



**NUMBER:** 18-003-16

**GROUP:** Vehicle Performance

**DATE:** January 07, 2016

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**THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 18-010-15 REV. D, DATED OCTOBER 08, 2015, TECHNICAL SERVICE BULLETIN 18-069-14, DATED NOVEMBER 26, 2014, AND TECHNICAL SERVICE BULLETIN 18-048-14, DATED AUGUST 29, 2014, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDES UPDATED SYMPTOMS/CONDITIONS FOR 2014 MODELS AND A NEW LOP.**

**TECHNICAL SERVICE BULLETIN 18-010-15 DATED JANUARY 23, 2015 ALSO RELEASED RAPID RESPONSE TRANSMITTAL (RRT) 15-010. 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.**

**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 reprogramming the Powertrain Control Module (PCM) with the latest software.

***MODELS:***

2014 - 2015

(FF)

Fiat 500

**NOTE: This bulletin applies to vehicles equipped with the 1.4L I4 Multiair 16V Engine (sales code EAB) or 1.4L I4 Multiair Turbo Engine (sales code EAF).**

***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):

- \*\*P0141 - Oxygen Sensor 1/2 Heater Performance.
- Improved reverse lamp activation time.\*\*
- Cranks fast, as if no compression.
- P1524 - Oil Pressure Out Of Range - Camshaft Advance/Retard Disabled (2014 Vehicles only).
- P1128 - Closed Loop Fueling Not Achieved - Bank 1 Upstream (2014 Vehicles only).
- 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.
- P061A Internal Control Module Torque Performance (2014 Vehicles only).
- Improved cold weather starting, below -4 °F (-20 °C).

The following powertrain system improvement/enhancement has been released to improve the accuracy of Mode 6 data parameters in generic scan tools.

***DIAGNOSIS:***

Using a scan tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If DTCs other than the one listed above are present, record them 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: 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. Inspect/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.

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

**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.
4. Clear any DTCs that may have been set in all 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:**

| <b>Labor Operation No:</b> | <b>Description</b>  | <b>Skill Category</b>  | <b>Amount</b> |
|----------------------------|---|------------------------|---------------|
| 18-19-06-EA                | Module, Powertrain Control (PCM) - Inspection<br>(0 - Introduction) | 8 - Engine Performance | 0.2 Hrs.      |
| **18-19-06-GZ**            | Module, Powertrain Control (PCM) - Reprogram<br>(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 a 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    |