

**NUMBER:** 18-052-19 REV. A

**GROUP:** 18 - Vehicle Performance

**DATE:** October 22, 2019

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This bulletin supersedes Service Bulletin 18-052-19, dated June 21, 2019, which should be removed from your files. All revisions are highlighted with \*\*asterisks\*\* and include updated build date, Diagnostic Trouble Codes (DTCs), symptom/conditions and LOP.

# 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:**

2019	(DJ)	RAM 2500 Pickup
2019	(D2)	RAM 3500 Pickup

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

NOTE: This bulletin applies to vehicles built on or before \*\*September 28, 2019 (MDH 0928XX)\*\* equipped with a 6.7L I6 Cummins Turbo Diesel Engine (Sales Code ETL) or 6.7L I6 Cummins HO Turbo Diesel Engine (Sales Code ETM).

# 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 Diagnostic Trouble Codes (DTCs) have been set:

- \*\*P0421-00 Catalyst 1 Efficiency Below Threshold Bank 1.
- P1451-00 Diesel Particulate Filter System Performance.
- P24A5-00 EGR Cooler Bypass Bank 1 Control Stuck.
- P21C4-00 Reductant Line Heater Relay Control Circuit High.
- P1D73-00 AGS Performance.
- P2560-00 Engine Coolant Level Low.
- P2201-00 Aftertreatment NOX Sensor Circuit Performance Bank 1 Sensor 1.
- P0604-00 Internal Control Module Ram.
- P0607-00 ECU Internal Performance.
- P0868-00 Line Pressure Low (Module, Powertrain Control (PCM), 68RFE).\*\*
- P0740-00 TCC Out Of Range.
- P0299-00 Turbocharger Underboost.
- P218F-00 -Reductant No Flow Detected.
- P20EE NOx Catalyst Efficiency Below Threshold.
- P226C Turbocharger Boost Control "A" Slow Response (In extreme cold ambient temperatures).

- P061A Level 2 Torque Performance.
- P061B Internal Control Module Torque Calculation Performance.
- P061E Internal Control Module Brake Signal Performance.
- P062C Etc Level 2 Mph Performance.
- P203F (Diesel Exhaust Fluid) Reductant Level Too Low.
- P20E8 (Diesel Exhaust Fluid) Reductant Pressure Too Low.
- P0420 Catalyst System Efficiency Bank 1.
- U02A3 Lost of Communication with PM Sensor.
- P1507 Crankcase Filter Restriction.
- P0116 Engine Coolant Temperature Sensor Performance.
- P0106 Manifold Absolute Pressure Sensor Performance (In extreme cold ambient temperatures).
- U3017 Control Module Timer/Clock Performance.
- P0870 Hydraulic Pressure Test.
- U0101 Lost Communication with TCM.
- P2579 Turbocharger Speed Sensor Circuit.

# The customer may also notice one or more of the following:

- \*\*Tachometer bouncing at idle with no change in RPM.
- Speed Control/Adaptive Cruise Control icon remains on in cluster after function has been canceled.
- Stumble on acceleration in higher altitudes (D2 High Output Only).
- Cruise Control Resume Function will not go to last set speed after cruise control was turned off.
- Rough idle.\*\*
- Oil life monitor resets after PCM flash
- Diesel exhaust fluid (DEF) level gauge inaccurate.
- Excessive DEF consumption
- Poor idle quality at times when engaging cab heat feature.

## In addition the following enhancements are included:

- \*\*Enabling message in dash alerting operator when in "Exhaust Brake Cab Warm Up" mode.
- System Improvement for "Exhaust Brake Cab Warm Up" mode.
- Transmission upshift quality enhancements (68RFE Only).
- wiTECH "Fuel Pressure Override" test improvement.
- wiTECH Mass Air Flow (MAF) data parameter improvement (displaying raw value instead of estimated).\*\*
- wiTECH fuel system run-up test improvement.
- wiTECH fan actuation test improvement.
- Smart Exhaust Brake operation improvement.
- Engine warm up protection system improvement. Max engine speed limit change from 1,200 RPM to 1,000 RPM during initial startup in extreme cold ambient temperatures.
- Improved shift quality and engine performance when in 4LO.
- Idle Shutdown Timer System improvement.

#### **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/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.

- 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>>> Proceed to Step 4 of the repair procedure.
- 3. 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.
- 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. Using Wi-Tech, perform the "Oil Life Restore" procedure located in the ECM "Misc Functions".

## **POLICY:**

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-04-KF	Module, Engine Control (ECM) - Reprogram, (Aisin AS69RC & 68RFE Transmission) (1 - Semi-Skilled)	10 - Diesel	0.4 Hrs.**

NOTE: The expected completion time for the flash download portion of this procedure is approximately 10 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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