

NUMBER: 08-081-20 REV. A

**GROUP:** 08 - Electrical

DATE: September 18, 2020

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This bulletin supersedes Technical Service Bulletin (TSB) 08-081-20, date of issue September 10, 2020, which should be removed from your files. All revisions are highlighted with \*\*asterisks\*\* and include vehicle build dates.

This Technical Service Bulletin has also been released as a Rapid Response Transmittal (RRT) 20-055, date of issue September 10, 2020. All applicable Sold and Un-Sold RRT VINs have been loaded. To verify 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. This RRT will expire 18 months after the date of issue.

### SUBJECT:

Telematic Box Module (TBM) Enhancements

## **OVERVIEW**:

This bulletin involves performing a two step Firmware Over The Air (FOTA) on the Telematic Box Module (TBM). The first step will take the ECU SW from 201772 to 201774 and the second step will take the software from 201774 to 201775.

### **MODELS:**

2020	(M7)	Jeep Compass
2020	(BV)	Jeep Renegade

NOTE: This bulletin applies to vehicles within the following markets/countries: EMEA.

NOTE: This bulletin applies to vehicles built on or after \*\*May 15, 2020 (MDH 0515XX) and on or before September 07, 2020 (MDH 0907XX)\*\* equipped with Connectivity - Europe (Sales Code RTK).

### SYMPTOM/CONDITION:

The customer may notice:

- Pop-up message displayed on the radio screen "Connected Service Not Working".
- SOS and Assist Buttons are disabled.

### 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 a customer's VIN is listed in VIP or your RRT VIN list, perform the Diagnosis procedure. **This RRT only applies to vehicles on the RRT VIN list.** 

1. Using wiTECH check the TBM ECU software level. Select TBM2 on the Topology screen, than select ECU details and check for ECU Sw Number value (Fig. 1).

E 🛄 WITECH 2	D 🔊 TTop	
ECU Serial Number Calendar Year	9	
ECU Serial Number Sequence Number		
Vehicle Manufacturer ECU Hardware Number		
Spare Part Number		
ECU Hw Number	TBM20GA100	
EQU Hw Version Number		
ECU Se Number		
ECU Sw Version Number		
r90 Code	00 23 70 88 17	
VDS Current	BUOVP9	
WMI Original		
VDS Original		
VIS Original		
Standard Unified Diagnostic Services (UDS) on CAN FGA/CHRYSLER	CS (00051 change level - (ex 07209)	
ECU Flash Reprogramming Requirements FGA/CHRVSLER	CS.00053 change level - (ex 07264/01)	
Standard Diagnostic Data UDS	FF.	

Fig. 1 TBM ECU SW Level

- 2. Is the ECU software level at 201775 or higher?
  - YES>>> This bulletin has been completed. Use inspection LOP (18-19-55-A1) to close this active RRT.
  - NO>>> Proceed to Step 1 of the Repair Procedure.

# REPAIR PROCEDURE:

- 1. Has the pre delivery inspection been performed and the logistic mode been disabled?
  - YES>>> Proceed to Step 2.
  - NO>>> Proceed to Step 3.
- 2. Has logistic mode been disabled for more than 16 hours?
  - YES>>> Proceed to Step 5.
  - NO>>> Proceed to Step 4.
- Perform Pre Delivery Inspection / MAPO. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: Service Info>04 - Vehicle Quick Reference / New Vehicle Preparation Instructions / Standard Procedure (EMEA).
- 4. Using wiTECH perform a "Proxi Configuration Alignment" and follow all prompts to allow the TBM reboot.
- 5. Clear any DTC's which may have been set during this repair procedure.
- 6. Using wiTECH check the battery State Of Charge (SOC). What is the SOC of the battery?
  - Battery SOC between 71% and 99%, TBM software update can be performed. Proceed to Step 7.
  - Battery SOC is 100%, This mean the Intelligent Battery Sensor (IBS) is still calibrating. Wait at least 4 hours to the end of IBS calibration. With the vehicle parked and closed with all device switched off (CAN in sleep mode). After 4 hours recheck the SOC value, perform Step 6 again.
  - Battery SOC is 70% or lower, the battery must be recharged. Then wait at least 4 hours to the end of IBS calibration making sure the vehicle is parked and closed with all devices switched off (CAN in sleep mode). After 4 hours recheck the SOC value, perform Step 6 again.

- 7. Change the "Radio Off Delay" setting to 0 minutes. This is done through the radio setting menu.
- 8. Park the vehicle in a position where both GPS and SIM coverage are available. Check that both the 4G and position are displayed on the status bar of the radio screen. Check that the vehicle direction is displayed on the navigation compass (Fig. 2).



- 9. Leave the vehicle parked at least 3 hours in a place where both GPS both SIM coverage are available.
- 10. Connect the wiTECH diagnostic tool to the vehicle.
- NOTE: During the first part of this software update the Internal Combustion Engine (ICE) must be running at all times. This will help prevent the battery from being drained.
- 11. Turn on the vehicle and make sure "4WD Lock" is active. When 4WD is active ICE will start and run all the time (Fig. 3).



Fig. 3 4WD Lock Must Be Active

- 12. Leave wiTECH connected to the vehicle in order to check the TBM2 "ECU Sw Number" at the end of this procedure.
- 13. Turn on the radio.
- 14. Leave the engine running for 25 minutes.
- 15. Turn off the engine.

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16. Wait 30 seconds with the key in the "Off" position. During this time, a pop-up should appear on the radio display. Press "Update Now" soft key on the radio screen (Fig. 4).



Fig. 4 Start Update Now Display

- 17. If the pop-up doesn't appear, switch the key-on and engine off for 10 seconds then switch the key-off and go back to Step 16. If these steps have been repeated 3 times, the vehicle is not able to get FOTA update. The vehicle will need additional diagnostics, open an eContact ticket for advanced technical support.
- 18. Wait 10 seconds.
- 19. Turn on the vehicle and make sure "4WD Lock" is active (Fig. 3). When 4WD is active ICE will start and run all the time. Please make sure that the engine runs at least 60 minutes while performing next steps.
- 20. A pop-up should appear to indicate that the updating procedure is started (Fig. 5) press "OK" and **do not switch off the engine.**

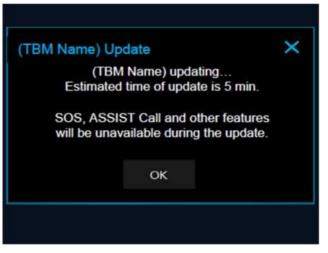


Fig. 5 Press OK to Begin The Update

21. If no pop-up appears or the following error pop-up appears (Fig. 6) the FOTA update procedure has failed. The vehicle will need additional diagnostics, **open an eContact ticket for advanced technical support.** 



22. Wait for a pop-up to appear on the radio display to indicate update completed press "OK". **Do not** switch off the engine (Fig. 7).



- 23. Using wiTECH check if the software update is at the proper level, 201774. Is the SW at the proper level?
- NOTE: ICE needs to be running for 60 minutes to ensure the battery is fully charged and the TBM has completely processed the first part of the update.
  - YES>>> Leave ICE running 60 minutes before proceeding to Step 24 and starting the 2nd half of this update.
  - NO>>> The FOTA update procedure has failed. The vehicle will need additional diagnostics, open an eContact ticket for advanced technical support.

- 24. Turn off the vehicle.
- 25. Wait 30 seconds with the key in the "Off" position. During this time, a pop-up should appear on the radio display. Press "Update Now" soft key on the radio screen (Fig. 4).
- 26. If the pop-up doesn't appear, switch the key-on and engine off for 10 seconds then switch the key-off and go back to Step 25. If these steps have been repeated 3 times, the vehicle is not able to get FOTA update. The vehicle will need additional diagnostics, **open an eContact ticket for advanced technical support.**
- 27. Wait 10 seconds.

# NOTE: ICE does not have to be running to perform the 2nd half of the TBM update.

- 28. Switch the key-on (ICE off).
- 29. A pop-up should appear to indicate that the updating procedure is started (Fig. 5) press "OK".
- 30. Wait 35 minutes in key-on (ICE off), during this time, a pop-up should appear on the radio display to indicate the update is completed (Fig. 7) press OK and go to Step 32.
- 31. If no pop-up appears or the following error pop-up appears (Fig. 6) the FOTA update procedure has failed. The vehicle will need additional diagnostics, open an eContact ticket for advanced technical support.
- 32. Using wiTECH check if the software update is at the proper level, 201775. Is the SW at the proper level?
  - YES>>> Disconnect wiTECH and release the vehicle to the customer.
  - NO>>> The FOTA update procedure has failed. The vehicle will need additional diagnostics, open an eContact ticket for advanced technical support.

## **POLICY:**

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-55-A1	Module, Telematic Box (TBM), Inspection software Only (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
18-19-55-A2	Module, Telematic Box (TBM), Inspection software and Two Step Reprogram (0 - Introduction)	6 - Electrical and Body Systems	0.7 Hrs.
18-19-55-A3	Module, Telematic Box (TBM), Inspection software, Recharger 12V Battery and Two Step Reprogram (0 - Introduction)	6 - Electrical and Body Systems	0.9 Hrs.
18-19-55-A4	Module, Telematic Box (TBM), Inspection software, Proxi Align- ment and Two Step Reprogram (0 - Introduction)	6 - Electrical and Body Systems	0.7 Hrs.
18-19-55-A5	Module, Telematic Box (TBM), Inspection software, Recharger 12V Battery, Proxi Alignment and Two Step Reprogram (0 - Introduction)	6 - Electrical and Body Systems	1.0 Hrs.

# FAILURE CODE:

- 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.
- The failure code "RF" (Required Flash) can no longer be used on Service Bulletin flashes. **The** "**RF**" failure code must be used on an **RRT**.

RF Required Flash - RRT
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