

# 2012-Current FIAT 500 ABARTH / 500T 1.4L MultiAir Turbo MADNESS Autoworks MAXPower ECM Module Installation Instructions



#### SAFETY INFORMATION

The MADNESS product you have purchased is a high performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read all the following safety information.

#### **SAFETY GUIDELINES:**

- 1. Do not exceed legal speed limits on public streets. Use any performance speed capabilities of this product only in legally sanctioned racing environments expressly for this purpose.
- 2. Do not operate the device while driving. Perform all adjustments while stopped. Changing a setting while driving can interfere with your attention to roadway conditions.
- 3. Some features may not function on all vehicle models. Check a newly installed device for all features you intend to use. Do not rely on their working without checking first.

All MADNESS MAXPower ECM modules are built to operate with OEM ECU tunes. MADNESS Autoworks updates its active products (i.e. those currently being manufactured) to work effectively with updated OEM tunes. However, this process can take some time, as MADNESS Autoworks is not always aware of calibration changes made by OEM manufacturers.

If you have used another tuner/programmer on your vehicle, you will need to revert back to stock and remove the device before using the MADNESS Autoworks MAXPower ECM.

**Trailure** The return to stock may result in PCM failure or engine damage.

Programming your vehicle may expose existing defects in your vehicle's PCM that could disable your vehicle.

#### Introduction:

Thank you for purchasing the MADNESS Autoworks MAXPower ECM. The MAXPower ECM has been developed and produced to ensure the best performance for the life of your vehicle. If you have any questions, please contact MADNESS Autoworks. We will be very happy to answer your questions about our complete product line.

The MAXPower ECM is a "piggy-back" Engine Control Module (ECM) that offers additional features not available on a stock engine. Since it is a "piggy-back" ECM, it uses all the factory data, and then enhances the factory settings to optimize your vehicles performance.

The MAXPower ECM offers a power increase over stock throughout the RPM range, but the power is most noticeable in midrange RPM's. This greatly improves drivability and performance.

The first thing you will notice is improved performance, especially if this is your first time driving a turbo vehicle with a performance module. You will experience more power, better throttle response, better passing and acceleration.

#### **IMPORTANT:**

Read all Safety, Warranty, and Installation Instructions before installing this product. Read through these instructions completely so that you understand each step prior to installation.

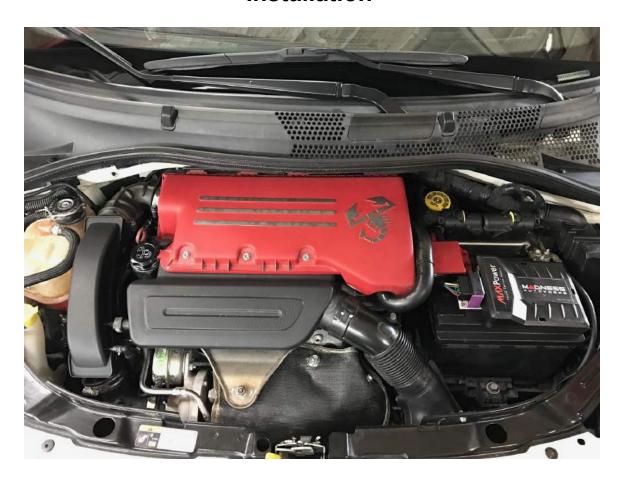
## **Tools Required:**

10mm Open Ended Wrench 13mm socket 10mm socket 6" extension Pliers and/or fastener pry tool O-ring picks

# **Supplied Items:**

- 1. MADNESS Autoworks MAXPower ECM Module
- 2. MAXPower Wiring Harness
- 3. Bypass Plug

# FIAT 500 ABARTH / 500T 1.4L MAXPower ECM Installation



# **Module Installation:**

The MAXPower ECM can be mounted to the top of the battery located on the driver's side of the engine compartment. Adhere the module using Velcro or double-sided tape, allowing enough harness movement for removal (if/when required.)

## **Harness Connections:**

Your MAXPower ECM is equipped with a harness that can be disconnected at the module itself. It is important to make sure that your MAXPower ECM and/or the bypass plug are always connected to the harness when the wiring harness is installed on the vehicle.

Not doing so may cause the vehicle to run improperly, and/or may trigger a Check Engine Light (CEL).

#### **Factory Airbox Removal:**

- 1. Disconnect the negative (black) terminal from the battery using a 10mm wrench and place the connection out of the way.
- 2. Loosen the 8mm hose clamp that connects the airbox coupler to the 2" turbo inlet.
- 3. Disconnect the vacuum lines from the stock intake tube.
- 4. Remove the 8mm bolt that secures the accordion tubing to the radiator core support.
- 5. Gently pry off the 3/4" PCV hose connected to the valve cover.
- 6. Lift-up and remove the airbox from the vehicle.
- 7. Using a pry tool remove the accordion tubing from the factory airbox and place aside. This will be reused with the MAXFlow Intake.







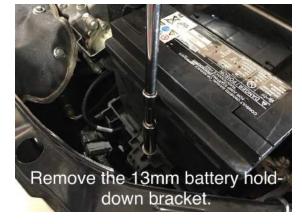


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#### **Boost Pressure Sensor Connection:**

Connect the supplied Boost Pressure sensor wiring harness to the main wiring harness in the engine compartment. To do this you must disconnect the stock wiring harness at the Boost Pressure sensor located under the battery tray on the main charge pipe. This will require removing the battery from the vehicle as well as the battery tray. Plug the supplied Boost Pressure sensor connector into the stock Boost Pressure sensor and the stock engine wiring harness connector into the supplied Boost Pressure sensor connector.

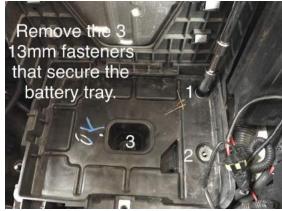


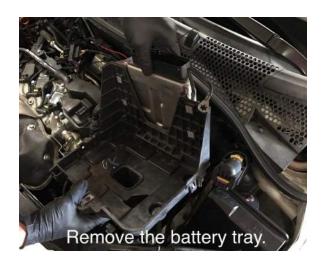














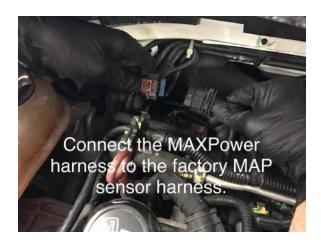


#### **Manifold Pressure Sensor Connection:**

Connect the supplied Manifold Pressure sensor wiring harness to the main wiring harness in the engine compartment. To do this you must disconnect the stock wiring harness at the Manifold Pressure sensor located on top of the engine (passengers side near firewall). Plug the supplied Manifold Pressure sensor connector into the stock Manifold Pressure sensor and the stock engine wiring harness connector into the supplied Manifold Pressure sensor connector.

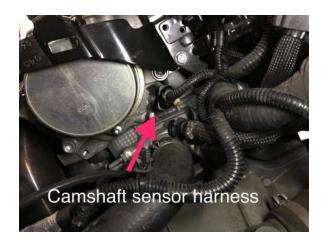




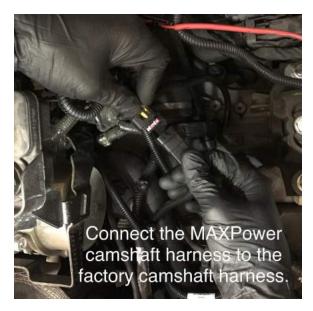


#### **Camshaft Sensor Connection:**

Connect the supplied Camshaft sensor wiring harness to the main wiring harness in the engine compartment. To do this you must disconnect the stock wiring harness at the Camshaft sensor located on the drivers side of the block under the round vacuum canister on the head. Plug the supplied Camshaft sensor connector into the stock Camshaft sensor and the stock engine wiring harness connector into the supplied Camshaft sensor connector.







# **Battery Power Supply Connections**:

Connect the supplied 12-volt power connections to the positive (red) and negative (black) battery terminals when reinstalling the battery in the vehicle.





# **Final Inspection and Operation:**

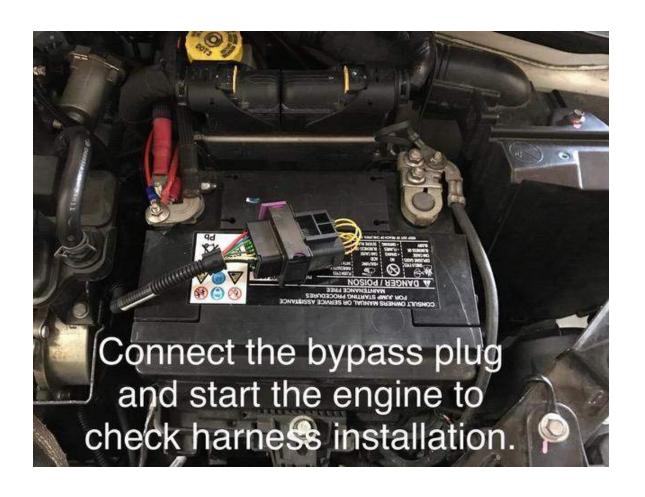
- 1. Recheck all connections, fittings and fasteners for a properly secure installation.
- 2. Before initial startup install the included bypass plug to test the wiring harness installation. Start the engine with the bypass connector installing on the harness and check for and CEL lights. If the car starts and drives normally proceed to next step. Should a CEL





light illuminate begin troubleshooting harness installation.

- 3. If step 2 is successful remove bypass plug and install MAXPower ECM.
- 4. The factory ECU will go through an adaptation phase with the MAXPower ECM. In general this process will take approximately 70 miles to complete, after completion the factory ECU and MAXPower ECM will be optimized to run together for maximum performance.



# **Warranty Information**

#### **LIMITED 3-YEAR WARRANTY:**

MADNESS Autoworks LLC, (hereafter "SELLER") gives Limited Warranty as to description for any product's purpose, productiveness, or any other matter of SELLER's product sold herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by SELLER and BUYER.

The Warranty is Limited to 3 Years from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the **SELLER** and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by MADNESS Autoworks.

Under no circumstances shall the **SELLER** be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

If the **BUYER** sends back a failed unit that is out of warranty and chooses to buy a refurbished unit, the refurbished unit will only carry a 90-day warranty. If the **BUYER** purchases a new unit at a predetermined discounted rate, it will have the standard 1-year warranty.

Under no circumstances will the **SELLER** be liable for any damage or expenses insured by reason of the use or sale of any such equipment.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE **BUYER** HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

# **Technical Support**

562.981.6800

To expedite your support call please have your Vehicle Information, Part Number, Serial Number, ready prior to calling Technical Support.