

**NUMBER:** 18-023-16 REV. A

**GROUP:** Vehicle Performance

**DATE:** May 18, 2016

This bulletin is supplied as technical information only and is not an authorization for repair. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without written permission of FCA US LLC.

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-023-16 DATED MARCH 11, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDES UPDATED DIAGNOSTIC TROUBLE CODES (DTCs) FOR 2015 UF VEHICLE AND LABOR OPERATION.

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 15-012. ALL APPLICABLE SOLD AND UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

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: 2.4L Powertrain Diagnostic and System Improvements

### **OVERVIEW:**

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

### **MODELS:**

2013 - 2015	(PF)	Dodge Dart	
2015	(UF)	Chrysler 200	

NOTE: This bulletin applies to vehicles equipped with a 2.4L Engine (Sales Codes ED6 or ED8).

#### SYMPTOM/CONDITION:

A small number of customers may experience a Malfunction Indicator Lamp (MIL) illumination or one or more of the following conditions. Upon further investigation the technician may find the following Diagnostic Trouble Codes (DTCs) set in the PCM memory:

# 2015 UF Vehicles with (Sales Codes ED6, ED8)

- \*\*P050D Cold Start Rough Idle.
- P0335 Crankshaft Position Sensor Circuit.
- P1607 PCM Internal Shutdown Timer Rationality.
- P0133 O2 Sensor 1/1 Slow Response.
- P0456 Evap System Small Leak.\*\*
- P0480 Cooling Fan 1 Control Circuit/Open.
- U0402 Implausible Data Received From TCM.
- P2172 High Airflow/Vacuum Leak Detected.
- P1D73 AGS Performance.
- U0140 Lost Communication With Body Control Module.
- P0441 Evap Purge System Performance.
- P0116 Engine Coolant Temperature Sensor 1 Performance.

In addition to the DTCs above the following improvements have been made:

- Engine Startup Flare and Idle Surge.
- Improved vehicle acceleration.

## 2015 PF Vehicles with (Sales Codes ED6, ED8)

- P050D Cold Start Rough Idle.
- P0133 O2 Sensor 1/1 Slow Response.
- P0456 Evap System Small Leak.
- P219A Bank 1 Air-Fuel Ratio Imbalance.
- P2172 High Airflow/Vacuum Leak Detected.
- P1D73 AGS Performance.
- U0140 Lost Communication With Body Control Module.
- P0116 Engine Coolant Temperature Sensor 1 Performance.
- P050B Cold Start Ignition Timing Performance.
- P061A Level 2 Torque Performance.
- P2172 High Airflow/Vacuum Leak Detected (Instantaneous Accumulation).

In addition to the DTCs above the following improvements have been made:

- Low Idle Speed After Cold Start between -10°C to 0°C (14°F to 32°F).
- Cold Idle Surge With AC Engaged.
- Improve cabin warm up in cold weather, when the vehicle is in park or neutral and the temperature is between -12°C to 4.5°C (10°F to 40°F).

### 2013-2014 PF Vehicles (Sales Codes ED6)

- P0456 Evap System Small Leak.
- P219A Bank 1 Air-Fuel Ratio Imbalance.
- P2251 O2 Sensor 1/1 Negative Current Control Circuit Open.
- P106A Cylinder 3 Oil Supply Solenoid Valve Switch Off Time Out Of Range.
- P2172 High Airflow/Vacuum Leak Detected.
- P1D73 AGS Performance.
- U0140 Lost Communication With Body Control Module.

### **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all vehicle 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 a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. For all other customers that describe the symptom/condition, or if the technician finds any of the DTCs listed above 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.

NOTE: If the PCM already has the latest software, use inspection LOP 18-19-06-FA to close the active RRT.

- 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 allows 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-FA	Module, Powertrain Control (PCM) - Inspection Only (0 - Introduction)	1 - Engine Repair and Performance	0.2 Hrs
**18-19-06-JV	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