

# MADNESS

## AUTOWORKS

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**2017-Current FIAT 124 Spider 1.4L MultiAir Turbo  
MADNESS Autoworks MAXFlow Intake  
Installation Instructions & Manual**



## **SAFETY INFORMATION**

The MADNESS Autoworks 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 attempt to install the intake system while the engine is hot.

### **Introduction:**

Thank you for purchasing the MADNESS Autoworks MAXFlow Intake. The MAXFlow Intake 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 MAXFlow Intake is a high performance air intake system that offers increased performance not available on a stock engine.

The MAXFlow Intake offers a power increase over stock throughout the RPM range, but the power is most noticeable in mid-range RPM's. This greatly improves drivability and performance. 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.

**Note: MADNESS Autoworks strongly recommends that this system be installed by a professional mechanic.**

**Tools Required:**

10mm Open Ended Wrench  
10mm socket  
6" extension  
Ratchet  
Flathead screwdriver  
8mm Socket and/or nut-driver  
Pliers and/or fastener pry tool  
Silicone spray or Dish Soap/Water Mixture

**Supplied Items:**

1. BMC Carbon Canister **Part no. 275-BMC-CAN**
2. 2.5"-2.75" Straight Silicone Reducer (2) **Part no. 25-275-STRT-SIL**
3. 2"-2.5" Straight Silicone Reducer **Part no. 2-1.75-RDCR**
4. 3.25" Hose Clamps (1) **Part no. 5415K24**
5. 3" Hose Clamps (6) **Part no. 5415K22**
6. MAXFlow Passenger Side Induction **Pipe Part no. 25.MF.F124.PS**
7. MAXFlow Drivers Side Induction Pipe **Part no. 25.MF.F124.DS**
8. 3/8" Intake Vacuum Hose Assembly (3 connection)
9. 5/8" Intake Vacuum Hose/Barb Fitting Assembly (1)
10. M6 Vacuum Cap (1)
11. 1" Spring Loaded Hose Clamp (1)
12. M6 Fender Washer (1)

## FIAT 124 Spider 1.4L MAXFlow Intake Installation



### Intake Installation:

The MAXFlow Intake will replace the factory restrictive airbox system found on the 2017-Present FIAT 124 Spider.

### Factory Airbox Removal:

1. Disconnect the negative battery terminal using a 10mm socket/open end wrench. Pull the terminal from the negative post and tuck away.

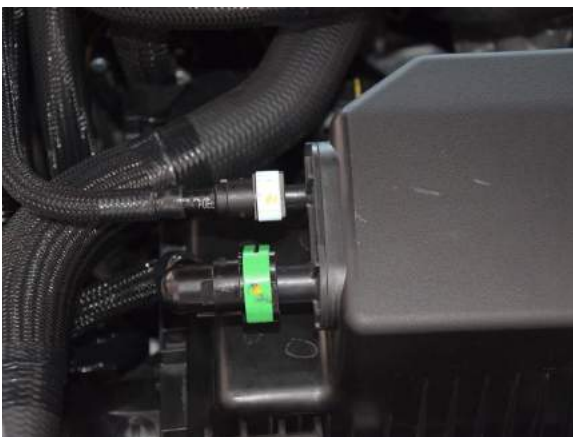




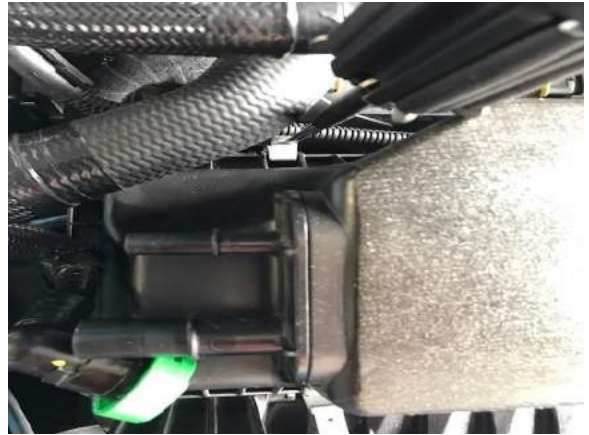
2. Remove engine cover by gently pulling up around the edge of the cover releasing the ball and socket mounts.



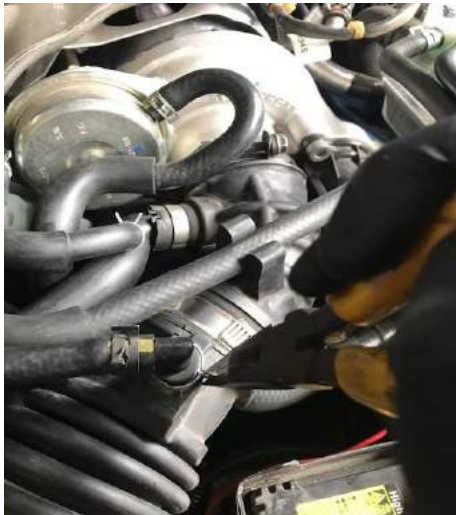
3. Remove the two breather hoses off the right side of the stock air box. Use a screwdriver to gently pull up the white and green tabs.



4. Release the two (2) upper airbox spring loaded clips to free the upper airbox from the lower airbox.



5. Using pliers release the tension from the hose clamp securing the 90-degree vacuum line to the accordion turbo hose. Remove the 90-degree fitting from the accordion pipe. Remove the second vacuum hose that is held to the accordion pipe show below.



6. Using pliers release the tension from the hose clamp securing manifold pressure sensor vacuum line from the molded crankcase tube. Remove the line from the tube.



7. Remove the 10mm bolt that secures the molded crankcase tube to the mounting bracket at the front of the motor.





8. Using pliers release the tension from the hose clamp securing Soft Crankcase  $\frac{3}{4}$ " molded line from the vacuum canister on the passenger's side of the engine.



9. Loosen the 8mm clamp that secures the accordion tube to the turbocharger. Remove the entire upper airbox and tubing assembly.





10. Separate the hose circled in red and put aside. We will reuse this later in the intake assembly.



11. Remove the 10mm bolt securing the lower airbox to the radiator core support. Put the bolt aside.



12. Separate the lower airbox inlet duct from the lower airbox assembly. Remove the 10mm nut that secures the lower airbox inlet duct from the box of the car. Remove the rubber isolator from the body this will not be reused.



13. Using a long flat head screwdriver reach down behind the ECU mounting bracket on the passenger's side and release the purple locking clip that secures the hard line to the charge pipe on the vehicle. Take the line and set it aside.



14. Using a regular flathead release the Blue/Green locking clip that secures the hard line to the vacuum box atop the valve cover. Take the line and set it aside.



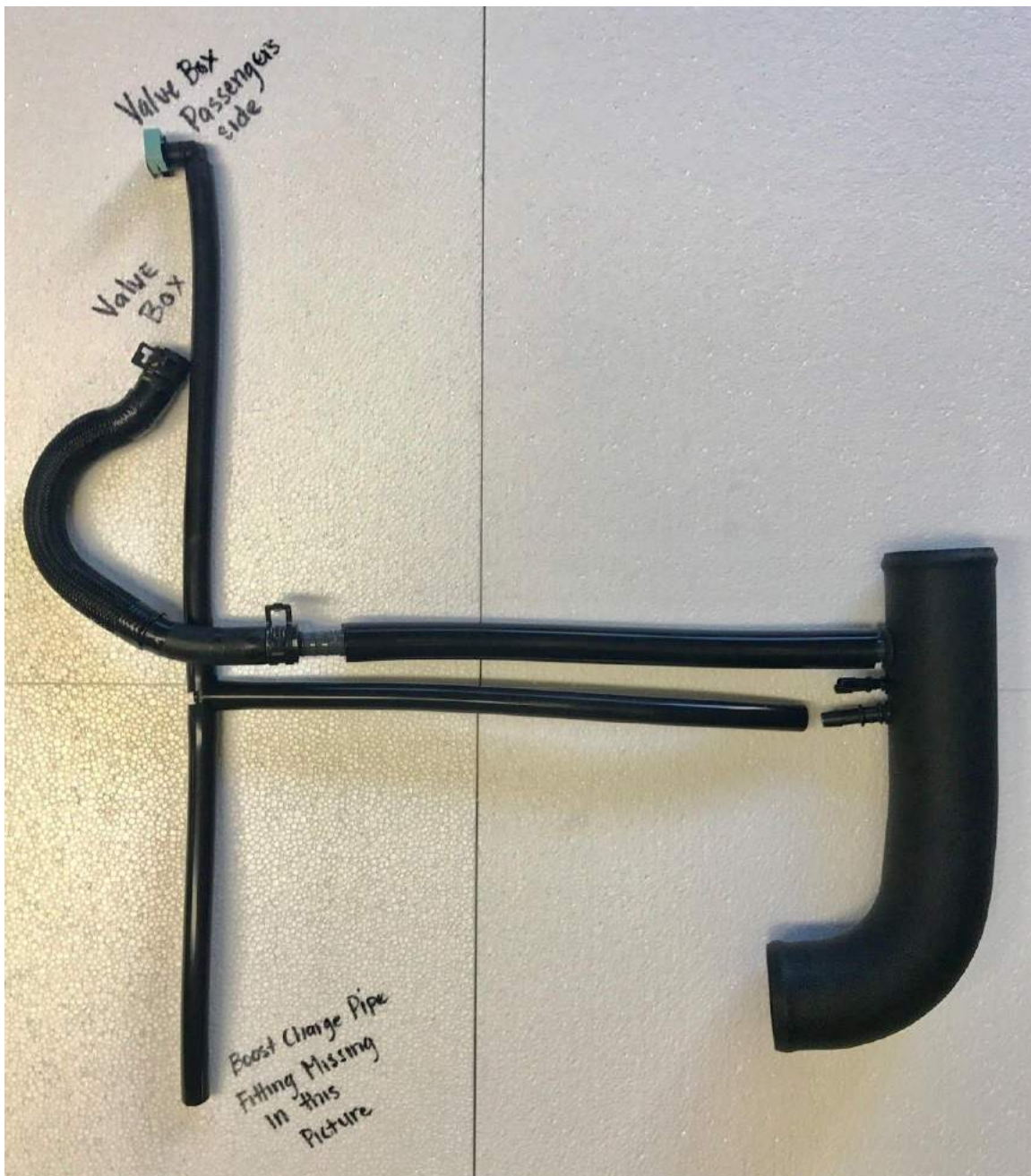


15. Take a heat gun or lighter and apply heat to the push to lock connections on both hard lines removed on steps 15 & 16 removing the locking connectors that we will reuse with the supplied 3/8" intake vacuum hose assembly (3 connection.) Make sure to twist these connections BEFORE you heat them to loosen them from the line. If you do this after you have heated the line it (line) will simply twist as the heating makes it malleable. With the line softened (from heating) wiggle the connectors free from the hard lines. Place the hard lines aside and take the connectors to a workbench to inset them into the 3/8" intake vacuum hose assembly (3 connection.)

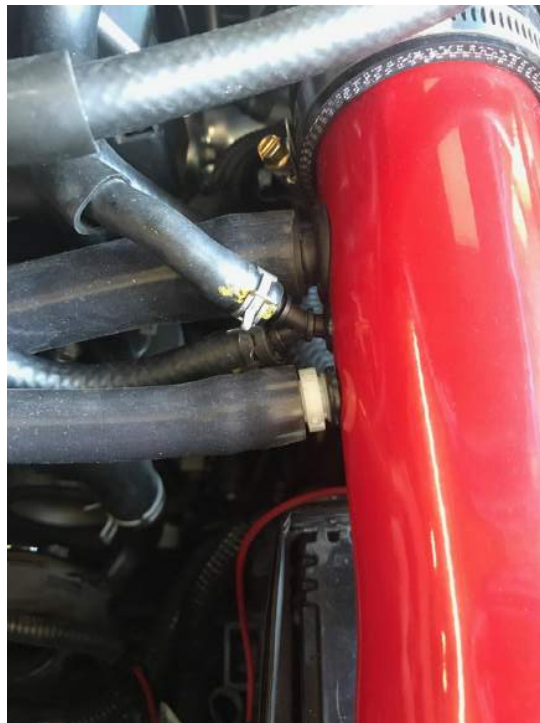


13. Take the push to lock fittings that you removed in step 16 and install them onto 3/8" intake vacuum hose assembly (3 connection) supplied with the MAXFlow intake. Use the following diagram below as a guide. Please note that the larger (purple) push to lock connector is not shown in the photo but is located on the line at the bottom left of the picture.

**NOTE:** The Y fitting shown on the driver's pipe on the RIGHT of the Diagram below accepts the factory vacuum lines disconnected in steps 5 & 6. See below for a close up shot of the connections at the driver's pipe.



14. With the 3/8" intake vacuum hose assembly (3 connection) now complete take it to the vehicle and route it to the factory connections as shown in the diagram on step 13. Make sure to secure these lines away from any moving parts.





15. We need to swap the factory vacuum lines from the connections on step 5 & 6 in order to give them enough slack to connect to the Y-fitting on the intake. Remove the short runs of vacuum line from each connection and swap them as show in the pictures below.



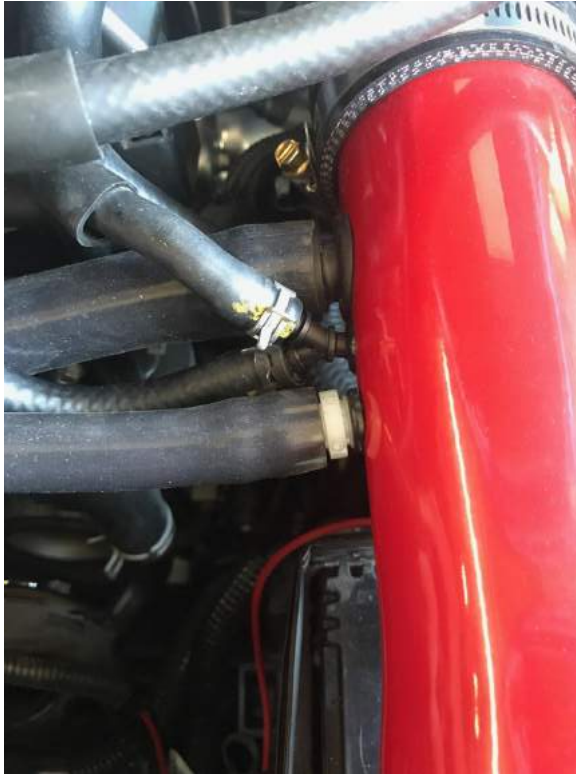
16. Remove the hard 90-degree elbow from the longer vacuum connection and put it (90-degree elbow) aside with your other stock parts, as it will not be reused.



17. After swapping the hoses lines will look like this. Install each hose to a dedicated port on the Y-Fitting on the drivers intake tube.



18. Connect the ends of the vacuum lines from step 17 to the Y-fitting on the driver side pipe.





19. Install the supplied vacuum cap onto the threaded battery hold-down post just under the drivers side pipe.



### **Pipe Installation:**

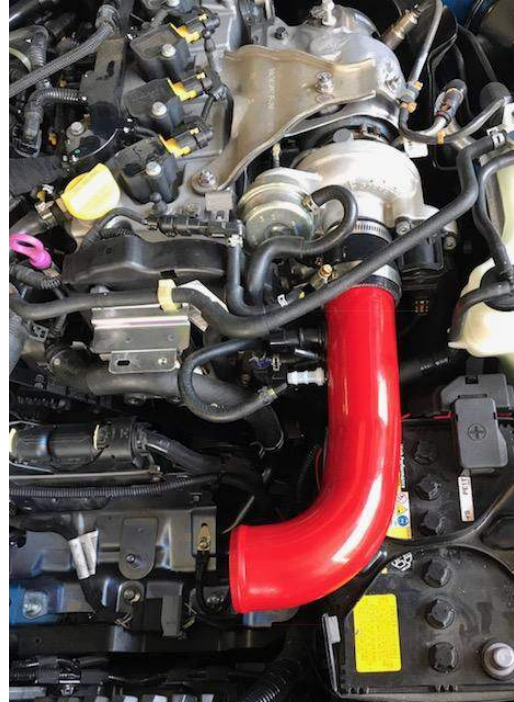
1. Remove the rubber seal from the passenger side factory air box and place it on the MAXFlow passenger intake tube.



2. Insert the MAXFlow passenger intake tube into the factory inlet duct making sure to slide the hose clamp into place on the inlet duct. Loosely tighten the hose clamp to secure the tube in place aligning the mounting bracket with the hole on the upper radiator core support. Take the supplied M6 washer and slide it onto the factory M6 bolt and hand tighten the bolt in place securing the bracket to the radiator core support.



3. Take the 2"-2.5" straight silicone reducer and apply a light coat of silicone spray. Slide the reducer onto the inlet side of the turbo orienting the clamps in such a way so you have access to tighten them. Then take the MAXFlow drivers side pipe and install it on the 2.5" inlet side of the silicone coupler.



4. Take the pair of 2.75"-2.5" straight silicone reducers with hose clamps and install them onto the carbon canister lightly tightening the 2.75" side. Make sure to lubricate these boots with silicone spray or dish soap/water mixture (lubricate VERY lightly.)





5. Take the canister and slide it onto both pipes. Make sure to orient the INLET side of the canister on the passenger's side pipe.



6. Lineup the canister and begin tightening the clamps working from the passenger's side towards the turbo. The hose clamps are 8mm.



7. Take the 5/8" Intake Vacuum Hose/Barb Fitting Assembly (1) and the factory hose we removed in step 10 and couple them together. On the 5/8" Intake Vacuum Hose/Barb Fitting Assembly (1) there are 2 barbs on each end of the hose. The shorter barb installs on the drivers side pipe near the turbocharger inlet while the longer barb installs on the factory hose removed in step 10. Use the supplier spring loaded hose clamp to secure the connection to the factory hose.

**NOTE:** We had to pull lines out from where we routed them to get access for clear photographs (picture below.) Rest assured enough line is provided to route lines cleanly and discretely.



8. Reinstall the engine cover and reconnect the negative terminal on the battery.

### **Final Inspection and Operation:**

1. Align the entire intake system for the best possible fitment. Once the intake has been properly fitted continue to tighten all nuts, bolts and clamps until snug.
2. Periodically, recheck the alignment of the intake system and make sure there is proper clearance around and along the length of the intake. Failure to follow proper maintenance procedures may cause damage to the intake and will void the warranty.
3. Start the engine and listen carefully for any odd noises, rattles and/or air leaks prior to taking it for a test drive. If any problems arise go back and check the vacuum lines, hoses and clamps that maybe causing leaks or rattles and correct the problem.
4. Check the filter for excessive dirt build up every 5,000 miles. Clean as needed only with the proper BMC Cleaning Kit. Failure to use the proper cleaning solution may damage the filter media inside the filter canister and void the warranty on the product.



## **Warranty Information:**

### **LIMITED 1-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 1 year 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.

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 SEVEN (7) 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, ready prior to calling Technical Support.**