

NUMBER: 18-091-16

GROUP: Vehicle Performance

DATE: July 26, 2016

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-057-15 REV. A, DATED JULY 25, 2015 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 Pick Up
2013	(D2)	Ram 3500 Pick Up

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).

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SYMPTOM/CONDITION:

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

Several software improvements are available for the following conditions.

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:

- **P2281 Air Leak Between MAF And Throttle Body.
- P218F Reductant No Flow Detected.
- P242F Diesel Particulate Filter Restriction Ash Accumulation.
- P20E8 (Diesel Exhaust Fluid) Reductant Pressure Too Low.
- P202E Diesel Exhaust Fluid) Reductant Injector Performance.
- P209F Diesel Exhaust Fluid) Reductant Tank Heater Control Circuit Performance.
- P218F Reductant No Flow Detected.**
- 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.
- P2281 Air Leak Between MAF And Throttle Body.
- U3017 Control Module Timer/Clock Performance.
- P1477 Dual Snorkel Calibration Change to Voltage Limit.
- P20EE SCR NOX Catalyst Efficiency Below Threshold Bank 1.
- P20E8 Diesel Exhaust Fluid Reductant Pressure Too Low.
- U3017 Control Module Timer/Clock Performance.
- P026B Injection Timing Performance.
- P0128 Thermostat Rationality. In cold ambient temperatures.
- P0087 Fuel Rail Pressure Too Low.
- U1421 Implausible Ignition Key Off Time Received.
- P026A Charge Air Cooler Efficiency Below Threshold.
- P04DB Crankcase Ventilation System Disconnected.

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- 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.
- P20EE SCR NOX Catalyst Efficiency Below Threshold Bank 1.
- P202E Diesel Exhaust Fluid (DEF) Reductant Injector Performance.
- P2201 Aftertreatment NOX Sensor Circuit Performance Bank 1 Sensor 1.
- P2281 Air Leak Between MAF and Throttle Body.
- P24A5 EGR Cooler Bypass Bank 1 Control Stuck.
- P2459 Diesel Particulate Filter Regeneration Too Frequent.
- P249E Closed Loop SCR Reductant Injection Control At Limit Flow Too High.

Other updates also include:

- **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 Snorkle 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 with the appropriate Diagnostic Procedures available in TechCONNECT, verify all related systems are functioning as designed. If DTCs are present, other than the ones listed above, record them on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. For all other customers that describe the symptom/condition or if the technician finds any of the DTCs listed above, 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.

 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:

- 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.
- 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.

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POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

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