

**NUMBER:** 18-027-16 REV. A

**GROUP:** Vehicle Performance

**DATE:** April 08, 2016

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-027-16, DATED MARCH 30, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE ADDITIONAL DTC, IMPROVEMENT/ENHANCEMENT AND UPDATED LABOR OPS.

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: 6.7L Diagnostic And System Improvements

# **OVERVIEW:**

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

## **MODELS:**

| 2016 | (DJ) | Ram 2500 Pickup |
|------|------|-----------------|
| 2016 | (D2) | Ram 3500 Pickup |

NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA.

NOTE: This bulletin applies to vehicles built on or before April 06, 2016 (MDH 0406XX) equipped with a 6.7L Cummins Diesel engine (Sales Code ETK).

### SYMPTOM/CONDITION:

DTCs have been changed from a one trip fault to a two trip fault:

- \*\*P0421 Catalyst 1 Efficiency Below Threshold Bank 1.\*\*
- P2280 Air Flow Restriction / Leak Between Air Cleaner And MAF.
- P203C (Diesel Exhaust Fluid) Reductant Level Sensor Circuit Low.
- P208D (Diesel Exhaust Fluid) Reductant Pump Control Circuit High.

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

- P2281 Air Leak Between MAF and Throttle Body.
- P218F Reductant No Flow Detected.
- P0218 Transmission High Temperature Operation Activated (68RFE Only).
- P0868 Line Pressure Low, MIL Action (68RFE Only).
- U110E Lost Ambient Temperature Message.
- P205E (Diesel Exhaust Fluid) Reductant Tank Temperature Sensor Circuit Intermittent (setting when the block heater is plugged in).

In addition to addressing the above DTCs, the following powertrain system improvements/enhancements are also included in this software release:

- \*\*Reduction in engine noise during regeneration at idle.\*\*
- 68RFE Transmission Overall Shift Quality Improvements.
- Test results fix for partial range misfire (68RFE Only).
- Ambient Air Temperature Improvements.
- Stationary Desoot with wiTECH Fix.
- OBD Misfire Monitoring Improvement (68RFE Only).

#### **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine 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 symptoms/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: If DTC U1601 is present, the ECM/PCM P/N did not update or the engine did not start after the flash, then the flash may have been unsuccessful. Restart the flash update.

 Reprogram the ECM/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. Is this vehicle equipped with the 68RFE automatic transmission?
  - a. Yes>>> Proceed to Step #3.
  - b. No>>> Turn ignition key "OFF" for 75 seconds then proceed to Step #5.
- 3. Turn ignition key "OFF" for 10 minutes.
- 4. Perform the transmission "Quicklearn" procedure. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT, Service Info Section 08 Electrical > 8E Electronic Control Modules > MODULE, Transmission Control > Standard Procedure > Quicklearn.
- 5. 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 allows them to be cleared.
- 6. Perform the PCM Configuration routine in wiTECH located in the PCM "Misc. Functions" menu tab.

# **POLICY:**

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

| Labor Operation No: | Description   | Skill Category | Amount     |
|---------------------|---|----------------|------------|
| **18-19-04-FA       | Module, Engine Control (ECM) -<br>Reprogram, (M/T & Aisin)<br>(1 - Semi-Skilled)                  | 10 - DIESEL    | 0.4 Hrs.   |
| 18-19-04-FB         | Module, Engine Control (ECM) -<br>Reprogram, Quicklearn 68RFE<br>Only (A/T)<br>(1 - Semi-Skilled) | 10 - DIESEL    | 0.6 Hrs.** |

NOTE: The expected completion time for the flash download portion of this procedure is approximately 14 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 the dealer found updated software 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    |