



NUMBER: 18-076-22

GROUP: 18 - Vehicle Performance

DATE: April 8, 2022

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This bulletin supersedes Technical Service Bulletin (TSB) 18-015-18, date of issue February 23, 2018, 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:

2015 (DJ) RAM 2500 Pickup 2015 (D2) RAM 3500 Pickup

NOTE: This bulletin applies to vehicles within the following market/country: North America.

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

SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation a technician may find one or more of the following DTCs have been set:

- **P064F Unauthorized Software/Calibration Detected**.
- P202E (Diesel Exhaust Fluid) Reductant Injector Performance.
- 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.
- P229E NOx Sensor Circuit Bank 1 Sensor 2.
- P218F Reductant No Flow Detected.

- P242F Diesel Particulate Filter Restriction Ash Accumulation.
- 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.
- P1477 Intake Air Diverter Valve Position Sensor Circuit Shorted To Ground.
- U1421 Implausible Ignition Key Off Time Received.
- P026B Injection Timing Performance.

In addition, the following software enhancements are also available:

- A/C pressure sensor update.
- Improvements made to reduce misfire.
- wiTECH engine cooling fan actuation test update.
- Improved Exhaust Gas Recirculation (EGR) valve response.
- 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.
- Enhanced software for a No crank/No start issue. (U0100 Lost Communication With ECM/ PCM). (Sales Code DG7).
- Ambient Air Temperature (AAT) improvements.
- 68RFE Transmission overall shift quality improvements.
- Charging system improvements for single alternator applications (Changes the cutout threshold from 600 to 500 RPM).
- Charging system improvements for dual alternator applications.
- Diesel Exhaust Fluid (DEF) system calibration improvement during Stationary Regeneration.
- Cold idle speed stability improvement.
- Torque increase to 865 ft/lbs (D2 vehicles equipped with the Aisin transmission sales code DF2 only).
- Fuel filter minder calibration changes.
- wiTECH Fuel Pressure Override and Fuel System Run Up test improvements.

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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 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/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.
 - NO>>> Turn ignition key OFF for 75 seconds then proceed to Step 5.
- 3. Turn ignition key OFF for 10 minutes and proceed to Step 4.
- 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.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-04-NG	Module, Engine Control/Powertrain Control (ECM/PCM) - Reprogram, (Manual Trans/Aisin) (1 - Semi-Skilled)	10 - DIESEL	0.4 Hrs.
18-19-04-NH	Module, Engine Control/Powertrain Control (ECM/PCM) - Reprogram, Quicklearn 68RFE Only (Automatic Transmission) (1 - Semi-Skilled)	10 - DIESEL	0.7 Hrs.**

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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 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