STELLANTIS
PARTS & SERVICES

Technical Service Bulletin (TSB)

Flash: Powertrain Control Module (PCM) Updates

REFERENCE:	**TSB:** 18-003-23 **GROUP** 18 - Vehicle Performance	**Date:**	January 7, 2023	**REVISION:**	**18-049-21**

VEHICLES AFFECTED:	**2020 (JL) Jeep Wrangler** **This bulletin applies to vehicles equipped with a 3.0L V6 Turbo Diesel Engine W/ESSG3 (Sales Code EXJ) and a 8-SPD Auto 8HP75 Transmission (Sales Code DFV).**	**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 that one or more of the following Diagnostic Trouble Codes (DTCs) have been set:

- **P016F - Closed Loop Fuel Pressure Control At Limit - Pressure Too Low.
- P025C - Fuel Pump Module Control Circuit Low.
- P208B - Reductant Pump 1 Control Performance.
- P0300-00 - Multiple Cylinder Misfire **(MIL Illuminated During 4WD-LO Only)**.
- P0301-00 - Cylinder 1 Misfire **(MIL Illuminated During 4WD-LO Only)**.
- P0302-00 - Cylinder 2 Misfire **(MIL Illuminated During 4WD-LO Only)**.
- P0303-00 - Cylinder 3 Misfire **(MIL Illuminated During 4WD-LO Only)**.
- P0304-00 - Cylinder 4 Misfire **(MIL Illuminated During 4WD-LO Only)**.
- P0305-00 - Cylinder 5 Misfire **(MIL Illuminated During 4WD-LO Only)**.
- P0403-00 - EGR Control Circuit Open – Disabled Fault.**
- P225D-00 - NOX Sensor 1/1 Performance Signal Stuck Low.
- P249C-00 - Excessive Time To Enter Closed Loop Reductant Injection Control.
- P065A - Generator System Performance.
- P00F4-00 - Humidity Sensor Circuit Low.
- P20FB-00 - Reductant Pump 2 Control Performance.
- P200A-00 - Intake Manifold Runner Performance Bank 1.
- P200B-00 - Intake Manifold Runner Performance Bank 2.
- P2610 - PCM Internal Engine Off Timer Performance.
- P0534-00 - AC Refrigerant System A Charge Loss.
- P04DB-00 - Crankcase Ventilation System Disconnected.
- P204F-00 - Reductant System Performance.
- P2199-00 - Intake Air Temperature Sensor 1/2 Correlation.
- P0087-00 - Fuel Rail Pressure Too Low **(with rapid apply and release of accelerator pedal)**.
- P0306-00 - Cylinder 6 Misfire.
- P01CB-00 - Cylinder 1 Injection Timing Performance Over Retarded.
- P01CC-00 - Cylinder 1 Injection Timing Performance Over Advanced.
- P01CD-00 - Cylinder 2 Injection Timing Performance Over Retarded.
- P01CE-00 - Cylinder 2 Injection Timing Performance Over Advanced.
- P01CF-00 - Cylinder 3 Injection Timing Performance Over Retarded.
- P01D0-00 - Cylinder 3 Injection Timing Performance Over Advanced.
- P01DL-00 - Cylinder 4 Injection Timing Performance Over Retarded.
- P01D2-00 - Cylinder 4 Injection Timing Performance Over Advanced.
- P01D3-00 - Cylinder 5 Injection Timing Performance Over Retarded.
- P01D4-00 - Cylinder 5 Injection Timing Performance Over Advanced.
- P01D5-00 - Cylinder 6 Injection Timing Performance Over Retarded.
- P01D6-00 - Cylinder 6 Injection Timing Performance Over Advanced.
- P020A-00 - Cylinder 1 Injection Timing.
- P020B-00 - Cylinder 2 Injection Timing.
- P020C-00 - Cylinder 3 Injection Timing.

	• P020D-00 - Cylinder 4 Injection Timing. • P020E-00 - Cylinder 5 Injection Timing. • P020F-00 - Cylinder 6 Injection Timing. • P0524 - Engine Oil Pressure Too Low **(cold ambient temperature)**. • U0100 - Lost Communication With ECM/PCM "A". **Customers may experience one or more of the following:** • Unstable idle in high altitudes. • Remote start idle instability. • Cluster flashes erroneous message "Press Brake and Push Button to Start" during unstable idle. • A loud fan is heard at low speeds and during an active regeneration. • "Oil Change Required" message remains on after resetting the Oil Life Monitor. **In addition, the following software enhancements are also available:** • **Low speed engine idle improvements. • Engine restart performance and torque response during low fuel level and/or hot ambient conditions.** • Cruise set speed displays differently than the speed cruise was set to. • Eliminate battery overcharging/gassing risk. • Improvements to remote start idle instability. • Improvement of combustion stability for cold start drive offs. • Air control optimization to avoid turbo surge during high idle maneuver. • Engine starting / cranking / idle / shutdown performance. • Cruise control updates. • Drivability improvements at sea level and at altitude. • Improvements to engine shutdown performance Engine Stop/Start (ESS). • Aftertreatment (Selective Catalytic Reduction (SCR) / DEF) system. • Turbocharger performance.
CAUSE:	**PCM Software**

This bulletin supersedes Technical Service Bulletin (TSB) 18-049-21, date of issue May 20, 2021, which should be removed from your files. All revisions are highlighted with **asterisks and include additional DTCs, Software Enhancements and LOP.**

REPAIR SUMMARY:

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

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
**18-19-04-TE	Module, Powertrain Control (PCM) - Reprogram (0 - Introduction)	10 - Diesel	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 a symptom/condition or if the technician finds a DTC listed above, perform the repair procedure.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	–	–

REPAIR PROCEDURE:

NOTE: Install a battery charger to ensure battery voltage does not drop below 13.2 volts. Do not allow the charging voltage to climb above 13.5 volts during the flash process.

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

1. Using wiTECH create a Vehicle Scan Report (VSR) and save it, the VSR will be needed later on in this Repair Procedure.
2. 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.
3. Cycle ignition off for three minutes to properly complete the PCM update.
4. Check the VSR created in Step 1 and verify if any of the DTCs listed below are present.
   - P01CB-00 - Cylinder 1 Injection Timing Performance Over Retarded.
   - P01CC-00 - Cylinder 1 Injection Timing Performance Over Advanced.
   - P01CD-00 - Cylinder 2 Injection Timing Performance Over Retarded.
   - P01CE-00 - Cylinder 2 Injection Timing Performance Over Advanced.
   - P01CF-00 - Cylinder 3 Injection Timing Performance Over Retarded.
   - P01D0-00 - Cylinder 3 Injection Timing Performance Over Advanced.
   - P01DL-00 - Cylinder 4 Injection Timing Performance Over Retarded.
   - P01D2-00 - Cylinder 4 Injection Timing Performance Over Advanced.
   - P01D3-00 - Cylinder 5 Injection Timing Performance Over Retarded.
   - P01D4-00 - Cylinder 5 Injection Timing Performance Over Advanced.
   - P01D5-00 - Cylinder 6 Injection Timing Performance Over Retarded.
   - P01D6-00 - Cylinder 6 Injection Timing Performance Over Advanced.
   - P020A-00 - Cylinder 1 Injection Timing.
   - P020B-00 - Cylinder 2 Injection Timing.
   - P020C-00 - Cylinder 3 Injection Timing.
   - P020D-00 - Cylinder 4 Injection Timing.
   - P020E-00 - Cylinder 5 Injection Timing.
   - P020F-00 - Cylinder 6 Injection Timing.
5. Were any of the listed DTCs found?
   - YES>>> Perform the "Reset Zero Fuel Quantity Calibration". Proceed to Step 6.
   - NO>>> Proceed to Step 7.
6. Using wiTECH perform a "Reset Zero Fuel Quantity Calibration" routine. This routine can be found in PCM Misc Functions.
7. 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.

POLICY:
Reimbursable within the provisions of the warranty.