

 NUMBER:
 08-141-21

 GROUP:
 08 - Electrical

DATE: August 26, 2021

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This Technical Service Bulletin (TSB) has also been released as a Rapid Response Transmittal (RRT) 21-123, date of issue August 26, 2021. 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:

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

## OVERVIEW:

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

### **MODELS:**

2021 (JL) Jeep Wrangler

- NOTE: This bulletin applies to vehicles within the following markets/countries: North America, APAC and EMEA.
- NOTE: This bulletin applies to vehicles built on or before July 09, 2021 (MDH 0709XX) equipped with the 2.0L I4 DOHC DI Turbo PHEV Engine (Sales Code ECX).

### SYMPTOM/CONDITION:

Customers may experience a false Malfunction Indicator Lamp (MIL) illumination related to PHEV battery:

- U0111 Lost Communication With Hybrid Battery Pack Sensor Module.
- P0EDD-00 Hybrid/EV Battery Pack B Deterioration.
- P0CA7-00 Hybrid/EV Battery Discharging Current High.
- P1A0C-00 Battery Energy Control Module System Voltage Low.

This software enhancement will improve PHEV battery performance and diagnostics.

NOTE: Additional module flashes are required for this update to be effective, the following modules are all to be updated along with this BPCM update:

- Hybrid Control Processor (HCP), Auxiliary Hybrid Control Processor (AHCP) also known as the Power Invertor Module (PIM).
- Transmission Control Module (TCM).
- Powertrain Control Module (PCM).
- Integrated Dual Charging Module (IDCM).

# 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 repair. If any vehicle not on the VIN list exhibits the symptom/condition or DTC, perform the repair.

# **REPAIR PROCEDURE:**

NOTE: The HCP, AHCP, TCM, PCM and IDCM must be updated to the latest available software at the conclusion of this repair procedure. Refer to all applicable published technical service bulletins for detailed repair procedures and labor times regarding updating the HCP, AHCP, TCM, PCM and IDCM software.

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.

- 1. Is the vehicle on the RRT 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 (18-19-87-9K) to close the active RRT.
  - NO>>> Proceed to Step 3.
- 3. Reprogram the BPCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
- 4. 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.
- 5. Verify the HCP, AHCP, TCM, PCM and IDCM are also programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the HCP, AHCP, TCM, PCM and IDCM software.

## POLICY:

Reimbursable within the provisions of the warranty.

## TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-87-9K	Battery Pack Control Module (BPCM), Inspect (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
18-19-87-9L	Battery Pack Control Module (BPCM), Inspect and Repro- gram (0 - Introduction)	6 - Electrical and Body Systems	0.3 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 6 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 depending on if this is a Rapid Response Transmittal (RRT) or 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 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**.
- 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.

RF	Required Flash - RRT
CC	Customer Concern