STELLANTIS
PARTS & SERVICES

Technical Service Bulletin (TSB)

Flash: Powertrain Control Module (PCM) Updates

REFERENCE:	TSB: 18-001-24 REV. C GROUP: 18 - Vehicle Performance	**Date:**	September 7, 2024	**REVISION:**	18-001-24 REV. B
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 must experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician must find one or more of the following Diagnostic Trouble Codes (DTCs) have been set:** • **P0629 - Fuel Pump Control Circuit High. • P0171 - Fuel system Lean. • P0087 - Fuel Rail Pressure Too Low - Bank 1.** • P16F0-00 - SPI Comm Hardware Fault. **Customers may also experience one or more of the following:** • **The rear half shafts are damaged due to pressing the accelerator in drive with the Electric Parking Brake (EPB) applied. • The Oxygen Sensor (02) can give wrong values when entering EV mode, triggering a false MIL. • The Instrument Cluster Panel (ICP) unable to calculate the instantaneous fuel economy under heavy acceleration. • Variable Speed Fuel Pump inoperative after refueling (no start).** • Intelligent sign recognition is not working properly causing degradation in active speed limiting functionality **(IAP Only)**. • 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**				

This bulletin supersedes Technical Service Bulletin (TSB) 18-001-24 REV. B, date of issue April 25, 2024, which should be removed from your files. All revisions are highlighted with **asterisks and include new DTCs, new customer symptoms, new Related Time Allowance, new Repair Procedure steps and LOPs.**

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 24-081, date of issue April 25, 2024. 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 PCM, Transmission Control Module (TCM) and the Auxiliary Hybrid Control Processor (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-AI	Inspect Powertrain Control (PCM), Transmission Control (TCM), and Hybrid Control Processor/ Auxiliary Hybrid Control Processor (HCP/AHCP) (0 - Introduction)	1 - Engine Repair And Performance	0.2 Hrs.
**18-19-17-AN	Inspect and 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	RF	Required Flash	
	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.

**RELATED TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-87-51	Five Minute Power down After Disabling HV Battery Contactors (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.**

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 RSU VIN list, perform the repair. If any vehicle not on the VIN list exhibits 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: 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).**

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

1. Is the vehicle on the RSU VIN list?
   - YES>>> Proceed to Step 2.
   - NO>>> Proceed to Step 3.
2. Does the PCM have the latest software already installed?
   - YES>>> This bulletin is complete. Use Inspect LOP (18-19-17-AI) to close this 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 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.
6. 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.
7. 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.
8. 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.
9. **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.