

GROUP: Vehicle Performance

DATE: December 15, 2016

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-009-16 REV. B, DATED AUGUST 08, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS** AND INCLUDE UPDATED CALIBRATION ENHANCEMENTS, DIAGNOSTIC TROUBLE CODES (DTCs) UNDER SYMPTOM/CONDITION 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: Powertrain Diagnostic and System Improvements

OVERVIEW:

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

MODELS:

2016 (PF) Dodge Dart

- NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA.
- NOTE: This bulletin applies to vehicles equipped with a 2.4L Engine (Sales Codes ED6 or ED8).

SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find the following DTCs set in the PCM memory:

- **U1504 Implausible Message Data Length Received From Steering Angle Sensor.
- P0128 Thermostat Rationality.
- P0340 Camshaft Position Sensor Circuit Bank 1 Sensor 1.**
- P0335 Crankshaft Position Sensor Circuit.
- P1066 Cylinder 1 Oil Supply Solenoid Valve Switch Off Time Out Of Range.
- P1068 Cylinder 2 Oil Supply Solenoid Valve Switch Off Time Out Of Range.
- P106A Cylinder 3 Oil Supply Solenoid Valve Switch Off Time Out Of Range.
- P106C Cylinder 4 Oil Supply Solenoid Valve Switch Off Time Out Of Range.
- P1185 General Pressure Sensor Correlation.
- P050D Cold Start Rough Idle.
- P0456 Evap System Small Leak.
- P0133 O2 Sensor 1/1 Slow Response (additional enhancements).
- P2610 PCM Internal Engine Off Timer Performance.
- P1607 PCM Internal Shutdown Timer Rationality.

In addition to the above DTCs, this software release also includes the following:

- **Calibration update to allow the throttle body to be cycled while the engine is off, for diagnostic purposes.
- Calibration update to the catalyst temperature protection.**
- A "Clunk feeling" when depressing the gas pedal after a coasting maneuver when Decel Fuel Shut Off (DFSO) is enabled and is exiting during pedal tip-in.
- False reading that the engine is overheating based on the engine oil temp gauge read out.
- Improved ambient temperature sensor diagnostics during sunload.
- Disable misfire monitor when P0335 (Crankshaft Position Sensor Circuit) is present.
- Engine oil temperature gauge level recalibration to avoid the misperception of an engine overheating condition.

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 above or if the technician finds any of the listed DTCs, perform the Repair Procedure.

REPAIR PROCEDURE:

- NOTE: The Transmission Control Module (TCM) must be updated to the latest available software at the conclusion of this repair procedure. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the TCM software.
- 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.
- 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.
- 3. Verify the TCM is programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the TCM software.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-06-PM	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 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