ATTENTION:							
ATTENTION.	IMPORTANT - AII						
General Manager	Service Personnel						
PARTS MANAGER	Should Read and Initial in the boxes						
CLAIMS PERSONNEL	provided, right.						
SERVICE MANAGER	© 2022 Subaru of	America.	Inc. A	Il riahts	s reserv	ed.	



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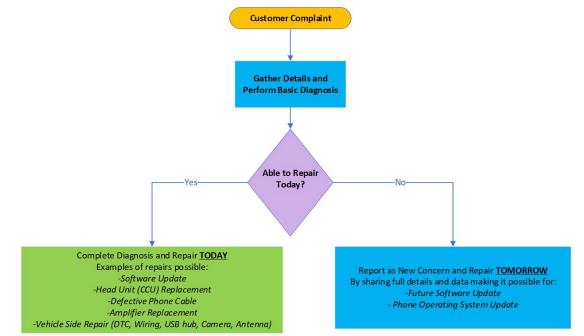
 SERVICE INFORMATION BULLETIN

 APPLICABILITY:
 All Models with Harman and Denso CP1 Infotainment
 NUMBER:
 15-192-22 DATE:
 02/16/2022

 SUBJECT:
 Infotainment Concern Data Collection Guidelines
 Date:
 02/16/2022

INTRODUCTION:

This Service Information Bulletin has been developed to outline the steps for gathering basic essential information during diagnosis and repair of the Infotainment concerns. This is to be used in conjunction with the information provided in STIS to help complement it from a reporting standpoint. Any time a repair is made to the Infotainment system, there should be clear understanding of the concern reported by the customer and the steps to duplicate it. As with any repair, the first step of diagnosis is duplicating the concern and determining if it is a typical operating characteristic or unexpected operation. If the condition reported is an expected operating characteristic, this should always be demonstrated to the customer with their understanding confirmed before releasing the vehicle. A guaranteed successful repair of a customer's Infotainment concern can only be achieved by following a proven diagnostic strategy outlined below.



Various resources are available to help diagnose and repair the Infotainment system: TSBs, TechTIPS, Techline and FSEs.

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.

SERVICE INFORMATION:

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

- Always confirm the condition as reported by the customer.
- Always attempt to use customer's setup and equipment for concern duplication.
- Always document the concern by capturing the steps leading to duplication and when possible record a video of concern.
- Make sure the concern is not due to the setup or the customer's accessory.
- Always document Infotainment system software version and accessory details: make, model, software version.
- Always document the date of the last concern duplication and collect the data log.

It is IMPORTANT to understand some conditions cannot be resolved in the field solely by parts replacement. Some of these situations will require Techline assistance or assistance from the vendor. Those are the times, when getting essential data about the concern as well as the diagnostic performed are the most critical.

Please keep in mind the basic essential information has to be captured to enable assistance as well as report a concern. Following the steps outlined below should be a good start.

STEPS TO GATHER BASIC ESSENTIAL INFORMATION

- 1. Obtain a detailed description of the customer concern including steps to duplicate it and frequency of occurrence .
 - Multiple concerns must be addressed one by one as each may have a unique cause. Consult the customer, if you do not clearly understand each reported concern and document each separately. Lumping concerns together will delay or prevent review of the reported condition.
- 2. Confirm whether the concern is duplicated at the time of repair.
- 3. Obtain the Video of condition being duplicated (may be supplied by the Customer.)
- 4. Obtain the current Software Version the concern has been duplicated with (Clear photo of the Software Screen is BEST.)
- 5. Obtain the Phone Information (Make/ Model/Operating System Version) as applicable.
 - Screen shot of phone software version screen is BEST
- 6. Obtain SSM Data with DTCs and Related Troubleshooting Results.
 - Always perform diagnosis of current DTCs which may be related. Any electrical concern may be impacting the operation of the audio/ navigation system and must be resolved to eliminate it as a possible source of the condition. Conditions like this can be repaired TODAY.
- Download Infotainment system Data Log and Note the Date/ Time of last occurrence (in item 1 summary above) See Appendix A on Page 4.
- 8. Issue a TechShare QMR and attach all related data, images, video of condition duplication, phone information and Data Log along with a full description of the concern and how it was duplicated.

Technicians following this method will find it provides the most efficient path to a successful Infotainment system repair.

IMPORTANT CAUTION: Always disconnect the Telematics Data Communication Module (DCM) **BEFORE** any swapping of CCU. **DCMs must NEVER be swapped or the customer's services** will not function and DCM replacement may be required as a result which would NOT be a warrantable repair.

WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Labor Time	Fail Code	
INFOTAINMENT DATA LOG & QMR	A031-170	1.4	ZUM-43	

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

- I. Denso CP1 Data Log Collection process (see TSB <u>15-285-21</u> for help to identify the vendor)
- II. Harman Head Unit Data Log Collection process (see TSB <u>15-285-21</u> for help to identify the vendor)
- III. Data log sharing for analysis

I. CP1 Data Log Collection process

Media:

- 1. The USB flash drives can be USB 2.0 or 3.0 of recommended 4GB or more storage capacity.
- 2. The USB flash drive MUST be reformatted to NTFS before loading any files to it. NTFS is not the standard format on most USB flash drives.
- 3. Log files are not overly large, 1GB size is sufficient.

Note: In order to optimize data log analysis process as well as to improve accuracy **it is strongly advised to mark the event of duplication**. There are couple ways to do it, but the most common one is pressing the front defroster at least 4 times.



We are still relying on collecting the approximate date and time of the event from the customer, if possible.

The data log contains data for approximately last 14 days.

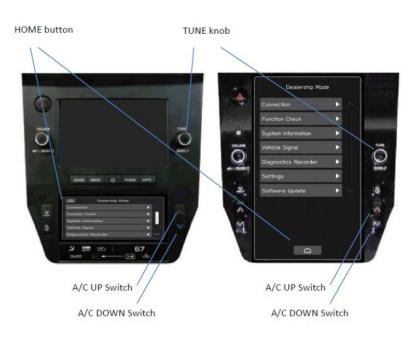
Procedure Information:

Entering and Exiting Dealership Mode

The infotainment system has a self-check function (Dealership mode) which can be performed on the screen. The function enables functions including checking the system operation status, displaying the system status (**Diagnostics Recorder**), checking system information (**Software Version**).

a. Please the steps below for entering Dealership mode.

Dealership Mode	Mode transition process
Enter	Push the TUNE knob six times while simultaneously pressing down on both sides of the passenger side A/C up/down switch.
Exit	Press the home button on the screen.



b. Select **Diagnostics Recorder** (Operated to output or delete diagnosis recorder settings and data. Turns on and off of the diagnosis recorder function.)



c. Please stop the recording before you output diagnosis recorder data to a USB.



d. Select **Export Data to USB** and insert USB Flash drive when prompted. Continue by pressing the "OK" button.

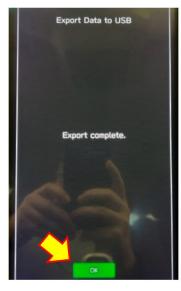


e. Start exporting. The progress bar will display until completed.



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f. Press **OK** when prompted as shown below



Enable data log recording turning on "Begin Recording" (see item c)



- g. Exit Dealership mode (see item a)
- h. Remove USB Flash and transfer the data.

Note: if you haven't been able to transfer the data due to the error message or no data stored on USB drive, please switch USB flash drive using the one confirmed to work prior. Also confirm you have prepared the media following instructions in "Media" section.

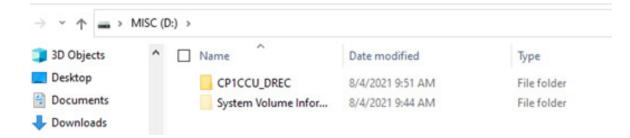
 It is a good practice to clear CPU's log buffer, after you have verified the data log transfer from the USB drive was successful. Following successful data log export clear Recorded Data (see item c).

<u>CAUTION</u>: NEVER clear the Recorded Data, until you have confirmed the recording has been captured on the USB and successfully moved to PC for uploading to TechShare.

j. Transfer data log folder (CP1CCU_DREC) from USB drive to PC. Do not modify the folder name or the data inside the folder.



Continued... Page 7 of 11



k. Next step is sharing the data log for analysis using TechShare QMR attachment (<u>TechShare</u> <u>OMR attachment</u>). See section "III. Data log sharing for analysis" for additional information.

II. Harman Head Unit Data Log Collection process

Media:

- 1. The USB flash drives can be USB 2.0 or 3.0 of recommended 4GB or more storage capacity.
- 2. The USB flash drive MUST be reformatted to FAT 32 format before loading any files to it.
- 3. Log files are not overly large, 1GB size is sufficient.

Process:

Vehicles collect analytical data that can be downloaded to a USB memory device and sent to the SBR/Harman for further analysis. Retailer/Dealer needs to follow these steps to download Data Analytics file from vehicle's Head Unit:

- 1. Go to the head unit home screen and connect the USB memory device
- 2. Press Home Button on Head Unit and press "TUNE/SCROLL" button 6 times. "Dealer Settings" screen will open.
- 3. Scroll down to the "Download Analytics Data" option.
- 4. Press "Download Analytics Data" button to download the Data Analytics file.
- 5. Wait for the data to be transferred to the USB memory device.
- 6. Press "OK" button and remove the USB memory device.



7. Next step is sharing the data log for analysis using TechShare QMR attachment (TechShare QMR attachment). See section "III. Data log sharing for analysis" for additional information.

III. Data log sharing for analysis

The following instructions will explain how to successfully share the data log using TechShare QMR attachment.

Create QMR using TechShare application (press "Start a new QMR" button after TechShare application is started) and provide detailed description of the quality concern, diagnostic steps and repair results as applicable. This application is accessible via *Subarunet -> Service Operations & Technical* or via website link <u>https://subarutechshare.com</u> or *mobile App "TechShare"*. Keep in mind it is required to validate VIN information by pressing highlighted button "Check VIN" in order to enable "Create QMR" step. See an example below.

⑦TechShare ⁱ					1
Dashboard		All Q	MRs		
QMRs		Look	for a QMR entering ID, Carline, DTC Code and more		
All QMRs					
Pending Review	53	Ŧ	Create QMR		
Updated - Pending Review	*		Retailer *		
Under Review	33		SUBARU OF AMERICA, INC., Camden NJ (#550101) V		
Further Study	14		VIN * VIN should be either 8 or 17 characters long		8/17
Needed		1.000	L8800001		Check VIN
Escalated		-	L		80
AR SEARCH Advanced Search		0		Cancel	Create QMR

It is mandatory to properly complete required fields in order to submit your report. See below examples for Web version and Mobile version.

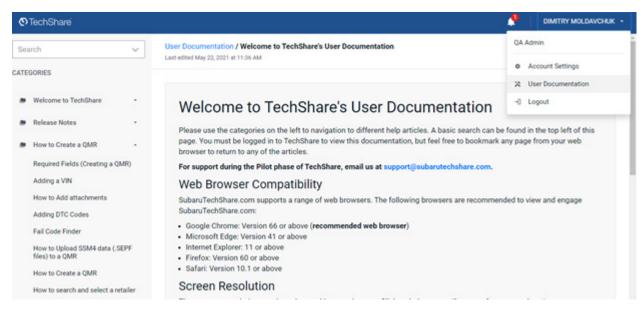
@Techthare		👌 System Account +	← Drafts TS-159136
e- TS-159135 Interf Napot - Vahila kanat Carae Carae Carae Carae Carae Carae Carae Carae Carae	Fail Code Attachments © Ties attached (2010) Drop files here to attach or utilized +	Activity Connects Details Activity Connects Proceeding Investments Proceeding Investments	Next Steps Complete these steps before submitting your QMR Attach Media > Quitonal > Add Concern >
C Attachments Optimiz	Additional Information () Whe can say additional information?	GA general Account	Add Course Add Correction Add Correction Control Enter DTC Codes Control Enter Fall Code Add

Make sure you include the date of failure duplication, steps to duplicate the failure, system software version. Video of the failure duplication is always a plus.

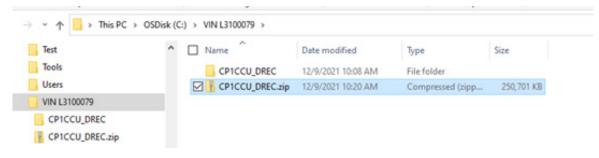
Continued...

BEST PRACTICE to use TechShare mobile App whenever possible while you are at the car, so you can take advantage of convenient features to optimize the process: scan the VIN, draft the QMR, and take a photo of the software version screen in the app, as well as a video of the condition while in the app.

Additional information to assist with TechShare application usage is available under "User Documentation" link found in web version as shown below.



2. In case of Denso CP1 system the data log contains multiple folders. In order to properly and completely upload the data log, please compress the folder containing the data log to create **.zip folder** as shown below. For Harman the data log is already a compressed file, so it is not necessary to create .zip file.



3. Attach .zip data log from PC following TechShare directions. There will be a progress bar and turning wheel displayed to show the progress.

ttachme	ents	1 file attached (0.0KB)		
Drop fil	es here to attach or upload	+		
0	CP1CCU_DREC.zip	1		
0		-		

4. It takes under 10 minutes to upload the file depending on its size. Once uploading is completed, the file is listed among attachments as shown below.

Attachments	1 file attached (0.0KB)		
Drop files here to attach or upload	+		
CP1CCU_DREC.zip	:		

5. It is a good practice to confirm the attached file is present prior submission. You can do it by pressing "Save and exit" button at the top right corner next to "Submit" button. Your QMR should be listed as DRAFT. See below.

Updated	QMR ID	QMR Status	Role Review	Year	Carline	Fail Code
December 9, 2021, 11:23:29 AM	TS-187675 ⁽¹⁾ attachments	O DRAFT	O FSE O QA	2020	Outback	ZTH Accessories Audio System

- 6. If not, you can search for it using VIN.
- 7. Go back to QMR clicking on QMR number link. Once the attachment status has been confirmed and all additional data supplied, please proceed with QMR submission.