



**NUMBER:** 18-032-15 REV. B

**GROUP:** Vehicle Performance

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**THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-032-15 REV. A, DATED APRIL 29, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **\*\*ASTERISKS\*\*** AND INCLUDE ADDITIONAL SYMPTOMS.**

**HELP USING THE wiTECH DIAGNOSTIC APPLICATION FOR FLASHING AN ECU IS AVAILABLE BY SELECTING “HELP” THEN “HELP CONTENTS” AT THE TOP OF THE wiTECH DIAGNOSTIC APPLICATION WINDOW.**

**\*\*THE wiTECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.\*\***

**SUBJECT:**

Flash: 1.4L Diagnostic And System Improvements

**OVERVIEW:**

This bulletin involves selectively erasing and reprogramming the Powertrain Control Module (PCM) with new software.

**MODELS:**

2015 (BF) Fiat 500L

**NOTE: This bulletin applies to vehicles built on or after October 13, 2014 (MDH 1013XX) and on or before March 23, 2015 (MDH 0323XX) equipped with a 1.4L engine (Sales Code EAM).**

**SYMPTOM/CONDITION:**

A small number of customers may experience a crank no start condition in extreme cold temperatures of -4°F (-20°C) partially due to the available fuel blend conditions. They may also experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the Technician may find that Diagnostic Trouble Code P0141 - O2 SENSOR 1/2 HEATER PERFORMANCE has been set in the PCM.

**\*\*Additional DTC Diagnostic Improvements.\*\***

- **\*\*P1046 - Cylinder 1 Oil Supply Solenoid Valve Overcurrent.\*\***
- **\*\*P1048 - Cylinder 2 Oil Supply Solenoid Valve Overcurrent.\*\***
- **\*\*P104A - Cylinder 3 Oil Supply Solenoid Valve Overcurrent.\*\***
- **\*\*P104C - Cylinder 4 Oil Supply Solenoid Valve Overcurrent.\*\***

**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 the customer describes the symptom/condition 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 "HELP" tab on the upper portion of the wiTECH window, then "HELP CONTENTS." This will open the Welcome to wiTECH Help screen where help topics can be selected.
2. Is vehicle equipped with a manual transmission?
  - a. Yes >>> DTC P1302 - Transmission Self Learning will be present. **Depress clutch pedal fully to allow DTC to store**, proceed to [Step #4](#).
  - b. No >>> DTC P1302 - Transmission Self Learning will be stored, proceed to [Step #4](#).
3. Perform Cruise Control Learn Procedure.
  - a. Turn Ignition Key to the OFF/LOCK position for 10 seconds to allow the module to power down.
  - b. Turn Ignition Key to the ON/RUN position.
  - c. Press, then release the Cruise ON/OFF button on the steering wheel.
  - d. Start Engine.
  - e. Press the Cruise ON/OFF button to verify that the Cruise indicator illuminates on the cluster.

**NOTE: After PCM reprogramming, the following must be performed:**

4. Clear any DTCs that may have been set in any modules 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-CH	Module, Powertrain Control (PCM) - Reprogram (0 - Introduction)	8 - Engine Performance	0.3 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, than 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