

Technical Service Bulletin (TSB)

Flash: Hybrid Control Processor (HCP) and Auxiliary Hybrid Control Processor (AHCP) Updates

REFERENCE:	TSB: 08-013-24 GROUP: 18 - Vehicle Performance	Date:	January 10, 2024	REVISION:	–
VEHICLES AFFECTED:	2023 (WL) Jeep Grand Cherokee/Grand Cherokee L This bulletin applies to vehicles equipped with a 2.0L I4 DOHC DI Turbo PHEV Engine (Sales Code ECX).			MARKET APPLICABILITY: ☒ NA☒ MEA ☒ SA☒ IAP ☒ EE☒ CH	
CUSTOMER SYMPTOM:	Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find the following Diagnostic Trouble Code (DTC) has been set in the Hybrid Control Processor (HCP) module: - P16F0-00 - SPI Comm Hardware Fault. Customers may also comment on one or more of the following: - Shifts rough occasionally when coming down to a stop. - Shifts rough occasionally when accelerating. - Shifts rough when transitioning from EV to Hybrid operation on low SoC. - Shifts rough when engines starts. - On part throttle accelerations with little to no battery available the transition from battery power to engine on is harsh and abrupt. - The engine oil life on dashboard drops down too fast when the engine oil dilution reaches high level without the ability to recover.				
CAUSE:	Module Software Updates.				

REPAIR SUMMARY:

This bulletin involves reprogramming the Powertrain Control Module (PCM), Transmission Control Module (TCM) and the AHCP also known as Power Inverter Module (PIM), with the latest available software.

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
18-19-17-9X	Reprogram Powertrain Control (PCM), Transmission Control (TCM), and Hybrid Control Processor/ Auxiliary Hybrid Control Processor (HCP/AHCP) (0 - Introduction)	1 - Engine Repair And Performance	0.6 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:**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).

NOTE: Install a battery charger to ensure sufficient battery voltage is provided during the flash process.

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

1. Disable HV battery contactors with wiTECH - Go to the Misc Functions tab select "Disable HV Battery Contactors" then follow the wiTECH prompts.
2. Using wiTECH confirm that the contactors are open and waiting five minutes. **If the contactors do not open place ignition in the ON position, then OFF.** Once successful, a note will appear on the wiTECH screen indicating the contactors are open.
3. Reprogram the PCM with the latest available software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
4. Reprogram the HCP and AHCP with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
5. Reprogram the TCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
6. Clear any DTCs that may have been set in any modules 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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