



advanced FLOW engineering

Instruction Manual P/N: 46-20354-B

Make: FIAT Model: 124 Spider Year: 2017-2019 Engine: I4 - 1.4L (t)



- · Please read the entire instruction manual before proceeding.
- · Ensure all components listed are present.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- · Retain factory parts for future use.

Label	Qty.	Description	Part Number
Α	1	Tube, Hot Side, Upper	05-60920B
В	1	Tube, Hot Side, Lower	05-60953B
С	1	Tube, Cold Side, Upper	05-60921B
D	1	Tube, Cold Side, Lower	05-60954B
E	1	Coupling, Silicon Elbow: 2-1/2" x 45°	05-60939
F	1	Coupling, Silicon Reducer: 2-1/4" x 1-7/8"	05-60940
G	2	Coupling, Silicon Elbow: 2-1/4" x 1-7/8 x 45°	05-60957
Н	1	Coupling, Silicon Elbow: 2-1/4" x 2" x 45°	05-60959
I	1	Coupling, Silicon Straight: 2-1/4" x 2-1/2"L	05-60782
J	2	Clamp, Spring Loaded T-Bolt: 2.7/8"	05-60039
K	6	Clamp, Spring Loaded T-Bolt: 2-1/2"	03-50560
L	1	Clamp, Spring Loaded T-Bolt: 2-1/4"	03-50280
M	3	Clamp, Spring Loaded T-Bolt: 2"	03-50613
N	2	Plug, Hex Hd Socket: 1/8" NPT	03-50029
0	1	Bracket, Wire Harness Relocation	05-60966
Р	2	Screw, Socket Head: M6x1x12	03-50102
Q	2	Washer, Flat: M6	03-50070

Tools Needed: 7mm, 8mm, 10mm, 11mm sockets, 3/16" allen wrench, 6mm allen wrench, 8mm allen wrench, 3/8" drive ratchet, 6" extension, panel popper, flat blade screwdriver, thread sealant.

Note: Legal in California for use on race vehicles only. The use of this device on vehicles used on public streets or highways is strictly prohibited in California and others states that have adopted California emission regulations.





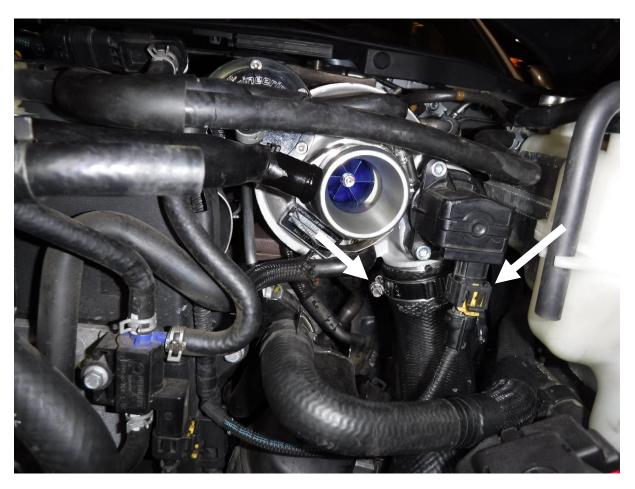
- Park the vehicle on level ground and engage the parking brake.
 Disconnect the negative battery cable.



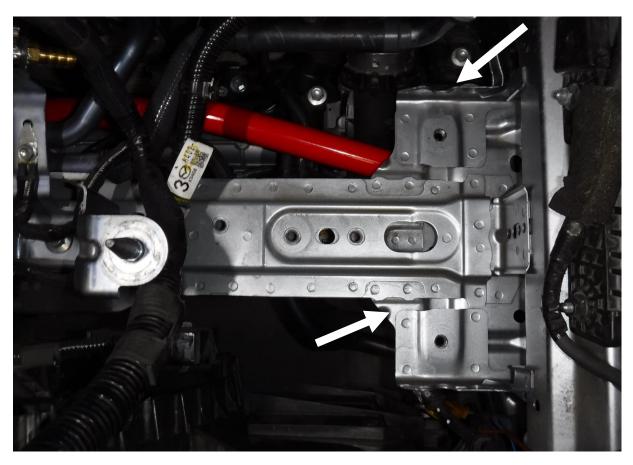
- 3. Disconnect all vacuum hoses from the air box and intake tube.
- 4. Remove the airbox and intake tube from the vehicle.



- 5. Disconnect the positive battery cable.
- 6. Remove the battery hold down and battery from the vehicle.
- 7. Disconnect all plastic clips securing the wire harness to the battery tray then, remove the screws securing the battery tray to the vehicle.
- 8. Remove the battery tray from the vehicle.



- 9. Disconnect recirculation valve connection by sliding the yellow locking tab back on the connector, on the front of the turbo, then press the black tab to pull the connections apart.
- 10. Loosen the clamp connecting the upper hot side intercooler tube to the turbo.
- 11. Disconnect the upper hot side intercooler tube from the turbo.



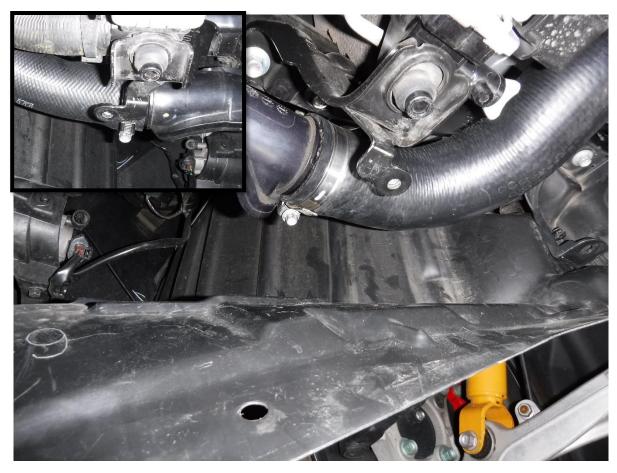
12. Remove the two (2) screws that secure the hot side intercooler tube plastic adapter to the vehicle.



- 13. Remove all the screws and clips securing the belly pan to the vehicle.
- 14. Remove the belly pan.



- 15. Remove the screws securing the skid plate to the vehicle.
- 16. Remove the skid plate from the vehicle.



17. Loosen the clamps securing both intercooler tubes to the intercooler.



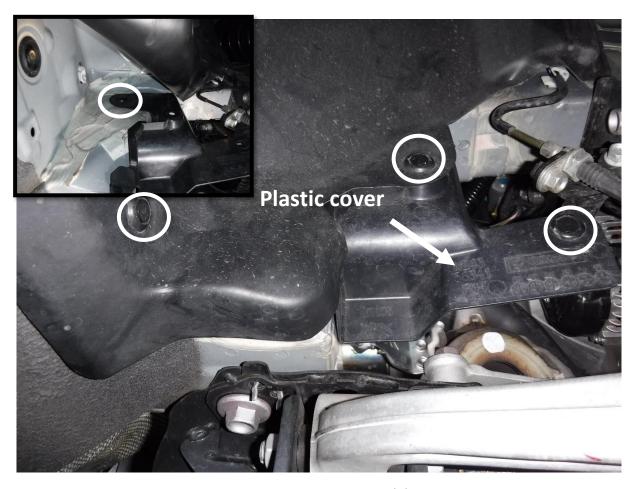
18. To disconnect the quick connect adapter you will need to lift both sides of the retaining clip that secure the intercooler tube to the plastic adapter using two flat head screwdrivers and pull the lower hot side intercooler tube off of the plastic adapter at the same time.



- 19. Remove the screw securing the lower radiator hose bracket to the subframe so that it can be moved to the side.
- 20. Remove the hot side intercooler tube plastic adapter and the upper hot side intercooler tube from the vehicle.



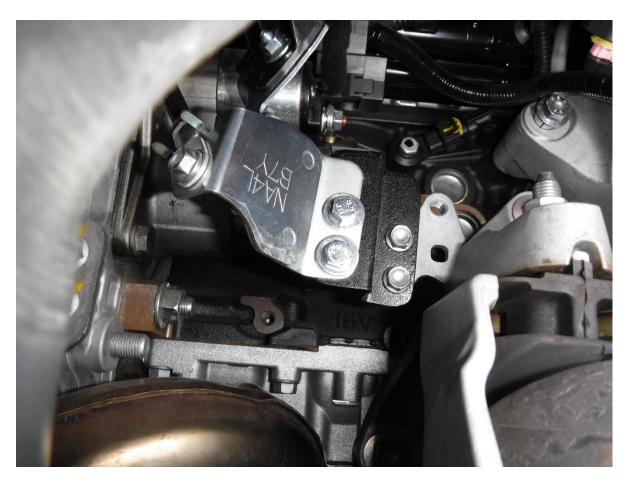
- 21. Disconnect both quick connect adapters from the cold side intercooler tube plastic adapter.
- 22. Release the locking tab on the factory breather tube and disconnect it from the plastic adapter.
- 23. Remove the two (2) mounting screws that secure the cold side intercooler tube plastic adapter to the mount and remove the plastic adapter from the vehicle.
- 24. Remove the two (2) screws securing the cold side intercooler tube plastic adapter mount to the frame and remove the mount from the vehicle.



- 25. Behind the passenger side tire, remove the three (3) clips securing the plastic cover and the inner fender linter to the vehicle.
- 26. Lift the back of the fender liner and remove the last clip and remove the plastic cover from the vehicle.



- 27. Unlock the locking tab on the MAF sensor connection, then disconnect the MAF sensor from the upper cold side intercooler tube.
- 28. Remove the two (2) screws securing the wire harness bracket to the engine.
- 29. Remove the two (2) screws securing the upper cold side intercooler tube to the engine.
- 30. Loosen the clamp securing the upper cold side intercooler tube coupling to the throttle body, then remove it from the vehicle.



- 31. Install the supplied aFe wire harness relocation bracket into the vehicle using the factory mounting bolts from step 28 and tighten.
- 32. Install the factory wire harness bracket onto the aFe wire harness relocation bracket using the two (2) supplied M6x1.0 socket head screws and M6 washers then tighten.



33. Remove the MAP sensor from the factory upper cold side intercooler tube.

Note: Be sure to use thread sealant on the plugs, sensors, or fittings to prevent any leaking

34. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the fitting on the supplied aFe upper cold side intercooler tube and tighten.

Note: Be sure to lubricate the O-ring on the MAP sensor with grease to prevent it from tearing during install.

- 35. Install the MAP sensor on the aFe upper cold side intercooler tube.
- 36. Secure the MAP sensor to the aFe upper cold side intercooler tube with the factory screw.



- 37. Install the supplied 2-1/4" x 2" x 45° coupling along with one (1) of the supplied 2-1/2" clamps onto the reduced end of the aFe upper cold side intercooler tube (do not tighten the clamp yet).
- 38. Install the aFe upper cold side intercooler tube coupling onto the throttle body along with one (1) of the supplied 2-1/4" clamps (do not tighten the clamp yet).



- 39. Install the supplied 2-1/2" x 45° coupling with one (1) of the supplied 2-7/8" clamps onto the aFe upper cold side intercooler tube.
- 40. Install the supplied aFe lower cold side intercooler tube along with one (1) of the 2-7/8" clamps into the coupling from the previous step (do not tighten the clamp yet).
- 41. Install the supplied 2-1/4" x 1-7/8" x 45° coupling with one (1) of the supplied 2-1/2" clamps onto the aFe lower cold side intercooler tube.
- 42. Connect the coupling from the previous step to the cold side of the intercooler along with one of the supplied 2" clamps (do not tighten the clamp yet).
- 43. Connect the factory breather tube to the aFe lower intercooler tube and press the locking tab, pull on the connection to be sure it is secure.
- 44. Ensure the tubes are not touching anything, then tighten all the clamps.



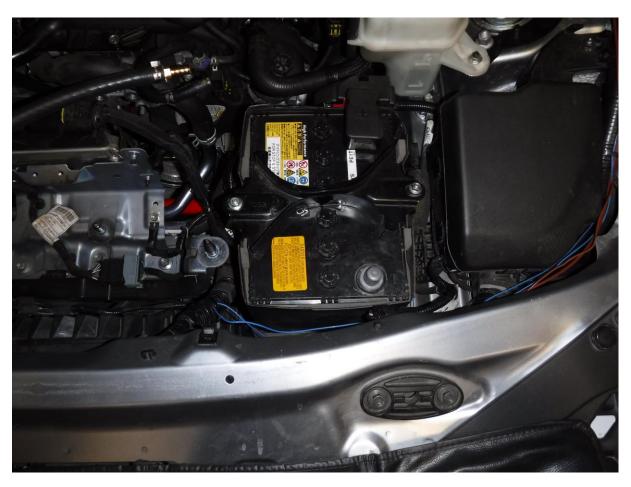
- 45. Install the remaining 2-1/4" x 1-7/8" x 45°° coupling with one (1) of the 2" clamps onto the hot side of the intercooler (do not tighten the clamp yet).
- 46. Install the supplied aFe lower hot side intercooler tube along with one (1) of the 2-1/2" clamps into the coupling from the previous step (do not tighten the clamp yet).
- 47. Install the supplied 2-1/4" x 2-1/2"L coupling with one (1) of the supplied 2-1/2" clamps onto the aFe lower hot side intercooler tube (do not tighten the clamp yet).

Note: Be sure to use thread sealant on the plugs, sensors, or fittings to prevent any leaking

48. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the fitting on the supplied aFe upper hot side intercooler tube and tighten.



- 49. Install the supplied 2-1/4" x 1-7/8" coupling along with one (1) of the supplied 2-1/2" clamps onto the end of the aFe upper hot side intercooler tube closer to the fitting (do not tighten the clamp yet).
- 50. Install the aFe upper hot side intercooler tube into the coupling from step 47 along with one (1) of the supplied 2-1/2" clamps from the top (do not tighten the clamp yet).
- 51. Connect the coupling from the step 49 to the turbo along with one of the 2" clamps (do not tighten the clamp yet).
- 52. Ensure the tubes are not touching anything, then tighten all the clamps.



- 53. Reconnect the recirculation valve connection and secure the locking tab.
- 54. Reinstall the battery tray, wiring harness to the battery tray, battery, and battery hold down.
- 55. Reconnect the positive battery cable.



56. Reinstall the intake system back into the vehicle. 57. Reconnect all the vacuum lines.



58. Reinstall the skid plate. 59. Reinstall the belly pan.



60. Reconnect the negative battery cable.

Install is now complete!

Note: Be sure to check all connection after 50-100 miles