



**NUMBER:** 18-006-18

**GROUP:** 18 - Vehicle Performance

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**THIS BULLETIN SUPERSEDES SERVICE BULLETINS 18-061-17, DATED JUNE 24, 2017, 21-009-15 REV. A, DATED MARCH 31, 2015 AND 21-020-15, DATED MARCH 31, 2015 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **\*\*ASTERISKS\*\*** AND INCLUDE THE ADDITION OF LATAM AND APAC MARKETS, LX VEHICLES, 6.4L ENGINE AND 8HP70 TRANSMISSION, SOFTWARE ENHANCEMENTS AND REVISED LOPS.**

**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: Powertrain and Transmission Diagnostic and System Enhancements

***OVERVIEW:***

This bulletin involves reprogramming the Powertrain Control Module (PCM) and Transmission Control Module (TCM) with the latest available softwares.

***MODELS:***

<b>**2015</b>	(LX)	Chrysler 300 <b>**</b>
2015	(LD)	Dodge Charger
2015	(LA)	Dodge Challenger

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

**NOTE:** This bulletin applies to vehicles equipped with a **\*\*6.4L V8 SRT Hemi MDS Engine (Sales Code ESG) with an 8HP70 Automatic Transmission (Sales Code DFK)\*\*** or a **6.2L Supercharged Hemi V8 SRT Engine (Sales Code ESD)** and an **8-Spd Auto HP90 Transmission (Sales Code DFE)** or a **6-Speed Manual Tremec Transmission (Sales Code DEC)**.

**SYMPTOM/CONDITION:**

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

- P0456 - EVAP System Small Leak (**Sales Codes ESD with DFE or DEC**).
- U1424 - Implausible Engine Torque Signal Received (**Sales Codes ESD with DFE or DEC**).
- P0335 - Crankshaft Position Sensor Circuit (**Sales Codes ESD with DFE or DEC**).
- P0339 - Crankshaft Position Sensor Intermittent (**Sales Codes ESD with DFE or DEC**).
- P2299 - Brake Pedal Position/Accelerator Pedal Position Incompatible (**Sales Codes ESD with DFE or DEC**).
- P2227 - Barometric Pressure Circuit Performance (**Sales Codes ESD with DFE or DEC**).
- P0300 - Multiple Cylinder Misfire (**Sales Codes ESD with DEC Only**).
- P1613 - Turbocharger/Supercharger Boost Pressure Sensor/Mass Air Flow Sensor Correlation (**Sales Codes ESD with DFE or DEC**).
- P1217 - Active Exhaust Valve 1 Performance (**Sales Codes ESD with DFE or DEC**).
- P121B - Active Exhaust Valve 2 Performance (**Sales Codes ESD with DFE or DEC**).
- P0513 - Invalid Skim Key (**Sales Codes ESD with DFE or DEC**).

**NOTE: DTC P0513 is set during remote starting the vehicle and nearly simultaneously pressing the key fob button against the Keyless Ignition Node (KIN) causing an engine stall.**

The following software enhancements are available:

- **\*\*Intake air sensor accuracy calibrations.**
- **Corrects TCM Signal Not Available messages causing invalid shift responses.\*\***
- **Reduction in reverse gear lockout speed from 16 kph to 5 kph (10 mph to 3 mph) to improve MTX transmission durability (Sales Codes ESD with DEC only).**
- **EAOCI (Electronic Automatic Oil Change Indicator) calibration change to notify driver of need to change oil sooner if the vehicle is being driven aggressively and later if vehicle is being driven more gently (Sales Codes ESD with DFE or DEC).**

This software also enables freeze frame/failure records to be stored for the following DTCs:

- P0102 - MAF sensor circuit shorted to ground (**Sales Codes ESD with DFE or DEC**).
- P0103 - MAF Sensor Circuit shorted High (**Sales Codes ESD with DFE or DEC**).
- P0607 - ECU Internal Performance (**Sales Codes ESD with DFE or DEC**).
- P060E - Level 2 TPS Sensor Coherency Check Has Failed (**Sales Codes ESD with DFE or DEC**).
- P1610 - Supercharger Bypass Valve Position Sensor 1 Circuit Low (**Sales Codes ESD with DFE or DEC**).
- P1611 - Supercharger Bypass Valve Position Sensor 1 Circuit High (**Sales Codes ESD with DFE or DEC**).
- P1616 - Supercharger Bypass Valve Position Sensor 2 Circuit Low (**Sales Codes ESD with DFE or DEC**).
- P1617 - Supercharger Bypass Valve Position Sensor 2 Circuit High (**Sales Codes ESD with DFE or DEC**).
- P1620 - Supercharger Bypass Valve Control Open Circuit (**Sales Codes ESD with DFE or DEC**).
- P1627 - Supercharger Bypass Valve Position Sensor 1/2 Correlation (**Sales Codes ESD with DFE or DEC**).
- P162A - Supercharger Bypass Valve Actuator Control System - Max PWM Exceeded - (Pulse Width Modulated) (**Sales Codes ESD with DFE or DEC**).
- P162C - Supercharger Bypass Valve Control Circuit (**Sales Codes ESD with DFE or DEC**).

In addition, customers may also notice one or more of the following:

- **\*\*Inconsistent 1-2 upshifts when first shifting after a cold start or in colder ambient temperatures (Sales Codes ESG with DFK).**
- **Harsh 1-2 upshifts during normal driving (Sales Codes ESG with DFK).**
- **Delayed engagement when shifting from reverse to drive (Sales Codes ESG with DFK).**
- **Transmission will not upshift during Wide Open Throttle (WOT) acceleration (Sales Codes ESD with DFE).**
- **Harsh or inconsistent coasting downshifts (Sales Codes ESD with DFE).**
- **Transmission will not shift into 7th gear during high speed driving (Sales Codes ESD with DFE).**
- **Inconsistent or busy shifts during stop and go traffic (Sales Codes ESD with DFE).**
- **Inconsistent gear shift patterns when driving on grades (Sales Codes ESD with DFE).**
- **MIL illumination during ABS activated stops with DTC P1DCD - TCM Monitoring Processor Performance, Multiple Clutches Locked Up (Sales Codes ESD with DFE).**
- **Harsh or inconsistent coasting 4-3 downshift (Sales Codes ESG with DFK).**
- **Harsh or inconsistent gear engagement when shifting to drive or reverse (Sales Codes ESG with DFK).**
- **IPC shows the incorrect gear when in manual mode (Sales Codes ESG with DFK).**
- **Harsh or inconsistent shifts during acceleration from closed throttle (Sales Codes ESG with DFK).**
- **Inconsistent gear shift patterns when driving on grades (Sales Codes ESG with DFK).**
- **Inconsistent release of Hill Start Assist during acceleration (Sales Codes ESG with DFK).**
- **Transmission upshifts on sweeping curves under track driving conditions (Sales Codes ESG with DFK).\*\***
- **Slight spark knock during aggressive high speed driving which may slightly inhibit vehicle performance (Sales Codes ESD with DFE or DEC).**
- **With the Instrument Panel Cluster (IPC) set on metric units, they are unable to accurately increase or decrease the cruise control set speed using the resume or set buttons. Instead of changing vehicle speed by 1 kph (0.6 mph) when pressing the buttons, the speed will increase approximately 1.6 kph (1 mph) (Sales Codes ESD with DFE or DEC).**

### **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 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 or if the technician finds any of the DTCs, perform the Repair Procedure.

### **REPAIR PROCEDURE:**

**NOTE: The Transmission Control Module (TCM) will also be updated to the latest available software during this software update.**

**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/TCM 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.

**NOTE: Do not clear the adaptive memory cells in the TCM. Clearing the memory cells may cause the transmission to not shift smoothly until they can be fully relearned.**

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

Labor Operation No:	Description	Skill Category	Amount
**18-19-06-UM	Modules, Powertrain Control (PCM) & Transmission Control (TCM) - Reprogram <b>(LA and LD Only)</b> (0 - Introduction)	1 - Engine Repair and Performance	0.3 Hrs.
18-19-05-9B	Module, Transmission Control (TCM) - Reprogram <b>(LX Only)</b> (0 - Introduction)	2 - Automatic Transmission	0.2 Hrs.**

**NOTE: The expected completion time for the flash download portion of this procedure is approximately 3 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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