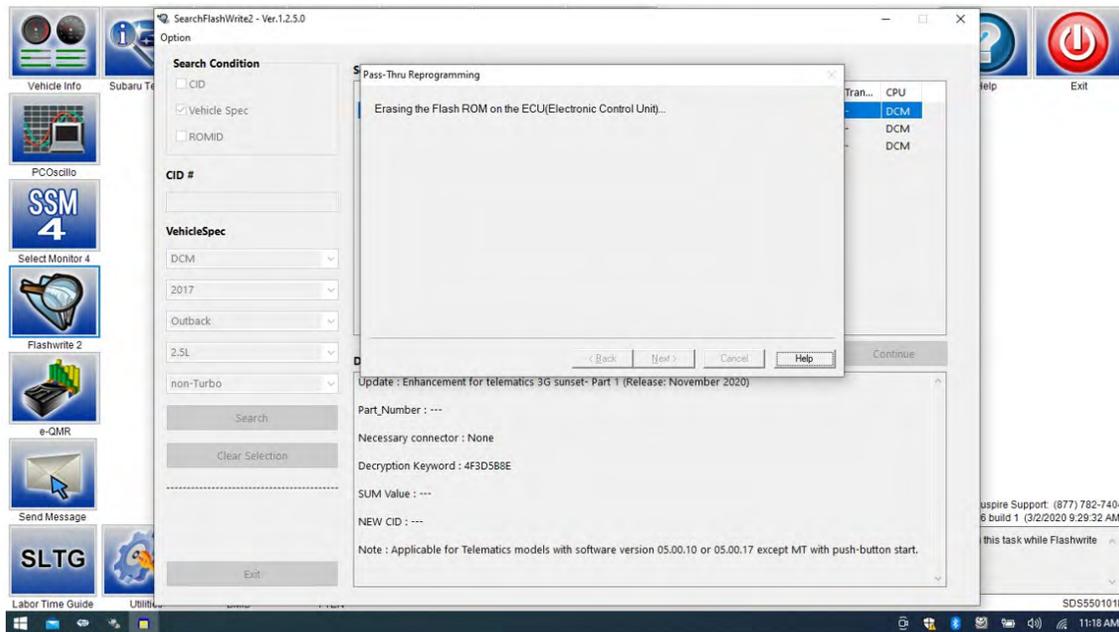


8. Click on “Execute.”

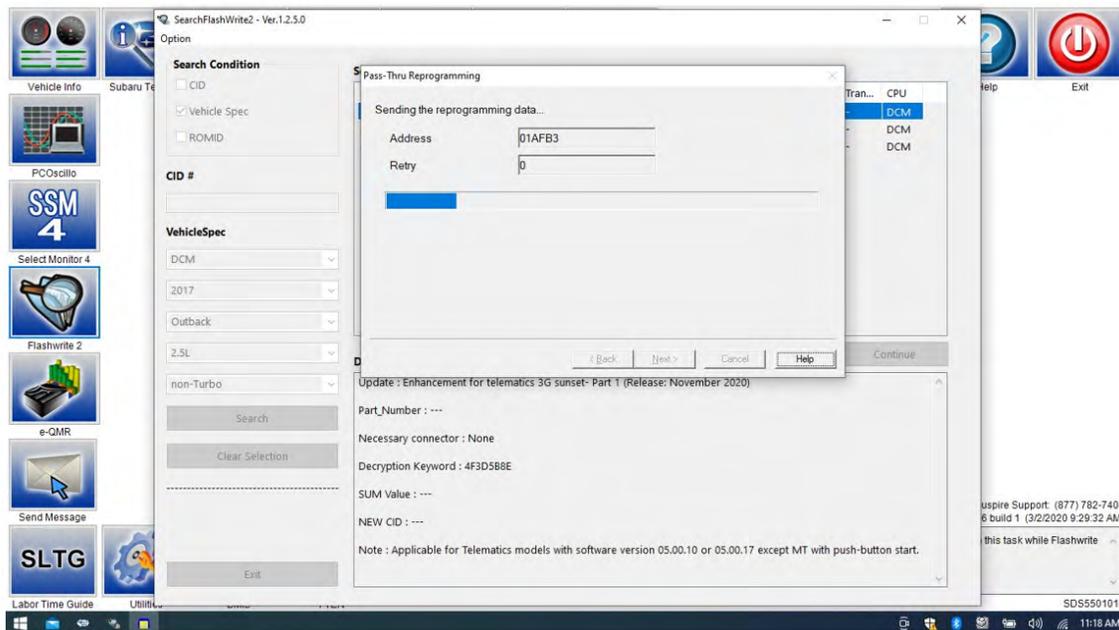


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9. Reprogramming will begin. Please wait.



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.

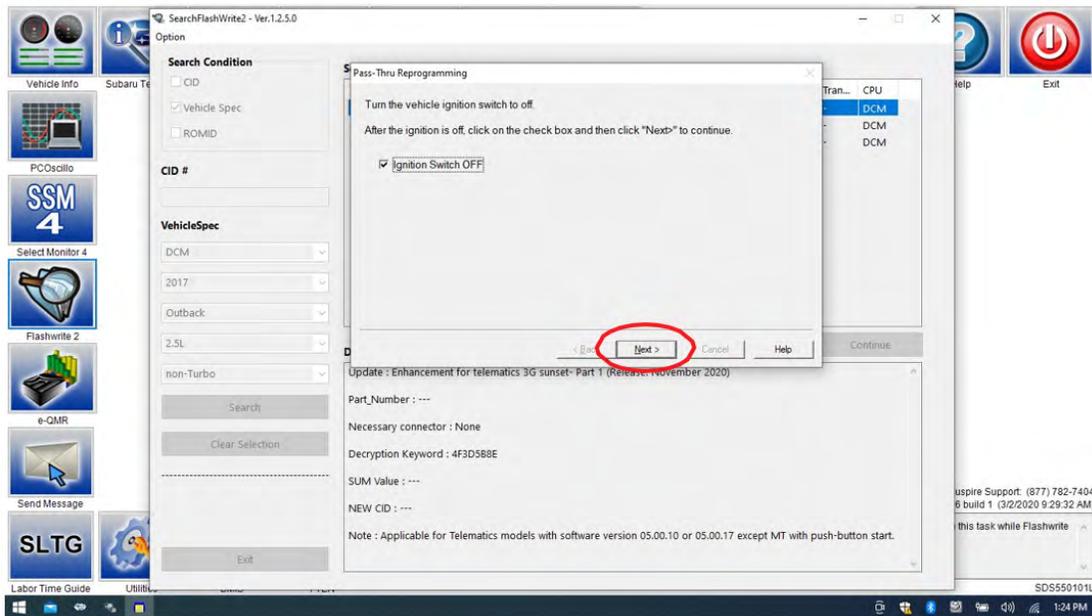


10. CRITICAL STEP: After reprogramming, always put a CVT-equipped vehicle in PARK and ensure the ignition is turned OFF. A prompt to switch the ignition OFF will be displayed. **DO NOT CLICK OK UNTIL THE VEHICLE IS IN PARK AND THE IGNITION IS SWITCHED OFF.**

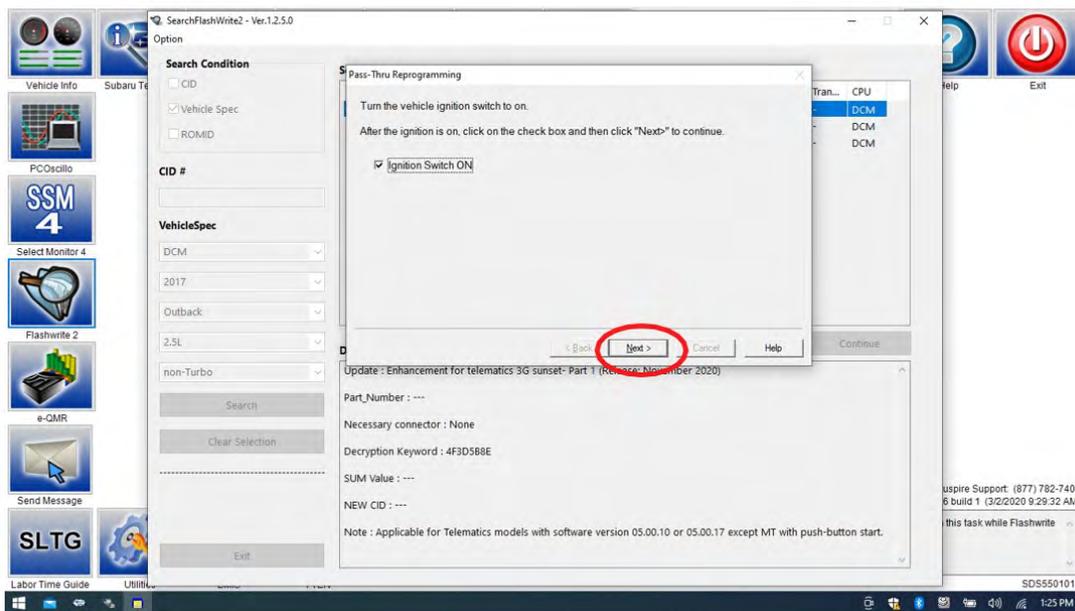
Continued...

NOTE: For CVT-equipped vehicles with push-button start:

- WITHOUT TOUCHING THE BRAKE PEDAL, push the start button (once).
- Move the selector into Park.
- Push the start button again to switch the vehicle OFF.
- WAIT 30 SECONDS and click OK.



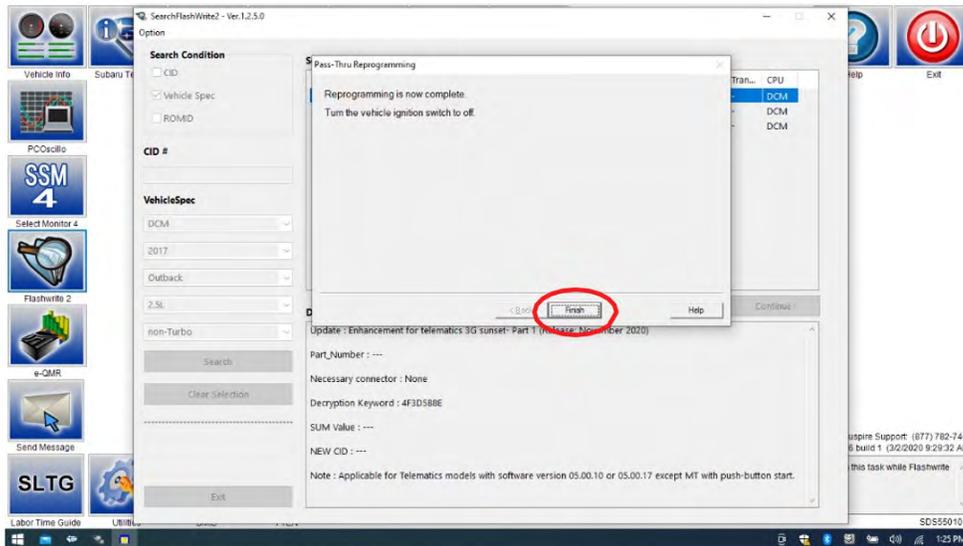
11. CRITICAL STEP: WAIT 30 seconds, cycle the ignition key or push-button start from OFF to ON, then click “Next.”



CRITICAL: Wait at least a full 5 minutes before proceeding from this point. During this waiting period, “repartitioning” is taking place in the DCM and cannot be interrupted. Do not attempt any other functions during this time (e.g., switching the ignition off, starting another update, using the SSM to check DCM status, Opening the door(s), etc.).

Continued...

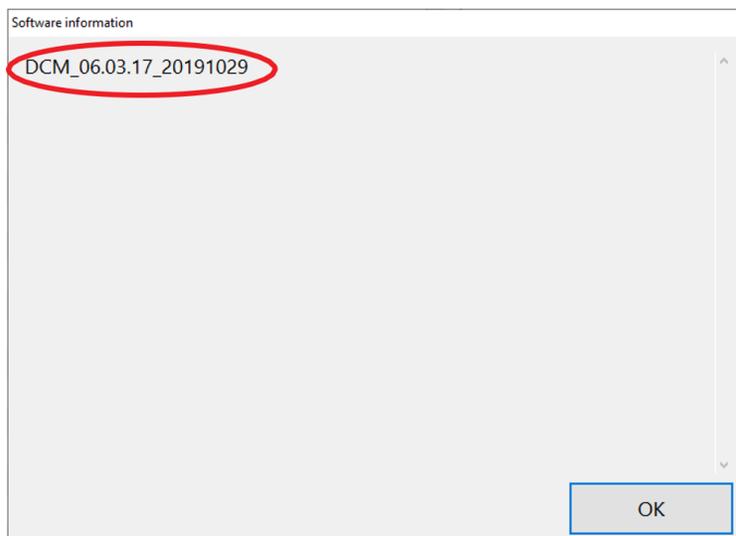
12. “Reprogramming is now complete” is displayed. Click on “Finish.”



13. With the vehicle in Park and the ignition on:

- a) Confirm SSM 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 the software on R.O. for reference.
 - i. After successful retrieval of the software version, proceed to **Step 14**.

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



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14. END OF PHASE 1 REPROGRAMMING. Proceed to **Step 1: Phase 3: Reprogramming** on page 18.

PHASE 2: REPROGRAMMING INTERMEDIATE 86229DCM01-2.PK2 (CURRENT SOFTWARE VERSION OF DCM IS 05.00.22 OR 05.00.30):

IMPORTANT: Due to the duration of each reprogramming procedure and consecutive reprogramming file transfers required to complete this 3G Sunset reprogramming update, a Subaru-approved Denso SSM cable is **STRONGLY** recommended. Cables from other manufacturers may not meet data transfer rate and interference shielding requirements to ensure error-free data transmission during reprogramming.

CAUTION: 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. This must be done 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 reprogramming will fail, resulting in irreparable damage.



FOR KEY START VEHICLES:

- Turn the ignition key ON (engine OFF).
- Depress the brake pedal and move the Shift Lever into NEUTRAL.
- Leave the ignition ON.

FOR VEHICLES EQUIPPED WITH KEYLESS ACCESS AND PUSH-BUTTON START:

- Without touching the brake pedal, press the Push Button Ignition Switch twice to put the ignition system in IG ON mode (Engine OFF).
- Depress the brake pedal and move the Shift Lever into NEUTRAL.
- Leave the ignition ON.

CRITICAL: DO NOT leave the vehicle in park! Doing so will damage the DCM requiring replacement.

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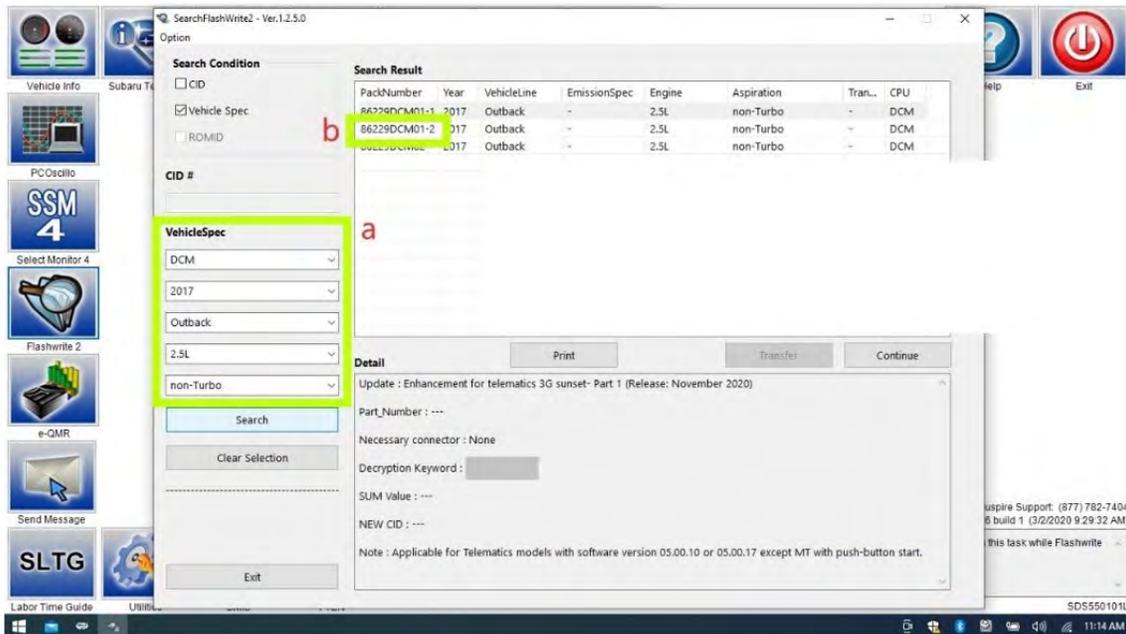
1. Connect the SDS Notebook and DSTi. Select **FlashWrite2** from the SDS Notebook GUI screen.



2. Once FlashWrite 2 opens, select DCM from the Vehicle Spec drop-down.

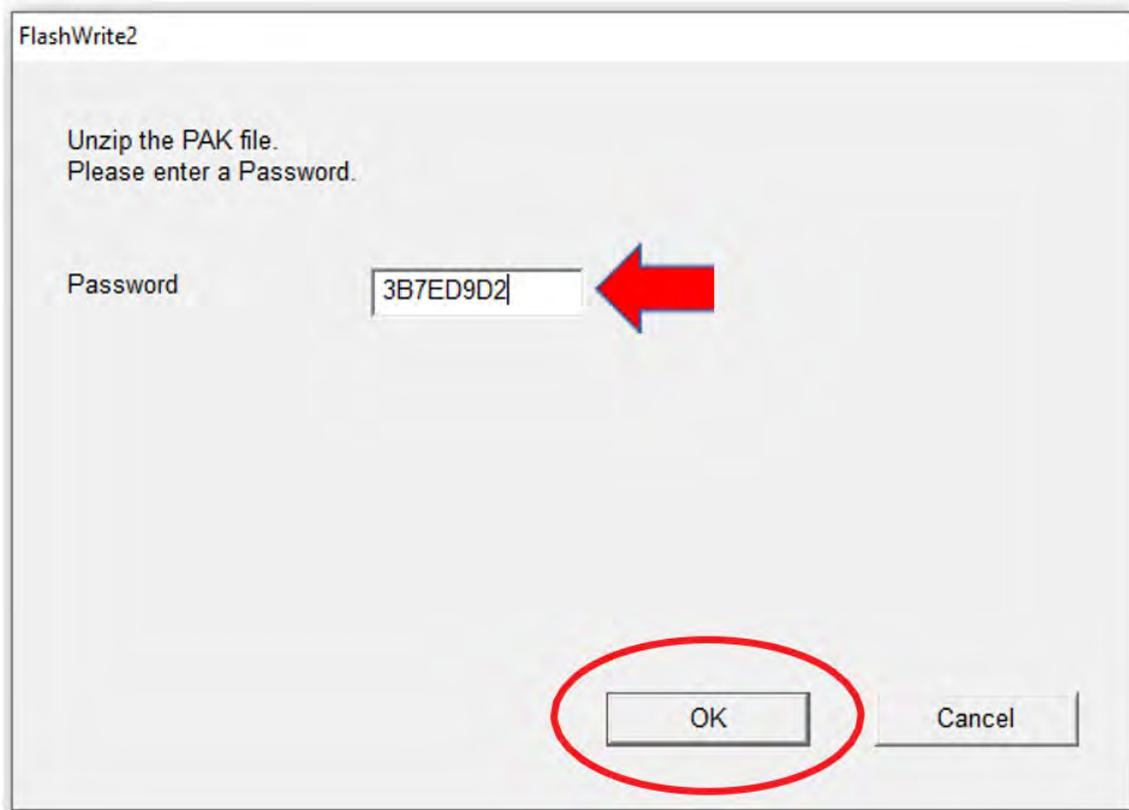
a) Complete entering the Vehicle Spec information.

b) Click and select the PK2 file **86229DCM01-2.pk2** intermediate image in FlashWrite.

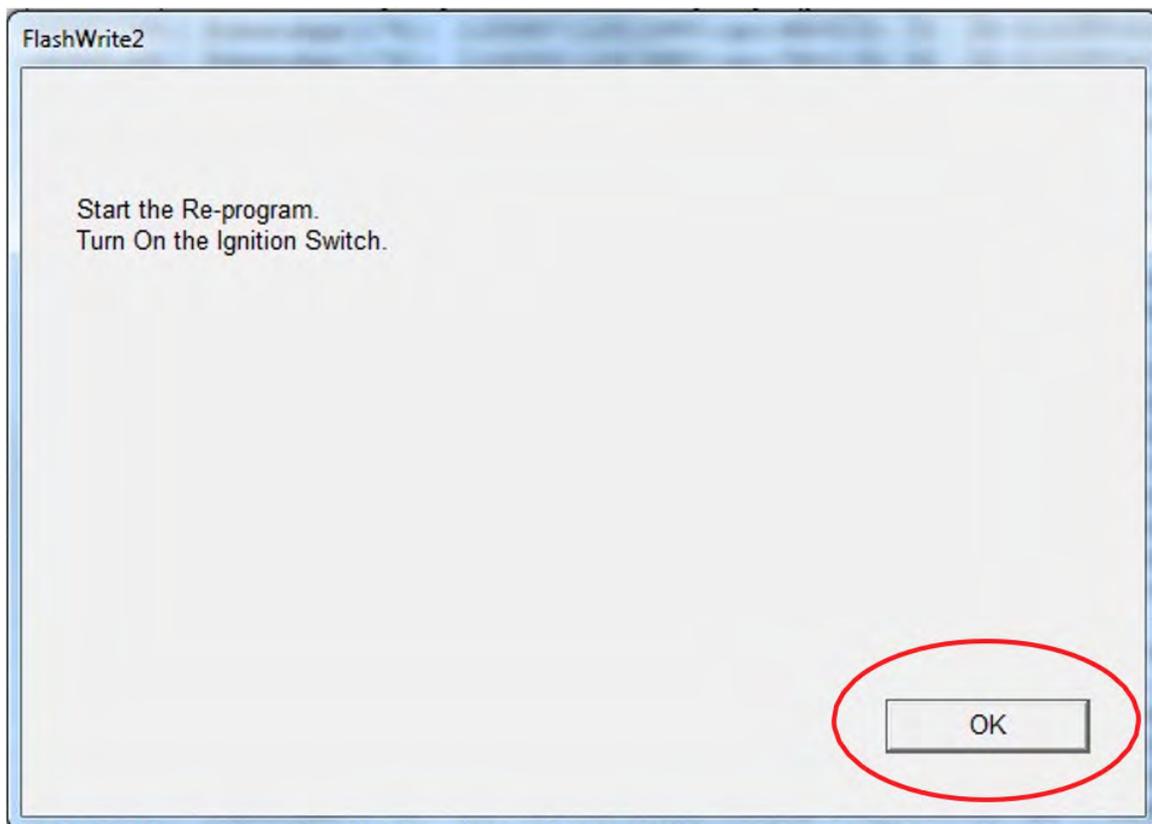


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3. Enter the Decryption Keyword from the table above (3B7ED9D2) and click “**OK**.”

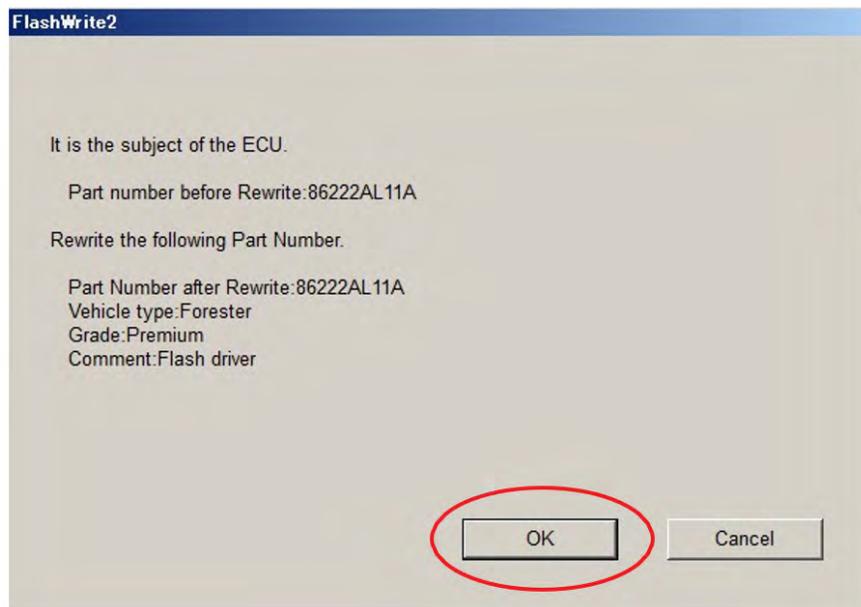


4. Turn the ignition ON and Click ‘**OK**’ to start the reprogram.



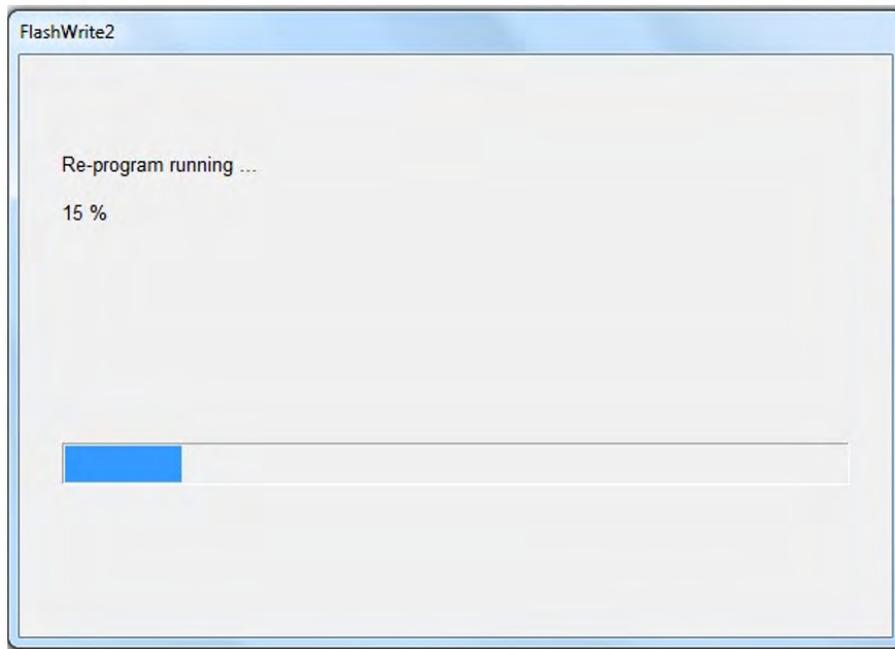
Continued...

- c) The part numbers before and after reprogramming 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 reprogramming. The Screen will always indicate "Forester" no matter what model or model year is being reprogrammed.

- d) A CAN reprogramming progression bar will appear and start incrementing toward 100%. The update may take up to 60 minutes to complete.

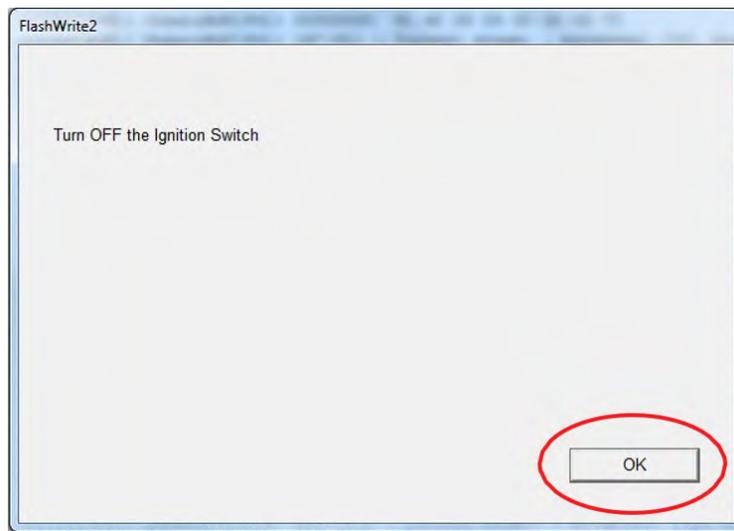


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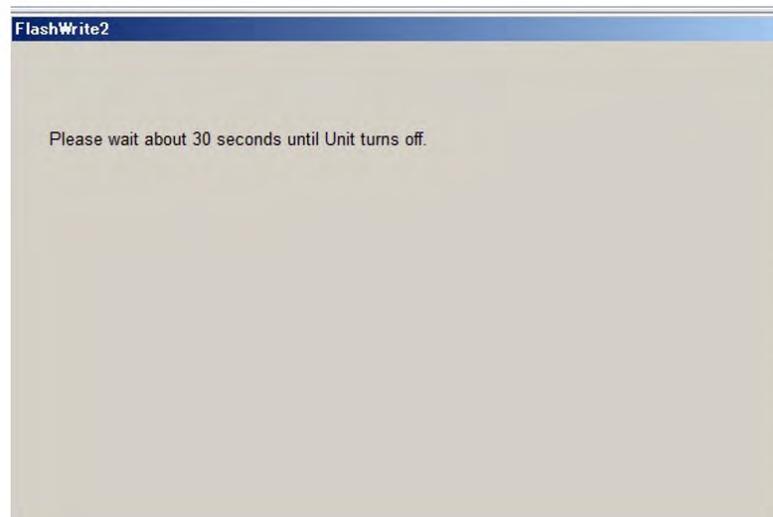
- e) **CRITICAL STEP:** After reprogramming, always put a CVT-equipped vehicle in PARK and ensure the ignition is turned OFF. A prompt to switch the ignition OFF will be displayed. **DO NOT CLICK OK UNTIL THE VEHICLE IS IN PARK AND THE IGNITION IS SWITCHED OFF.**

NOTE: For CVT-equipped vehicles with push-button start:

- WITHOUT TOUCHING THE BRAKE PEDAL, push the start button (once).
- Move the selector into Park.
- Push the start button again to switch the vehicle OFF.
- WAIT 30 SECONDS and click OK.

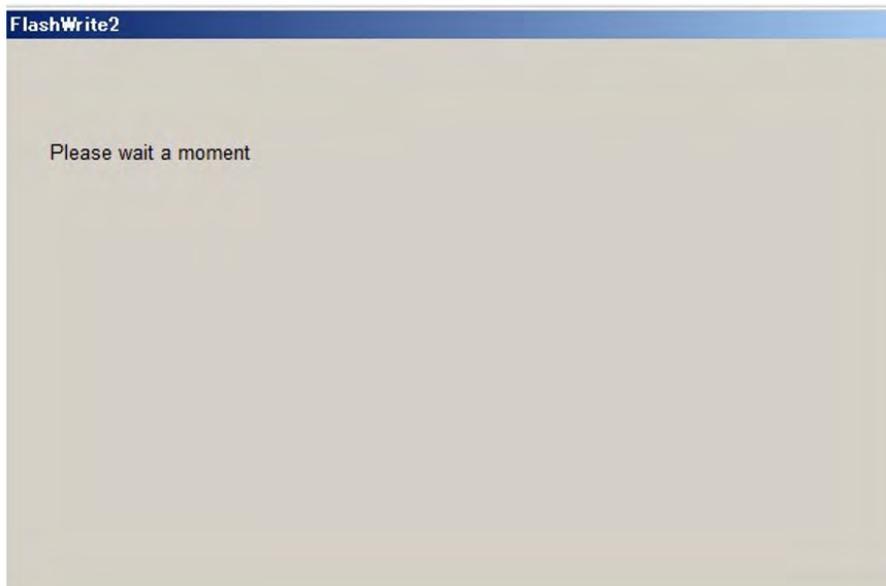
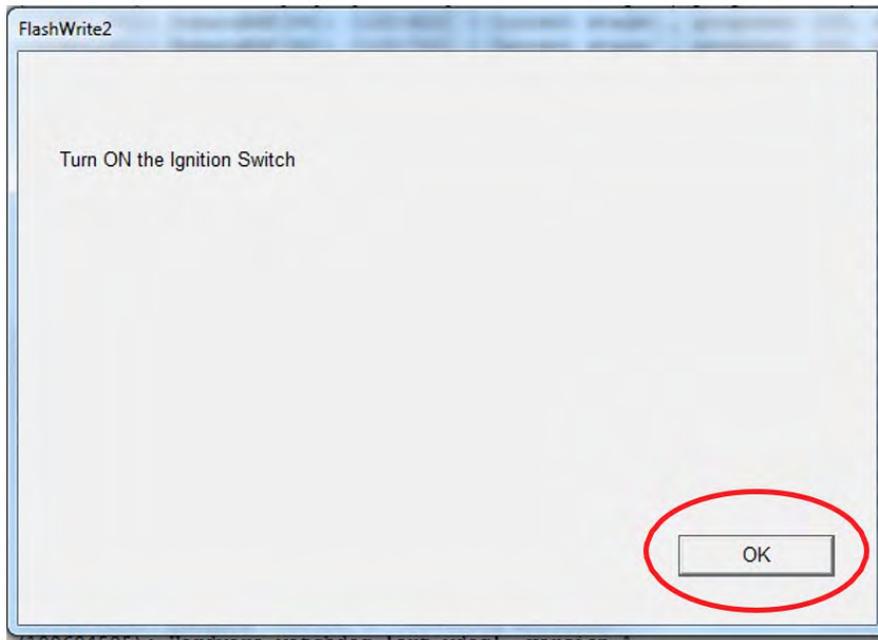


- f) **CRITICAL STEP:** FlashWrite will display the banner message “Please wait about 30 seconds until Unit turns off”. This banner page has a built-in timer and will NOT continue until 30 seconds have passed and the DCM has safely shut down. There is no way to verify the DCM has shut down except to wait to ensure the full 30 seconds have passed. The next screen, e) shown below, will display automatically.



Continued...

g) A prompt for toggling the ignition to ON will be displayed. Click on 'OK'

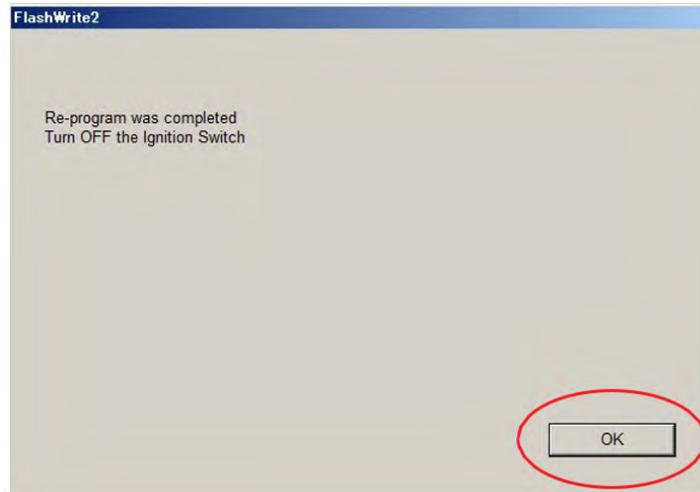


h) FlashWrite will display the banner message "Please wait a moment."

CRITICAL: Wait at least a full 5 minutes before proceeding from this point. During this waiting period, "repartitioning" is taking place in the DCM and cannot be interrupted. Do not attempt any other functions during this time (e.g., switching the ignition off, starting another update, using the SSM to check DCM status, Opening the door(s), etc.).

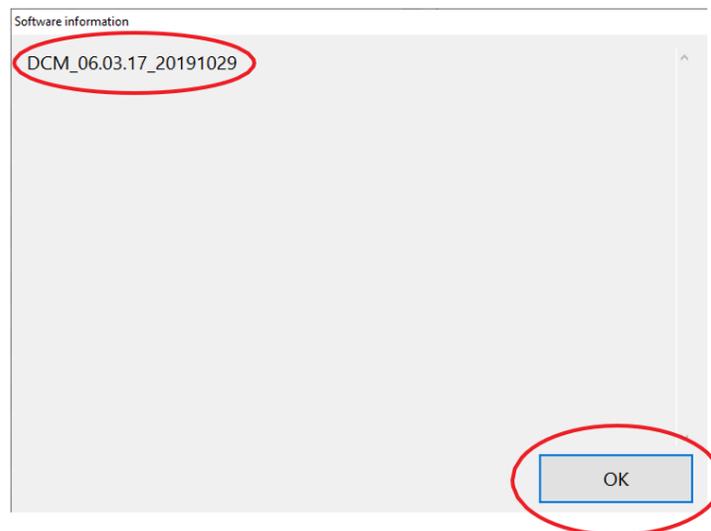
Continued...

- i) FlashWrite will display the banner message “Re-program was completed. Turn OFF the Ignition Switch.”



5. Verify the new DCM software version:

- j) Confirm SSM and DCM communication by retrieving the current software version.
- k) Click “Each System” on the left-hand menu.
- l) Select “Telematics” from the Systems List.
- m) Click “Work Support” on the left-hand menu.
- n) Select “Software Information” from the Work Support Items List.
- o) Record the current version of the software on the RO for reference.
 - i. Successful retrieval of DCM software version? Proceed to **Step 6 below**.
 - ii. If SSM cannot communicate with DCM, DCM has current DTC(s), or the DCM software version cannot be retrieved, contact Techline for assistance before proceeding.



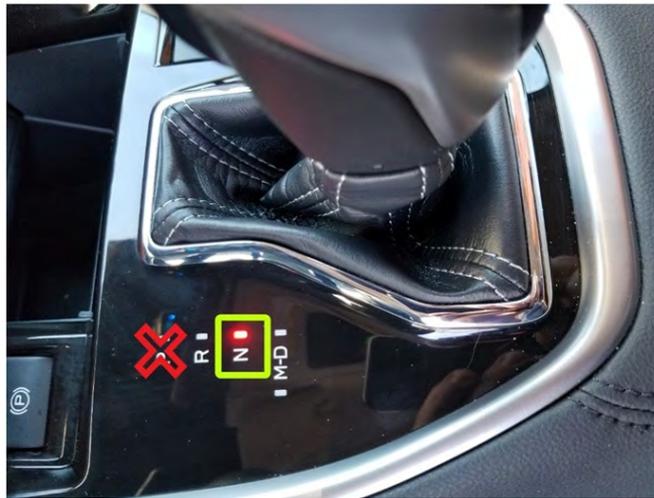
6. END OF PHASE 2 REPROGRAMMING. Proceed to **Step 1: Phase 3: Reprogramming Gen1 VoLTE 86229DCM02.pk2** on the next page.

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PHASE 3: REPROGRAMMING GEN1VOLTE 86229DCM02.PK2 (IF THE INTERMEDIATE DCM VERSION IS DCM_06.03.17_20191029):

REMINDER: Due to the duration of each reprogramming procedure and consecutive reprogramming file transfers required to complete this 3G Sunset reprogramming update, using a Subaru-approved Denso SSM cable is **STRONGLY** recommended. Cables from other manufacturers may not meet data transfer rate and/or interference shielding requirements to ensure error-free data transmission during reprogramming.

CAUTION: Ensure the Midtronics GR8 / Midtronics DCA-8000 in Power Supply Mode is connected to the vehicle, the parking brake is engaged, the ignition is in the “ON” position, the engine is OFF, the shift selector is in NEUTRAL, and the wheels are blocked. This must be done 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.



FOR KEY START VEHICLES:

- Turn the ignition key ON (engine OFF).
- Depress the brake pedal and move the Shift Lever into NEUTRAL.
- Leave the ignition ON.

FOR VEHICLES EQUIPPED WITH KEYLESS ACCESS AND PUSH-BUTTON START:

- Without touching the brake pedal, press the Push Button Ignition Switch twice to put the ignition system in IG ON mode (Engine OFF).
- Depress the brake pedal and move the Shift Lever into NEUTRAL.
- Leave the ignition ON.

CRITICAL: DO NOT leave the vehicle in park! Doing so will damage the DCM requiring replacement.

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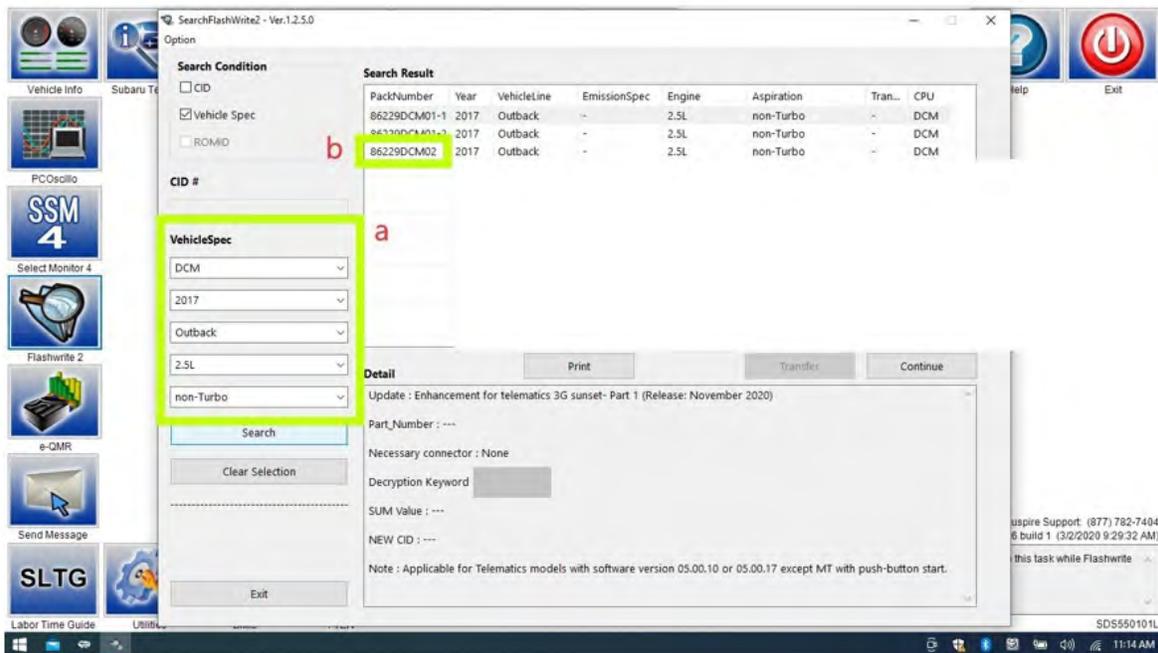
1. Connect SDS Notebook and DSTi. Select **FlashWrite2** from the SDS Notebook GUI screen.



2. Once FlashWrite 2 opens, select DCM from the Vehicle Spec drop-down.

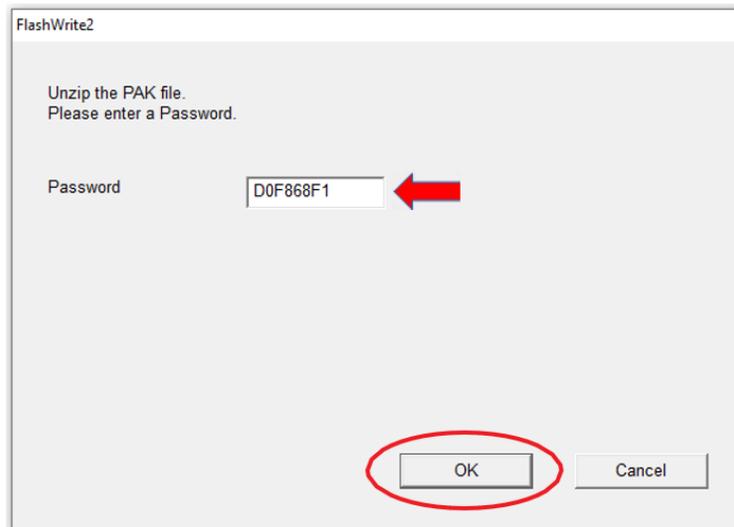
a) Complete entering the Vehicle Spec information.

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

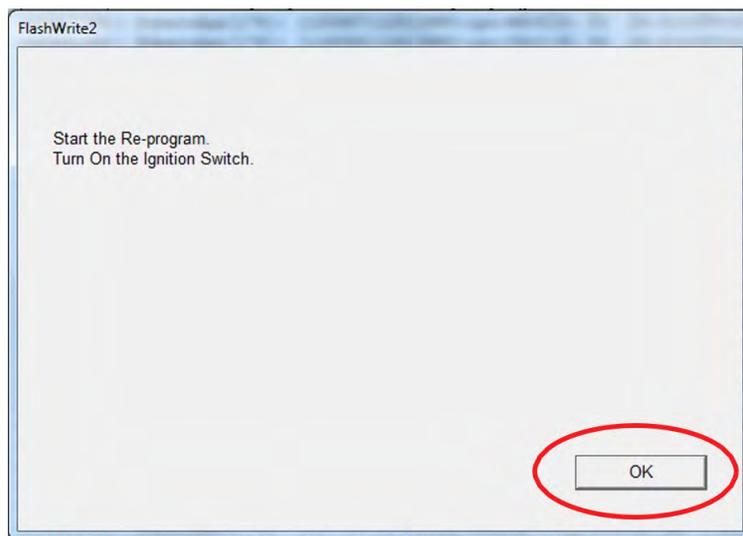


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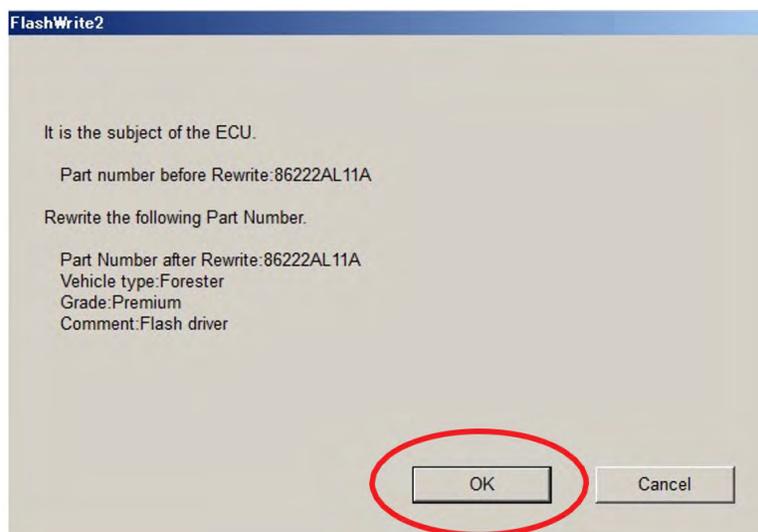
3. Enter the Decryption Keyword from the table above (D0F868F1) and click “OK.”



a) Turn the ignition switch ON and Click ‘OK’ to start the reprogram.



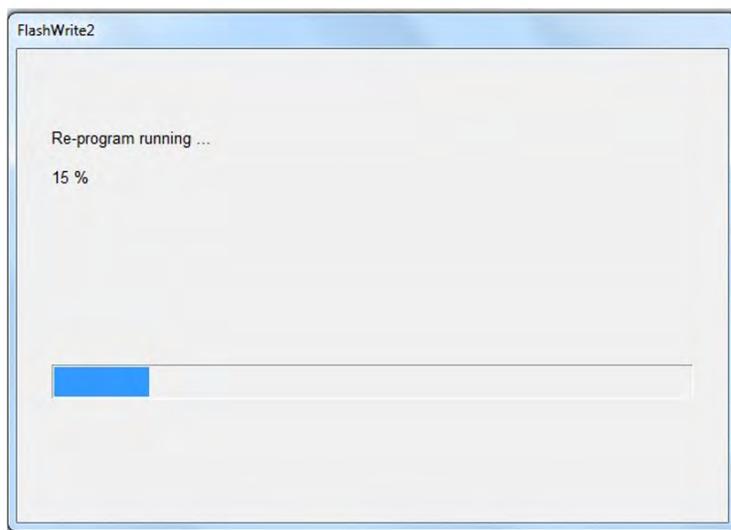
b) Part numbers before and after reflash will be displayed. Click ‘OK.’



Continued...

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 reprogramming. The Screen will always indicate “Forester” no matter what model or model year is being reprogrammed.

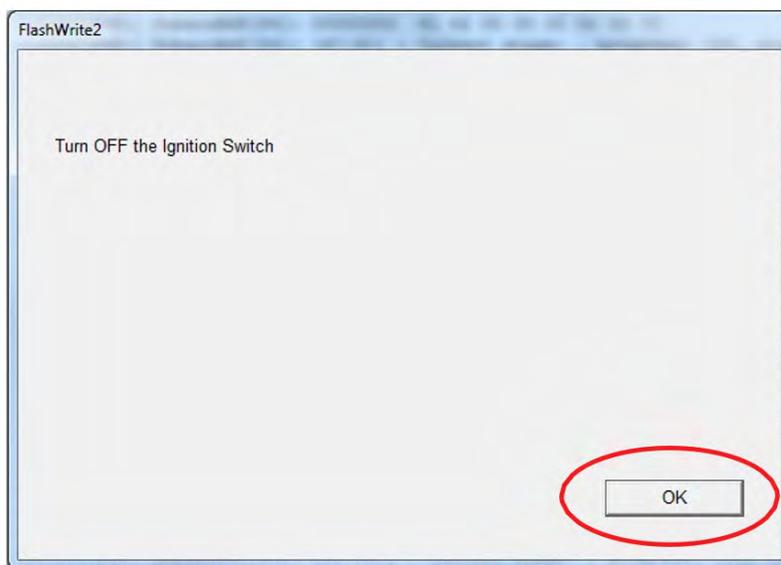
A CAN reprogramming progression bar will appear and start incrementing toward 100%. The update may take up to 60 minutes to complete.



- 1. CRITICAL STEP:** After reprogramming, always put a CVT-equipped vehicle in PARK and ensure the ignition is *turned OFF*. *A prompt to switch the ignition OFF will be displayed. DO NOT CLICK OK UNTIL THE VEHICLE IS IN PARK AND THE IGNITION IS SWITCHED OFF.*

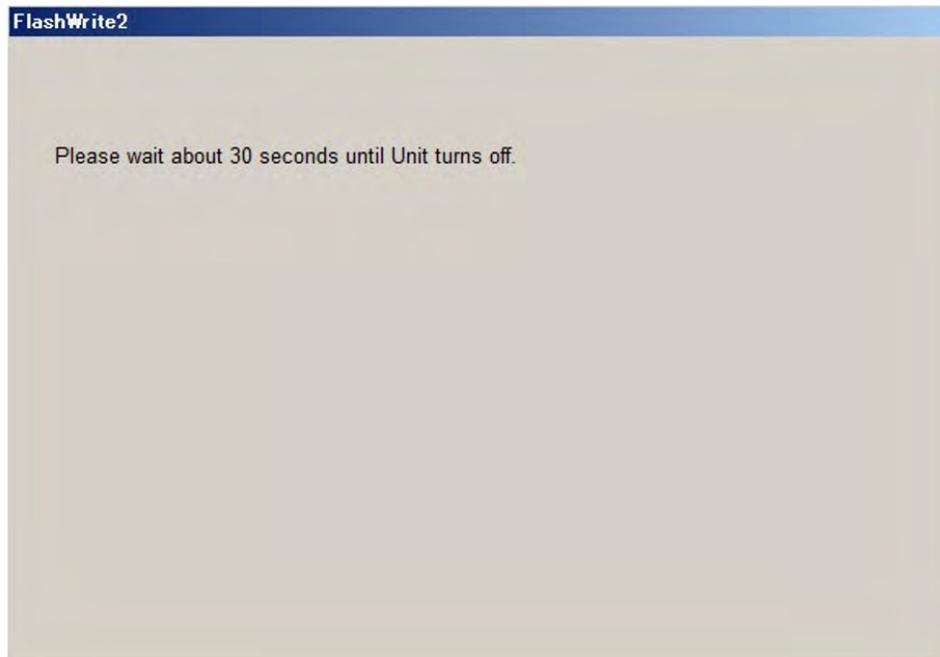
NOTE: For CVT-equipped vehicles with push-button start:

- WITHOUT TOUCHING THE BRAKE PEDAL, push the start button (once).
- Move the selector into Park.
- Push the start button again to switch the vehicle OFF.
- WAIT 30 SECONDS and click OK.

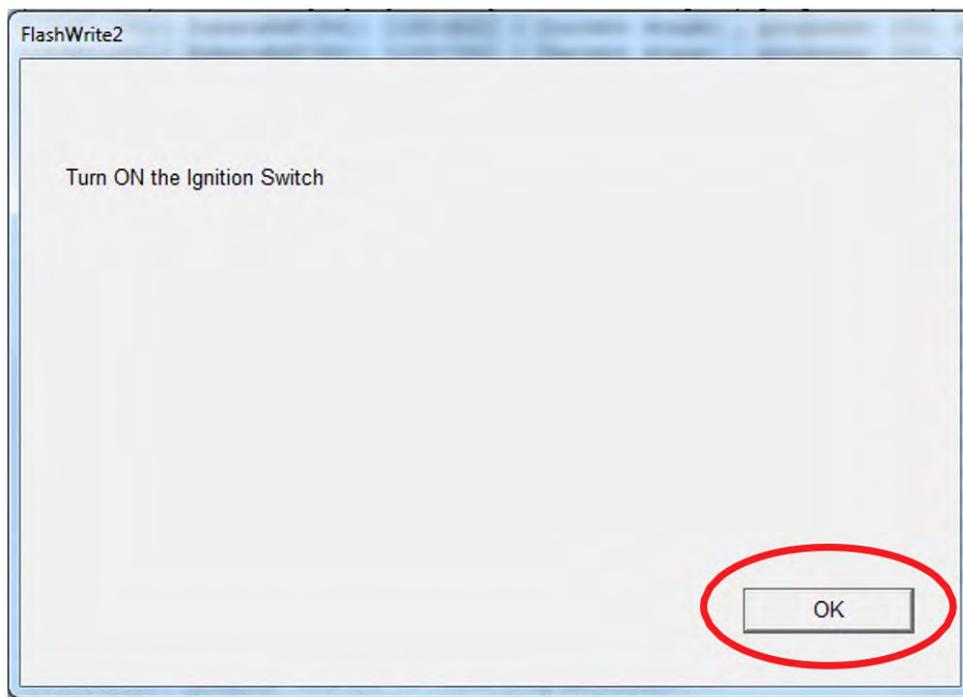


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- b) **CRITICAL STEP:** FlashWrite will display the banner message “Please wait about 30 seconds until the Unit turns off”. This banner page has a built-in timer and will NOT continue until 30 seconds have passed and the DCM has safely shut down. There is no way to verify that the DCM has shut down except **to wait to ensure the full 30 seconds have passed.** The next screen, e) shown below, will display automatically.

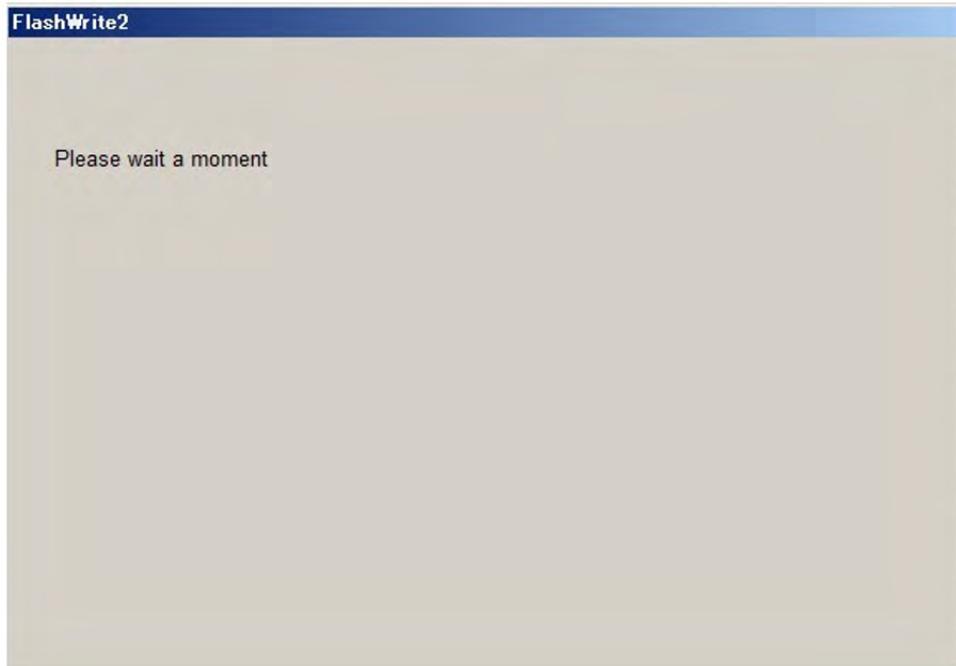


- c) The prompt for switching the ignition to ON will be displayed. Click on ‘OK.’



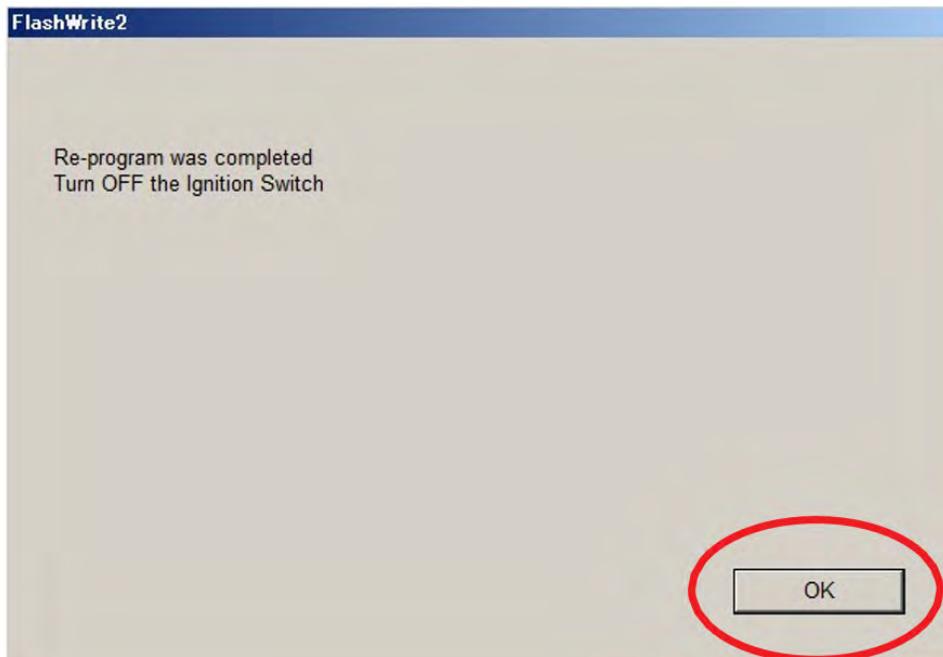
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- d) FlashWrite will display the banner message “Please wait a moment.”



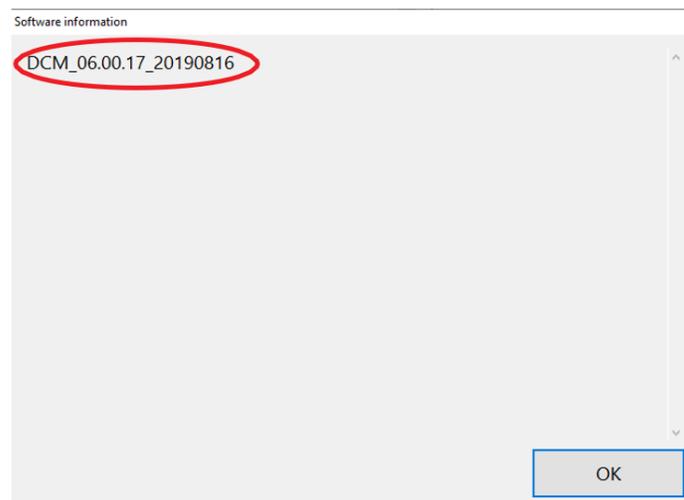
CRITICAL: Wait at least a full 5 minutes before proceeding from this point. During this waiting period, “repartitioning” is taking place in the DCM and cannot be interrupted. Do not attempt any other functions during this time (e.g., switching the ignition off, starting another update, using the SSM to check DCM status, Opening the door(s), etc.).

- e) FlashWrite will display the banner message “Re-program was completed. Turn OFF the Ignition Switch.”



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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 the 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 below.
 2. If the final version is incorrect, record the DCM software version and contact Techline.



END OF PHASE 3 REPROGRAMMING.

POST-REPROGRAMMING ACTIONS:

1. **Mandatory Techline Call:** Immediately after the successful completion of the DCM 3G reprogramming, contact Techline. Provide the vehicle identification number (VIN) and confirm the reprogramming has been completed.
2. **SIM Status Activation:** Request Techline to activate the SIM card associated with the DCM. Techline will confirm the successful activation before proceeding.
3. **Capacitive Discharge:** Perform a capacitive discharge on the vehicle’s electrical system. Follow the manufacturer’s recommended procedure for your specific model. This step ensures the DCM resets and attempts to attach to the 4G network.
4. **Enrollment:** Once the car is returned to the customer, the customer will wait five days before contacting STARLINK to complete enrollment.

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IMPORTANT NOTES:

Skipping the Techline call and SIM activation Step will prevent the DCM from connecting to the 4G network, rendering related features unusable.

The capacitive discharge is critical to ensure the DCM recognizes the updated network configuration.

Do not proceed with enrollment until the DCM is successfully connected to the 4G network.

CUSTOMER ENROLLMENT AND TELEMATICS VERIFICATION AFTER DCM REPROGRAMMING:

ENROLLMENT IN A STARLINK SUBSCRIPTION PLAN:

- **Customer Commitment:** Remind the customer that it is their responsibility to call the Starlink Enrollment Center 5 days after returning the vehicle to complete enrollment and verify operation.
- **MySubaru Account Confirmation:** Review with the customer the importance of updating or creating the MySubaru account associated with the VIN receiving the 3G reprogramming. This step must be completed before contacting the Starlink Enrollment Center to expedite enrollment.
- **Verification:** Once the subscription is active, the customer will verify telematics operation by completing an SOS call telling the call agent that they are completing a test call post-3G reprogramming and enrollment. The customer can also request a remote door unlock to verify all services are operating as expected.

TESTING TELEMATICS OPERATION:

- **SOS Call Test:** Testing the SOS call functionality. Make sure the vehicle is in a safe location before proceeding.
- **Initiate SOS Call:** Ensure the GREEN TELEMATICS LED IS ILLUMINATED BEFORE STARTING. DO NOT USE THE iButton FOR TESTING.
- **Verify Response:** Monitor the response from the Starlink call center. Ensure the call connects successfully and the call center agent can receive and understand the customer. The customer can request a remote door unlock from the call agent to test the full functionality of the telematics system.
- **Unexpected Results:** Should the car fail to provision, the customer cannot complete the SOS test call, or the remote door does not unlock as expected, SiriusXM will instruct the customer to return to the retailer for additional diagnosis.

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CUSTOMER RETURNS TO RETAILER FOR TESTING REMOTE SERVICES (IF APPLICABLE):

- **Explain Functionality:** Briefly explain the remote services available with the chosen Starlink subscription plan, such as vehicle lock/unlock, horns and lights, and location tracking.
- **Mobile App Setup:** Assist the customer in downloading and setting up the Starlink mobile app on their compatible device. Guide them through the login process using the newly created account credentials.
- **Test Features:** Demonstrate the various remote service features within the app, ensuring the customer understands how to use them effectively. Test lock/unlock commands and location tracking accuracy.

FINALIZATION:

- **Inform the Customer:** Briefly explain the next steps for the customer, including any follow-up instructions or reminders about their Starlink subscription and telematics features.
- **Return the Vehicle:** Release the vehicle to the customer after confirming their understanding of the telematics enrollment and functionality.

ADDITIONAL NOTES:

- Always follow the specific guidelines and procedures outlined by Subaru or Starlink for customer enrollment and telematics verification.
- Maintain clear communication with the customer throughout the process, addressing any questions or concerns they may have.
- Document all steps taken and results observed during the telematics testing on the repair order for future reference.

WARRANTY / CLAIM INFORMATION:

Credit for performing this reprogramming service will be based on submitting adequately completed repair order information.

IMPORTANT NOTE:

- Any labor performed in relation to the Data Communication Module Warranty Extension will require the claim information supplied in TSB 15-317-24.
- **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.

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Labor Description	Labor Operation #	Labor Time	Fail Code
3G SUNSET VOLTE SOFTWARE VERSION CHECK ONLY	A067-938	0.2	ZTX-43
3G SUNSET VOLTE SOFTWARE DCM SOFTWARE UPDATE	A067-928*	1.9	
3G SUNSET VOLTE SOFTWARE DCM SOFTWARE UPDATE FAILURE / DCM REPLACEMENT	B067-904*	2.3	

Impreza MT with Push-Button Start & WRX/STI MT with Push-Button Start Only.

Labor Description	Labor Operation #	Labor Time	Fail Code	Claim Type
3G SUNSET DCM REPLACEMENT	A067-941	0.5H	ZTY-43	PA

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

** This operation number can only be claimed when a software update retry is performed/attempted. An accurate punch count must be recorded for all software updates retry work. The Straight Time (S.T.) Labor Time for operation number C067-919 is, at most, 2.0 hours.

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.

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APPENDIX A (BATTERY CHARGING INFORMATION):

Subaru of America, Inc. (SOA) highly recommends utilizing either the Subaru Midtronics DCA8000 Dynamic Diagnostic Charging System or the Subaru Midtronics GR8-1100 Diagnostic Battery Charger to the vehicle in the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Once the Midtronics charger is connected to the vehicle, if the battery is fully charged, it will take less than three (3) minutes to boot-up the charger, select the Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

NOTES:

- For instructions on using the Power Supply Mode, reference the applicable User Manual for the Midtronics DCA-8000 Dynamic Diagnostic Charging System and the Midtronics GR8-1100 Diagnostic Battery Charger on STIS.
- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched OFF before setting up the charger for Power Supply Mode.
- Select the correct battery type (Enhanced Flooded, Flooded, Gel, AGM, or AGM Spiral).
- Input the 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.
- If using a DCA-8000 Dynamic Diagnostic Charging System, set the power supply voltage to 13.5 Volts.
- DO NOT connect the DST-i or DST-010 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 DST-i or DST-010 to the OBD connector and proceed with initiating the normal FlashWrite 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.

REMINDER: If the DCA-8000 or GR8-1100 indicates the vehicle's battery must be charged, charge the battery fully before proceeding to reprogram the vehicle while using the Power Supply Mode.

NOTE: 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.

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VERY IMPORTANT:

This information is applicable to the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System and the Subaru Midtronics 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 the GR8-1100 and their Power Supply Mode feature have been tested and approved by SOA.

APPENDIX B (TROUBLESHOOTING CONCERNS FOUND BEFORE UPGRADE):

Before initiating the 3G Sunset reprogramming, conduct a thorough system check to identify potential issues with the Telematics system. These conditions may require addressing before proceeding.

LED and DTC Checks:

1. Telematics LED RED: Stop the process immediately. Notify the customer and explain that DTC repair is not included in the free upgrade. The reprogramming cannot proceed until the Telematics system functions normally (green LED) and no DTCs are present.
2. Telematics LED RED with DTC(s) (except B2A0E): Follow step 1 above (DTC repair must be addressed).
3. The telematics LED is NOT green, and no DTCs are present (except B2A0E or B2A0C). Stop the process. Inform the customer about the malfunctioning Telematics system and the need for repairs before continuing.

DTC B2A0E EXCEPTION:

- This DTC may appear in older DCMs without a current hard fault. Clear the DTC and perform an ignition cycle.
- If the DTC resets as current, consider it a “hard” fault, and follow step 1 above.
- If the DTC does not reset after an ignition cycle, proceed with Step 2 on page 3 of the primary document.

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APPENDIX C (REPROGRAMMING FLOWCHART):

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.

