

Technical Service Bulletin (TSB)

Flash: Powertrain Control Module (PCM) Updates

REFERENCE:	TSB: 18-067-23 GROUP 18 - Vehicle Performance	Date:	May 24, 2023	REVISION :	18-102-22 REV. A
VEHICLES AFFECTED: CUSTOMER	2020 (DJ) RAM 2500 Pickup 2020 (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). Customers may experience a Malfunction Indicator Lamp (MIL) illumin		⊠NA ⊡SA ⊡EE	PPLICABILITY: MEA IAP CH	
SYMPTOM:	the technician may find that one or mo set: **P0299-00 - Turbocharger Underl P061B-00 - Internal Control Modul P0461-00 - Fuel Level Sensor 1 P P0506 - Idle Control System RPM P20EE-00 - NOx Catalyst Efficience P242F-00 - Diesel Particulate Filte P1451-00 - Diesel Particulate Filte P026B - Injection Timing Performa P0607-00 - ECU Internal Performa P0607-00 - Cylinder 1 Misfire. P0302-00 - Cylinder 2 Misfire. P0302-00 - Cylinder 3 Misfire. P0303-00 - Cylinder 5 Misfire. P0305-00 - Cylinder 5 Misfire. P0306-00 - Cylinder 5 Misfire. P1C54-00 - SCR NOx Catalyst Mi P2706-00 - MS Solenoid Circuit (6 P1D73-00 - AGS Performance. P24A5-00 - EGR Cooler Bypass E P0420-00 - Catalyst System Efficie P039B-00 - Reductant Pressure Se P0401-00 - EGR System Performa P208B-00 - Reductant Pump 1 Cc The following improvements are also in **Transmission overheat protection Adaptive Cruise improvements at Ambient Air Pressure displayed cc Oil pressure switch modification. Oil change monitor improvement f wiTECH "Fuel Injector Cutoff Test" wiTECH Mass Air Flow (MAF) Ser Enabling wiTECH Particulate Matt Engine Warm-up Protection Impro during cold starts. Hydrocarbon Desorption (HCD) M cycle.	re of the for poost. le Torque (erformance Lower Tha cy Below T er Restriction r System F r Restriction nce. ance. bo Low. ssing. sank 1 Contency Bank 1 Contency Bank 1 Contency Bank 1 Contency Bank 1 Contency ance (Sales ontrol Perfor ance (Sales) on (DG7 On high altitud or severe of fix.	 <i>i</i>llowing Diagnostic T <i>i</i>Calculation Performate. <i>i</i>An Expected. <i>i</i>hreshold. <i>i</i>Ash Accumulation <i>i</i>Cerformance. <	Trouble Codes nce. on. on Bank 1. Sales Code E Sales Code ET S Code ETM). e ETM). Fest in PCM "M oil delivery to d	(DTC)s have been TM). TM). TM):

	 Engine stumble improvement, during engine warm up (Sales Code ETM). Smoke improvement during highway driving and lower altitudes (sea level) (Sales Code ETM). The customer may also notice one or more of the following: 			
	 Idle Instability. Harsh downshift clunk during exhaust brake deceleration. Diesel Exhaust Fluid (DEF) gauge erratic when DEF level is low. Stall when putting in reverse in cold ambient temps. Engine stumble during engine warm up. Unstable idle when AC compressor cycles. Engine surge felt while driving (Sales Code ETM). Idle fluctuation. 			
CAUSE:	PCM Software			

This bulletin supersedes Technical Service Bulletin (TSB) 18-102-22 REV. A, date of issue August 10, 2022, which should be removed from your files. All revisions are highlighted with **asterisks** and include DTC, additional software enhancements and LOPS.

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 21-027, date of issue March 05, 2021. All applicable RSU VINs have been loaded. To verify this RSU service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/ Service Library. All repairs are reimbursable within the provisions of warranty. This RSU will expire 18 months after the date of issue.

NOTE: This calibration update is only for vehicles that have had the updated CP3.3 design High-Pressure Fuel Injection Pump installed. All other calibrations to support the CP4 design pump have been deactivated. DO NOT perform this calibration update unless recall Y78 has been performed first.

REPAIR SUMMARY:

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

Labor Operation No:	Labor Description	Skill Category	Labor Time
**18-19-04-P1	Module, Engine Control (ECM) - Perform Quicklearn Routine (68RFE Transmission) - Inspect and Reprogram (1 - Semi-Skilled)	10 - Diesel	0.5 Hrs.
18-19-04-NZ	Module, Engine Control (ECM) - (Aisin Transmission) - Inspect and Reprogram (1 - Semi-Skilled)		0.4 Hrs.**
Failure Code	СС	Customer Concern	

CLAIMS DATA:

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 Inspection Procedure.

INSPECTION:

- NOTE: The only calibration available will be for the updated CP3.3 design High-Pressure Fuel Injection Pump (Fig. 1) . Please ensure that recall Y78 has been completed first before proceeding with this update.
- 1. Inspect the High-Pressure Fuel Injection Pump to see which pump is currently installed on the vehicle (Fig. 1) . Also review the vehicle VIP report to see if campaign Y78 has been performed.

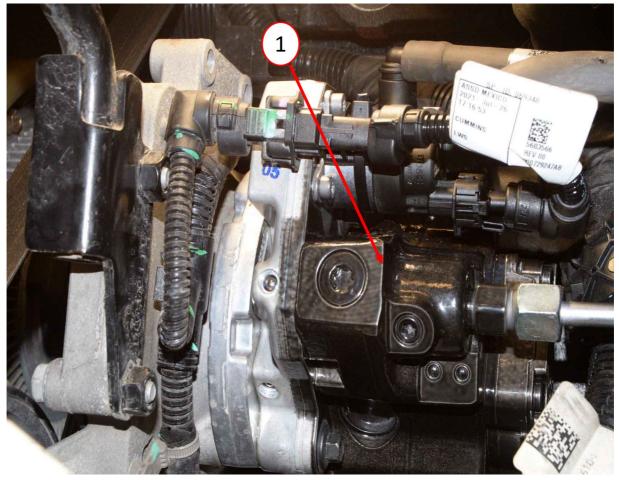


Fig. 1 CP3.3 Design Pump

1 - CP3.3 Design Pump From Top View.

- 2. Does the VIP report indicate that Y78 has been performed, and is the vehicle equipped with the new design fuel injection pump released under the campaign?
 - YES>>> Proceed to Step 1.
 - NO>>> Perform the Y78 campaign first. Once the campaign is performed, new pump installed and PCM updated, the PCM will have all of the updates listed in this document. This Bulletin does not apply.

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.
- 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 wiTECH, perform the "Oil Life Restore" procedure located in the ECM "Misc Functions".

POLICY:

Reimbursable within the provisions of the warranty.

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