



**NUMBER:** 18-005-13

**GROUP:** Vehicle Performance

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**THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-004-11 REV. B, DATED DECEMBER 21, 2011 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE SOFTWARE ENHANCEMENTS AND DIFFERENT LABOR OPERATION NUMBERS (LOP'S).**

**THE wiTECH SOFTWARE LEVEL MUST BE AT RELEASE 13.02 OR HIGHER TO PERFORM THIS PROCEDURE.**

**SUBJECT:**

Flash: Diagnostic and System Improvements

**OVERVIEW:**

This bulletin involves selectively erasing and reprogramming the Engine Control Module (ECM) with new software.

**NOTE: Trucks exhibiting any DTC related to Oxygen Sensor, Oxygen Sensor Module or communication to the Oxygen Sensor Module also require that Service Bulletin's 25-004-12 (or later bulletin) must be performed (if not previously performed).**

**MODELS:**

|      |      |                    |
|------|------|--------------------|
| 2010 | (DJ) | Ram Pick Up (2500) |
| 2010 | (D2) | Ram Pick Up (3500) |

**NOTE: This bulletin applies to vehicles equipped with a 6.7L Cummins engine (Sales code ETJ).**

**SYMPTOM/CONDITION:**

Pick up trucks equipped with a 6.7L Cummins diesel have a number of software improvements/enhancements available. This SB will include improved robustness for DTC's:

- \*\* P2000 - NOX ABSORBER EFFICIENCY BELOW THRESHOLD \*\*
- \*\* P1451 - DIESEL PARTICULATE FILTER SYSTEM PERFORMANCE \*\*
- P0101 - MASS AIR FLOW SENSOR "A" CIRCUIT PERFORMANCE
- P046C - EGR POSITION SENSOR PERFORMANCE

- P049D - EGR CONTROL POSITION EXCEEDED LEARNING LIMIT
- P051B - CRANKCASE PRESSURE SENSOR CIRCUIT RANGE/PERFORMANCE
- P2002 - DIESEL PARTICULATE FILTER EFFICIENCY BELOW THRESHOLD
- P2262 - TURBOCHARGER BOOST PRESSURE NOT DETECTED - MECHANICAL
- P2609 - INTAKE AIR HEATER SYSTEM PERFORMANCE
- P245B - EGR COOLER BYPASS STATUS LINE INTERMITTENT

**NOTE: Vehicles flashed to address the above codes should be driven and repair validated. If code(s) return, follow diagnostic procedures available in DealerCONNECT/TechCONNECT.**

#### **Improvements other than DTC robustness or enhancements:**

- \*\* O2 Sensor cleaning cycle \*\*
- \*\* Correct Charge Air Cooler (CAC) out voltage reading in WiTech \*\*
- \*\* Improve idle shutdown messages \*\*
- \*\* Add ability to read Exhaust Manifold Pressure (EMP) sensor value in WiTech \*\*
- \*\* Display correct Exhaust Gas Recirculation (EGR) position in WiTech \*\*
- \*\* Make Grid Heater off time selectable in WiTech \*\*
- \*\* Display correct alternator voltage in WiTech \*\*
- \*\* Turn Low Voltage Idle Up Off \*\*
- Other driveability enhancements
- MIL on with no DTC
- Ability to read EGR valve gap on wiTECH
- Erroneous, brief brake lamp flash at key on

#### **Secure Bootloader software**

If the Engine Control Module (ECM) does not have a calibration installed, or has an unapproved calibration installed then the ECM will be in a Read Only Memory (ROM) boot state. The ECM will have power but the lack of approved software will not allow the vehicle to be started and driven. No further diagnostics of the ECM will be available at this time. This code will be cleared and issue resolved when the ECM is updated with the correct approved calibration. Refer to the DealerCONNECT > TechCONNECT > Service Information for more detail.

DTC U1601 set outside of the dealership with a no crank (towed in), no start condition caused by unauthorized (up-rate) software will **NOT** be covered under the terms of the warranty.

DTC U1601 code may also be set when a legitimate flash is interrupted for any reason.

#### **DIAGNOSIS:**

Using a Scan Tool with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If DTC's are present record them on the repair order and repair as necessary before proceeding further with this bulletin.

If the above condition is present, perform the Repair Procedure.

#### **PARTS REQUIRED:**

| Qty. | Part No.   | Description                    |
|------|------------|--------------------------------|
| 1    | 04275086AD | Label, Authorized Modification |

**REPAIR PROCEDURE:**

**NOTE:** WITECH may erroneously give an error message at the conclusion of the download stating the that the flash was not successful. If there is an error message after the flash has completed, first confirm that the DTC U1601 is not present and that the P/N has been updated. If so, start the engine to confirm the flash was successful. If DTC U1601 is present, OR the P/N did not update, OR the engine did not start, the flash may have been unsuccessful. Restart the flash update.

1. Reprogram the ECM with the latest software. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT, Refer To Group 8 - Electrical > 8E - Electronic Control Modules > MODULE, Engine Control, Diesel > Standard Procedure > PCM/ECM Programming - DIESEL. **After PCM reprogramming, the following must be performed:**
  - a. Power down the PCM (key off) after flash. Automatic Transmission equipped trucks must have key off for 10 minutes. Manual Transmission trucks must have key off for 75 seconds.
  - b. Perform a Quicklearn procedure on Automatic Transmission equipped trucks. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT, Refer To Group 08 - Electrical > 8E - Electronic Control Modules > MODULE, Transmission Control > Standard Procedure > Quicklearn.
  - c. Clear any DTC's that may have been set in other modules due to reprogramming. The wiTECH application will automatically present all DTC's after the flash and allow the tech to clear them.
2. Type the necessary information on the "Authorized Modification Label" and attach it near the VECI label.

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

| Labor Operation No: | Description                                                                                | Amount   |
|---------------------|--------------------------------------------------------------------------------------------|----------|
| **18-19-04-F9**     | Module, Engine Control (ECM) - Reprogram, Quicklearn Transmission (A/T) (1 - Semi-Skilled) | 0.7 Hrs. |
| **18-19-04-G9**     | Module, Engine Control (ECM) - Reprogram, (M/T) (1 - Semi-Skilled)                         | 0.6 Hrs. |

**FAILURE CODE:**

|    |              |
|----|--------------|
| FM | Flash Module |
|----|--------------|