



NUMBER: 18-161-22

GROUP: 18 - Vehicle Performance

DATE: December 3, 2022

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This bulletin supersedes Service Bulletin 18-052-20, dated June 18, 2019, which should be removed from your files. All revisions are highlighted with **asterisks**** and include additional markets, Diagnostic Trouble Codes (DTCs) and LOP.**

This service bulletin is also being released as Rapid Service Update (RSU) 18-049. All applicable un-sold RSU VINs have been loaded. To verify that this RSU service action is applicable to the un-sold vehicle, use VIP or perform a VIN search in DealerCONNECT/Service Library. This RSU will expire 18 months after the date of issue.

SUBJECT:

Flash: Powertrain Control Module (PCM) Updates

OVERVIEW:

This bulletin involves reprogramming the Powertrain Control Module (PCM) with the latest available software.

MODELS:

2019 (KL) Jeep Cherokee

NOTE: This bulletin applies to vehicles within the following markets/countries: North America, Middle East/Africa, South America, ****China, India/Asia Pacific **** and Enlarged Europe.

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.
- P02EF - Cylinder 2 Injector Circuit Performance.
- P02F0 - Cylinder 3 Injector Circuit Performance.
- P02F1 - Cylinder 4 Injector Circuit Performance.
- P2C90 - Crankcase Ventilation System - Hose "A" Disconnected.
- P1D73 - AGS performance fault.**
- P04FC - Crankcase Ventilation System Performance.
- P152F - Engine Hood Switch 2 / Engine Hood Switch 1 Correlation (**Enlarged Europe and Middle East/Africa**) **only equipped with Gas Particulate Filter (GPF)**) (DTC will set when driving above 72 kph (45 mph).
- P0456 - EVAP System Small Leak.

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

- P050B - Cold Start Ignition Timing Performance.
- P258B - Electric Vacuum Pump Performance.
- C1252-92 - Vacuum Pump Control Circuit - Performance Or Incorrect Operation.
- P2B95 - Cold Start Injection Pulse Performance.
- P062A - Fuel Pump Control Performance.
- P058C - Battery Monitor Module Temperature Monitoring Performance.
- P0607 - ECU Internal Performance.
- Injector performance faults for cylinders 2 - 4 map to DTC for incorrect cylinders.

In addition the following software enhancement are included:

- **AGS stuck condition (The customer won't see an issue, but this calibration allows AGS performance fault - P1D73, to work correctly).**
- Software corrects an issue with the wrong cylinder identification if an injector circuit performance fault is set in the PCM:

NOTE: If any of the series of injector control circuit faults are set, please refer to the bullet-pointed list below to determine which injector to address.

For reference, the correct injector circuit performance faults are listed below:

- P02EE - Cylinder 1 Injector Circuit Performance.
- P02EF - Cylinder 2 Injector Circuit Performance.
- P02F0 - Cylinder 3 Injector Circuit Performance.
- P02F1 - Cylinder 4 Injector Circuit Performance.

Customers may also experience the following condition:

- Audible noise from the Low Temperature Radiator (LTR) coolant pump, at low speeds.
- Abnormal noise from the radiator cooling fan.
- LTR runs too long after the engine is turned off.
- Incorrect message "Speed Limiter" displayed, the message should be "Cruise Control Canceled".
- Generator may stop charging after an Engine Stop/Start (ESS) occurrence and battery voltage will start to drain illuminating the battery light.
- Knocking/pre-ignition noise while driving.
- Occasionally while in ESS mode, the engine may not automatically re-start. The vehicle must be put in park and then the engine can be re-started.

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 the symptom/condition listed above or if the technician finds the DTC, 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.

1. Reprogram the PCM with the latest 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 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.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-06-GP	Module, Powertrain Control (PCM) - Reprogram (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 6 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 Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM/CONDITION 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.

CC	Customer Concern
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