



NUMBER: 18-014-12

GROUP: Vehicle Performance

DATE: March 21, 2012

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-013-11 REV. A , DATED JUNE 29, 2011, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS AND INCLUDES NEW SOFTWARE THAT ALL VEHICLES MUST BE PROGRAMMED WITH, AND A ADDITIONAL SYMPTOM/CONDITIONS.**

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 LEVEL MUST BE AT RELEASE 12.02 OR HIGHER TO PERFORM THIS PROCEDURE.

SUBJECT:

Flash: MIL Illumination Or Cancel Cruise Control Bump Feeling Or Chime With Message In Cluster - Coolant Overtemp Turn Ignition Off

OVERVIEW:

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

MODELS:

2012 (FF) Fiat 500

NOTE: **This bulletin applies to vehicles equipped with a 1.4L engine (sales code EAB) built before March 12, 2012 (MDH 0312XX).**

SYMPTOM/CONDITION:

The customer may experience any of the following:

- i. **Chime and message in the instrument cluster "Coolant Overtemp Turn Ignition Off" **
- ii. **A bump feeling when canceling the Cruise Control Operation with the cancel switch or brake pedal**
- iii. MIL illumination

The Technician may discover that any of the following Diagnostic Trouble Codes (DTC) are set (active or stored):

- a. P0300 - Multiple Cylinder Misfire
- b. P0301 - Cylinder 1 Misfire

- c. P0302 - Cylinder 2 Misfire
- d. P0303 - Cylinder 3 Misfire
- e. P0304 - Cylinder 4 Misfire
- f. P1239 - Engine Oil Temperature Too Low
- g. P0298 - Engine Oil Temperature Too High
- h. P1523 - VVA Low Oil Pressure
- i. P1522 - Oil Viscosity Out of Range
- j. P1C60 - Oil Viscosity Sensor Circuit High
- k. P1C5F - Oil Viscosity Sensor Circuit Low
- l. P1D2F - Oil Viscosity Sensor Over Temperature
- m. P1C61 - Oil Viscosity Sensor Performance
- n. P1D31 - Oil Viscosity Too High
- o. P1D30 - Oil Viscosity Too Low
- p. **P0339 - Crankshaft Position Sensor Intermittent**
- q. **P0139 - O2 Sensor 1/2 Slow Response**

Updating the PCM software will correct the conditions listed above.

DIAGNOSIS:

Using a Scan Tool (wiTECH w/Smart Cable 410) and appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If DTC's are present other than the ones listed above 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 the DTC, perform the Repair Procedure.

SPECIAL TOOLS/EQUIPMENT REQUIRED:

Qty.	Part No.	Description
1	410	wiTECH Smart Cable

NOTE: The smart cable must be used to communicate and flash the Fiat 500. To obtain a smart cable, contact the wiTECH help desk at 1-888-948-3241.

PARTS REQUIRED:

Qty.	Part No.	Description
1	04275086AB	Label, Authorized Modification

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. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT, Refer To Group 8 - Electrical > Electronic Control Modules - Service Information > Module - Powertrain Control > Standard Procedures > PCM/ECM Programming. After PCM reprogramming, the following must be performed:
 - a. Clear any DTC's that may have been set in other modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow the tech to clear them.
2. Key "Off" the ignition for a minimum of **10 seconds** to allow module to update and power down.
3. Key "On" the ignition.
4. Using wiTECH at the home screen select PCM.
5. Is vehicle equipped with a manual transmission?
 - a. Yes >>> DTC P1302 - Transmission Self Learning will be present. **Depress clutch fully to allow DTC to store**, proceed to [Step #6](#).
 - b. No >>> DTC P1302 - Transmission Self Learning will be stored, proceed to [Step #6](#).
6. Perform Cruise Control Learn by Pressing and holding the ON/OFF button on steering wheel until cruise indicator illuminates on the instrument panel.
7. Key "Off" ignition for a minimum of 10 seconds to allow module to update and power down.
8. Using wiTECH, clear any DTC's that may have been set in all modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow the tech to clear them.
9. Start vehicle and verify No DTCs are set.
10. Did vehicle arrive at the Dealer with any of these DTC's; P0300 or P0301 or P0302 or P0303 or P0304 present in the PCM?
 - a. Yes >>> proceed to [Step #12](#).
 - b. No >>> proceed to [Step #11](#).
11. Did vehicle set any of these DTC's; P0300 or P0301 or P0302 or P0303 or P0304 during PCM reprogramming?
 - a. Yes >>> proceed to [Step #12](#).
 - b. No >>> proceed to [Step #15](#).
12. From the Misc. Functions Tab Under PCM - Select "Clear Misfire TLC".

NOTE: Only perform steps 13 and 14, if DTC P0300 or P0301 or P0302 or P0303 or P0304 was set in the PCM.

13. Warm engine until a minimum coolant temperature of 60° C (140° F) is reached.

NOTE: Temperature can be visually verified on cluster. 3 fully illuminated temperature indicator bars will equal desired temperature.

14. After temperature is reached, perform a Wide Open Throttle (WOT) stab of accelerator pedal reaching a minimum of 6000 RPM and then release Pedal. TLC learn procedure is complete.
15. Type the necessary information on the "Authorized Modification Label" and attach it near the VECI label.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
18-19-06-M1	Module, Powertrain Control - Reprogram (C)	0.3 Hrs.

FAILURE CODE:

FM	Flash Module
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