

**NUMBER:** 18-040-17 REV. A

**GROUP:** 18 - Vehicle

Performance

**DATE:** June 24, 2017

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-040-17, DATED APRIL 25, 2017, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE NEW BUILD DATE, UPDATING NOTES, ADDITIONAL DIAGNOSTIC TROUBLE CODES (DTCS), ADDITIONAL IMPROVEMENTS, AND NEW 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: 6.4L Powertrain Diagnostic and System Enhancements

## **OVERVIEW:**

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

# **MODELS:**

2017	(D2)	RAM Truck 3500 Pickup
2017	(DD)	RAM Truck 3500 Cab Chassis
2017	(DF)	RAM Truck 3500 <10K LB Cab Chassis
2017	(DJ)	RAM Truck 2500 Pickup
2017	(DP)	RAM Truck 4500/5500 Cab Chassis

NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA, LATAM, EMEA and APAC.

NOTE: This bulletin applies to vehicles built on or before \*\*May 22, 2017 (MDH 0522XX)\*\* equipped with a 6.4L engine (Sales Code ESA) or (Sales Code ESB) and with 6-Speed Automatic 66RFE transmission (Sales Code DFP) or 6-Speed Auto Aisin AS66RC HD Trans (Sales Code DF3).

#### SYMPTOM/CONDITION:

NOTE: This bulletin fixes all vehicles listed and also contains an optional software path for situations where the customer is specifically complaining of a drone noise, shudder, pulsation, or vibration under light throttle applications, while vehicle is operating in \*\*Multi Displacement System/Economics (MDS/ECO)\*\* mode (optional software available for D2 & DJ vehicles).

There will be two separate software options displayed on the wiTECH flash tab. The software file released for this condition contains the verbiage \*\*"MDS NOISE".\*\*
The other file is the standard software that does not contain improvements for the drone/shudder concern. If for some reason the customer finds this shudder improvement objectionable, the PCM software may be returned/reflashed to the standard version.

Both software versions will address the remaining conditions noted in the bulletin.

A small number of customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find that the following DTCs have been set:

- \*\*P1404 EGR Close Position Performance.
- P0404 EGR Position Sensor Performance.
- P0405 EGR Position Sensor Circuit Low.
- P0406 EGR Position Sensor Circuit High.
- P2172 High Airflow/Vacuum leak detected.\*\*
- P0870 OD Hydraulic Pressure Test (66RFE Only).

This software update also includes the following enhancements:

- \*\*Reduced downhill gear hunting when using cruise control.
- Reduced drone noise at minimum converter clutch operating speed.
- Reduced low speed drone noise.
- Improved Exhaust Gas Recirculation (EGR) valve control at maximum desired lift. This will help reduce, long crank/start time.
- Improvements to engine idle quality such as rough idle after high altitude start and stability of engine RPM at idle.
- Refine MDS transitions with improved slip and torque management (66RFE Only).
- Improved garage shift stability (66RFE Only).
- Revised 4WD low shift schedule for improved off-road response (66RFE Only).
- Revised low RPM lockup throttle threshold to prevent shudder on upgrade (66RFE Only).
- Updated calibration to help reduce a bump/clunk feeling when coasting down to a stop (66RFE Only).\*\*
- Improvements to address engine hesitation issues.
- Revised cruise and tow/haul map changes to address cruise undershoots, and gear hunting on grades while towing (66RFE Only).
- Upgrade provides options for faster torque converter unlock in 4-low mode to improve engine rpm stability (66RFE Only).
- Upgrade to address HD thermostat rationality issues.

#### **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, 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 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. 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:

Labor Operation No:	Description	Skill Category	Amount
**18-19-06-RX	Module, Powertrain Control (PCM) - Reprogram (0 - Introduction)	1 - Engine Repair and Performance	0.2 Hrs. **

NOTE: The expected completion time for the flash download portion of this procedure is approximately 6 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