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GROUP: 18 - Vehicle Performance

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This bulletin supersedes Technical Service Bulletin 18-061-20 REV. A, date of issue October 17, 2020, which should be removed from your files. All revisions are highlighted with **asterisks** and include an additional Diagnostic Trouble Code (DTC) and LOPs.

SUBJECT:

Flash: Powertrain Control Module (PCM) Updates

OVERVIEW:

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

MODELS:

2018	(DJ)	RAM 2500 Pickup
2018	(D2)	RAM 3500 Pickup

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

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 one or more of the following DTCs have been set:

- **P064F Unauthorized Software/Calibration Detected**.
- P2706 MS Solenoid Circuit (68RFE Only).
- P0868 Line Pressure Low.
- P229F Aftertreatment NOx Sensor Circuit Performance Bank 1 Sensor 2.
- P207F Reductant Quality Performance.
- P2509 PCM/PCM Power Input Signal Intermittent.
- P0401 EGR System Performance.
- P0870 OD Hydraulic Pressure Test.
- P040B Exhaust Gas Recirculation Temperature Sensor "A" Circuit Performance.
- P2201 Aftertreatment NOx Sensor Circuit Performance Bank 1 Sensor 1.
- P1C54 SCR NOx Catalyst Missing.
- P249E Closed Loop SCR Reductant Injection Control At Limit Flow Too High.
- P0128 Thermostat Rationality.
- P24C7 Particulate Matter Sensor Temperature Circuit Performance.

Customers may also comment on the following:

Engine misfire in cold ambient temperatures.

In addition, the following software enhancements are also available:

- Scan tool fan actuation test fix.
- Enabling diagnostics for DTC P208B Reductant Pump 1 Control Performance.
- Unable to turn on the ability to set "MAX" road speed using wiTECH scan tool.
- Mass Air Flow (MAF) sensor Out Of Range (OOR) low calibration.
- Improved 5-4 shift (reduce shift flare) after extended operation in 5th or 6th gear.
- Engine Manifold Pressure Misfire Monitor (EMP MFM) retune (68RFE Only).
- Idle based misfire retune.
- Abort timer for Selective Catalytic Reduction (SCR) out NOx sensor missing change to 70 seconds.
- Map SCR missing Fault/DTC P1C54 to tampering inducement.
- Particulate Matter (PM) sensor false fault improvement.
- CC inner loop used up faults.
- Ultrasonic Flow Meter (UFM) test results fix.
- Engine run state idle unstable software fix.
- Ability to write Engine Serial Number (ESN) through wiTECH.
- Add Diesel Exhaust Fluid (DEF)/reagent type as a readable value in wiTECH.
- SCR missing tuning capability improvement.
- Smart tampering improvement.
- Transmission shift quality and performance improvements.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/Service Library, 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 or if the technician finds any of the DTCs listed above, 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.

- 1. Reprogram the PCM/ECM 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?
 - YES>>> Proceed to Step 3 of the Repair Procedure.
 - NO>>> Turn ignition key "OFF" for 75 seconds then proceed to Step 5 of the Repair Procedure.
- 3. Place the ignition in the "OFF" position for 10 minutes.
- 4. Perform the transmission "Quicklearn" procedure. Follow the detailed service procedures available in DealerCONNECT/Service Library, 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

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POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-04-NK	Module, Engine Control (ECM) Reprogram, (M/T & Aisin) (0 - Introduction)	10 - Diesel	0.4 Hrs.
18-19-04-NL	Module, Engine Control (ECM) - Reprogram, Quicklearn 68RFE Only (A/T) (0 - Introduction)	10 - Diesel	0.7 Hrs.**

NOTE: The expected completion time for the flash download portion of this procedure is approximately 15 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 Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Technical 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 Technical Service Bulletin flash/reprogramming conditions.

CC	Customer Concern