

**NUMBER:** 18-026-17

**GROUP:** Vehicle Performance

**DATE:** March 03, 2017

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 18-116-16, DATED NOVEMBER 04, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE UPDATED BUILD DATE, ADDITIONAL DIAGNOSTIC TROUBLE CODES (DTCs), ADDITION OF SYMPTOM/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: Diagnostic And System Improvements

#### **OVERVIEW:**

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

# **MODELS:**

2017 (BF) FIAT 500L

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

NOTE: This bulletin applies to vehicles built on or before \*\*December 05, 2016 (MDH 1205XX)\*\* equipped with a 1.4L I4 Multiair Turbo Engine (Sales Code EAM).

# SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find that the following DTCs have been set:

- \*\*P0141-00 O2 Sensor 1/2 Heater Performance.
- P1523-00 VVA Low Oil Pressure.
- 1524-00 Oil Pressure Out Of Range Camshaft Advance/Retard Disabled.\*\*
- P0000-00 will be displayed but should really be displaying P0326-00 (Knock Sensor 1 Circuit Performance).

\*\*The following improvement is included in this update:

 Purge control improvements made to limit the duty cycles when refueling with engine running.\*\*

### **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 DTC, 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.

# NOTE: Follow all screen prompts that apply to the vehicle.

- 2. Is the vehicle equipped with a manual transmission?
  - a. YES >>> Fully depress the clutch pedal and then release it. Push OK to continue.
  - b. NO >>> Push OK to continue.
- 3. Is the vehicle equipped with cruise control?
  - a. YES >>> Depress cruise on/off switch until the cruise indicator in the cluster illuminates and push OK to continue.
  - b. NO >>> Push OK to continue.
- 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- 18-026-17

# **POLICY:**

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

| Labor Operation<br>No: | Description  | Skill Category                       | Amount   |
|------------------------|--|--------------------------------------|----------|
| **18-19-06-QR**        | Module, Powertrain<br>Control (PCM) -<br>Reprogram<br>(0 - Introduction) | 1 - Engine Repair<br>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    |