

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 INFORMATION BULLETIN

APPLICABILITY: Models with Harman and Denso CP1 Infotainment
NUMBER: 15-304-22R
DATE: 10/11/22
SUBJECT: Procedure for Techline Infotainment Concern Data Collection and Sharing via TechShare
REVISED: 07/31/23

This bulletin supersedes TSB 15-192-22 “Infotainment Concern Data Collection Guidelines” and explains the process of using the Infotainment Form for Infotainment cases submission.

INTRODUCTION:

This Service Information Bulletin has been developed to outline the steps for gathering basic but essential information during diagnosis of Infotainment concerns. The information collected will be used to escalate potential software or phone side concerns. In some cases, these escalations will lead to future software releases improving the infotainment system performance.

Anytime a repair is made to the Infotainment system, it must start with a clear understanding of the concern reported by the customer and the steps to duplicate it. As with any repair, the second step after understanding the concern is to duplicate it and determine if it is an operating characteristic or unexpected operation. If the condition reported is an expected operating characteristic, this should always be demonstrated to the customer to confirm their understanding before releasing the vehicle.

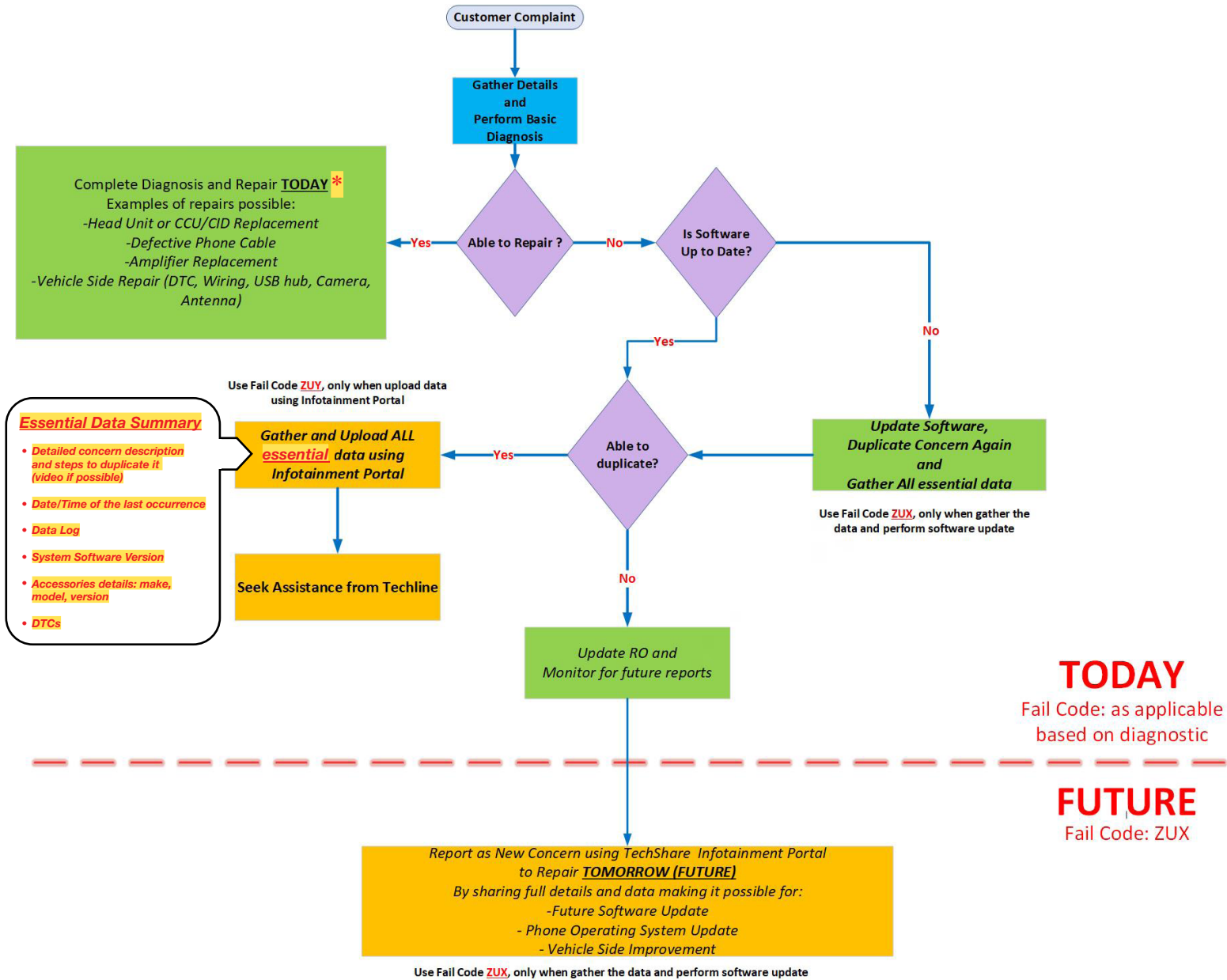
Successful repair of a customer’s Infotainment concern can only be achieved by following a proven diagnostic strategy as outlined below.

Concern description, Date and Time of duplication, Data log are essential elements for understanding the customer concern and must be included with all submissions.

<p>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</p> <p>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.</p>	<p style="text-align: center;">Subaru of America, Inc. is ISO 14001 Compliant</p> <p>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.</p>
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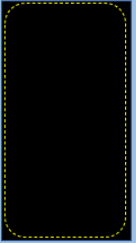

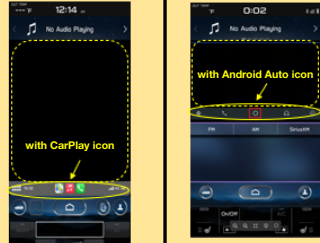
Infotainment Concern Diagnostic and Reporting Flow



*** NOTE:** In case of CP1 Black Display concern confirm it is duplicated with the latest software version. If yes, it would be due to the hardware failure in the CCU (Cockpit Control Unit) part of CP1 system. CCU replacement is advised as the next step to repair this concern. Please follow proper exchange procedure.

Please see chart below to differentiate CP1 Black/Blank Display cases and decide on the repair action

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Customer Concern: Black or Blank Display / Reboot			
Which of the following is customer's concern?			
			
COMBI METER BLACK DISPLAY and CID FULL BLACK DISPLAY	FULL BLACK DISPLAY / REBOOT	PARTIAL BLACK DISPLAY	PROJECTED IMAGE IS BLACK (CARPLAY / ANDROID AUTO)
Proceed with CCU exchange, if duplicated with the latest software version		Addressed by current / future software update	Restart the phone / Check the phone for updates

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

[Subarunet->Service Operations & Technical -> Forms/Downloads or Subarunet->Service Operations & Technical -> STIS](#)

SPECIAL NOTE: For the latest updates on Tips for current concerns, perform key word search in “TechTIPS Article Locator Index” (Document code: SUTTIPSLOC), or review all relevant infotainment related TechTips from the “Accessories” (#15) tab found on the table of contents. To locate the “TechTIPS Article Locator Index” from STIS “Subaru Tech Info System”, select “Online Reference”. Select “Other/Miscellaneous” in Publication Type and input Document code in applicable area, OR search KEYWORD for “TechTIPS Article”.

SERVICE INFORMATION:

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

- Always confirm the condition as reported by the customer.
- Always document the date and time of the last concern duplication and collect the data log.
- Always attempt to use customer’s setup and equipment for concern duplication. If you can’t use the customer’s phone make sure the phone you test with is as close a match as possible by using a phone with the same make, operating system, and carrier version
- 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/phone. As an example does the condition occur with all phones, all phones of the same type or just the customer’s phone that are connected in a similar way.
- Always document Infotainment system software version and accessory details: make, model, software version.
- When you replace hardware or perform software update in attempt to repair a concern, please claim appropriate labor operation. The warranty information in the bulletin is not applicable in those instances.
- Always document the date and time of the last concern duplication and collect the data log.

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

NOTE: In case of CPI Black Display concern confirm it is duplicated with the latest software version. If yes, it would be due to the hardware failure in the CCU (Cockpit Control Unit) part of CPI system. CCU replacement is advised as the next step to repair this concern. Please follow proper exchange procedure.

If you'd like to request assistance from Techline regarding an infotainment case, please have all your files and documents and submit an infotainment case online through the TechShare website. If the vehicle has been in with previous infotainment concerns, please have the previous repair order information available. **If you have any issues with the process or technical issues, please contact Techline.**

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 INFORMATION

➤ ESSENTIAL INFORMATION

1. Obtain a detailed description of the customer concern including steps to duplicate it
 - A. 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 one separately. Lumping concerns together will delay or prevent review of the reported condition.
 - B. Describe the condition in detail. What is the customer description for what is happening. How would you as a technician describe it. Include notes on the features that are not working but also what is working even when the condition occurs. The table below shows an example of the detail being requested.

Level of Details	Description Details
Not Acceptable	No Sound/ No Audio
Acceptable	No sound from SXM radio, but there is sound from AM/FM radio. Audio streaming is working as well.
 - C. **Date/Time:** Obtain from the customer the date and time of the last occurrence. The customer may not remember the time of occurrence clearly. In that case, please confirm with the customer whether it was morning or evening and the day of the week etc.
 - D. **Data Log:** Download Infotainment system Data Log and note the Date/ Time of last occurrence – see Appendix

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► REMAINING INFORMATION

2. Confirm whether the concern is duplicated at the time of repair
 - A. Note the frequency of occurrence. Is it: Constant or continuous (easily duplicated), Intermittent (happens frequently at least daily but not all the time with a good chance of duplication), or Random (happens with no set occurrence. Could be weekly or monthly. Very hard to duplicate.)
3. Obtain the current Software Version the concern has been duplicated with (Clear photo of the Software Information Screen showing the latest software version is REQUIRED).

NOTE: DO NOT use the coding from this bulletin to submit the claim, if the software update resolves the concern. In that case please use the labor time codes from the related software update bulletin to submit the claim.
4. Obtain the Video of condition being duplicated (may be supplied by the Customer if an intermittent or randomly occurring condition.)
 - A. **Verify the date and time of concern duplication.**
5. Obtain the Phone Information (Make/ Model/Operating System Version) as applicable
 - A. Screen shot of phone software version screen is BEST.
6. Obtain SSM Data with DTCs and Related Troubleshooting Results.
 - A. 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.
 - B. Revise following portal request format
 - C. Attach troubleshooting results for all Bxxxx and Uxxxx DTCs infotainment specific B/U codes.

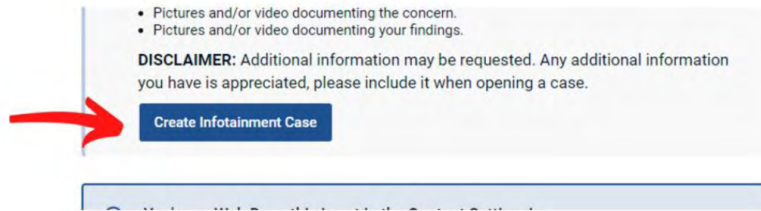
STEPS FOR SUPPLYING INFORMATION USING INFOTAINMENT PORTAL



- 1) Log into TechShare
- 2) From the left-hand dropdown menu, navigate to Techline

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3) Under the Techline Support Phone Number, click “Create Infotainment Case”



4) Select your Retailer from the dropdown menu

5) Fill out Infotainment Case Form and submit

Preview of Infotainment Case Form

*Fields are dynamically shown based on answers

A preview of the Infotainment Case Form. The form is divided into two columns: 'Retailer Employee' (Natalie Miller) and 'Retailer' (Nate Wade Subaru). The form includes the following fields:

- VIN: JF2SKAMC3UH50GZ71
- ROB: 576564
- RO open date: M/D/YYYY
- Mileage: 4000
- Is the vehicle at the retailer?: No Yes
- Head Unit Software Version at time of failure: v1.42994872
- Has vehicle been in for the same concern previous: No Yes
- Previous ROB: [Empty field]
- Please provide details about previous diagnosis and repairs: [Empty text area]
- Defect Type: Apple CarPlay/Android Auto concern
- When did the customer experience this concern?: M/D/YYYY's min A
- Frequency Of Failure: [Empty field]

A calendar widget for April 2022 is visible on the right side of the form, showing dates from 27 to 7.

6) The technician will receive an email with the Techline case number

IMPORTANT NOTE: Please upload all available attachments to complete portal submission- data log, video(s), photo(s), SSM data, questionnaire etc. Techline will review the data you provided and follow up for additional information if required. Please note your inputs can be helpful in future quality enhancement when provided with sufficient information to SOA. Cases submitted without enough details cannot not be reviewed by SOA quality team for future product enhancements.

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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 or covered by an active Subaru Added Security Gold Plan, this repair may be submitted using the following claim information. *

Operation Description	Labor Operation #	Fail Code	Labor Time
HARMAN AUDIO/NAV			
<ul style="list-style-type: none"> REPROGRAM AND DOCUMENT SOFTWARE VERSIONS POST-UPDATE CONCERN DUPLICATION INFOTAINMENT PORTAL DATA SUBMISSION 	A031-188	ZUX-43	2.0
DENSO CP1 AUDIO/NAV			
<ul style="list-style-type: none"> REPROGRAM AND DOCUMENT SOFTWARE VERSIONS POST-UPDATE CONCERN DUPLICATION INFOTAINMENT PORTAL DATA SUBMISSION 	A031-198		2.4
INFOTAINMENT PORTAL DATA SUBMISSION (ONLY)	A031-180	ZUY-98	1.0
BASE LEVEL CCU (CHASSIS) EXCHANGE FOR BLACK SCREEN FAULT #	B031-535	TSL-43	0.6
ELECTRICAL TESTING & DIAGNOSIS	C860-001		0.4
MID LEVEL CCU (CHASSIS) EXCHANGE FOR BLACK SCREEN FAULT #	B031-545	TSM-43	0.6
ELECTRICAL TESTING & DIAGNOSIS	C860-001		0.4
HIGH LEVEL CCU (CHASSIS) EXCHANGE FOR BLACK SCREEN FAULT #	B031-633	TSN-43	0.6
ELECTRICAL TESTING & DIAGNOSIS	C860-001		0.4

Exchange Number is required for claim entry. See 8.4.9. of Warranty P&P for more information. SATELLITE RADIO REACTIVATION; C031-10: 0.2h when applicable.

* Please include Techline Case number in claim notes with “ZUX” or “ZUY” Fail Code.

Please put your best effort to collect and share the data via Infotainment portal, because your inputs are used for future product performance improvement as long as you have provided sufficient amount of information.

Do not enter any claims using ZUX as failure code if you:

Installed an exchange or a new CCU, CID, or Head Unit as a repair, unless the condition is still duplicated following this repair. A NEW video will be required as confirmation.

Swapped components as a repair, unless the condition is still duplicated following this repair. A NEW video will be required as confirmation.

Installed a software update as a repair, unless the condition is still duplicated following this repair. A NEW video will be required as confirmation.

Continued...

Performed any other repair or update, unless the condition is still duplicated following this repair. A NEW video will be required as confirmation. ZUX are only used when reporting conditions, which cannot currently be resolved by any other means available.

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

- I. Denso CP1 Data Log Collection process (see TSB 15-285-21 for help to identify the vendor)
- II. Harman Head Unit Data Log Collection process (see TSB 15-285-21 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. There are various types of USB flash drive available from many suppliers. See below for some recommendations.

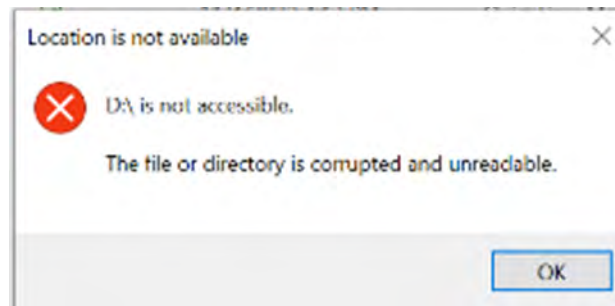


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2. The USB flash drive **MUST** be reformatted to NTFS before loading any files to it. NTFS is not the standard format on most USB flash drives.

Note: If there is an issue with transferring the data log from the head unit to the USB flash drive, please reformat to FAT32 format.

3. Log files are not overly large, 1GB size is sufficient.
4. In case you encounter an error shown below, after accessing USB flash drive from your PC, consider a recovery steps outlined in this section.



a. Recovery steps

- i. Reformat USB Flash drive to NTFS format.
- ii. Write any file under 300MB from PC to the USB flash drive, while it is still inserted in the port.
- iii. Properly remove USB flash drive from PC.
- iv. Repeat the data log collection.
- v. If you are still encountering issues, please use a USB flash drive from another manufacturer.

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.



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We are still relying on collecting the approximate date and time of the event from the customer, if possible. Please make an effort to obtain this information, if possible.

The data log contains data for approximately last 14 days. For the systems updated to the latest software version the log size has been expanded for up to 28 days.

Process:

Entering and Exiting Dealership Mode

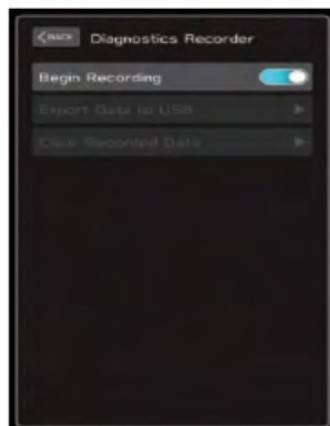
The infotainment system has a self-check function (Dealership mode) which can be performed on the screen. The function enables functions including checking the system operation status, displaying the system status (**Diagnostics Recorder**), checking system information (**Software Version**).

a. Please see below the steps 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.

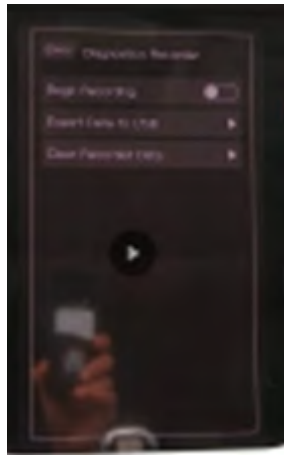


b. Select **Diagnostics Recorder** (Operated to output or delete diagnosis recorder settings and data. Turns on and off of the diagnosis recorder function.)

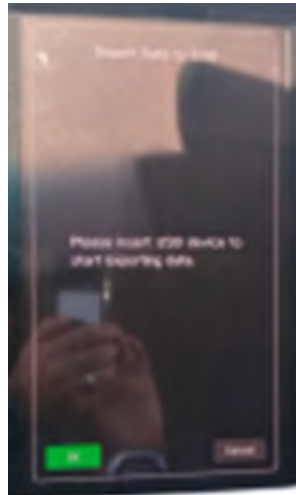


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- c. Please **stop the recording** before you output diagnosis recorder data to a USB.



- d. Select **Export Data to USB** and insert USB Flash drive when prompted.

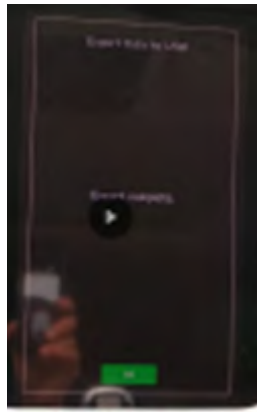


- e. **Start exporting.** The progress bar would come up and stay until completed.



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



- g. **Enable** data log recording turning on “Begin Recording” (see item c)



- h. **Exit** Dealership mode (see item a)
i. **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.

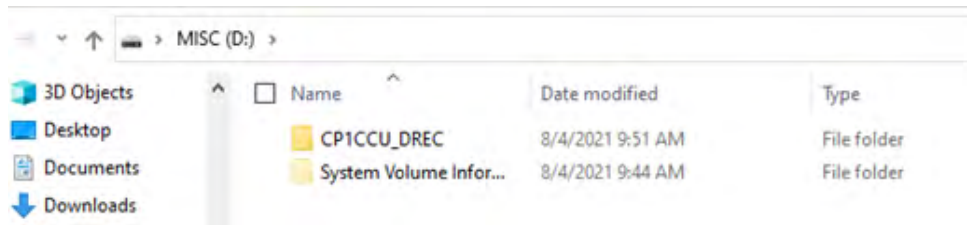
- j. It is a good practice to clear CPU's log buffer, after you have verified the data log transfer from the USB drive was successful. Following successful data log export **clear Recorded Data** (see item c).



CAUTION: 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.

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



1. Next step is sharing the data log for analysis using Infotainment Portal. 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.



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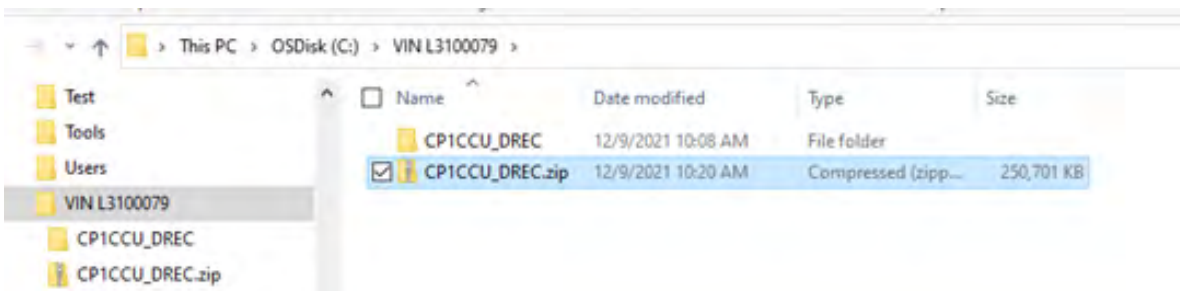
7. Next step is sharing the data log for analysis using Infotainment Portal or TechShare QMR attachment (**TechShare QMR attachment**). See section “**III Data log sharing for analysis**” for additional information.

III. Data log sharing for analysis

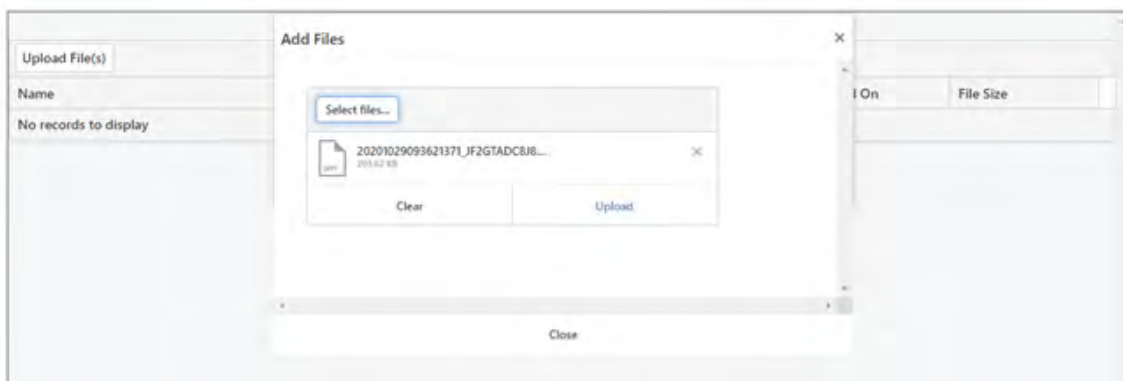
It is mandatory to properly complete required fields in order to submit your report. Make sure you include the date of failure duplication, steps to duplicate the failure, system software version. Video of the failure duplication is always a plus.

The following instructions will explain how to successfully share the data log using TechShare Infotainment Portal.

Please note 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.

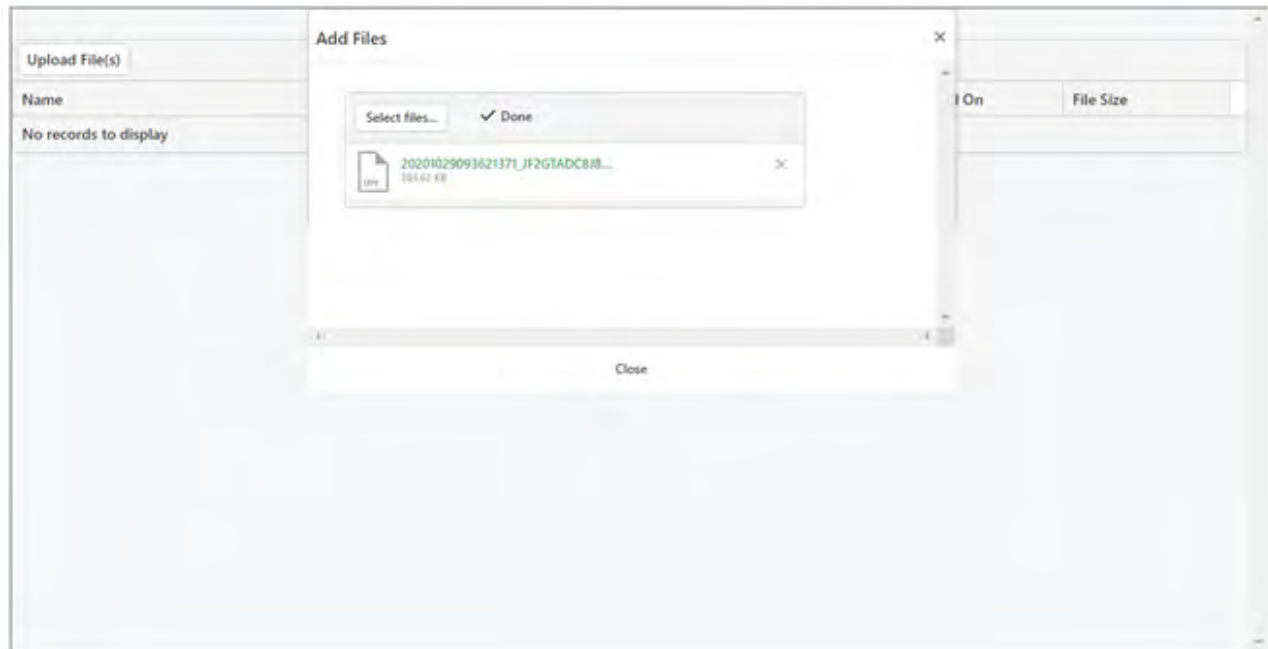


Attach data log from PC following TechShare directions. Make sure you upload .zip file in case of Denso CP1 report.



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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.



Apply the same steps if uploading multiple files to attach to the case for further analysis.

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

