

Technical Service Bulletin (TSB)

Flash: Powertrain Control Module (PCM) Updates

REFERENCE:	TSB: 18-024-23 REV. A GROUP 18 - Vehicle Performance	Date:	May 24, 2023	REVISION:	18-024-23
VEHICLES AFFECTED:	2021 (DJ) RAM 2500 Pickup 2021 (D2) RAM 3500 Pickup 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).			MARKET APPLICABILITY: ☒ NA ☐ SA ☐ EE ☐ MEA ☐ IAP ☐ CH	
CUSTOMER SYMPTOM:	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 (DTC)s have been set: • **P0299 - Turbocharger Underboost.** • P061B - Internal Control Module Torque Calculation Performance. • P0755 - Shift Solenoid B (DG7 Only). • P0765 - Shift Solenoid D (DG7 Only). • 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). The following improvements are also included in this update: • **Transmission overheat protection (DG7 Only).** • Improvements to upshifts when releasing the accelerator pedal (DG7 only). • Reduced audible engine flare during upshifts (DG7 Only). • Improvements to help prevent OD clutch premature wear (DG7 Only). • 1-2-1 gear hunting on grades while operating under high loads in areas of low traction (e.g. rain, snow, ice, or dirt) (DG7 Only). • 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. 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.				
CAUSE:	PCM Software				

This bulletin supersedes Technical Service Bulletin (TSB) 18-024-23, date of issue March 1, 2023, which should be removed from your files. All revisions are highlighted with ****asterisks**** and include DTC, additional software enhancements and LOPS.

REPAIR SUMMARY:

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

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
**18-19-04-P1	Module, Engine Control (ECM) -Reprogram and Perform Quicklearn Routine (0 - Introduction)	10 - Diesel	0.5 Hrs.
18-19-04-NZ	Module, Engine Control (ECM) -Reprogram (0 - Introduction)	10 - Diesel	0.4 Hrs.**
Failure Code	CC	Customer Concern	

The dealer must use failure code CC with this Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM 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.

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 any of the symptoms listed above in the customer symptom section, 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 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 (Sales Code DG7) 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 any DTCs that may have been set in any modules 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.

This bulletin is supplied as technical information only and is not an authorization for repair. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without written permission of FCA US LLC.