2014 Dodge or Ram Truck RAM 2500 Truck 4WD L6-6.7L DSL Turbo
Vehicle

FLASH - 6.7L DIAGNOSTIC AND SYSTEM IMPROVEMENTS

NUMBER: 18-041-17
GROUP: Vehicle Performance
DATE: May 04, 2017

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-054-16, DATED MAY 07, 2016 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS AND INCLUDES ADDITIONAL DIAGNOSTIC TROUBLE CODE (DTC), SOFTWARE ENHANCEMENTS, UPDATED FAILURE CODE STATEMENT AND LOF**

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:

2014	(DJ)	RAM 2500 Pick Up
2014	(D2)	RAM 3500 Pick Up

NOTE: This bulletin applies to vehicles equipped with a 6.7L Cummins Engine (Sales Code ETK).

SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) Illumination. Upon further investigation, a techniciar may find one or more of the following DTCs set in the PCM memory:

- **P2463 - Diesel Particulate Filter - Soot Accumulation.**
- P1451 - Diesel Particulate Filter System Performance.
- P218F - Reductant No Flow Detected.
- P242F - Diesel Particulate Filter Restriction - Ash Accumulation.
- P2281 - Air Leak Between MAF And Throttle Body.
- P205E - (Diesel Exhaust Fluid) Reductant Tank Temperature Sensor Circuit Intermittent (setting when the block heater is plugged in).
- U110E - Lost Ambient Temperature Message.
- P20E8 - (Diesel Exhaust Fluid) Reductant Pressure Too Low.
- P1477 - Intake Air Diverter Valve Position Sensor Circuit Shorted To Ground.
- U3017 - Control Module Timer/Clock Performance.
- P0087 - Fuel Rail Pressure Too Low.

- P0544 - Exhaust Gas Temperature Sensor Circuit - Sensor 1/1.
- P0128 - Thermostat Rationality. In cold ambient temperatures.
- P214D - SCR NOx Catalyst Outlet Temperature Too High During Particulate Filter Regeneration.
- P24A5 - Exhaust Gas Recirculation (EGR) Cooler Bypass Bank 1 Control Stuck.
- P040B - Exhaust Gas Recirculation Temperature Sensor “A” Circuit Performance.
- U1421 - Implausible Ignition Key Off Time Received.
- P0420 - Catalyst Efficiency Below Threshold.
- P026B - Injection Timing Performance.
- P04DB - Crankcase Ventilation System Disconnected.
- P1C55 - NOx Sensor Intermittent - Bank 1 Sensor 1.
- P202E - Diesel Exhaust Fluid (DEF) Reductant Injector Performance.
- P20EE - SCR NOx Catalyst Efficiency Below Threshold - Bank 1.
- P2002 - Diesel Particulate Filter Efficiency Below Threshold.
- P0604 - Internal Control Module RAM.

In addition to the above symptoms, the following software improvements are also included in this update:

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

- P0201 - P0206 - Fuel Injector X Circuit Open Fault Codes.
- P049D - EGR Control Position Exceeding Learning Limit.
- P226C - Turbocharger Boost Control “A” Slow Response.

The following DTC has been changed from a two trip fault to one trip fault:

- U1A24 - Lost Communication With Ammonia Sensor.

Other software enhancements included:

- **Over Running Clutch (ORC) software improvement.
- Unpleasant odor in the vehicle at low speeds during regeneration cycle.
- Selective Catalytic Reduction (SCR) efficiency improvement in cold weather.**
- NOx sensor calibration improvements.
- Cap Urea Dosing at Low Temps.
- Ambient Air Temperature (AAT) improvements.
- SCR efficiency scan tool test improvement.
- 68RFE transmission shift quality improvements for low speed first to neutral and neutral to first (garage shifts).
- Charging system improvements for single alternator applications (changes the cutout threshold from 600 to 500 RPM).
- Diesel Exhaust Fluid (DEF) system calibration improvement during stationary regeneration.
- Cold idle speed stability improvement.
- Fuel Filter Minder calibration improvement to save current mileage count during module reflash.
- Diagnostic improvement for DTC P20E8 - (Diesel Exhaust Fluid) Reductant Pressure Too Low. Increases pump prime attempts to eliminate false failures.
- Cruise control system improvements.
- Improvements in exhaust brake switch operation.
- Charging system improvements for dual alternator applications.
- Cold Idle Stability improvements.
- Charge Air Cooler (CAC) leak detection software improvements.
- Various wiTECH data and system test additions or improvements.
- 68RFE transmission shift quality improvements.

- Dosing thaw calibration improvement.
- I/M OBD II readiness - DTC P2002 improvements help Particulate Matter (PM) filter monitor group to be set to ready more often.
- Grid heater inhibit operation correction.
- Add engine run time to fuel filter minder.
- Dual alternator WiTECH improvements.
- Inducement timer reset procedure improvement.
- DEF refill detection calibration improvement.

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: If DTC U1601 is present, the ECM 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.

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 ECM/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. 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 allow them to be cleared.
6. Perform the PCM Configuration routine in wiTECH located in the PCM "Misc Functions" menu tab.
7. Verify the Dosing Control Unit (DCU) software is up to date in accordance with the service procedures and labor times outlined in all applicable published service bulletins.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount

**18-19-04-GH	Module, Engine Control/Powertrain Control (ECM/PCM) (Manual Trans/Aisin) - Reprogram (1 - Semi-Skilled)	10 - DIESEL	0.4 Hrs.
18-19-04-GJ	Module, Engine Control/Powertrain Control (ECM/PCM) 68RFE Trans Only - Reprogram (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 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