

**GROUP:** Electrical

DATE: March 29, 2013

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# THIS BULLETIN SUPERSEDES SERVICE BULLETIN 08-018-12, DATED MARCH 27, 2012, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDES VEHICLES WITHOUT REMOTE USB PORTS.

# THE wITECH SOFTWARE LEVEL MUST BE AT RELEASE 13.03 OR HIGHER TO PERFORM THIS PROCEDURE.

#### SUBJECT:

Flash: Hands Free Module Customer Satisfaction Enhancements

#### **OVERVIEW:**

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

#### **MODELS**:

2012	(LC)	Challenger
2012	(MK)	Compass / Patriot
2012	(PM)	Caliber
2012	(WK)	Grand Cherokee
2012	(W2)	Grand Cherokee
2012	(WD)	Durango
2012	(KK)	Liberty
2012	(K1)	Cherokee
2012	(JS)	Avenger / 200
2012	(DS)	1500 Pickup
2012	(DJ)	2500 Pickup
2012	(D2)	3500 Pickup
2012	(DD)	3500 Cab Chassis
2012	(DP)	4500/5500 Cab Chassis
2012	(DX)	1500 Pickup (Mexico)
2012	(JK)	Wrangler
2012	(J3)	Wrangler (CKD)
2012	(RT)	Grand Caravan / Town & Country

NOTE: This bulletin applies to vehicles built up to January 1, 2012(MDH 0101XX) equipped WITH UConnect Voice Command w/Bluetooth (sales code RSP, RSQ) and WITHOUT Media Center 730N CD/DVD/MP3/HDD/NAV (sales code RER or RHR) or Media Center 735N CD/DVD/HDD/NAV (sales code REW or RHW) or Media Center 731N CD/DVD/HDD/NAV (sales code REP) or AM/FM CD MP3 NAV RADIO (sales code RHP).

#### SYMPTOM/CONDITION:

The customer satisfaction enhancements are included with this software release:

#### NOTE: After the HFM has been updated it will receive these enhancements.

- Reduced "Device Reading" wait time after connecting a device to the remote USB port.
- Call / Dial separation improves upon names being recognized as phone numbers.
- Improved sound quality during Bluetooth streaming.
- Increased iPod and iPhone compatibility.
- SMS messaging support via MAP protocol (not all phones support the MAP protocol).
- Added "None of These" and "Correction" to the phone book prompt menu for better handling of similar names.
- Previous button will return the song currently being played to the beginning of the track.
- AirPlay feature "Dock Connector" no longer needs to be manually selected on Apple devices. This will resolve the "No Audio" condition when the device is connected to the remote USB port and dock connector is not selected.

#### NOTE: USB mode resume will no longer 'resume' after ignition OFF

#### DIAGNOSIS:

- 1. Using wiTECH, determine the HFM part number. The HFM part number can be found under Module Information for the HFM.
- 2. Is the HFM Part number currently at the AB level?
  - a. Yes >> Perform the Repair Procedure.
  - b. No >>> This service bulletin does not apply. Further diagnostics may be required.

#### NOTE: If the HFM part number ends with AA the HFM will need to be replaced.

If the customer describes the symptom, perform the Repair Procedure.

#### PARTS REQUIRED:

Qty.	Part No.	Description
1(AR)	68086985AB	USB Cable use on vehicles without remote USB port
1(AR)	Dealer Supplied	USB Portable Flash Drive / Memory Stick (256 Mb or larger, formatted for Windows)

NOTE: One USB Cable can be used to service multiple vehicles. If you already have cable P/N P/N 82212160, you don't need to order cable P/N 68086985AB.

### REPAIR PROCEDURE:

#### **HFM Remote USB Port Connector Location Table**

Vehicle Family.	UCI-USB Connector Location
LC	USB port connection located in center console; forward-most side. Connection illuminates when ignition/ Accy is ON
PM / MK	USB port connection located in passenger glove compartment; Top-right corner, Above glove compartment when OPEN. Connection illuminates when ignition/ Accy is ON
WK/WD	USB port connection located in center console, backside of Top Tray. Connection illuminates when ignition/ Accy. is ON
JS	USB port connection located below HVAC controls;. Connection illuminates when ignition/ Accy. is ON
JK	USB port connection located in center console; forward-most side. Connection illuminates when ignition/ Accy. is ON
RT	USB port connection located in TOP passenger glove compartment; Left Side. Connection illuminates when ignition/ Accy. is ON
RAM Trucks	USB port connection located in passenger glove compartment. Connection illuminates when ignition/ Accy. is ON
KA / KK / K1	NOT EQUIPPED with USB Connection; See Special instructions
**All other vehicles <b>without</b> remote USB port (sales code RSX)**	**NOT EQUIPPED with USB Connection; See Special instructions**

#### NOTE: Preparation of the USB memory stick involves using the wiTECH flash framework to copy a proprietary module flash application to a USB memory stick. The USB memory stick is then used to flash update the Hands Free Module

- 1. Verify that the Hands Free Module is functioning as designed. If DTC's are present, record them on the repair order and repair as necessary before proceeding further.
- 2. Proceed with the wiTECH Diagnostic Application to reflash the HFM (Fig. 1). Help using the wiTECH Diagnostic Application for flashing Hands Free Module is made available through the wiTECH Diagnostic Application. For instructions select the "HELP" tab on upper portion of the wiTECH window, then "HELP CONTENTS." This will open the Welcome to wiTECH Help screen where help topics can be selected.

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		New Part Number	Description		
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ime: is Type: is Type: dware Version: ftware Version: IC Count:	Hands Free Acdule(cell phone) 68140636AA CAN RIS 13.04 43.01.40 0				
			II available service documentation (58%, RRT%, R a flash is not applicable to the connected vehicle t		

Fig. 1 wiTECH Flash Application

3. The Flash Warning Dialog will appear(Fig. 2). Click on OK to acknowledge the warning.

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# Fig. 2 wiTECH Flash Warning Dialog

4. The Download Progress Dialog will appear (Fig. 3). Click on OK after progress has reached 100%.



#### Fig. 3 wiTECH Download Progress Dialog

5. The Supplier Application Warning Dialog will appear (Fig. 4). Click on OK to acknowledge the warning.

wiTECH Diagnostic Application - 11.03.64 Utilities Reports Monitors Preferences	About Help	
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#### Fig. 4 Supplier Application Warning Dialog

6. A scrollable Process Description Dialog will appear (Fig. 5) and (Fig. 6). Insert the dealer supplied USB memory stick into the first USB port of the wiTECH computer at this time, ensure that no other USB memory sticks are installed, and click on OK to acknowledge the instructions.



Fig. 5 Process Description - Top Of Scrollable Dialog



#### Fig. 6 Process Description - Bottom Of Scrollable Dialog

- 7. Did the Successful Completion Dialog (Fig. 7) appear indicating the update files have been copied to the USB memory stick?
  - a. Yes >> Click on OK to acknowledge successful creation of the update USB and proceed to Step #11.
  - b. No >>> Proceed to Step #8



# Fig. 7 Successful Completion Dialog

8. The USB Not Found dialog (Fig. 8) will appear. Click on OK to continue.



# Fig. 8 USB Memory Stick Not Found

9. The Alternate Instructions dialog (Fig. 9) will appear.



Fig. 9 Alternate Instrictions If Memory Stick Not Found

10. Insert a blank USB Memory Stick into a USB port on the wiTECH computer and then "drag and drop" the Uconnect.upd file from the computer desktop (Fig. 10) onto the blank USB Memory Stick.



#### Fig. 10 Sample Windows Desktop With Update File

- 11. Remove the prepared update USB Memory Stick from the wiTECH computer and perform the software reflash on the vehicle.
- 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: In the event of a reflash failure the system will respond with an audio prompt indicating "Digital Signature not recognized" or USB Mass Storage device not compatible". If this should occur, download the flash to the USB Flash Drive using a different USB port on the computer. If this does not resolve the issue use another brand of flash drive.
- CAUTION: Damage to the HFM may occur! Do not interrupt vehicle power, cycle ignition, or remove the USB memory stick while performing software reflash. If the flash is interrupted and an audible prompt IS heard after pressing the radio's phone button the flash can be reattempted. If the flash is interrupted and an audible prompt is NOT heard after pressing the radio's phone button (with the radio volume set at <sup>3</sup>/<sub>4</sub> volume or higher), Perform a capacitor discharge on the vehicle. Then turn on ignition and wait 30 seconds, press the radio's phone button, if no audible prompt is heard the HFM module will need to be replaced.
- 12. Locate the HFM Remote USB Port using the HFM Remote USB Port Connector Location Table (This is **NOT** the same as the USB port located on the radio).
- 13. Access the HFM USB Connector.

# NOTE: KK/K1 and vehicles not equipped with a remote USB port. Follow Special Instruction below.

- 14. Insert the HFM software update USB Memory Stick into the Remote USB Port Connector.
- 15. Sit in the passenger seat and close all doors and windows.
- 16. Press and release the radio's u-Connect Phone button and, following the HFM verification prompt, say "Set-up, Software Update". The system will respond with an audio prompt stating: "Starting Software Update, Please Wait".
- 17. The audio prompt will be followed by periodic beeps for approximately 20 minutes. There are no additional actions required until after the radio exits re-flash mode. After the periodic beeps end the radio will exit re-flash mode and return to the last radio mode.

#### NOTE: Do not remove the USB memory stick at this point.

- 18. Wait one additional minute for the HFM to complete the update and reset.
- 19. Verify software reflash by pressing and release the phone button.
- 20. Quickly turn the radio volume control knob to above 3/4 of maximum volume and leave it there.
- 21. Did the vehicle audio system play any of the following verification prompts: "UConnect Ready ... beep", "Ready ... beep", or just an audible "beep"?
  - a. YES >>> Proceed to Step #22.
  - b. NO >>> Proceed to Step #25.
- 22. Press and release the phone button to end the session.
- 23. Using wiTECH, determine the HFM part number. The HFM part number can be found under Module Information for the HFM.
- 24. Is the HFM Part number should now end with a AC level?
  - a. Yes >>> Proceed to Step #26.
  - b. No >>> Proceed to Step #25.
- 25. Have you attempted the Flash Procedure at least twice previously?

- a. YES >>> This service bulletin does not apply. Further diagnostics may be required.
- b. NO >>> Reattempt the 'Perform Software Reflash' procedure.
- 26. Remove and properly store the USB Memory Stick.

27. Using WiTECH clear any faults which may have been set during the reflash procedure.

28. \*\*Vehicles without remote USB ports, return to the Special Instructions Step #5.

# \*\*Special Instructions (For KK / K1 and vehicles not equipped with remote USB port sales code RSX)\*\*.

\*\*Use USB cable (82212160 or 68086985AB) to flash the HFM\*\*.

\*\*The HFM Module on the KK is located on the right rear side (passenger's side on left hand drive vehicles also), and behind the audio system's subwoofer enclosure. Follow DealerConnect / TechCONNECT> Group 08 - Electrical> 8T -

Navigation/Telecommunications> MODULE, Hands Free (HFM)> Removal - REMOVAL\*\*.

\*\*To help find the location of the HFM on vehicles with a factory installed HFM and **Without** remote USB port can follow HFM removal/Installation In TechCONNECT\*\*.

To help find the location of the HFM on vehicles with a Mopar accessory HFM can get the installation instruction from their parts person.

#### NOTE: \*\*Vehicles with a Mopar accessory HFM may have the module installed in different locations. Some technician may chose not to install the module in the proper location.\*\*

- 1. Access the HFM Module by following the installation instructions call out above.
- 2. Do **NOT** disconnect the electrical connectors from the HFM.
- 3. Connect the USB harness as shown in (Fig. 11).
- 4. Return to the Perform Software Reflash Procedure Step #14.



Fig. 11 USB Harness Connection

1 - USB harness PN# 82212160 or 68086985AB.

6. Reinstall HFM Module by following DealerConnect / TechCONNECT> Group 08 -Electrical> 8T - Navigation/Telecommunications> MODULE, Hands Free (HFM)> Installation - INSTALLATION or the instruction sheet.

## POLICY:

Reimbursable within the provisions of the warranty.

#### TIME ALLOWANCE:

Labor Operation No:	Description	Amount
18-19-63-9J	Diagnosis Only - HFM Part Number. (1 - Semi-Skilled)	0.2 Hrs.
18-19-63-9K	Diagnose and Flash Reprogram HFM Module. (1 - Semi-Skilled)	0.3 Hrs.
18-19-63-9L	Diagnose and Flash Reprogram HFM Module. (1 - Semi-Skilled)	0.6 Hrs. KK / K1 Only
**08-99-34-91	Diagnose and Flash Reprogram HFM Module, Without remote USB port. (2 - Skilled)	0.4 Hrs JS/RT/PM/MK/ JK/J3**
**08-99-34-91	Diagnose and Flash Reprogram HFM Module, Without remote USB port. (2 - Skilled)	0.5 Hrs LC**
**08-99-34-91 Diagnose and Flash Reprogram HFM Module, Without remote USB port. (2 - Skilled)		0.6 Hrs DS/DJ/D2/DD/ DP/DX WK/W2/WD**

#### FAILURE CODE:

**ZZ	Service Action**
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