

# **Technical Service Bulletin (TSB)**

Flash: Battery Pack Control Module (BPCM) Diagnostic and System Updates

REFERENCE:	TSB: 08-032-23 GROUP 08 - Electrical	Date:	January 27, 2023	REVISION:	08-179-22 REV. A
VEHICLES AFFECTED:	2022 (WL) Jeep Grand Cherokee This bulletin applies to vehicles built on or before October 03, 2022 (MDH 1003XX) equipped with the 2.0L I4 DOHC DI Turbo PHEV Engine (Sales Code ECX).		MARKET AI  NA  EE  SA	PPLICABILITY:  ⊠IAP  ⊠MEA  ⊠CH	
CUSTOMER SYMPTOM:	Customers may experience a false Malfunction Indicator Lamp (MIL) illumination related to PHEV battery. Upon further investigation the technician may find that the following Diagnostic Trouble Code (DTC) has been set:  • P0D0F-00 - Hybrid/ EV Battery Negative Contactor "A" Stuck Closed.  Customers may also comment on the following:  • Low 12V battery causing vehicle not to start.				
CAUSE:	BPCM Software				

This bulletin supersedes Technical Service Bulletin (TSB) 08-179-22 REV. A, date of issue November 05, 2022, which should be removed from your files. All revisions are highlighted with \*\*asterisks\*\* and include updated Repair Procedure steps and LOP.

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 22-217, date of issue November 05, 2022. All applicable Sold and UnSold RSU VINs have been loaded. To verify this RSU 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 RSU will expire 18 months after the date of issue.

### **REPAIR SUMMARY:**

This bulletin involves updating the BPCM with the latest available software.

## **CLAIMS DATA:**

Labor Operation No:	Labor Description	Skill Category	Labor Time
18-19-87-9U	Battery Pack Control Module (BPCM) - Inspect (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
18-19-87-9T	Battery Pack Control Module (BPCM), Inspect and Reprogram (Includes High Voltage Power Down and Up) (0 - Introduction)	6 - Electrical and Body Systems	0.8 Hrs.
Failure Code	RF	Required Flash	
	CC	Customer Concern	

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### **RELATED TIME ALLOWANCE:**

<b>Labor Operation No:</b>	Labor Description	Skill Category	Labor Time
**18-19-87-51	Five Minute Power down After Disabling HV Bat- tery Contactors (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.**

The dealer must choose which failure code to use depending on if this is a Rapid Service Update (RSU) or Technical Service Bulletin.

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

### **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 a customer's VIN is listed in VIP or your RSU VIN list, perform the repair. If any vehicle not on the VIN list exhibits the DTCs, perform the repair.

# SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent		

#### **REPAIR PROCEDURE:**

NOTE: Install a battery charger to maintain a 12 volt system voltage.

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

#### **WARNING!**

- Before performing the software reprogramming, it is necessary to make the vehicle safe.
- When performing repairs that directly involve or imply possible contact with live high voltage components/systems, the technician must ensure that the power supply of the high-voltage system is disconnected throughout the operation.
- Only specifically trained technicians qualified to perform repairs on vehicles with high voltage systems under current national laws/regulations are authorized to work on the vehicle.
- Before performing any diagnostic repair work on the vehicle, carefully read and comply with the general instructions for working safely on hybrid/electric vehicles and use suitable general equipment and Personal Protective Equipment (PPE).

- 1. Is the vehicle on the RSU VIN list?
  - YES >>> Proceed to Step 2.
  - NO >>> Proceed to Step 3.
- 2. Does the BPCM have the latest software already installed?
  - YES >>> This bulletin has been completed, use inspect LOP (18-19-87-9U) to close the active RSU.
  - NO >>> Proceed to Step 3.
- 3. \*\*Disable HV battery contactors with wiTECH Go to the Misc Functions tab --> Select Disable HV Battery Contactors --> then follow the wiTECH prompts.
- 4. Using wiTECH confirm that the contactors are open and waiting five minutes. If the contactors do not open turn the ignition on then off. Once successful a note will appear on the wiTECH screen indicating the contactors are open.\*\*
- 5. Reprogram the BPCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application "HELP" tab.
- 6. Clear all DTCs that may have been set in any module due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.
- 7. \*\*Enable HV battery contactors with wiTECH Go to the Misc Functions tab --> Select Enable HV Battery Contactors For Service--> then follow the wiTECH prompts.\*\*

### **POLICY:**

Reimbursable within the provisions of the warranty.

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