



NUMBER: 18-044-18

GROUP: 18 - Vehicle Performance

DATE: May 30, 2018

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-043-17, DATED MAY 04, 2017 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND INCLUDES UPDATED DIAGNOSTIC TROUBLE CODES (DTCs), ADDITIONAL SOFTWARE UPDATES AND LOPS.**

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 13-082. ALL APPLICABLE UN-SOLD RRT VIN's HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE UN-SOLD VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. FOR VEHICLES NOT INCLUDED IN THE RRT VIN LIST, APPLICATION OF THIS SERVICE BULLETIN TO SOLD UNITS IS BASED UPON THE CUSTOMER EXPERIENCING THE SYMPTOM/CONDITIONS. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

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: Powertrain Diagnostic and System Improvements

OVERVIEW:

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

MODELS:

2013	(DJ)	RAM 2500 Pickup
2013	(D2)	RAM 3500 Pickup

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

NOTE: This bulletin applies to vehicles equipped with a 6.7L I6 Cummins Turbo Diesel Engine (Sales Code ETK).

SYMPTOM/CONDITION:

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

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

- U1A24 - Lost Communication With Ammonia Sensor.

Prevent or reduce MIL illumination when no defect is present for the following DTCs. These faults have been changed from a one trip fault to a two trip fault:

- P0201 - P0206 - Fuel Injector X Circuit/Open.
- P049D - EGR Control Position Exceeding Learning Limit.
- P0711 - Transmission Temperature Sensor Performance.
- P0712 - Transmission Temperature Sensor Low.
- P0713 - Transmission Temperature Sensor High.
- P0714 - Transmission Temperature Sensor Intermittent.
- P0740 - TCC Out Of Range.
- P0869 - Line Pressure High.
- P0933 - Hydraulic Pressure Sensor Range/Performance.
- P0934 - Line Pressure Sensor Circuit Low.
- P0935 - Line Pressure Sensor Circuit High.
- P1775 - Solenoid Switch Valve Latched In TCC Position.
- P1776 - Solenoid Switch Valve Latched In LR Position.
- U0100 - Lost Communication With ECM/PCM.
- U0002 - CAN C Bus Off performance - Bus Off.

Improvements to prevent or reduce MIL illumination when no defect is present for:

- **P202E - (Diesel Exhaust Fluid) Reductant Injector Performance.
- P218F - Reductant No Flow Detected.
- P24A5 - EGR Cooler Bypass Bank 1 Control Stuck.
- P1C55 - NOx Sensor Intermittent – Bank 1 Sensor 1.
- P0301 - Cylinder 1 Misfire.
- P0302 - Cylinder 2 Misfire.
- P0303 - Cylinder 3 Misfire.
- P0304 - Cylinder 4 Misfire.
- P0305 - Cylinder 5 Misfire.
- P0306 - Cylinder 6 Misfire.
- P020A - Fuel Injector 1 Performance.
- P020B - Fuel Injector 2 Performance.
- P020C - Fuel Injector 3 Performance.
- P020D - Fuel Injector 4 Performance.
- P020E - Fuel Injector 5 Performance.
- P020F - Fuel Injector 6 Performance.
- U0001 - Can C Bus.**
- P1451 - Diesel Particulate Filter System Performance.
- P1477 - Dual Snorkel Calibration Change to Voltage Limit.
- P026B - Injection Timing Performance.
- P0087 - Fuel Rail Pressure Too Low.
- P0128 - Thermostat Rationality. In cold ambient temperatures.
- P026A - Charge Air Cooler Efficiency Below Threshold.
- P04DB - Crankcase Ventilation System Disconnected.
- P0544 - Exhaust Gas Temperature Sensor Circuit - Bank 1 Sensor 1.

- P0562 - Battery Voltage Low.
- P0604 - Internal Control Module RAM Error.
- P1451 - Diesel Particulate Filter System Performance.
- P20E8 - Diesel Exhaust Fluid Reductant Pressure Too Low.
- P20EE - SCR NOX Catalyst Efficiency Below Threshold - Bank 1.
- P205E - (Diesel Exhaust Fluid) Reductant Tank Temperature Sensor Circuit Intermittent (setting when the block heater is plugged in).
- P209F - Diesel Exhaust Fluid) Reductant Tank Heater Control Circuit Performance.
- P2281 - Air Leak Between MAF And Throttle Body.
- P229E - NOx Sensor Circuit - Bank 1 Sensor 2.
- P20E8 - Diesel Exhaust Fluid Reductant Pressure Too Low.
- P242F - Diesel Particulate Filter Restriction - Ash Accumulation.
- P20EE - SCR NOX Catalyst Efficiency Below Threshold - Bank 1.
- P2201 - Aftertreatment NOX Sensor Circuit Performance - Bank 1 Sensor 1.
- P2281 - Air Leak Between MAF and Throttle Body.
- P2459 - Diesel Particulate Filter Regeneration Too Frequent.
- P249E - Closed Loop SCR Reductant Injection Control At Limit - Flow Too High.
- U110E - Lost Ambient Temperature Message.
- U1421 - Implausible Ignition Key Off Time Received.
- U3017 - Control Module Timer/Clock Performance.

Other updates also include:

- **AC Pressure Sensor Error Threshold Change.
- AAT Timer Change from 1.2s to 3s.
- EGR Reduction for Hydrocarbon and Misfire Improvement.
- Enhanced software for a No crank/No start issue. (U0100 - Lost Communication With ECM/PCM) (Sales Code DG7).**
- Overrunning Clutch Transmission Content.
- Unpleasant odor in the vehicle at low speeds during regeneration cycle.
- Improved Exhaust Gas Recirculation (EGR) valve response.
- Unpleasant odor in the vehicle at low speeds and when regeneration is active.
- SCR Efficiency improvement in cold weather.
- Ambient Air Temperature (AAT) improvements.
- NOx sensor calibration improvements.
- Cap urea dosing at low temps.
- SCR Efficiency scan tool test improvement.
- Transmission Updates.
- Alternator Dropout Threshold Set to 500 RPM.
- Warm Up Combustion Stability Improvement.
- Urea Dosing During Stationary Regen.
- Dual Snorkel Calibrate Mode.
- Various Urea system calibration changes and cold weather system improvements and dosing heater thaw times.
- Various additional wiTECH data and system test additions or improvements.
- 68RFE Transmission shift quality improvements.
- Cruise control system improvements.
- System enhancements to starter lockout feature.
- Erroneous "Service Exhaust System - See Dealer" message setting with the ignition in the "Run" position, engine not running.
- I/M OBD II readiness - DTC P2002 improvements help Particulate Matter (PM) Filter monitor group to be set to ready more often.

- Add engine run time to fuel filter minder.
- Remove MIL for DTC; P1C70 - SCR Error Detected - Engine Disabled.
- Frozen CAC Diagnostic Improvement.
- wiTECH - Reset fix (PTO request on Pickup).
- wiTECH - Road governor speed upper limit adjustment.
- SCR Performance test fix.
- DEF Refill detection calibration change.
- Grid heater inhibit correction.
- P0544 - Exhaust Gas Temperature Sensor Circuit - Bank 1 Sensor 1 - Does not clear correctly.
- Fuel filter minder distance trigger correction.
- Fuel system test improvements.
- Exhaust brake switch improvement.
- Cold idle stability improvement.
- Add ability to reset soot load after DPF replacement.
- Correct condition - Cruise control does not cancel at key off.

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 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.

NOTE: After PCM reprogramming has completed successfully, the following must be performed:

2. Power down the PCM (key off) after flash. Automatic Transmission equipped trucks must have key off for 10 minutes. Manual Transmission trucks must have key off for 75 seconds.
3. Perform a Quicklearn procedure on vehicles equipped with a 68RFE Automatic Transmission. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT, Service Info Section 08 - Electrical > 8E - Electronic Control Modules > Module, Transmission Control > Standard Procedure > Quicklearn.
4. 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.
5. Perform the PCM Configuration routine in wiTECH located in the PCM "Misc Functions" menu tab.
6. Verify the Dosing Control Unit (DCU) is at the latest software calibration. Refer to all applicable published service bulletins regarding DCU system improvements for detailed repair procedures and labor times.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-04-HG	Module, Engine Control (ECM) - Reprogram, (M/T & Aisin) (1 - Semi-Skilled)	10 - Diesel	0.4 Hrs.
18-19-04-HJ	Module, Engine Control (ECM) - Reprogram, Quicklearn 68RFE Only (A/T) (1 - Semi-Skilled)	10 - Diesel	0.6 Hrs.**

NOTE: The expected completion time for the flash download portion of this procedure is approximately 12 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
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