

*NUMBER:* 08-083-19

**GROUP:** 08 - Electrical

DATE: August 16, 2019

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This bulletin supersedes service bulletin 08-080-18, dated June 12, 2018, which should be removed from your files. All revisions are highlighted with \*\*asterisks\*\* and include 2018 - 2019 JC vehicles, a symptom/condition and LOPs.

This service bulletin is also being released as rapid response transmittal (RRT) 12-010. All applicable sold and unsold RRT VIN's have been loaded. To verify that this RRT service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/ Service Library. All repairs are reimbursable within the provisions of warranty.

#### SUBJECT:

Flash: Hands Free Module (HFM) Software Enhancements

#### **OVERVIEW**:

This bulletin involves reprogramming the HFM with the latest available software.

#### **MODELS:**

| **2012 - 2019** | (JC) | Dodge Journey |
|-----------------|------|---------------|
| 2012 - 2014     | (LD) | Dodge Charger |
| 2012 - 2014     | (LX) | Chrysler 300  |

- NOTE: This bulletin applies to vehicles within the following markets/countries: North America, EMEA, LATAM and APAC.
- NOTE: This bulletin applies to vehicles equipped with Uconnect Voice Command W/Bluetooth (Sales Codes RSP or RSQ for international).

#### SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find that the following Diagnostic Trouble Code (DTC) has been set:

• U0197-00 - Lost Communication With Hands Free Phone Module.

Customers may also comment one or more the following:

- \*\*Loss of audio while on a Bluetooth phone call (MYs 2014 2019 JC Only).\*\*
- HFM does not boot properly. "Hands-Free Module Loading" is displayed on the head unit.
- The HFM is inoperative and unresponsive to all user input.
- The HFM is unresponsive and appears off the bus to wiTECH.
- Inaccurate foreign language translations.
- Voice Recognition (VR) is sluggish after changing the language.
- IPhone 4 starts auto recording itself.
- Background noise from automated speech recognition.
- When in Bluetooth Streaming Audio (BTSA) mode, the display will show "Music paused connecting phone" while a song is being played and without an incoming call. Wrong BTSA screen when deleting.
- When in Text To Speech (TTS), it will be a mix of the TTS and recording.
- IPod touch, BTSA will not audio stream.
- Integrated center stack screen will display "music paused" after ignition was cycled and BTSA was being used before the ignition was turned off.
- Automatic Sound Recognition (ASR) microphone picking up background noise.
- When the language is set for Italian and after the ignition is cycled, the phone screens will change to English (Sales Code RSQ Only).
- No response from the steering wheel VR button.
- Not being able to enter into the phone screen on the radio.
- The customer may note when trying to select a non-supported language like Russian or Portuguese, the Hands Free screen will default to English. The VR will default back to the last language (Italian, French, Spanish, German or Dutch) the customer was using.

The following software enhancement is included for all vehicles, not just international vehicles:

• VR teleprompter update.

## 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 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 the symptom/condition listed above or if the technician finds the DTC, perform the Repair Procedure.

NOTE: If the module will not communicate, follow normal diagnostic procedures for "no response from HFM" in Service Library. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: Service Info> 29 - Non-DTC Diagnostics/Communication/Diagnosis and Testing.

| Qty.   | Part No. | Description   |
|--------|----------|---|
| 1 (AR) | 500      | <b>Orange</b> wiTECH USB Cable for LD and LX Vehicles Only. <b>Provided as an essential tool.</b> |
| 1 (AR) | 501      | Purple wiTECH USB Cable for JC Vehicles Only. Provided as an essential tool.                      |

#### SPECIAL TOOLS/EQUIPMENT REQUIRED:

#### **REPAIR PROCEDURE:**

NOTE: Install a battery charger to ensure battery voltage does not drop below 13.2 volts. Do not allow the charging voltage to climb above 13.5 volts during the flash process.

#### NOTE: If this flash process is interrupted/aborted, the flash should be restarted.

- 1. Using wiTECH, identify if an update is required and if so determine the new software version.
  - Record the current software version and the new (update) software version. The vehicle ignition key will need to be in the "RUN" position to read software version.
  - The wiTECH application will still be used to check module status and part number, but flash reprogramming for these modules will require downloading the flash file and the "HFM USB Flash" application from Uconnect.
  - The flash file and PC application are bundled in the zip file that is downloaded after entering the required vehicle information.
  - Go to DealerCONNECT>Service>Uconnect Command Center>Uconnect>More Information >Dealer software downloads to download the files.
  - If you don't use the vehicle VIN for your search, you will need to enter "Year", "Model" and "Radio".

# NOTE: A search can be used to find an update using the Year, Make and Model, but to download the software, the VIN will be required.

Any applicable HFM module update will be found under the "Radio" drop down list via the sales code (Fig. 1).

| Secure In                     | ttps://tsut.extra.chrysler.com/rsur/isurOealer/  | do ·                                  |                                     |                             |   |                                  |   |                    |              |                    |         |
|-------------------------------|--|---------------------------------------|-------------------------------------|-----------------------------|---|----------------------------------|---|--------------------|--------------|--------------------|---------|
|                               | 'n   | Uconnect                              | Systems                             | - Deal                      | er Updat                                | e Portal                         |   | Search             |              |                    |         |
|                               | IOTE: Not all software updates are available thru<br>arch DealerCONNECT for any other potential upd<br>ar Selection, then Press Go | ugh this website<br>lates that may be | es a software de<br>available throe | wricad due<br>yf the tradic | to file size and/o<br>ional delivery pr | or delivery method restrictions. |   |                    |              |                    |         |
| VIN                           |  | 90                                    | EAQ (Empore                         | lly Asked Or                | neticensi)                              |                                  | Reset   |                    |              |                    |         |
| Year<br>Pirase cli            | 2013 •   | Model                                 | LD-CHARGER                          |                             | - 3                                     | • 6460                           | REG-Uconnect 3.<br>Select Redio<br>RBS-Uconnect 8.<br>RB6-Uconnect 8.<br>RE2-Uconnect 8.<br>RE2-Uconnect 8. | 4N<br>4N AW/RH/DVD | /SO/M447/USB | *                  |         |
| <u>Soltware</u><br>Release ID | SW. Balaana Nama   | Service<br>Balletin                   | desired at                          | initial<br>Juniti           | posteles)                               | Sales Code Applicability         | REE-Uconnect 4.<br>RHA-Uconnect 4.<br>Access<br>Hethori   | 15 CD/MP3          | ht           | Version<br>Numbers | Status: |
| 1264                          | UCONNECT_8.4_RADIO_16.21.07_MY13_JC_IF_1   | 0.17 CB-004-1                         | 2 BCING                             | 1012                        | 253540.44                               | AB4,885,886,RE2,8E3,RE4,RE6,R    | FT SOPTWARE   | SOFTWARE           | 01/27/2017   | 16-21-07           | ACTIVE  |

Fig. 1 Dealer Update Portal

2. The HFM USB Flash application only runs on Windows PCs, however for "OS" selection, you can choose either "WINDOWS" or "MAC" to download files. If you select "WINDOWS" you will download a self-extracting ".exe" file. If you select "MAC", you will download a ".zip" file. In either case, after clicking on the downloaded file, you will be able to extract the bundled files (flash file and flash PC application). For this flash, regardless of "OS" selection, you'll end up with the same files after extraction and you must use a PC running either Windows 7 or Windows 10 (Fig. 2).



Fig. 2 Download Software - Push Windows or MAC Radial-Button

- 3. After downloading the flash file to your PC, you will need to click on the ".exe" or ".zip" file (depending on the OS you selected in Step 2) and extract both files located inside.
- 4. After extracting the files, run the installation procedure for the PC flash application by double clicking on HfmUsbFlash\_Install\_1.16.exe" and follow the instructions that are provided (Fig. 3). Again, this application only runs on the WINDOW OS. You will need a PC running Windows 7 or Windows 10.
- NOTE: After installation, you will find the application in "C:\Program Files x86)\ChryslerGroupLLC\HFM USB Flash", where you can create a shortcut to it. Right click on "hfmusbflash.exe" to create a shortcut to your desktop.

| Organize 👻 🛅 Open | Burn New folder |                   | ä                   | # • 🖬    |
|-------------------|-----------------|-------------------|---------------------|----------|
| 🔆 Favorites       | Name            | Date modified     | Туре                | Size     |
| 📃 Desktop         | hfmusbflash.exe | 6/15/2017 2:42 PM | Application         | 418 KB   |
| 🚂 Downloads       | f libcurl.dll   | 8/18/2014 2:51 PM | Free Viewer associ  | 335 KB   |
| 📃 Recent Places   | E Ibeay32.dll   | 8/18/2014 2:51 PM | Free Viewer associ  | 1,150 KB |
| ineDrive 🍊 🝊      | Tibssh2.dll     | 8/18/2014 2:51 PM | Free Viewer associ  | 180 KB   |
|                   | msvcr120.dll    | 8/18/2014 2:51 PM | Free Viewer associ  | 949 KB   |
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Fig. 3 Create Shortcut

NOTE: If you have already installed the HFM USB Flash application, there is no need to re-install it for subsequent HFM USB flash reprogramming.

5. Place the vehicle ignition to the "RUN" position and then start the application. You will be prompted to browse for the HFM flash file. Navigate to the location of the flash file that you extracted. The flash file will have a ".bin" extension. Click on the "Flash" button (Fig. 4).

| FM USB Flash  | ×                    |
|---|----------------------|
| To flash the Magneti Marelli HFM ECU, please select the proper flash binary t<br>the HFM ECU and dick the Flash button. | file appropriate for |
|   |                      |
| Flash file  |                      |
| C:\Flash Validation\SF6034\EFD-files\05064986AL_t.bin   | Browse               |
| Flash status  |                      |
| ٠   |                      |
|   |                      |
|   |                      |
| Flash   |                      |
|   |                      |

Fig. 4 Flash Status

6. If you are not familiar with this process, please watch a video at the following link (Fig. 5) . Click the "OK" button.



Fig. 5 Video Reference

 Magneti-Marelli HFM USB flash (MYs 2011 - 2013) requires special USB cables (Fig. 6). Before proceeding, ensure that you have the correct cables available. For LD and LX vehicles, you will need the orange cable (wiTECH essential tool #500). For JC vehicles, you will need the purple cable (wiTECH essential tool #501). Click the "OK" button.



Fig. 6 Cable Warning

For LX and LD vehicles, the HFM module is located above the driver side kick panel. Plug the orange cable into your PC and into the HFM at the connector marked "1" in (Fig. 7).



Fig. 7 LD and LX HFM Locations

1 - USB Connector Cavity

2 - Hands Free Module

3 - Headlamp Switch

For JC vehicles, a Delphi 4-way USB connector is located on the driver side, next to the diagnostic connector. Plug the purple cable into your PC and into the connector marked "1" in (Fig. 8) .



Fig. 8 JC HFM Connections

- 1 Delphi 4-Way connector (connect wiTECH USB Cable here)
- 2 Diagnostics Connector
- 3 Hands Free Module
- 8. Click the "OK" button after reading the content in the alert box (Fig. 9).
  - NOTE: The following instructions are for pulling the appropriate fuses for the Electronic Control Unit (ECU) to be detected.



Fig. 9 Fuse Instruction Pop-up

Locate the fuse panel in preparation to remove the HFM fuse. For JC vehicles, locate fuse #131 on the fuse panel found under the Instrument Panel (IP) on the passenger side (Fig. 10).



Fig. 10 JC Fuse Panel

1 - Fuse #131

• For LD and LX vehicles, locate fuse #23 on the fuse panel found in the trunk under the floor panel on the passenger side (Fig. 11) .



Fig. 11 LX and LD Fuse Panel

9. Remove the HFM fuse and then click on "OK" (Fig. 12).



Fig. 12 Pull Fuse Instruction Pop-up

10. Re-install the HFM fuse and then click on "OK" (Fig. 13) .



Fig. 13 Re-install Fuse Instruction Pop-up

11. It may take a few minutes for the PC to detect the HFM. If so, the following screen will be displayed (Fig. 14).



Fig. 14 HFM Status Pop-up (While waiting for connection)

• The flash download will begin after the USB-HFM connection is established (Fig. 15) .



Fig. 15 HFM Status Pop-up (After connection found)

12. When the download and reprogramming is complete, a message will indicate "Flash process successful!" (Fig. 16) .

| Alert                     | HFM USB Flash  |
|---------------------------|--|
| Flash process successful! | To flash the Magneti Marelli HFM ECU, please select the proper flash binary file appropriate for the HFM ECU and click the Flash button.<br>Flash file |
| OK                        | C: \Flash Validation \SF6034\EFD-files \05064986AL_t.bin Browse Flash status Flash process successful!   |
|                           | Flash  |

Fig. 16 Flash Successful Pop-up

- 13. Click the "OK" button.
- 14. Disconnect the USB cable from the PC. Close the HFM USB Flash application and start the wiTECH application. Verify the current HFM part number. It should match the new part number that you recorded in Step 1. If the number is a match, the flash process is complete. If the number does not match, verify that the ignition is in the "RUN" position and repeat the flash procedure from Step 2.

## NOTE: After the software update has been completed, both the hands free screen and VR will default back to the last language used.

- 15. Cycle the ignition to "OFF" and back to "RUN". Press the steering wheel mounted Phone Voice Recognition Button. This is the button on the left steering wheel switch bank with a graphic of a phone handset embossed onto it. If the system did not respond to the Phone Voice Recognition button press, repeat the procedure from Step 2.
- 16. Remove the USB cable from the vehicle. Use the wiTECH application to clear any DTC's that may have been set in other modules due to reprogramming.

#### POLICY:

Reimbursable within the provisions of the warranty.

## TIME ALLOWANCE:

| Labor Operation<br>No: | Description   | Skill Category                     | Amount     |
|------------------------|---|------------------------------------|------------|
| **18-19-63-K9          | Hands Free Module (HFM) - Reprogram<br>Software<br>(0 - Introduction) | 6 - Electrical and<br>Body Systems | 0.7 Hrs.** |

## FAILURE CODE:

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

- If the customer's concern matches the SYMPTOM/CONDITION identified in the 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 Service Bulletin flash/reprogramming conditions.

| CC | Customer Concern |
|----|------------------|
|    |                  |