



**NUMBER:** 18-036-21

**GROUP:** 18 - Vehicle Performance

**DATE:** April 15, 2021

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**This bulletin supersedes Technical Service Bulletin (TSB) 18-014-20 REV. B, date of issue June 19, 2020, which should be removed from your files. All revisions are highlighted with **\*\*asterisks\*\*** and include additional Diagnostic Trouble Codes (DTCs) and LOP.**

**SUBJECT:**

Flash: Powertrain Control Module (PCM) Updates

**OVERVIEW:**

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

**MODELS:**

2018 (JL) Jeep Wrangler

**NOTE: This bulletin applies to vehicles within the following markets/countries: North America, APAC, EMEA and LATAM.**

**NOTE: This bulletin applies to vehicles equipped with a 2.0L I4 DOHC DI Turbo Engine W/ESS (Sales Code EC1).**

**SYMPTOM/CONDITION:**

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find that one or more of the following DTCs have been set:

- **\*\*P02EE - Cylinder 1 Injector Circuit Performance (APAC, EMEA and LATAM Only).**
- **P02EF - Cylinder 2 Injector Circuit Performance (APAC, EMEA and LATAM Only).**
- **P02F0 - Cylinder 3 Injector Circuit Performance (APAC, EMEA and LATAM Only).**
- **P02F1 - Cylinder 4 Injector Circuit Performance (APAC, EMEA and LATAM Only).**\*\*
- **P2C90 - Crankcase Ventilation System - Hose "A" Disconnected (APAC, EMEA and LATAM Only).**
- **P04FC - Crankcase Ventilation System Performance (APAC, EMEA and LATAM Only).**
- **P2453 - Particulate Filter Pressure Sensor "A" Circuit Range/Performance (APAC and EMEA only equipped with Gas Particulate Filter (GPF)).**
- **P245F - Particulate Filter Pressure Sensor "B" Circuit Range/Performance (APAC and EMEA only equipped with Gas Particulate Filter (GPF)).**
- **P0456 - EVAP System Small Leak.**

**NOTE: If DTC P0456 is present use wiTECH Small Leak Verification Test (SLVT) to determine if a leak is present in the system.**

- **P0171 - Fuel System 1/1 Lean (LATAM Only).**
- **P0172 - Fuel System 1/1 Rich (LATAM Only).**
- **P0128 - Thermostat Rationality (Sales Codes NA1 with NBQ or NB6 Only - APAC and EMEA Only).**
- **P050B - Cold Start Ignition Timing Performance (Sales Codes NA1 with NBQ or NB6 Only - APAC and EMEA Only).**

Customers may comment on one or more of the following:

- Excessive fan noise when the A/C is on MAX output.
- Rough idle at engine start up in colder ambient temperatures.

The following software enhancements are also included in this update:

- Electric Vacuum Pump (EVP) update.
- Fan noise reduction.
- Low Speed Pre Ignition (LSPI) update.

### **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 are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If the customer describes the symptom/conditions listed above or if the technician finds the DTCs, perform the Repair Procedure.

### **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.

**NOTE:** The Anti-lock Brake System (ABS) module must be updated to the latest available software at the conclusion of this repair procedure. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the ABS software.

1. 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.
2. 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.
3. Verify the ABS module is programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the ABS software.

### **POLICY:**

Reimbursable within the provisions of the warranty.

### **TIME ALLOWANCE:**

| Labor Operation No: | Description                                                           | Skill Category                    | Amount     |
|---------------------|-----------------------------------------------------------------------|-----------------------------------|------------|
| **18-19-06-QB       | Module, Powertrain Control (PCM)<br>- Reprogram<br>(0 - Introduction) | 1 - Engine Repair and Performance | 0.3 Hrs.** |

**NOTE:** The expected completion time for the flash download portion of this procedure is approximately 7 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

***FAILURE CODE:***

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

- 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 (customer's concern, cause and correction) must be provided for processing Service Bulletin flash/reprogramming conditions.

|    |                  |
|----|------------------|
| CC | Customer Concern |
|----|------------------|