

GROUP: 08 - Electrical

DATE: July 1, 2017

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 08-008-12, DATED JUNE 15, 2012, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE REVISED REPAIR PROCEDURE, NEW LOP AND UPDATED FAILURE CODE STATEMENT.

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 12-007. ALL APPLICABLE UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE UN-SOLD VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. FOR VEHICLES NOT INCLUDED IN THE RRT VIN LIST, APPLICATION OF THIS SERVICE BULLETIN TO SOLD UNITS IS BASED UPON THE CUSTOMER EXPERIENCING THE SYMPTOM/CONDITIONS. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

HELP USING THE WITECH DIAGNOSTIC APPLICATION FOR FLASHING AN ECU IS AVAILABLE BY SELECTING "HELP" THEN "HELP CONTENTS" AT THE TOP OF THE WITECH DIAGNOSTIC APPLICATION WINDOW.

THE wITECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.

#### SUBJECT:

FLASH: Hands Free Module Software Enhancements

# **OVERVIEW**:

This Bulletin involves performing a USB service flash of the Hands Free Module (HFM).

#### **MODELS**:

2011	(JC)	Dodge Journey
2011	(LD)	Dodge Charger
2011	(LX)	Chrysler 300

NOTE: This bulletin applies to vehicles built from December 20, 2010 (MDH 1220XX) to June 10 2011 (MDH 0610XX) equipped with Uconnect Voice Command W/Bluetooth (Sales Code RSP or RSQ for International).

# SYMPTOM/CONDITION:

The customer may experience the following:

- Revised foreign language translations.
- Complete Hands Free Module (HFM) Lockup, no hands free functionality can be used.
- No start or drained battery due to HFM keeping bus awake.
- Using station names to switch channels will take user to the wrong channel.
- Station names added to the Sirius<sup>®</sup> line up after May 4th are not recognized.
- HFM does not work and the phone screens cannot be entered into at all.
- If the Emergency and Towing assistance number are modified by the customer, they revert back to default number after several ignition cycles.
- Voice Recognition (VR) for phone book names may not work.
- VR may not work at all. VR may recover after several ignition cycles or in some cases VR may never recover.
- Phone book download to vehicle system is incomplete. Phone book download may recover after several ignition cycles.
- Once a call is transferred to handset, it cannot be transferred back to vehicle hands free system. This issue is intermittent.
- VR Satellite commands may not work. VR Satellite commands may recover after several ignition cycles or in some cases may never recover.
- User can not select Brief or Detailed voice response mode in settings.
- In NAV mode "Call" soft key is not available for Points Of Interest with phone numbers.
- Hands free calls with audio muted. Incoming or outgoing calls are intermittently muted or muted when making a call via a favorite, immediately after ending a call.
- Screen switches to Main Phone screen every time phone connects.
- System may call Emergency without waiting for user to say "Yes" when detailed prompt modes are active.
- Cannot get into phone mode via "Phone" soft key after editing emergency number.

# DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all related systems are functioning as designed. If 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 a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. For all other customers that describe the symptom/condition, perform the Repair Procedure.

# PARTS REQUIRED:

Qty.	Part No.	Description
1 (AR)	500	wiTECH USB Cable for LD/LX. Provided as an essential tool.
1 (AR)	501	wiTECH USB Cable for JC. Provided as an essential tool.

# NOTE: The cable intended for LD/LX is orange in color and the cable intended for JC is purple in color.

#### **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 part number. Record the current part number and the new (update) part number. The vehicle ignition key will need to be in the "RUN" position to read part numbers.

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



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 (Fig. 2). 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 end up with the same files after extraction and you must use a PC running either Windows 7 or Windows 10.

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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. 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 (Fig. 3) . Right click on "hfmusbflash.exe" to create a shortcut to your desktop

Organize 🕶 🔂 Open 🛛 Burn	New folder		1	# • 🗇
Favorites	Name	Date modified	Туре	Size
📃 Desktop	🔛 hfmusbflash.exe	6/15/2017 2:42 PM	Application	418 KB
Downloads	Ibcurl.dll	8/18/2014 2:51 PM	Free Viewer associ	335 KB
📃 Recent Places 🗮	🚯 libeay32.dll	8/18/2014 2:51 PM	Free Viewer associ	1,150 KB
🝊 OneDrive	Iibssh2.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
🗃 Libraries	🕼 sbdl_full.dll	8/18/2014 2:51 PM	Free Viewer associ-	74 KB
Documents Music Pictures Videos	😰 ssleay32.dll	8/18/2014 2-51 PM	Free Viewer associ	264 KB

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. Turn the vehicle ignition key 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).

IFM USB Flash	×
To flash the Magneti Marelli HFM ECU, please select the proper flash binary fi	e appropriate for
Flash file	
C:\Flash Validation\SF6034\EFD-files\05064986AL_t.bin	Browse
Flash status	
•	
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 (2011-2013) requires special USB cables. Before proceeding, ensure that you have the correct cables available. For LD/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) (Fig. 6). Click "OK" button.



Fig. 6 Cable Warning

For LX/LD vehicles, the HFM module is located above the driver's 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. 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 (I/P) on the passenger side (Fig. 9).



Fig. 9 JC Fuseblock

1 - Fuse #131.

For LD/LX vehicles, locate fuse #23 on the fuse panel found in the trunk under the floor panel on the passenger side (Fig. 10).



Fig. 10 LX and LD Fuseblock

#### 1 - Fuse #23.

Click the "OK" button (Fig. 11) .



Fig. 11 Fuse Instruction Pop-up

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



Fig. 12 Pull Fuse Instruction Pop-up

10. Reinsert the HFM fuse and then click on OK (Fig. 13) .



Fig. 13 Re-install Fuse Instruction Pop-up

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11. It may take a few minutes for the PC to detect the HFM. If so, the following screen is 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).

HFM USB Flash	X
To flash the Magneti Marelli HFM ECU, please select the proper flash bina the HFM ECU and click the Flash button.	ary file appropriate for
Flash file	
C:\Flash Validation\SF6034\EFD-files\05064986AL_t.bin	Browse
Flash status Downloading flash file to ECU, please wait	
Flash	

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. Flash file
ок	C:\Flash Validation\SF6034\EFD-files\05064986AL_t.bin Browse
	Flash status Flash process successful!
	Flash

Fig. 16 Flash Successful Pop-up

Click the "OK" button.

- 13. 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 key is in the RUN position and repeat the flash procedure from Step 2\*\*.
- 14. Cycle the ignition to "OFF" and back to "RUN" again. 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.
- 15. 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 No:	Description	Skill Category	Amount
**18-19-63-G9	Hands Free Module (HFM) Inspect Soft- ware Level and Reprogram Module (0 - Introduction)	6 - Electrical and Body Systems	0.6 Hrs.
18-19-63-F9	Hands Free Module (HFM) Inspect Soft- ware Level (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.**

NOTE: The expected completion time for the flash download portion of this procedure is approximately 5 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

#### FAILURE CODE:

\*\*The dealer must choose which failure code to use. If the customer came in with an issue and if the dealer finds a software update to correct that issue, use failure code CC, for all other use failure code RF.

- 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 must be supplied.
- The failure code "RF" (Required Flash) can no longer be used on Service Bulletin flashes. The "RF" failure code can only be used on RRT.
- The "RF" failure code is required for essential module flash/reprogramming and can only be used after confirmation that the VIN is included on the RRT.\*\*

CC	Customer Concern
RF	Required Flash