



**NUMBER:** 18-093-22

**GROUP:** 18 - Vehicle Performance

**DATE:** May 10, 2022

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**This bulletin supersedes Technical Service Bulletin (TSB) 18-071-21, date of issue August 12, 2021, which should be removed from your files. All revisions are highlighted with **\*\*asterisks\*\*** and include an updated build date, Diagnostic Trouble Codes (DTCs), symptom/conditions 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:**

2021	(DJ)	RAM 2500 Pickup
2021	(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 ETL) or a 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 DTCs have been set:

- **\*\*P0299** - Turbocharger Underboost.
- P0401 - EGR System Performance.
- P0755 - 2C Solenoid Circuit.
- P0765 - UD Solenoid Circuit.
- P244A - Diesel Particulate Filter Differential Pressure Too Low.
- P20EE - SCR NOx Catalyst Efficiency Below Threshold - Bank 1.
- P242F - Diesel Particulate Filter Restriction - Ash Accumulation.
- P1451 - Diesel Particulate Filter System Performance.
- P2463 - Diesel Particulate Filter Restriction - Soot Accumulation Bank 1.\*\*
- P0607-00 - ECU Internal Performance.
- P0299-00 - Turbocharger Underboost.
- P1451-00 - Diesel Particulate Filter System Performance (**Sales Code ETL Only**).

\*\*In addition, the customer may notice one or more the following conditions:

- Idle instability.
- Air handling bump after startup.
- Harsh shifts during garage shift tip-in.
- 2-1-2 gear hunting at low speeds, especially on grades.
- Driveline “clunk” “bump” during D-R and R-D Garage Shifts.
- Harsh 5-3 downshift.
- 2-1 ERS downshift with exhaust brake on, performance improvement.
- Intermittent shift bump.\*\*

The following improvements are also included in this update:

- \*\*Fuel System Run-Up Test routine, wiTECH improvement.
- wiTECH PCM data improvements.
- wiTECH cylinder cut-out routine, wiTECH improvement.\*\*
- Oil pressure switch modifications.
- Urea (DEF fluid) level sensor calibration update, to help prevent bumps in DEF level gauge.

### **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: 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>>> Proceed to [Step 4](#).
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.

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

<b>Labor Operation No:</b>	<b>Description</b>	<b>Skill Category</b>	<b>Amount</b>
**18-19-04-SZ	Module, Engine Control (ECM) - Reprogram and Perform Quicklearn Routine (68RFE Transmission) (0 - Introduction)	10 - Diesel	0.5 Hrs.
18-19-04-TA	Module, Engine Control (ECM) - Reprogram (Aisin Transmission) (0 - Introduction)	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 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
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