	Technical Service Bulletin				
BE-00188T-TME	Subject: Toyota Touch 2 (MM17) - Fix for Hands-Free Bluetooth bad audio quality with Denso-TEN DCU RAV4 Area of Application:	Body Ele			
Version 1 24 Oct 2019	All Markets Models – Model Codes: RAV4 - AXAA52, AXAA54, AXAH52, AXAH54, MXAA52, MXAA54;	Electrical			

Introduction

This Technical Service Bulletin is to inform you of the fix method for complaints related to bad audio quality on the far end (outside of the vehicle) when talking via Hands-free by pairing the telephone to Toyota Touch 2 (MM17) system in 2018 RAV4. This phenomenon and the fix related only applied to those Toyota RAV4 with an MM17 produced by Denso-TEN.

Note

Important note 1: Input this TSB number in the warranty claim as Remedy, because TME has to trace the vehicles fixed.

Important note 2: This phenomenon and therefore this TSB does not apply to RAV4s in Russia or Kazakhstan, due to the fact that the microphone in those countries is different.

Description of the phenomenon

Bad voice quality on Hands Free talk. The far end party cannot hear well and asks again and again to repeat. Symptoms: A-word cutting, B-Muffled audio, C-low volume.

This is due to a double Noise cancelling phenomenon by combined noise cancelling in Microphone and in DCU.

SW version 1215 and higher (future) versions of this SW include the C/M to this phenomenon.

Parts information

No parts replacement is necessary. This TSB concerns a software update for the DCU to introduce fixes for reported software bug.

Repair procedure

Software Update

1. SOFTWARE PREPARATION

1. Download the software

Link to DCU software DCU software version: 1215

2. Unzip the downloaded .zip file and extract the content of the extracted folder (.kwi file only) onto 1 USB stick, directly into the root path. This USB stick should be previously FAT-32-formatted and preferably 2.0.



2. UPDATE THE DISPLAY CONTROL UNIT

1. Switch Ignition on and start the engine of the car (Ready mode for Hybrid). Leave the engine running until this process.

Important note: For hybrid vehicles, make sure to set the vehicle to READY ON. ACC or IG ON will be shut down after some time, which could interrupt the update.



- 2. Let the multimedia system start up completely until the Home Screen is displayed.
- 3. Press "Setup", located on the side of the head unit.

Note Location may differ based on the unit version. Image is indicative.



4. In the "Setup" menu, scroll down and select "Software Update".

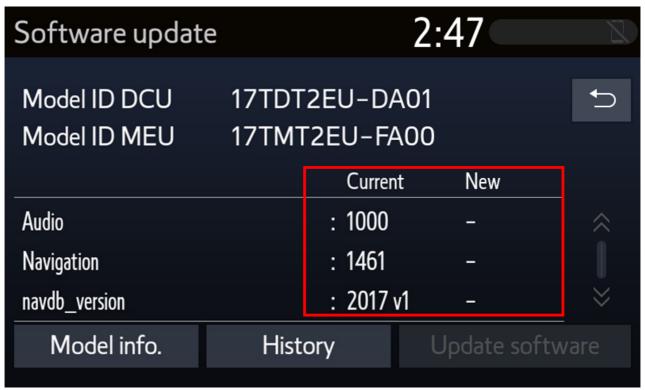


5. Check that the Unit is Denso-TEN unit by "Model ID DCU" letter after "-":

Denso-TEN unit: C in Model ID DCU
Panasonic unit: D in Model ID DCU



5. In the "Software update" menu: the current installed software is displayed. The DCU software is listed under "Audio".



6. Insert the USB media stick in the USB slot. The update file will be automatically detected.

Note Location may differ based on vehicle. Image is indicative.

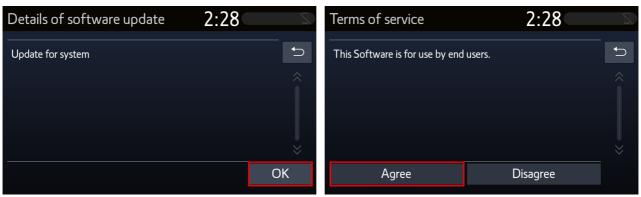


7. The new version of the DCU software will be displayed. Confirm by pressing "Update software".

Note The SW version shown under "New" in the image is not necessarily the latest version.

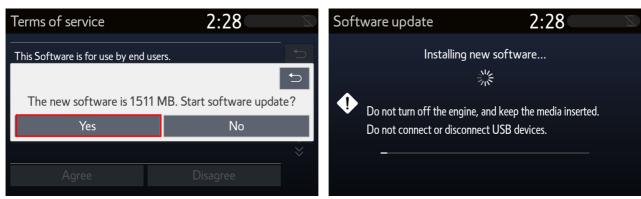


8. The details of the software update will be displayed: select "OK". Next screen are the "Terms of service": select "Agree" to proceed with the update.



9. A pop-up will appear displaying the size of the update. Select "Yes" to start the update. A screen with a progress bar will be shown. This process will take around 20 minutes for MEU update.

Note follow recommendations appearing in screen. The file size shown below might not match the size of the file.



10. Wait to get the screen confirming that the update is ready, follow the safety recommendations.



11. Turn IGNITION OFF. Wait for 1 minute. Turn IGNITION ON.



3. CHECK IF THE SOFTWARE INSTALLED CORRECTLY

1. Go back to the "Software update" menu to verify that the correct software has been installed and. The newly installed DCU software is now displayed under "Audio" & "Current".

Note The SW version shown under "Current" in the image is not necessarily the latest version.



Warranty information

For the warranty application, please refer to the applicable warranty policy and procedures manual.

Warranty operation codes for DCU

Model	Model code	OP code	Operation	Time	OFP	T1	T2
RAV4	AXAA52 AXAA54 AXAH52 AXAH54 MXAA52 MXAA54	86699	Reprogramming	0.2	86140-42540 86140-42541 86140-42550 86140-42551 86140-42590 86140-42660 86140-42670 86140-42671	87	74

Note

The implementation of this TSB for rectification of the phenomenon reported requires the mandatory CCR (Condition, Cause, Remedy) comments in the warranty claim for further detailed technical analysis. It is required to mention this TSB number in the Remedy field. Failure to comply with this requirement could lead to claim rejection.