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GROUP: Vehicle Performance

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-042-15, DATED NOVEMBER 04, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND INCLUDE ADDITIONAL DIAGNOSTIC TROUBLE CODE (DTC), ENHANCEMENTS, ADDITIONAL NOTES ON STATING THIS IS AN OPTIONAL SOFTWARE UPDATE 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.

NOTE: **This bulletin contains an optional software update that should only be used in situations where the customer is specifically complaining of the condition described below.******

SUBJECT:

Flash: 6.4L Diagnostic And System Improvements

OVERVIEW:

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

MODELS:

2014	(DJ)	Ram 2500
2014	(D2)	Ram 3500 Pickup
2014	(DD)	Ram 3500 Cab Chassis
2014	(DP)	Ram 4500/5500 Cab Chassis

NOTE: This bulletin applies to all vehicles equipped with a 6.4L engine (Sales Codes ESA or ESB).

SYMPTOM/CONDITION:

NOTE: **This bulletin contains optional software update that should only be used in situations where the customer is specifically complaining of a Drone Noise, Shudder, Pulsation, or Vibration under light throttle applications while vehicle is operating in MDS/ECO mode. There will be two separate software options displayed on the wiTECH flash tab. The software file released for this condition contains the verbiage “OPTIONAL”. 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 surge, shudder or pulsation type sensation when driving on smooth road surfaces at highway speeds of 64-129 km/h (40-80 mph).**

During normal diagnostics a technician may find one or more of the following Diagnostic Trouble Codes (DTCs) present:

- ****P0335 - Crankshaft Position Sensor Circuit.****
- P0300 - Multiple Cylinder Misfire, cold Idle misfire **(DJ,D2 or DD vehicles only).**
- P030X - Cylinder Misfire (any cylinder).
- P04D1 - Cooled EGR Temperature Sensor Circuit High.
- P04D0 - Cooled EGR Temperature Sensor Circuit Low.
- P2504 - Charging System Output High.
- P0441 - Evap Purge System Performance.
- P2066 - Fuel Level Sensor 2 Performance.
- P0401 - EGR System Performance **(DJ/D2 vehicles only).**
- P2096 - Downstream Fuel Trim System 1 Lean **(DD/DP vehicles only).**
- P2098 - Downstream Fuel Trim System 2 Lean **(DD/DP vehicles only).**
- P0740 - TCC Out of Range **(DD vehicles equipped with a DFP automatic transmission).**

Customers may also experience any of the following conditions:

- Slightly elevated idle speed noticed during engine warm-up when in Reverse or Drive and when operating in cold ambient temperatures.
- PTO mobile mode cancels or deactivates when vehicle comes to a stop **(DD/DP vehicles only).**
- Engine cycles in and out of MDS mode too often when operating in PTO stationary mode **(DD/DP vehicles only).**
- PTO stationary mode cancels or deactivates when PTO up-fit equipment loads fluctuate **(DD/DP vehicles only).**

The following powertrain system improvements/enhancements are also included in this software release:

- ****Improve idle rpm control with A/C engagements.**
- Improvements for knock detection at higher altitudes.
- Enable cruise over-speed downshifts.**
- Improve Idle at high altitudes **(DJ,D2 or DD vehicles only).**
- Spark knock on vehicle with low octane fuel **(DJ,D2 or DD vehicles only).**
- Operator idle speed control enhancements.

- Raise 4x4 low range minimum engine speed from 725 to 800 RPM.
- Raise minimum engine speed to allow MDS activation in PTO stationary mode **(DD/DP vehicles only).**

NOTE: Some vehicles may have been shipped from the plant with summer blend fuel depending on the build date. Use of this fuel in cold climate regions may result in false misfire detection. Ensure vehicle fuel tank has been filled with local winter blend fuel.

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 any of the DTCs, 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 any 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-MQ	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 5 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

FAILURE CODE:

The dealer must choose which failure code to use. If the customer came in with an issue and the dealer found updated software to correct that issue, use failure code CC, for all other use failure code RF.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Service Bulletin, failure code CC is to be used.
- If an available flash is completed while addressing a different customer concern, failure code RF is to be used.

CC	Customer Concern
RF	Routine Flash