



SERVICE PROGRAM BULLETIN

APPLICABILITY: 2020-2021MY Legacy and Outback

SUBJECT: Reprogramming of Denso CP1 Infotainment

Units to Optimize System Performance

NUMBER: WRI-20R

DATE: 12/11/20 **REVISED:** 01/21/21

INTRODUCTION:

In the interest of customer satisfaction, Subaru of America, Inc. (Subaru) is initiating a Service Program for certain 2020-2021 model year Legacy and Outback vehicles to update the Cockpit Control Module (CCM) software to the latest version.

AFFECTED VEHICLES:

Not all vehicles listed below are included in this Service Program. <u>Coverage for all affected vehicles must be confirmed by using the Vehicle Coverage Inquiry function on subarunet.com.</u> This information will be available today.

The number of U.S. vehicles included in this service campaign is 212,971.

Model Year	Carline	Affected Units	
2020-2021	Legacy	Refer to Vehicle Coverage Inquiry for WRI-20	
2020-2021	Outback	Service Program Applicability	

DESCRIPTION OF THE REPAIR:

Subaru dealers will reprogram the CCM software on the affected vehicles at no charge for these customers.

RETAILER RESPONSIBILITY:

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 (new, used, demo & SSLP). Additionally, whenever a vehicle subject to this Service Program is taken into inventory or in for service, necessary steps should be taken to ensure the repair has been made before selling or releasing the vehicle.

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.

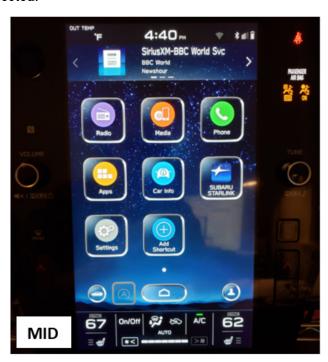
OWNER NOTIFICATION:

Owner notification letters will be mailed in January 2021. Retailers will be notified when owner notification begins.

SERVICE PROCEDURE:

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

This Campaign affects certain "Mid" and "High" (w/ Navigation) -level CP1 Head Units with 11.6-inch display ONLY as pictured below. The "Base" model (2- 7.0-inch display screen unit) is NOT affected.





MATERIALS REQUIRED:

An empty, USB 2.0 or 3.0 storage device (flash drive) will be needed to perform the update procedure. The device should be dedicated to storing and transferring these updating files only. It must be a minimum of 16GB or more in size and contain a NTFS file format before downloading the update files onto it. Be sure to locate and re-format any existing USB drives used for updating Denso CP1 audio units to remove any outdated update versions. They must be fully cleared and properly formatted before adding these new update files to them.

IMPORTANT NOTES:

- NEVER change the update file names after downloading them.
- NEVER save any other files on the same flash drive.

There are various types of USB flash drive available from many suppliers. If the head unit does NOT recognize the USB drive during the reprogramming process due to controller IC type of USB drive or compatibility with the Cockpit Control Module (CCM), confirm the flash drive format is NTFS. The flash drive must be formatted for NTFS. If a recognition problem persists, use a different USB flash drive from another manufacturer.

RECOMMENDED USB FLASH DRIVES:

• Kingston®:

DataTraveler G3 Series, DataTraveler 100 G3 DT100G3, DataTraveler SE9 Series, DataTraveler SE9 G2 3.0 DTSE9G2 and Digital Data Traveler 3.0 USB Flash Drive - Violet DTIG4



• SanDisk®:

Ultra Series SDCZ48-064G-J57, Cruzer Blade Series and Cruzer Glide Series CZ60 SDCZ60-064G-B35



• Transcend®:

JetFlash 790 Series TS64GJF790KBE



• PNY®:

Retract USB 3.0 Flash Drive, black (P-FD64GTRTC-GE)



• Silicon Power®:

(2 Pack) USB 3.0/3.1 Gen1 USB Flash Drive Blaze



IMPORTANT NOTE: There are 4 (FOUR) FILES required to complete the update for 2020MY Legacy and Outback. For 2021MY Legacy and Outback, there are only 3 (THREE) files required. ALL 4 (or 3) update files MUST BE DOWNLOADED TOGETHER to the USB Flash Drive before starting the update. PERFORMING THIS UPDATE USING A USB FLASH DRIVE WITH ANY OF THE REQUIRED UPDATE FILES MISSING WILL LEAD TO A NON-RECOVERABLE FAILURE OF THE COCKPIT CONTROL MODULE (CCM) REQUIRING CCM REPLACEMENT.

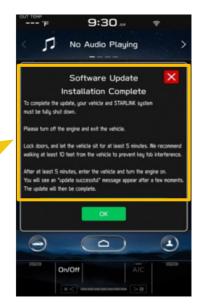
ADDITIONAL REPROGRAMMING FILE CONTENT INFORMATION:

In addition to the update for Firmware Over The Air (FOTA) functionality, the following list of other updates and an enhancement addressed by this reprogramming is supplied below:

• Clarification of the post-FOTA procedure instructions required to complete the update. The screenshot below will appear and explain what must be done to complete the update installation.

Software Update Installation Complete

To complete the update, your vehicle and STARLINK system must be fully shut down. Please turn off the engine and exit the vehicle. Lock doors, and let the vehicle sit for at least 5 minutes. It is recommended to walk at least 10 feet from the vehicle to prevent key fob interference. After waiting at least 5 minutes, enter the vehicle and turn the engine on. An "Update Successful" message will appear after a few moments. The update will then be complete.



- Currently, the microphone level indication is incorrect. The indicator level has been corrected. More microphone level indication information is included in TSB **15-275-20**.
- A reduced (low) volume (-6db) concern during handsfree conversation when using CarPlay has been addressed to make the volume level consistent.
- Voice recognition (VR) has been enhanced to improve recognition of short words (e.g. YES).
- The program has been corrected to prevent repeated rebooting and system freeze-up immediately after activation of AndroidAuto.

OPERATIONAL ENHANCEMENT INCLUDED:

The Auto Stop-Start On/Off function button has been moved from the bottom to top layer of the system for easier use. A screenshot of how the button will appear is shown below.



STEP 1: Perform a Vehicle Inquiry on Subarunet to confirm WRI-20 applicability. If there is an OPEN WRI-20 recall, proceed to **STEP 2,** otherwise this bulletin does not apply.

STEP 2: VERY IMPORTANT: Before proceeding with the software updating procedure, the currently installed software Version Number MUST be confirmed by following the steps below:

2a) After starting the engine and system boot-up completes, from the HOME screen, touch the Settings button.



2b) Press the General button. Use the down arrow to scroll to System Information then press to display the System Information / Version information.





The examples below identify the head unit model and the last 6 digits signify the software version number. Examples:

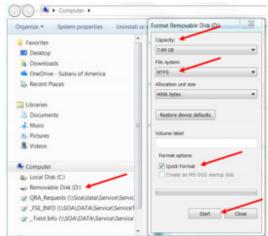
- F11GHMxxx-xxx (HIGH model software)
- F11GMMxxx-xxx (MID model software)
- For <u>2020MY</u> vehicles, if the software version number (xxx-xxx) is 020-501, 020-502, 021-503, 020-704, 021-704 or 022-504, proceed to STEP 4 below. If the software version is 042-380 or higher, STOP as the module already has the latest software version installed. Proceed to Claim Reimbursement and Entry Procedures section of the TSB and process a Version Check Only claim.
- For <u>2021MY</u> vehicles, if the software version number (xxx-xxx) is **008-500**, proceed to **STEP 4** below. If the software version is 040-980 or higher, STOP as the module already has the latest software version installed. Proceed to Claim Reimbursement and Entry Procedures section of the TSB and process a Version Check Only claim. **NOTE:** The Version Number identified MUST be entered in the Miscellaneous Detail field during claim submission.

STEP 3: Prepare the USB:

CAUTION: Do not use any USB flash drive which utilizes file organizing software or an operating system.

VERY IMPORTANT: Before attempting to download any data files, confirm the PC and flash drive being used is not infected with any virus. The flash drive MUST be formatted for NTFS.

- Make sure the USB flash drive contains no other files.
- Right click on the corresponding "Removable Disk".
- Select "Format".
- From the File System drop-down menu, select "NTFS"
- Check the "Quick Format" box (if not already done).
- Click on "Start" to format the USB flash drive.



STEP 4: Download the Update Files to the USB.

- The files are available for download on Subarunet (See "A" below).
- The applicable reprogramming files have also been sent directly to retailers by Nuspire in the same way a Select Monitor Update would be pushed out. (See "B" below).

Follow "A" below when using files downloaded from Subarunet. Subarunet Links Page screenshot:

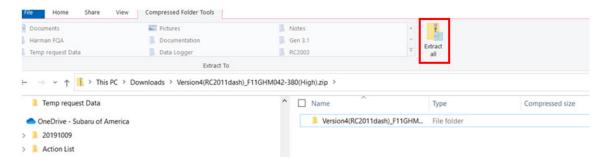


IMPORTANT: Files downloaded from Subarunet will be .zip files and must be unzipped before they can be used. Using the normal audio / navigation system file update download procedure: Go to Subarunet, select Service Operations and Technical>>Forms/Downloads>>Gen 4/Denso for Audio/Navi then click on the applicable Hyperlink to download the file(s) to your SDS Notebook or PC:

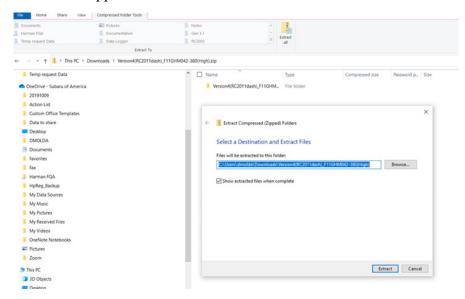
MID-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-DECEMBER 2020 HIGH-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-DECEMBER 2020 MID-21-Legacy-Outback-Denso-CP1 AUDIO UPDATE-DECEMBER 2020 HIGH-21Legacy-Outback-Denso-CP1 AUDIO UPDATE-DECEMBER 2020

REMINDER: Although BASE models are listed on the Links Page, this **WRI-20** Campaign is applicable to "MID" and "HIGH" (Navigation-equipped) units ONLY.

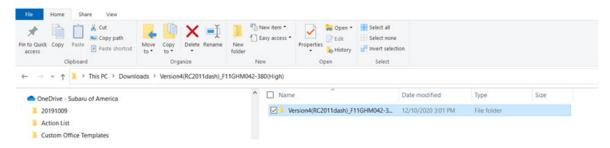
- Go to Downloads.
- CAUTION: After download is complete, NEVER change the file or folder names.
- Open / display the contents of File folder, for example: "Version4(RC2011dash)_F11GHM042-380(High).zip".
- Click on "Extract All Files"



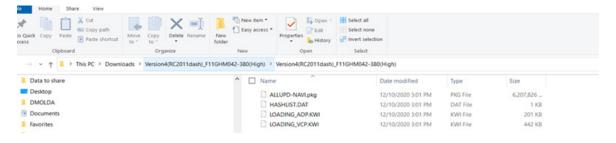
• The screen below will appear to set a destination for the extracted file.



• Double-click on the required folder (for this example, select the file entitled "Version4(RC2011dash) F11GHM042-380(High)")



• This will display all 4 (four) files inside the folder



• Select and copy all 4 (four) files then paste (or click / drag) them into the "clean" USB flash drive as listed (Removable Disk) in the directory.

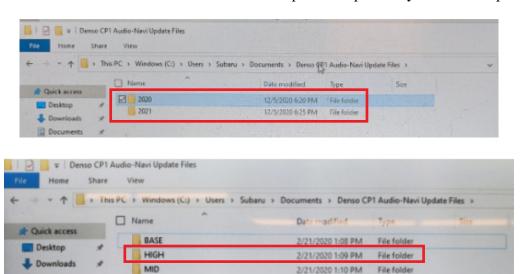
IMPORTANT NOTE: There are 4 (FOUR) FILES required to complete the update for 2020MY Legacy and Outback. For 2021MY Legacy and Outback, there are only 3 (THREE) files required. ALL 4 (or 3) update files MUST BE DOWNLOADED TOGETHER to the USB Flash Drive before starting the update. PERFORMING THIS UPDATE USING A USB FLASH DRIVE WITH ANY OF THE REQUIRED UPDATE FILES MISSING WILL LEAD TO A NON-RECOVERABLE FAILURE OF THE COCKPIT CONTROL MODULE (CCM) REQUIRING CCM REPLACEMENT.

- To avoid confusion, use a permanent marker to label the flash drive with the file contents (e.g. MID Denso CP1 WRI-20, or HIGH Denso CP1 WRI-20).
- Go to **STEP 5**:

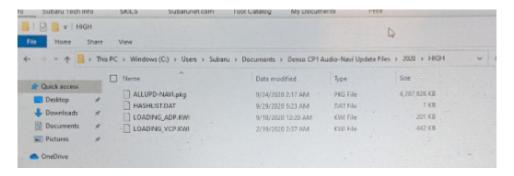
Follow "B" below when using the files sent directly to the SDS notebook from Nuspire.

B:

• Go to My Documents on the GUI screen click on the folder "Denso CP1 Audio-Navi Update Files" to display the list of available update files shown below. **IMPORTANT:** Always confirm there are two folders as shown below, "2020" and "2021". If not, the SDS notebook hasn't been updated with the latest release. Please contact Nuspire to request they resend the update.



• Double-click on the required folder (for this example, select the file entitled "HIGH") and the update file will display as shown below.



- Select all files and either copy / paste or click / drag them to the USB flash drive. **CAUTION:** NEVER change the file names.
- Once all files have been loaded onto the USB flash drive, right click on the drive and select "Eject".
- Remove the USB flash drive after the prompt appears that says, "Safe to Remove Hardware".

- Mark the USB to indicate the head unit it will update (MID Denso CP1 WRI in this example).
- Repeat the above steps to create the MID Denso CP1 WRI or HIGH Denso CP1 WRI USB flash drives as needed using a separate USB drive for each update folder.
- Proceed to **STEP 5** below.

STEP 5:

Perform the software update.

CAUTIONS:

- **NEVER** attempt to install the software immediately following an exchange unit installation. Let the system restart first and operate for 20 minutes.
- **NEVER** attempt to install the software a second time for 30 minutes following a previously unsuccessful software installation.
- **NEVER** attempt to install the software for at least 30 minutes after completing a FOTA update.
 - **5a)** Perform the update in a well-ventilated location if updating with the engine running OR with the ignition ON and the DCA battery charger connected in Power Supply mode.
 - **5b)** PRESS and HOLD the RIGHT-side temperature control buttons (both up and down), press the Tune / Scroll knob 6 times then release all to display the Dealership Mode Menu.



5c) Select Software Update from the Dealership Mode menu.



IMPORTANT NOTE: On a RARE occasion, the message "Software update setup is initializing..." may be displayed. Should this occur, proceed to "**Appendix A**" at the end of this bulletin for further instruction. For critical Service Bulletin helpful tips to prevent unnecessary hardware replacement, follow the link to an important Subarunet message: https://www.subarunet.com/home/ home.html#/

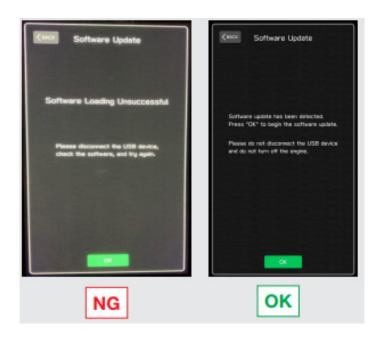
Announcement/83194.

5d) The screen shown here will be displayed.



5e) Insert the H/U reprogramming USB into the USB port. When the update screen appears, confirm the message on it and if no concerns, press OK.

NOTE: If after plugging in the USB, the screen displays a Software Loading Unsuccessful message, confirm the USB device has been properly formatted and the software on the device matches the H/U being reprogrammed (example: **MID** software is being used to update a **MID** H/U).



5f) The screen below will be displayed. **NOTE:** The actual software version displayed will be different from the EXAMPLE picture shown below.

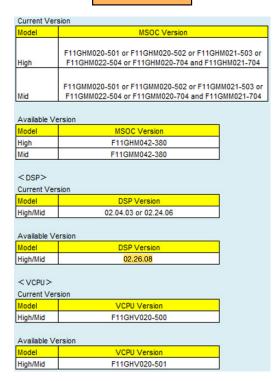


IMPORTANT: The example above identifies the head unit model and the last 6 digits signify the software version number. Examples:

- F11GHMxxx-xxx (HIGH model software)
- F11GMMxxx-xxx (MID model software)

Software Version Table

2020MY





Current ver	SIUII			
Model	MSOC Version			
High	F31BHM008-500			
Mid	F31BMM008-500			
Available Ve	ersion			
Model	MSOC Version			
High	F31BHM040-980			
Mid	F31BMM040-980			
<dsp></dsp>				
Current Ver	sion			
Model	DSP Version			
High/Mid	02.26.08			
Available Version				
Model	DSP Version			
High/Mid	02.24.08			

Press OK to start the software update.

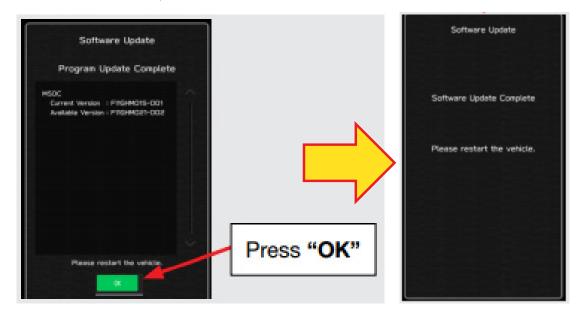
5g) Once the update begins, the screen below will be displayed with a progress bar. It takes about 15 to 20 minutes for the update to complete.

VERY IMPORTANT: <u>NEVER</u> turn the ignition OFF or ON while the software update is in process. To avoid any concerns with battery condition during programming, always perform the update with either the engine running (outside or with an exhaust hose attached) or with the DCA charger attached

and in power supply mode.



5h) When the update is complete, the screen below will be displayed (the actual software version number will be different).



IMPORTANT NOTE: On rare occasions a "Software Update Incomplete" message may appear in this step which occurs due to a bug in the software update procedure. DO NOT attempt to install the update again, proceed to **5i)** below to confirm the software version has been updated to the latest version.

5i) Select OK in the screen above then remove the H/U reprogramming USB from the USB port. *Continued...*

- **5j)** Turn the Ignition OFF, open the driver's door then close the driver's door.
- **5k)** Wait for at least 3 minutes, then turn the ignition ON.
- 51) Access Dealership Mode following steps provided STEP 2 above and confirm the software update completed successfully using the table below. Always record the new software version number on the RO.

2020 and 2021 MY Post-Update Version Number Tables

Version	n Table		
20MY	Model	MSOC Version	
	High	F11GHM042-380	
	Mid	F11GMM042-380	
	Model	DSP Version	
	High/Mid	02.26.08	
	Model	VCPU Version	
	High/Mid	F11GHV020-501	

Version Table				
21MY	Model	MSOC Version		
	High	F31BHM040-980		
	Mid	F31BMM040-980		
	Model	DSP Version		
	High/Mid	02.26.08		

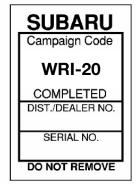
5m) Turn the ignition OFF, open the driver's door then close the driver's door to complete the update procedure.

VERY IMPORTANT: After the CCM reprogramming procedure is complete, <u>**ALWAYS**</u> confirm proper back-up camera operation before releasing the vehicle.

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
10-00			



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
WRI-20- SOFTWARE VERSION CHECK ONLY	A131-138	0.2	WRI-20
WRI-20- SOFTWARE UPDATE / REPROGRAMMING	A131-118	0.6	WNI-20

A ONE-TIME charge of \$30.00 can be claimed in sublet to cover the cost of the USB flash drives.

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.

"APPENDIX A"

Follow this procedure in the RARE case of "Software update setup is initializing..." message is displayed:

If the screen shown below appears, WAIT for approximately 15 minutes or as long as necessary
to allow the Software update setup initialization process to complete.



The screens shown below will be displayed when the process completes.



- Turn the ignition OFF, open the driver's door, close the driver's door and WAIT for 3 or more minutes before proceeding further.
- Open the driver's door again and either turn the ignition ON (if a charger is connected) or start the engine.
- Go to Dealership Mode menu again (PRESS and HOLD the RIGHT-side temperature control buttons (both up and down) and press the Tune / Scroll knob 6 times then release all to display the Dealership Mode) and select Software Update as in STEP 3 beginning on pg. 8.

IMPORTANT NOTE: If this procedure is required, contact Techline as additional action may be necessary.

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



Subaru Service Program WRI-20 January 2021

Dear Subaru Owner:

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

Subaru of America, Inc. (Subaru) is initiating a service program for certain 2020-2021 model year Legacy and Outback vehicles to update the Cockpit Control Module (CCM) software to the latest version. Our records indicate that you currently own one of these vehicles.

REASON FOR THIS SERVICE PROGRAM

The latest version of the CCM software includes an update for the firmware-over-the-air (FOTA) functionality, updates related to the microphone and volume level functionality, an update related to the voice recognition functionality, and an update to prevent repeated rebooting after activating Android Auto.

WHAT SUBARU WILL DO

In the interest of your continued satisfaction Subaru will reprogram the CCM in your vehicle at no cost to you.

WHAT YOU SHOULD DO

Please contact your Subaru retailer (dealer) for an appointment to have this repair performed at no cost to you.

HOW LONG WILL THE REPAIR TAKE?

The actual time to perform this repair is less than 40 minutes. However, it may be necessary to leave your vehicle for a longer period of time on the day of your scheduled appointment to allow your Subaru retailer flexibility in scheduling.

CHANGED YOUR ADDRESS OR SOLD YOUR SUBARU?

If you have moved or sold your vehicle, please update this information online at www.subaru.com, select 'Customer Support,' then select 'Address Update' or 'Ownership Update' from the drop-down menu.

IF YOU HAVE PREVIOUSLY PAID FOR A REPAIR

If you have already paid for repairs associated with this coverage, you may be eligible for reimbursement. Reimbursement consideration will be based on the amount an authorized Subaru retailer in your area would charge for the same repair.

Please send the original service repair order, which has the name of the repair facility, date of repair, mileage at the time of repair, complete 17-digit vehicle identification number (VIN), and your name, with correct mailing address and telephone number to the address listed below.

Subaru of America, Inc.

Customer Advocacy Department, Attention: WRI-20 Service Program P.O. Box 9103, Camden, NJ 08101-9877

Please send original receipts only and retain a photocopy for your records. Please be assured that we will attempt to process your reimbursement request as quickly as possible, but it may take up to 60 days for this process to be completed.

IF YOU NEED FURTHER ASSISTANCE:

To locate the nearest Subaru retailer, you can access our website at www.subaru.com and select 'Find a Retailer.'

For additional information, please go to: http://www.wri20.service-campaign.com.

If you need additional assistance, please contact us directly:

- By e-mail: Go to www.subaru.com and select "Contact Us"
- By telephone: 1-844-373-6614
 Monday through Friday between 8:00 a.m. and 7:00 p.m. ET
- By U.S. Postal mail: Write us at Subaru of America, Inc.

Attn: Customer Advocacy Department P.O. Box 9103, Camden, NJ 08101-9877

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

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

Sincerely, Subaru of America, Inc.

A subsidiary of SUBARU CORPORATION