SUBARU

QUALITY DRIVEN® SERVICE

SERVICE PROGRAM BULLETIN

APPLICABILITY:	2022 MY WRX	**NUMBER:** WRA-22R
SUBJECT:	WRX EyeSight® Reprogramming	**DATE:** 07/18/22
		REVISED: 08/02/22

In the interest of customer satisfaction, Subaru of America, Inc. (Subaru) is initiating a service program for certain 2022 model year WRX vehicles equipped with EyeSight® Driver Assist Technology.

REASON FOR THIS SERVICE PROGRAM

The EyeSight® software in the vehicles included in this service program may erroneously cause the EyeSight® functions to temporarily stop working under certain operating conditions. EyeSight® functionality will be unavailable for the remainder of the drive cycle, the EyeSight® warning light will illuminate, and diagnostic trouble code (DTC) B28A6 will be stored. Following the next ignition cycle, the EyeSight® function returns to normal.

DESCRIPTION OF THE REPAIR

Subaru retailers will check and, if necessary, update the EyeSight® software as described in this bulletin at no cost to the customer.

AFFECTED VEHICLES

The number of U.S. vehicles included in this service program is 1,185.

Model Year	Carline	Production date range
2022	WRX	February 25, 2022 – April 27, 2022

Not all vehicles in the production date range listed above may be included in this service program. Coverage for all affected vehicles must be confirmed by using the Vehicle Coverage Inquiry function on subarunet.com.

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Retailer Responsibility

Please be advised that it is a violation of Federal law for a dealer to deliver a new motor vehicle covered by a recall under a sale or lease until the defect is remedied. Therefore, any Authorized Subaru Retailer failing to perform the applicable service procedures to correct all affected vehicles in their inventory prior to the vehicle being placed in service may be subject to civil penalties of up to $22,423 per violation (i.e., for each vehicle), as provided in 49 CFR §578.6 and will also be in breach of the Subaru Dealer Agreement.

Any vehicles listed in any recall/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 (used, demo & SSLP). Whenever a vehicle subject to this service program is taken into retailer inventory necessary steps should be taken to ensure the recall correction has been made before selling or releasing the vehicle.

Owner Notification

Subaru will notify affected vehicle owners by first class mail in August. Retailers will be advised when the notification is scheduled.

EyeSight® Stereo Camera Location:

EyeSight® Stereo Camera

SERVICE PROCEDURE /OUTLINE:

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                          │    START    │
                          └─────────────┘
                                 │
                                 ▼
                          ╱───────────────╲
        NO  ◄─────────────  Check The VIN.
                            Is The VIN Affected By
                            The Service Campaign?
                          ╲───────────────╱
                                 │ YES
                                 ▼
          ┌──────────────────────────────────────────────────┐
          │ Check the EyeSight® software version information  │
          │                 using SSM                         │
          └──────────────────────────────────────────────────┘
                                 │
                                 ▼
                          ╱───────────────╲
                           Original Version
          ◄────────────          or
                           Updated Version
                          ╲───────────────╱
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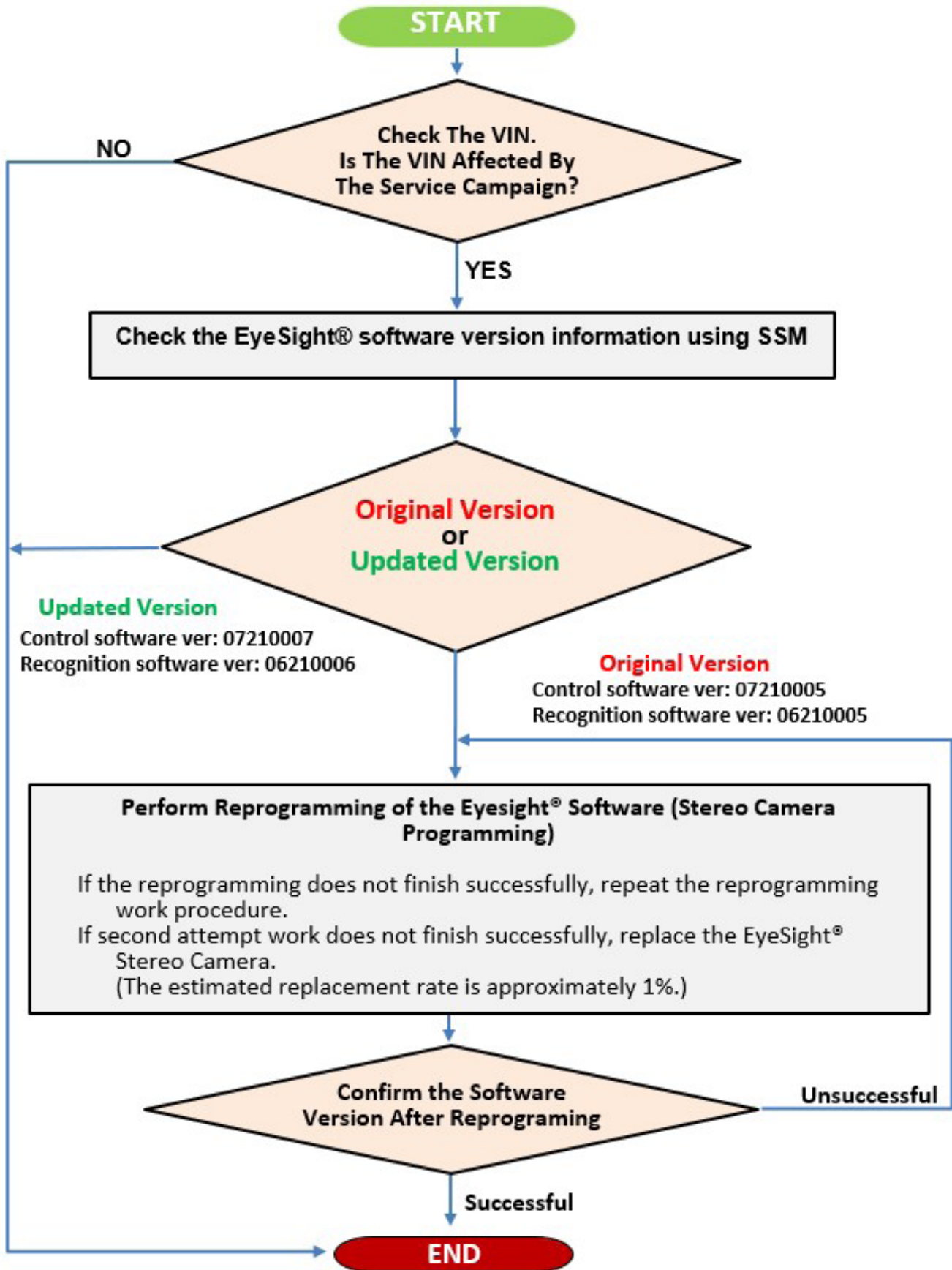
Updated Version
Control software ver: 07210007
Recognition software ver: 06210006

Original Version
Control software ver: 07210005
Recognition software ver: 06210005

Perform Reprogramming of the Eyesight® Software (Stereo Camera Programming)

If the reprogramming does not finish successfully, repeat the reprogramming work procedure.
If second attempt work does not finish successfully, replace the EyeSight® Stereo Camera.
(The estimated replacement rate is approximately 1%.)

Confirm the Software Version After Reprograming — Unsuccessful

Successful

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                          ┌─────────────┐
                          │     END     │
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PACK FILE APPLICABILITY:

Model	Model Year	File Name	Decryption Keyword
WRX	2022	87501VC012.pk2	6C5ACB43

SERVICE PROCEDURE / INFORMATION:

REMINDER: Customer satisfaction and retention starts with performing quality repairs.

STEP 1: Confirm the VIN is affected by the Service Campaign.

STEP 2: Using the Subaru Select Monitor (SSM), check the current Control Software Version and the Recognition Software Version in the Data Monitor function of the EyeSight® Stereo Camera Assembly.

		Item	Value	Unit	Maximum	Minimum	Average
☐	ES	Camera Temperature (Current)	124.7	°F	124.7	124.7	124.7
☐	ES	Control Software Version	07210005		-	-	-
☐	ES	Recognition Software Version	06210005		-	**EXAMPLE**	-

Using the values found within the data, confirm if the software has the updated version as per the table below.

Software	Control Software Version Number	Recognition Software Version Number	Result
Updated Version	7210007	6210006	End of Procedure
Original Version	7210005	6210005	Proceed to STEP 3

STEP 3: Using the Subaru Select Monitor (SSM), check the Camera Temperature within the Data Monitor Function of the EyeSight® Stereo Camera Assembly. <mark>Confirm the Camera Temperature is less the 176°F (80°C). Allow the temperature to decrease if needed before proceeding.</mark>

		Item	Value	Unit	Maximum	Minimum	Average
☐	ES	Camera Temperature (Current)	124.7	°F	124.7	124.7	124.7
☐	ES	Control Software Version	07210005		-	-	-
☐	ES	Recognition Software Version	06210005		-	**EXAMPLE**	-

STEP 4: EyeSight® Stereo Camera Assembly Reprograming Precautions

   A. Confirm there are no faults within the EyeSight® system. If there are any faults, they must be diagnosed, repaired, and cleared prior to reprogramming. Fully exit SSM prior to starting FlashWrite 2.

   B. Apply the Electronic Parking Brake (EPB). Switch the ignition switch to the "ON" position (engine off). Using the gear selector lever, set the vehicle in the Neutral (N) range. Wait at least 5 minutes after complete.

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CRITICAL:

- If the gear selector is in the Park (P) range, it is possible for the ignition switch to turn off automatically while reprogramming after approximately 60 minutes. This will cause the reprogramming procedure to fail.

- **DO NOT** operate SSM during reprograming.

- **DO NOT** have the engine running during reprogramming.

  C. Confirm the PC being use for reprogramming is connected to a known good power source. Turn off any screen saver settings. Make sure the PC is not in power saving mode and is set to the normal power mode.

  D. Confirm all electrical loads are switched off such as climate control, seat heater, audio system, etc.

  E. Connect a Midtronics DCA-800 or GR8-100 battery charger to the vehicle, utilize the Power Supply Mode feature to supply a stable **13.5 volts**.

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 (Flooded, EFB, 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, DST-010, or SDI 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, DST-010, or SDI 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 14V 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.

- 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.

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

STEP 5: EyeSight® Stereo Camera Assembly Reprograming

   A. Reprogram the EyeSight® Stereo Camera Assembly following the normal FlashWrite procedure.

REMINDER: When the reprogramming procedure is completed correctly, Flashwrite will prompt a message displaying "Turn OFF the Ignition Switch." The gear selector MUST be placed in the Park (P) position prior to switching the ignition switch to the "Off" position.
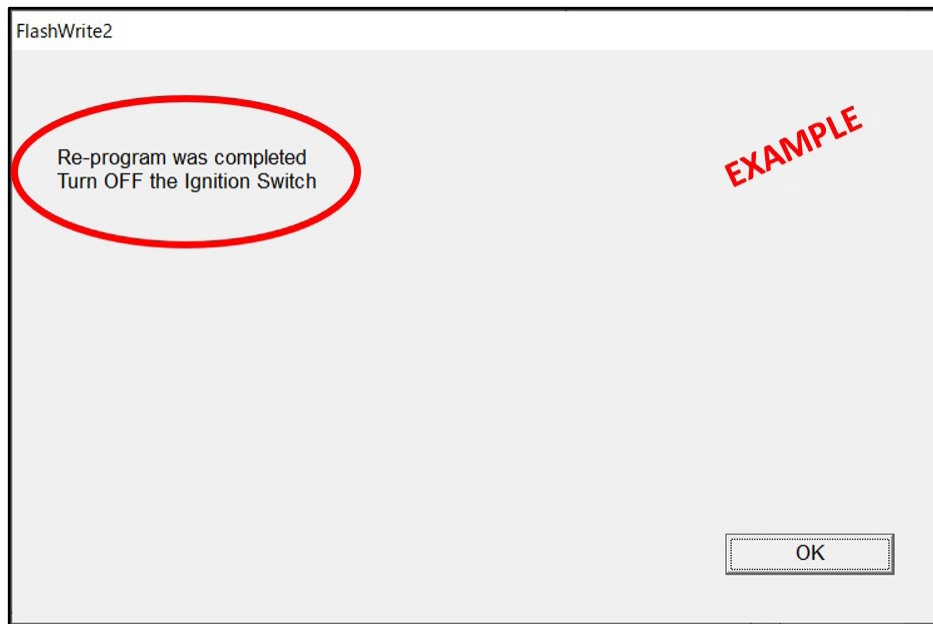
STEP 6: Reprogramming Confirmation

   A. Switch the ignition switch to the "ON" position.

   B. Using SSM, check the current Control Software Version and the Recognition Software Version in the Data Monitor function of the EyeSight® Stereo Camera Assembly. Document the current software information on the repair order.

		Item	Value	Unit	Maximum	Minimum	Average
	ES	Camera Temperature (Current)	104.0	°F	104.0	104.0	104.0
	ES	Control Software Version	07210007		-	-	-
	ES	Recognition Software Version	06210006		**EXAMPLE**		-

Continued...

Confirm the Control Software Version is **07210007** and the Recognition Software Version is **06210006. If** the software version shown on SSM is does not match the versions stated above, the procedure has failed. Repeat the procedure starting from **STEP 2.**

CAUTION: Additional reprograming error information can be found on page #9. If the reprogramming is not successful after two attempts, replace the Stereo Camera Assembly.

NOTE: The steering responsive headlight and automatic headlight beam leveler function may be turned off temporarily after EyeSight® reprogramming has been performed. These features will recover automatically after driving.

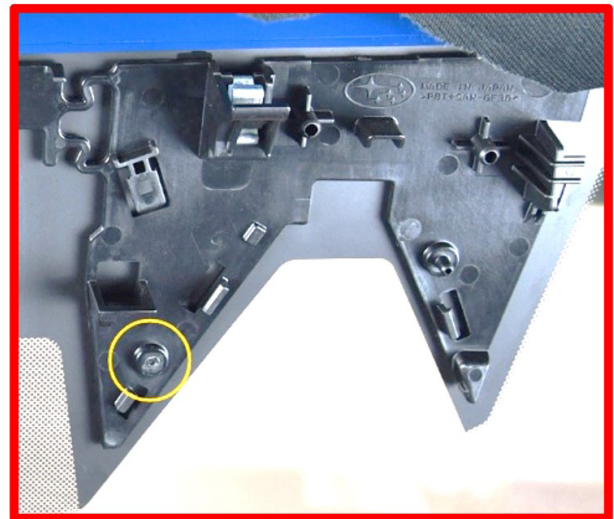**EyeSight® Stereo Camera Assembly Replacement (if required):**

In the event that the reprogramming cannot be completed after two attempts, the EyeSight® Stereo Camera Assembly will require replacement.

The service procedures for the stereo camera assembly replacement remain unchanged. Always refer to the applicable Service Manual and review the full requirements of the repair being performed. The Service Manual procedures contain information critical to performing an effective repair the first time, every time. This includes but is not limited to important SAFETY precautions, proper inspection criteria, necessary special tools, required processes and related one-time-use parts needed for a complete and lasting repair.

Refer to STIS: Body & Electrical/WIRING SYSTEM > EyeSight® > Stereo Camera

CAUTION:

If EyeSight® stereo camera assembly removal is required, particular care must be taken while removing the cover in order to avoid damaging the camera bracket. If excessive force is applied to the camera cover during removal the camera cover may contact the lens hood alignment pins on the camera bracket, causing them to break. If this happens, the windshield will require replacement.

EyeSight® Stereo Camera Part Information:

Part Description	Part Number
CAMERA ASSY	87501VC012

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IMPORTANT: The part number labeled on the stereo camera assembly may be **87501VC010** or **87501VC011** even though the part number located on the outer box is **87501VC012.** If the part has a pink dot sticker as shown in the image below, this indicates that the software has been updated to the latest version and can be used in place of **87501VC012.**
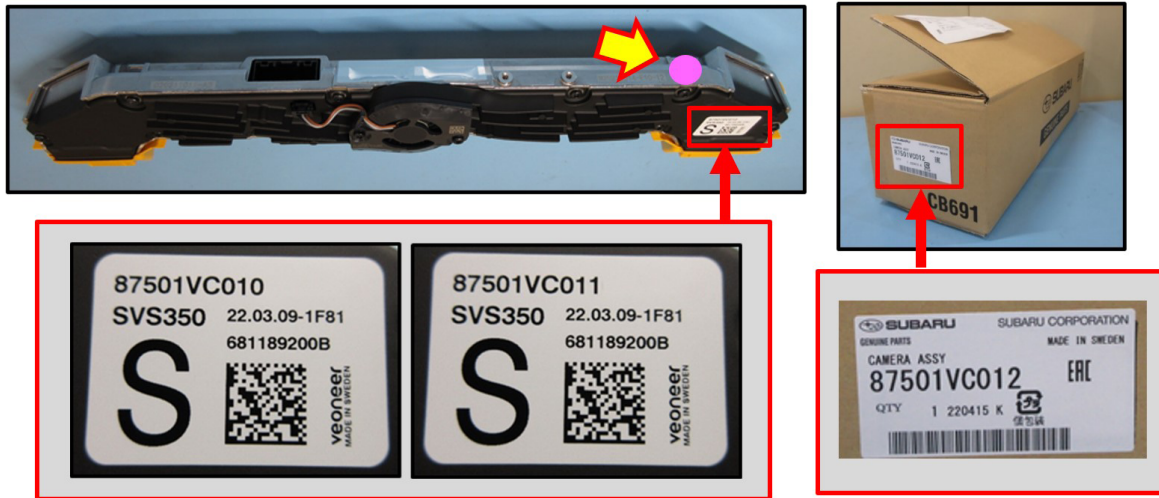
Error Code Information:

In the event of an unsuccessful reprogramming attempt, an error code may be displayed. Pictured below is a description of the codes and the correct course of action if encountered.

No	Error Code	Type of Error	Course of Action
1	00000001	Parameter Error	The reprogramming may have been successful. Confirm the software was updated to the latest version. Control software-version: 07210007 Recognition software-version: 06210006 If yes, successfully reprogrammed. Clear the fault memory. End of the procedure. If unsuccessful, repeat the reprogramming procedure from STEP 5.
2	00000009	Communication Error	
3	00000281	Download Error	Turn OFF the ignition switch and wait for 10 seconds. Repeat the reprogramming procedure from STEP 5. <u>DO NOT close FlashWrite2 at this time.</u>
4	00000282	Data transfer Error	
5	00000283	Transmit Completion Error	
6	00000284	Checksum Error	
7	00000270	Unit Condition Error	Confirm the stereo camera temperature is less than 176°F / 80°C and the battery voltage is approximately 13.5 volts. Turn OFF the ignition switch and wait for 10 seconds. Close FlashWrite2 and repeat the reprogramming procedure from STEP 5.

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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 upper radiator support. 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

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SUBARU
Campaign Code

WRA-22

COMPLETED
DIST./DEALER NO.


SERIAL NO.


DO NOT REMOVE
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CLAIM REIMBURSEMENT AND ENTRY PROCEDURES:

Credit to perform this recall will be based on properly completed repair order information. Retailers may submit claims through Subarunet.com.

Labor Description	Labor Operation #	Labor Time	Fail Code
VERSION CHECK & REPROGRAMING	A167-718	1.3	
VERSION CHECK & REPROGRAMING (2 TIMES)	A167-728	2.1	
VERSION CHECK & REPROGRAMMING (2 TIMES & FAILED) STEREO CAMERA REPLACEMENT	A167-701	3.5	WRA-22
VERSION ID CHECK (NO REPROGRAMMING NEEDED)	A167-708	0.2	

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.