

NUMBER: 08-095-22 REV. A

**GROUP:** 08 - Electrical

DATE: November 16, 2022

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This bulletin supersedes Technical Service Bulletin (TSB) 08-095-22, date of issue April 26, 2022, which should be removed from your files. All revisions are highlighted with \*\*asterisks\*\* and include new software levels, additional symptom/conditions, Repair Procedure Note and LOPs.

### SUBJECT:

UAX And UCX KR20.12 To PR40.1 Software Version Updates

### **OVERVIEW**:

This bulletin involves inspecting the software level to see if the radio needs one or two USB flash drive(s) to update the radio software level to \*\*40.1\*\*.

CAUTION! The repair procedure must be followed step by step. If the radio is not updated with the correct software level at the correct time the radio can be damaged. If the radio was damaged by not following the Repair Procedure the radio may need to be replaced.

### **MODELS:**

2019 - 2021	(DT)	RAM 1500 Pickup
2019 - 2021	(DJ)	RAM 2500 Pickup
2019 - 2021	(D2)	RAM 3500 Pickup
2019 - 2021	(DD)	RAM 3500 Cab Chassis
2019 - 2021	(DF)	RAM 3500 <10K Cab Chassis
2019 - 2021	(DP)	RAM 4500/5500 Cab Chassis

- NOTE: This bulletin applies to vehicles within the following markets/countries: North America (U.S. and Canada).
- NOTE: This bulletin applies to vehicles equipped with a Uconnect 12.0 with Navigation radio (Sales Codes UAX or UCX).

### SYMPTOM/CONDITION:

Customers may experience one or more of the following:

- \*\*Wi-Fi hotspot connection failure.
- Mobile Station International Subscriber Directory Number (MSISDN) missing from radio, no connected services working.\*\*
- Lost radio presets.
- SXM<sup>®</sup> favorite song not displaying/playing.
- Incorrect navigation address/location/directions.
- Wireless connectivity pair or connection issue.
- Radio channel change by itself.
- SXM icon inoperative.
- SXM channel skipping.
- High pitch chime noise.
- Contact list not loading.
- Device not supported message.
- Remote app inoperative.
- Device not supported message (HD Trucks).
- Heated steering wheel icon incorrect (HD Trucks).
- Travel-Link fuel price incorrect.
- Backup camera grid lines missing.
- Unable to adjust volume.
- Audio distortion (2019 DT).
- Navigation route guidance incorrect (2019 DT).
- Voice recognition inoperative (2019 DT).
- Navigation locks up and/or black screen (2019 DT).
- Missing CarPlay<sup>®</sup> message "Device Not Present?" when using the IPhone<sup>®</sup> display screen (2019 DT).
- Split screen with incorrect display (2019 DT).
- Radio display screen may flicker (2019 DT).
- Poor wireless connectivity audio (2019 DT).
- Radio will intermittently reset (2019 DT).
- SXM audio stops working (2019 DT).
- SXM missing the menu and/or display graphics (2019 DT).

In addition, the following enhancements are included:

- Radio reception improvements (2019 DT).
- AndroidAuto®/CarPlay enhancements (2019 DT).
- Language enhancements (2019 DT).

### DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/Service Library, verify all related systems are functioning as designed. If Diagnostic Trouble Codes (DTCs) or symptom/conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If the customer describes any of the symptom/conditions listed above, perform the Inspection Procedure.

CAUTION! The following procedure is to be performed in the order shown in this document. Failure to do so may damage the radio and may need to be replacement. The expected minimum SW version should be \*\*20.12\*\* or higher for the update.

#### **INSPECTION PROCEDURE:**

- 1. Verify the radio software version. Radio must be in Dealer Mode to verify by following these steps:
  - a. Press and hold both lower corners of the display screen, until the Dealer Mode screen appears (approximately seven seconds). Release corners.
  - Select "Radio Part Information". The software version will be listed next to "Application Version" (Fig. 1).

/ System In/ Radio Part Information				
HU ID	0x8EBFFD3F			
Hardware part number	CNSC28N0GL			
Software version	18.18.1b			
Application version SBX	USA-KR- 40.1 )-20180429-K09X			
Fig	4			

Fig. 1 Radio Software Level Screen

- 2. What is the radio software level (Application Version) at?
  - \*\*40.1\*\* or higher >>> The radio software is already up to date. Normal diagnostics should be performed.
  - At or above 34.2 and under \*\*40.1\*\* >>> The radio will only need one USB flash drive to update the radio. Create a USB flash drive with \*\*40.1\*\* software. Proceed to Step 1 of the Repair Procedure.
  - At or above \*\*20.12\*\* and under 34.2 >>> The radio will need two USB flash drives to update the radio. Create two USB flash drives with 34.2 and \*\*40.1\*\* software. Proceed to Step 1 of the Repair Procedure.

### CAUTION! If this software is used on a radio with software level under \*\*20.12\*\* it could damage the radio. If the radio is damaged it may need to be replaced.

• Under \*\*20.12\*\* >>> This bulletin does not apply. Normal diagnosis should be performed.

### REPAIR PROCEDURE:

- NOTE: Before and after any single phase of update is MANDATORY to take a Vehicle Scan Report by wiTECH. Scan reports can be requested during warranty claim assessment; failing to show them can result in refusing to pay the warranty claim.
- 1. Using wiTECH create a Vehicle Scan Report and save a copy to the work order.
- 2. Has a one or two 4GB USB flash drives been created?
  - YES>>> Proceed to Step 10.
  - NO>>> Proceed to Step 3.
- NOTE: If the software cannot be downloaded, make sure you have proper security access. If not, have the Service Manager or Shop Foreman download the software update.
- 3. Go to DealerCONNECT>Service>Uconnect Command Center>Uconnect>More Information >Dealer software downloads to download the files.

## NOTE: \*\*If 2-step update is required, please always download and flash the LR34.2 software first. After LR34.2 is installed successfully, flash PR40.1 software.\*\*

- 4. Use one blank USB flash drive with at least 4GB of space for each software file. Follow the on-screen instructions to download the software files.
- NOTE: When downloading the software file from the Uconnect site, always select the MAC version, regardless of the computer being used.
- 5. Download the software update file to your local PC's desktop. Make sure to select the "MAC" radial button for all downloads (Fig. 2).



#### Fig. 2 MAC Download Steps

- 6. Perform the following steps to format the USB flash drive.
  - a. Select "FAT32" format.
  - b. Select "Default allocation size" under Allocation Unit Size.
  - c. Select "Quick Format" under Format Options.
  - d. Click "Start".
- 7. Be sure to download the file to your designated folder before extracting the zip file to the blank USB flash drive.

# NOTE: A blank USB flash drive will be needed for each radio update, additional updates cannot be on the same USB flash drive.

8. Unzip the file to the root folder of USB flash drive. File should not be within a zip folder. Your USB file should look like (Fig. 3) when you open it.



Fig. 3 Files/Folders In The USB Flash Drive

- 9. Once the file is extracted to the USB flash drive, it's recommended to label the USB flash drive with the bulletin number and proper software level.
- 10. Go to the media screen (Fig. 4) .





- CAUTION! Make sure no other device is plugged into any of the USB ports while performing this update. If other devices are connected to USB ports during re-programming, it may cause the download to fail and may cause the radio to need replacement.
- Start the vehicle and insert the correct USB flash drive with new software into the USB port.
  \*\*(If 2-step update is needed, Step 1 LR34.2 and Step 2 PR40.1).\*\*

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NOTE: The software update screen may take up to a minute before it is displayed. If the update screen isn't displayed, cycle the ignition to "Off" then "Run" (Fig. 5).



Fig. 5 Software Update Screen

12. Press 'Update Now'. The timer screen will be displayed for two minutes. After two minutes the radio will reset and the update will start (Fig. 6).



Fig. 6 Timer Screen

- NOTE: During the software update the backup camera, radio, SOS and several driving assistance features will be unavailable.
- NOTE: Once the update has started the vehicle can be started so the battery doesn't run low.
- 13. After the update has been completed, perform the following:
  - a. Shut the vehicle off.
  - b. Open the driver door.
  - c. Wait five minutes.
  - d. Using wiTECH under the radio tab performed the ECU reset two times.
  - e. Remove the USB flash drive.
- 14. What was the radio software level after this update?
  - \*\*40.1\*\* >>> The radio download has been completed. Proceed to Step 15.
  - 34.2 >>> The next phase of the radio update needs to be performed. Proceed to Step 1 of the Repair Procedure.
- 15. Check if the navigation is working properly by pressing the 'Nav' button on the bottom tool bar. Verify the navigation map loads properly.
- NOTE: If the radio or navigation software didn't update properly or the navigation map doesn't load, attempt the software update one more time. If the software doesn't update properly or the navigation doesn't work, the radio may need to be replaced.
- 16. Using wiTECH, clear all DTCs that may have been set in any module due to reprogramming.
- 17. Using wiTECH create another Vehicle Scan Report and save a copy to the work order.

### POLICY:

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-60-02-D8	Radio, Check Software Level and Perform Software Update UAX or UCX Radio w/ PR40.1 <b>ONE Update</b> (0 - Introduction)	6 - Electrical and Body Systems	0.6 Hrs.
18-60-02-D9	Radio, Check Software Level and Perform Software Update UAX or UCX Radio w/ LR34.2 and PR40.1 <b>TWO Updates</b> (0 - Introduction)	6 - Electrical and Body Systems	1.0 Hrs.
18-60-02-DY	Radio, Software - Create USB Jump Drive from Uconnect Website UCX Radio w/ PR40.1 (One Time Only) (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.

18-60-02-AZ	Radio, Software - Create USB Jump Drive from Uconnect Website UAX Radio w/ PR40.1 (One Time Only) (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.**
18-60-02-U1	Create USB Jump Drive from Uconnect Website UAX Radio w/ 34.2 (One Time Only) (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
18-60-02-U2	Create USB Jump Drive from Uconnect Website UCX Radio w/ 34.2 (One Time Only) (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.

NOTE: The "One Time Only" LOP is used one time per dealer when downloading the software onto a USB flash drive. The dealer can only use the download LOP(s) one time for each of the radios listed.

### FAILURE CODE:

### The dealer must use failure code CC with this Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Technical Service Bulletin, failure code CC is to be used.
- When utilizing this failure code, the 3C's (customer's concern, cause and correction) must be provided for processing Technical Service Bulletin flash/reprogramming conditions.

CC Customer Concern