

Technical Service Bulletin (TSB)
Flash: Battery Pack Control Module (BPCM) Updates

REFERENCE:	TSB: 08-036-26 GROUP: 08 - Electrical	Date:	January 31, 2026	REVISION:	08-048-23
VEHICLES AFFECTED:	2021 (JL) Jeep Wrangler This bulletin applies to vehicles equipped with the 2.0L I4 DOHC DI Turbo PHEV Engine (Sales Code ECX).			MARKET APPLICABILITY: ☒ NA☒ IAP ☒ EE☒ MEA ☐ SA☒ CH NOTE: **This bulletin applies to North America, Enlarged Europe, Middle East & Africa, India & Asia Pacific and China markets.**	
CUSTOMER SYMPTOM:	**Customers must experience a Malfunction Indicator Lamp (MIL) illumination and the vehicle must exhibit/set one or more of the following Diagnostic Trouble Codes (DTCs):** • **P0B28-00 - Hybrid/EV Battery “B” Voltage Unstable. • P0BBE-00 - Hybrid/EV Battery Pack Voltage Variation. • P0AA1 - Hybrid/EV Battery Positive Contactor “A” Stuck Closed. • P0C78 - Hybrid/EV Battery System Precharge Time Too Long. • P0CA6 - Hybrid/EV Battery Charging Current High. • P0B24 - Hybrid/EV Battery "A" Voltage Unstable. • P1C5E - Hybrid/EV Battery State Of Health Failed.** • P1A21-00 - HV Battery Contactor Control Sequence Incorrect. • P0B3E-00 - Hybrid/EV Battery Voltage Sense 1 Circuit High. • P0607-00 - ECU Internal Performance. • P1E1B-00 - Hybrid/EV Battery Side Voltage System Isolation. • P0AA4-00 - Hybrid Battery Negative Contactor Circuit Stuck Closed. • P1C00-00 - Hybrid/EV Battery Voltage Sense 1 Out Of Range Low. • P1C01-00 - Hybrid/EV Battery Voltage Sense 1 Out Of Range High. • P1A9B-00 - Hybrid/EV Battery Temperature Sensor 1 Out Of Range High. • P0BBD-00 - Hybrid Battery Pack Voltage Variation Exceeded Limit. • P167B-00 - Controlled System Shutdown. • U1885-00 - Battery Energy Control Module Lost Communication With HCP. • P0EDD-00 - Hybrid/EV Battery Pack B Deterioration. • U0111 - Lost Communication With Hybrid Battery Pack Sensor Module. • P0CA7-00 - Hybrid/EV Battery Discharging Current High. • P1A0C-00 - Battery Energy Control Module System Voltage Low.				

	Customers may also comment on the following: Vehicle does not start. NOTE: The no start condition is accompanied with the following DTCs: P0DAB-00, P0607-00, P0AA1, P0AA4, P0C78, P0CA6, P0B24 and/or P1C5E. P0B28 will result in a MIL for 49 days. After 49 days of the MIL, the vehicle will no longer be allowed to start.
CAUSE:	BPCM software

This bulletin supersedes Technical Service Bulletin (TSB) 08-048-23, date of issue February 10, 2023, which should be removed from your files. All revisions are highlighted with ****asterisks**** and include a new Market Applicability note, a new Customer Symptom statement, additional DTCs, new Customer Symptom with note, updated Repair Procedure and converting the bulletin from an RSU to a TSB. Changes not highlighted with asterisks include the removal of a build date and an updated TSB title.

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 23-037, date of issue February 10, 2023. All applicable 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.

REPAIR SUMMARY:

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

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:

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

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
**18-19-87-AU	Battery Pack Control Module (BPCM) - Reprogram (0 - Introduction)	6 - Electrical and Body Systems	0.3 Hrs.
Failure Code	CC	Customer Concern	

The dealer must use failure code CC with this Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM 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 the customer describes any of the symptoms listed above in the customer symptom section, perform the Repair Procedure.****

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	—	—

REPAIR PROCEDURE:

NOTE: The IDCM, PCM, HCP / AHCP and TCM 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 IDCM, PCM, HCP / AHCP and TCM software.

DANGER! Failure to update the IDCM, PCM, HCP / AHCP and TCM module following an BPCM software update may result in vehicle malfunctions.

CAUTION!

- 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).

CAUTION!

The vehicle must not be connected to a high voltage charger when performing software updates.

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. Disable the HV Battery Contactors using wiTECH - Go to the Misc Functions tab --> Select Disable HV Battery Contactors --> then follow the wiTECH prompts.
2. Use wiTECH to 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.
3. Reprogram the BPCM with the latest software. If issues arise when flashing a module using the wiTECH Diagnostic Application, please submit a ticket to the Helpdesk. The helpdesk can be found within the Help menu.
4. Verify the IDCM, PCM, HCP / AHCP and TCM 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 IDCM, PCM, HCP / AHCP and TCM software.

5. Enable the HV Battery Contactors using wiTECH - Go to the Misc Functions tab --> Select Enable HV Battery Contactors For Service--> then follow the wiTECH prompts.
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.**

POLICY:

Reimbursable within the provisions of the warranty.

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