



### **FITTING GUIDE** Fiat 500 Abarth 1.4 MVT Intercooler

The Direnza Fiat 500 Abarth MVT is a high performance aftermarket intercooler offering increased cooling and performance over the stock intercooler. The extra capacity along with revolutionary MVT technology gives lower output temperatures which result in power gains and more consistent power.

#### DISCLAIMER

- Allow the vehicle to cool completely prior to installation.
- We recommend that the intercooler is installed by a professional.
- Direnza is not responsible for any vehicle damage or personal injury due to installation errors, misuse or removal of Direnza products.
- Blue silicones for illustration purposes only.

#### **TOOLS REQUIRED**

- 8mm, 10mm, 14mm & 17mm Sockets
- T30 Socket
- Screwdriver

- Jack, Jack stands/Ramp or lift
- Socket extension

- Drill & drill bit
- 4mm allen key

- 17mm Spanner



# Contents

1x MVT Front Mount Intercooler
2x Intercooler Brackets
2x Crash Bar Spacers
4x Hard Pipes
6x Silicone Connector Pipes
12x Hose Clamps
3x Bolts

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1. Remove the 4x T30 Torx bolts from the top edge of the front bumper.



3. Remove 4x 8mm bolts under wheel arch (2 per side).



2. Remove the 3x T30 bolts and and 4x 10mm bolts from the underside of the bumper.



4. Remove 4mm allen bolt under wheel arch. Do this for both sides.



5. Carefully pull away front bumper.



6. REMEMBER! Unplug fog lights before removing bumper completely.





7. Undo 10mm bolt to remove intercooler bracket. (Drivers side RHD)



9. Intercooler bracket on the passenger is also used for the horn, place the horn in a safe place until later.



11. Remove front and rear Y pipes.



8. Remove 2x hose clamps from the OEM intercooler hoses. The intercooler can then be removed from the Y pipe. (Repeat steps 7 & 8 on both sides).

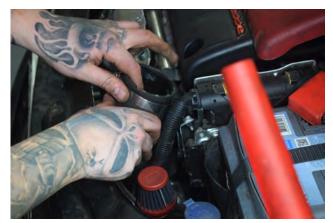


10. Undo 5x 10mm bolts from both the front and rear Y pipes and clamps from both hot side and cold side of intercooler hoses.



12. Loosen 7mm jubilee clip on top boost hose and remove from turbo. There is a handy gap underneath the headlight for access.





13. Also loosen 7mm jubilee clip on throttle body inlet hose and remove.



15. Remove the lower crash bar.



17. Once in place, drill a mounting hole in the upper crash bar, using the bracket on the MVT intercooler as a guide.



14. Remove 4x 17mm bolts and 1x 10mm bolt holding on lower crash bar. Repeat this on both sides.

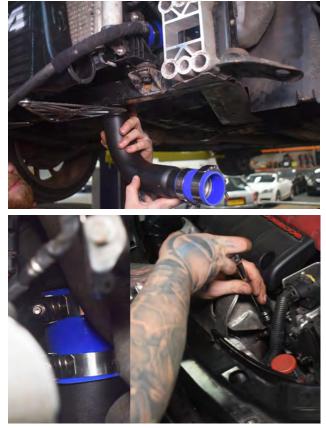


16. Place intercooler support brackets onto the MVT Intercooler and use the supplied 2x 13mm bolts to secure into place. Use 4x10mm bolt (from underside of bumper) to mock up the intercooler in the correct position.



18. Once drilled, secure the MVT to the upper crash bar using the 4mm allen bolt, nut and washer.





19. Place the largest silicone connector onto the largest end of the Direnza throttle body inlet pipe. Use 2x 75-67mm hose clamps to secure the silicone to the hard pipe and to the throttle body.

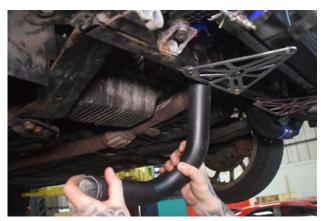


21. Use 2x silicone connectors to join the hard pipe to both the inlet pipe and the MVT intercooler. Use supplied clamps (62-54mm) to secure everything in place.



20. Place cold side hard pipe (Passenger side on RHD cars) into position on the rubber mounting points, as used by the standard intercooler.



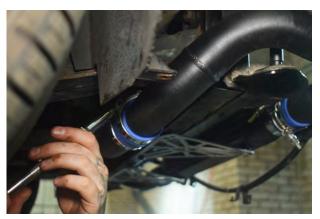


23. Place silicone connector and 2x clamps onto the Direnza hot side Turbo pipe and place into position - Push silicone over turbo connection.



24. Use the handy gap below the headlight to tighten the clamps on the turbo silicone.





25. On the hot side of the intercooler -Place hard pipe into rubber mounting point. Use connector pipe and clamps to secure this pipe to the MVT intercooler.



26. Connect the hot side hard pipe to the Turbo pipe using silicone connector and clamps.



19. The lower crash bar can now be reinstalled, place the Direnza spacers between crash bar and mounting point and tighten crash bar bolts.





28. Re-install horn using original intercooler mounting position.





29. Remember! The 4x 10mm bolts on the lower support bracket are also used for the bumper, remove these before the next step.



30. Place front bumper into position, reconnect fog lights and press sides into place. You can now put the 4x10mm bolts back in to secure bumper and lower support brackets for the MVT as well as the 3x T30 fittings.



31. Re-install 4x T30 Torx on the top edge of the bumper.

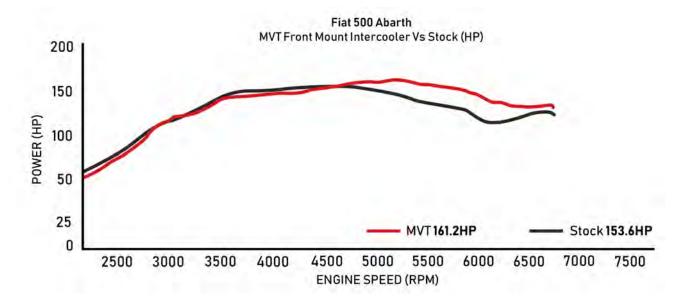
32. Install 2x 8mm bolt and 1x 4mm allen bolt from inside the wheel arch. Repeat this process on the other side. (As per removal).

33. You have successfully fitted your Direnza MVT Front Mount Intercooler Kit. Enjoy!

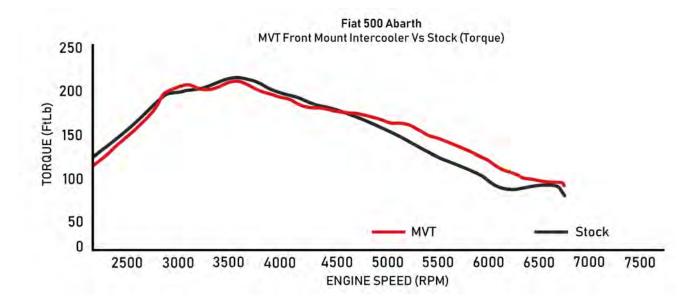


# Results

Vehicle info: MY2011 Fiat 500 Abarth, IHI Turbo (Manual Transmission).



With the Direnza MVT Intercooler, our Abarth 500 achieved 161.2Hp @5250rpm, a 7.6Hp increase over the stock system. The power curve is smoother and stronger, noticeably so after 4500rpm. Even bigger gains can be achieved if combined with accompanying modifications and an engine map.



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