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GROUP: Vehicle Performance

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-020-16, DATED FEBRUARY 25, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND INCLUDE UPDATED VEHICLE BUILD DATES, ADDITIONAL SYMPTOMS/CONDITIONS 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: 6.4L Powertrain Diagnostic And System Improvements

OVERVIEW:

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

MODELS:

2016	(LA)	Dodge Challenger
2016	(LD)	Dodge Charger
2016	(LX)	Chrysler 300

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

NOTE: This bulletin applies to vehicles built on or before **August 05, 2016 (MDH 0805XX)**** equipped with a 6.4L Engine (Sales Codes ESG or ESH) and an Automatic Transmission (Sales Code DFK) or a Manual Transmission (Sales Code DEC).**

SYMPTOM/CONDITION:

Customers may experience one or more of the following symptoms and/or a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find one or more of the following Diagnostic Trouble Codes (DTCs):

- **P0335 - Crankshaft Position Sensor Circuit.
- P0339 - Crankshaft Position Sensor Intermittent.
- P0441 - EVAP Purge System Performance.
- P0455 - EVAP System Large Leak.
- P2610 - PCM Internal Engine Off Timer Performance.**
- P0456 - EVAP System Small Leak.
- P2299 - Brake Pedal Position/Accelerator Pedal Position Incompatible.

Customers may also notice the following condition(s):

- Brief engine idle fluctuation while in hot ambient temperatures.
- A slight hesitation during light pedal application after engine cold start.
- Driveline noises.
- Engine stumble/hesitation on a very hard pedal acceleration from a dead stop.
- Transmission enhancements during low speed braking turning maneuvers.
- False detonation (spark knock) detected during a wide open throttle **(LA Challenger (Sales Codes ESH with DEC only))**.

In addition, the following software enhancements are available:

- **Torque security calibration changes to desensitize brake throttle override entry conditions.
- Calibration changes to address engine speed undershoot/overshoot during clutch disengagement when coming to a stop **(manual transmission only)**.
- Start fuel and transient fuel calibration change for improved drivability robustness.
- Purge calibration changes for a more robust purge volume result at altitude.
- ICFC (Individual Cylinder Fuel Control) calibration changes for improved fueling offset accuracy.**
- Calibration improvements for non-adaptive cruise control equipped vehicles.

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 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 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-MU	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 if the dealer finds a software update 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