

**NUMBER:** 18-063-16

**GROUP:** Vehicle Performance

**DATE:** June 04, 2016

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-043-15 REV. A, DATED JULY 10, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE AN UPDATED SYMPTOM/CONDITION LIST AND LABOR OP.

FOR HELP WITH USING WITECH FOR ECU FLASH REPROGRAMMING, CLICK ON THE APPLICATION'S "HELP" TAB.

THE WITECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.

## SUBJECT:

Flash: 2.4L Powertrain Diagnostic And System Enhancements

### **OVERVIEW:**

This bulletin involves reprogramming the Engine Control Module (ECM) with the latest available software.

### **MODELS:**

2015 (BU) Jeep Renegade

NOTE: This bulletin applies to vehicles equipped with a 2.4L engine (Sales Code ED6) and 948TE transmission (Sales Code DFH).

### SYMPTOM/CONDITION:

A small number of customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find the following Diagnostic Trouble Codes (DTCs) stored in the ECM memory:

- \*\*P050D Cold Start Rough Idle.
- P0101 Mass Air Flow Sensor "A" Circuit Performance.
- P0335 Crankshaft Position Sensor Circuit.
- P1CEC Variable Valve Solenoid Valve Cold Start Closing Position 1 Timing Over-Retard.
- P1CED Variable Valve Timing Solenoid Valve Cold Start Closing Position Timing Over-Advance.
- P1607 PCM Internal Shutdown Timer Rationality.
- P0128 Thermostat Rationality.
- P2610 PCM Internal Engine Off Timer Performance.

- P0440 General EVAP System Failure.
- P0441 EVAP Purge System Performance.
- P0456 EVAP System Small Leak.
- P0455 EVAP System Large Leak.
- P0452 EVAP Pressure Switch Stuck Closed.
- P0133 O2 Sensor 1/1 Slow Response.
- C0501 Wheel Speed Signal Left Front Rationality.
- C0507 Wheel Speed Signal Right Front Rationality.
- C050D Wheel Speed Signal Left Rear Rationality.
- C0513 Wheel Speed Signal Right Rear Rationality.
- U0428-00 Implausible Data Received From Steering Angle Sensor Module.
- C0061 Lateral Acceleration Sensor.\*\*
- U0402 Implausible Data Received From TCM.
- P0133 O2 Sensor 1/1 Slow Response.
- P050D Cold Start Rough Idle.

In addition, customers may experience one or more of the following concerns:

- RPM flare at cold start.
- Less than desired idle performance.
- Cold engine RPM surge with gear engagement.

# **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, 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: The Transmission Control Module (TCM) 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 TCM software.

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.

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

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## **POLICY:**

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

| Labor Operation No: | Description   | Skill Category                          | Amount    |
|---------------------|---|---|-----------|
|                     | Module, Engine Control (ECM) -<br>Reprogram<br>(0 - Introduction) | 1 - Engine<br>Repair And<br>Performance | 0.2 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 choose which failure code to use. If the customer came in with an issue and if the dealer finds a software update to correct that issue, use failure code CC, for all other use failure code RF.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Service Bulletin, failure code CC is to be used.
- If an available flash is completed while addressing a different customer concern, failure code RF is to be used.

| CC | Customer Concern |
|----|------------------|
| RF | Routine Flash    |