



**NUMBER:** 25-003-17 REV. A

**GROUP:** 25 - Emissions Control

**DATE:** June 24, 2017

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**THIS BULLETIN SUPERSEDES SERVICE BULLETIN 25-003-17, DATED MARCH 24, 2017, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **\*\*ASTERISKS\*\*** AND INCLUDE ADDITIONAL REPAIR PROCEDURE STEPS TO INCLUDE USE OF A DIAGNOSTIC FLASH COUNTER RESET TOOL AND LOP.**

**FOR HELP WITH USING wiTECH FOR ECU FLASH REPROGRAMMING, CLICK ON THE APPLICATION'S "HELP" TAB.**

**THE wiTECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.**

***SUBJECT:***

Flash: Dosing Control Unit (DCU) Diagnostic and System Improvements

***OVERVIEW:***

This bulletin involves reprogramming the DCU with the latest available software and if necessary replacing the unit.

***MODELS:***

2016	(D2)	RAM 3500 Pickup
2016	(DJ)	RAM 2500 Pickup
2016	(DD)	RAM 3500 Cab Chassis
2016	(DP)	RAM 4500/5500 Cab Chassis
2016	(DF)	RAM 3500 <10K LB Cab Chassis

**NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA.**

**NOTE: This bulletin applies to vehicles equipped with 6.7L I6 Cummins Turbo Diesel Engine (Sales Code ETK) equipped with Selective Catalytic Reduction (UREA) (Sales Code XAL).**

***SYMPTOM/CONDITION:***

Some customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation, a technician may find the following Diagnostic Trouble Codes (DTCs):

- P207F - Reductant Quality Performance.
- P202C - Reductant Tank Heater Control Circuit High.
- P203B - Reductant Level Sensor 1 Circuit Performance.

**DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all related systems are functioning as designed. If any DTCs or symptom conditions, other than the one listed above is present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer describes the symptom/condition listed above or if the technician finds DTCs, perform the Repair Procedure.

**\*\*SPECIAL TOOLS/EQUIPMENT REQUIRED:**

Equipment #	Description
2046800250	Tool, DEF DCU Programming

**Some DCUs may have an internal flash counter that is maxed out. This requires special tool (2046800250) to reset the counter before being able to flash. Special tool 2046800250 was automatically shipped to all dealers prior to the release of this Service Bulletin.\*\***

**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. Using wiTECH, check for any codes setting in the PCM and record them on the repair order. If necessary, perform a vehicle scan report and save it for your records.
2. **\*\*Using WiTech, attempt to reprogram the DCU with the latest available software. Did you receive the message "This ECU reports maximum flash attempts have been exceeded"?** (Fig. 1)
  - a. YES>>> Proceed to [Step 3](#).
  - b. NO>>> Proceed to [Step 9](#).



**Fig. 1**  
**Maximum Flash Attempts**

3. Key on the vehicle to the RUN position.
4. Disconnect the NOx sensor 1/2 electrical connector (Fig. 2) (located in the passenger side frame rail channel towards the rear axle).



**Fig. 2**  
**NOx Sensor Electrical Connector**

5. Connect the flash counter reset tool (Fig. 3) .



**Fig. 3**  
**DCU Flash Counter Reset Tool**

6. Red indicator means the tool is in progress. Wait for the light to turn green (usually goes from red to green in less than a second)(Fig. 4.)

**NOTE: If the tool lights up yellow, something went wrong in the process. Unplug the device and wait for 5 seconds. After 5 seconds repeat Step 5. After two attempts if the light does not turn green, the DCU must be replaced and reprogrammed. Replace the DCU. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info>25 - Emissions Control/Diesel Exhaust Fluid Emissions/Unit, Diesel Exhaust Fluid Dosing Control/Removal/Installation.**

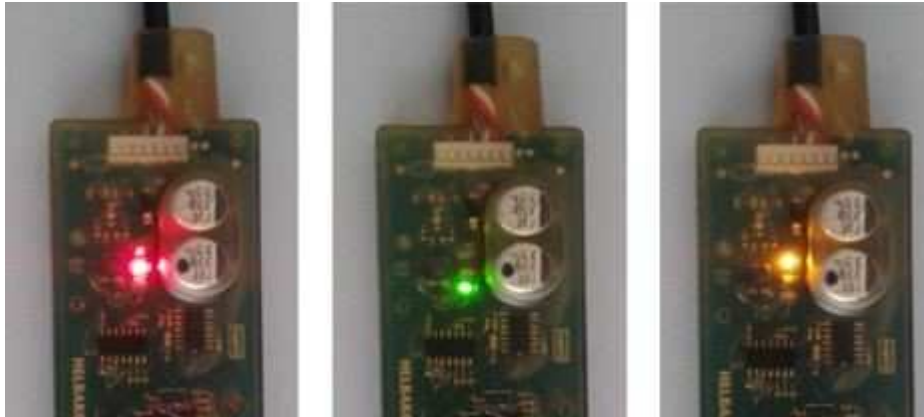


Fig. 4

Lights on the DCU Flash Counter Reset Tool

7. Once the light is green, remove the flash counter tool.
8. Reconnect the NOx 1/2 sensor electrical connector (Fig. 2.) \*\*
9. Reprogram the DCU with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
10. 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.
11. Using wiTECH, perform another vehicle scan report.
12. Is the DTC P207F set active?
  - a. YES>>> Ensure that the DEF tank temperature is above 4°C (39°F), then drive the vehicle for 15 minutes in an attempt to clear the fault. Proceed to Step 13.
  - b. NO>>> This bulletin has been completed.
13. Did DTC P207F reset?
  - a. YES>>> Follow all current published service information for P207F-Reductant Quality Performance and repair as necessary.
  - b. NO>>> This bulletin has been completed.

**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>
**18-19-18-97	Unit, Dosing Control (DCU) - Reprogram (0 - Introduction)	10 - Diesel	0.3 Hrs.**

<b>Labor Operation No:</b>	<b>Related</b>	<b>Skill Category</b>	<b>Amount</b>
18-19-18-50	Test Drive - (Requires Pre / Post Scan Reports)	10 - Diesel	0.4 Hrs.

**NOTE: The expected completion time for the flash download portion of this procedure is approximately 2 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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