



advanced FLOW engineering

Instruction Manual P/N: 46-20352-B

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

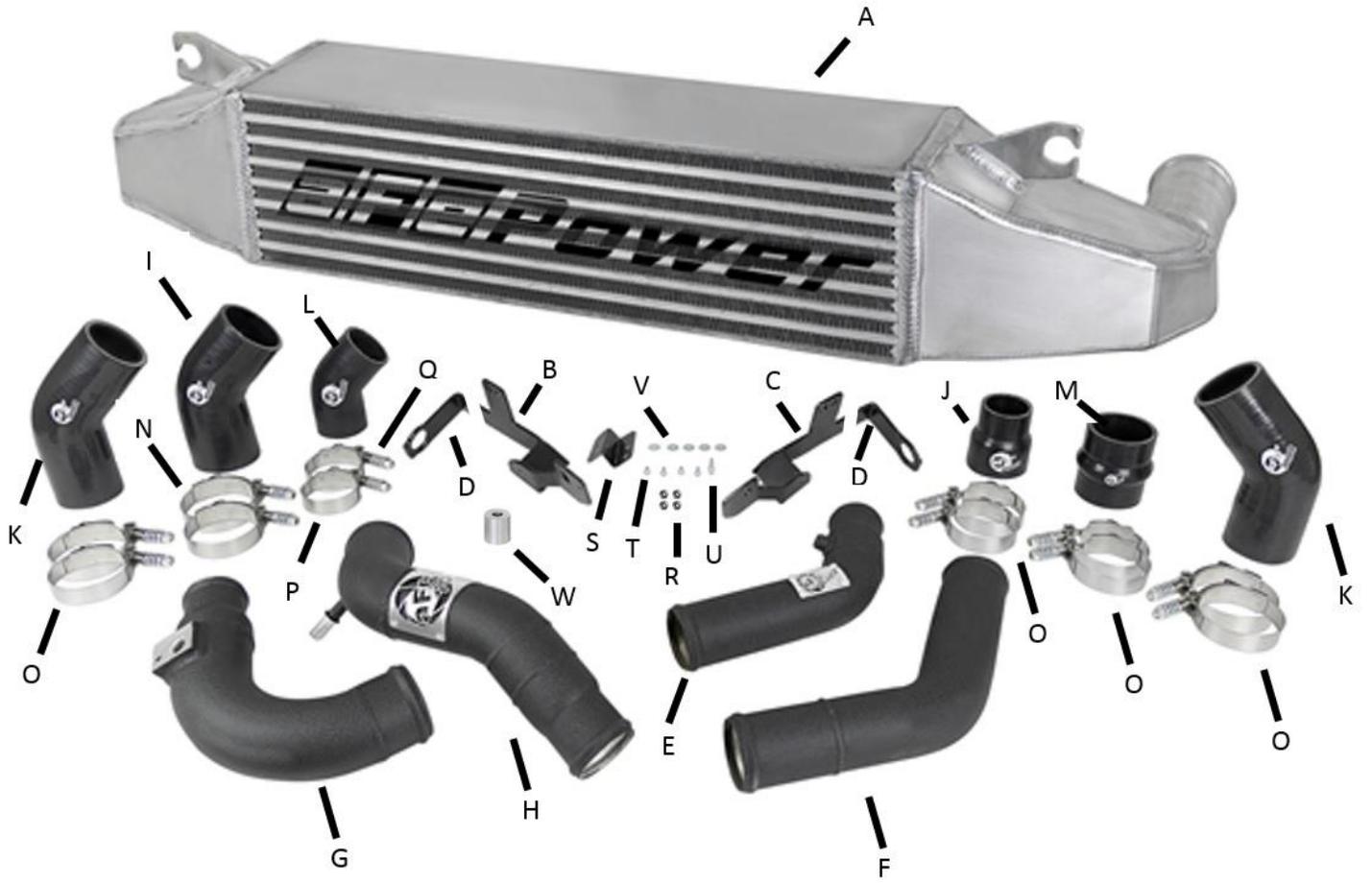


- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description
A	1	Intercooler
B	1	Bracket, Upper PS IC Mount
C	1	Bracket, Upper DS IC Mount
D	2	Bracket, Lower IC Mount
E	1	Tube, Hot Side, Upper
F	1	Tube, Hot Side, Lower
G	1	Tube, Cold Side, Upper
H	1	Tube, Cold Side, Lower
I	1	Coupling, Silicon Elbow: 2-1/2" x 45°
J	1	Coupling, Silicon Reducer: 2-1/4" x 1-7/8"
K	2	Coupling, Silicon Elbow: 2-1/4" x 3"L x 45°
L	1	Coupling, Silicon Elbow: 2-1/4" x 2" x 45°
M	1	Coupling, Silicon Straight: 2-1/4" x 2-1/2"L
N	2	Clamp, Spring Loaded T-Bolt: 2.7/8"
O	8	Clamp, Spring Loaded T-Bolt: 2-1/2"
P	1	Clamp, Spring Loaded T-Bolt: 2-1/4"
Q	1	Clamp, Spring Loaded T-Bolt: 2"
R	4	Plug, Hex Hd Socket: 1/8" NPT
S	1	Bracket, Wire Harness Relocation
T	4	Screw, Hex Hd: M6x1x20
U	1	Screw, Hex Hd: M6x1x40
V	5	Washer, Flat: M6
W	1	Aluminum Spacer

Tools Needed: 7mm, 8mm, 10mm, 7/16", 12mm sockets, 3/16" 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.

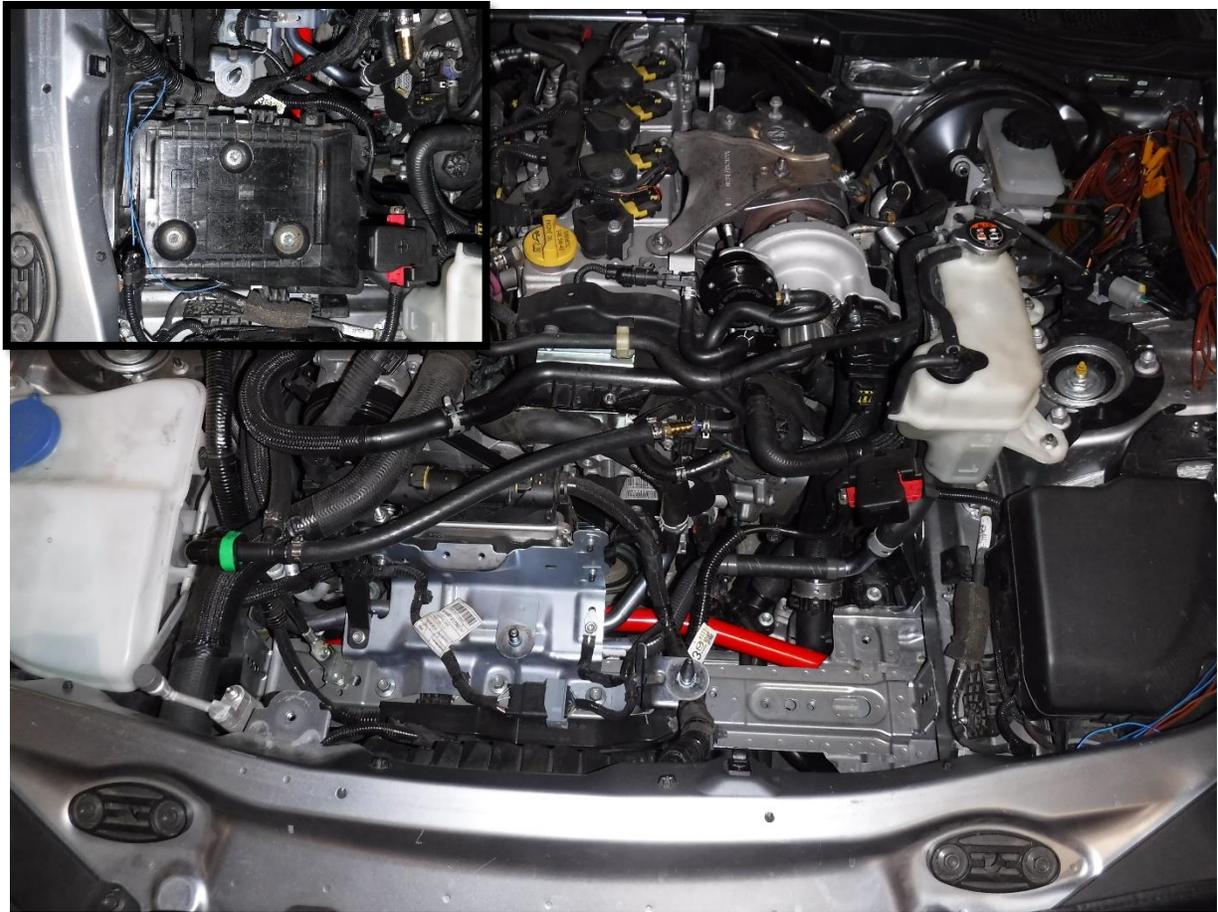




1. Park the vehicle on level ground and engage the parking brake.
2. Disconnect the negative battery cable.



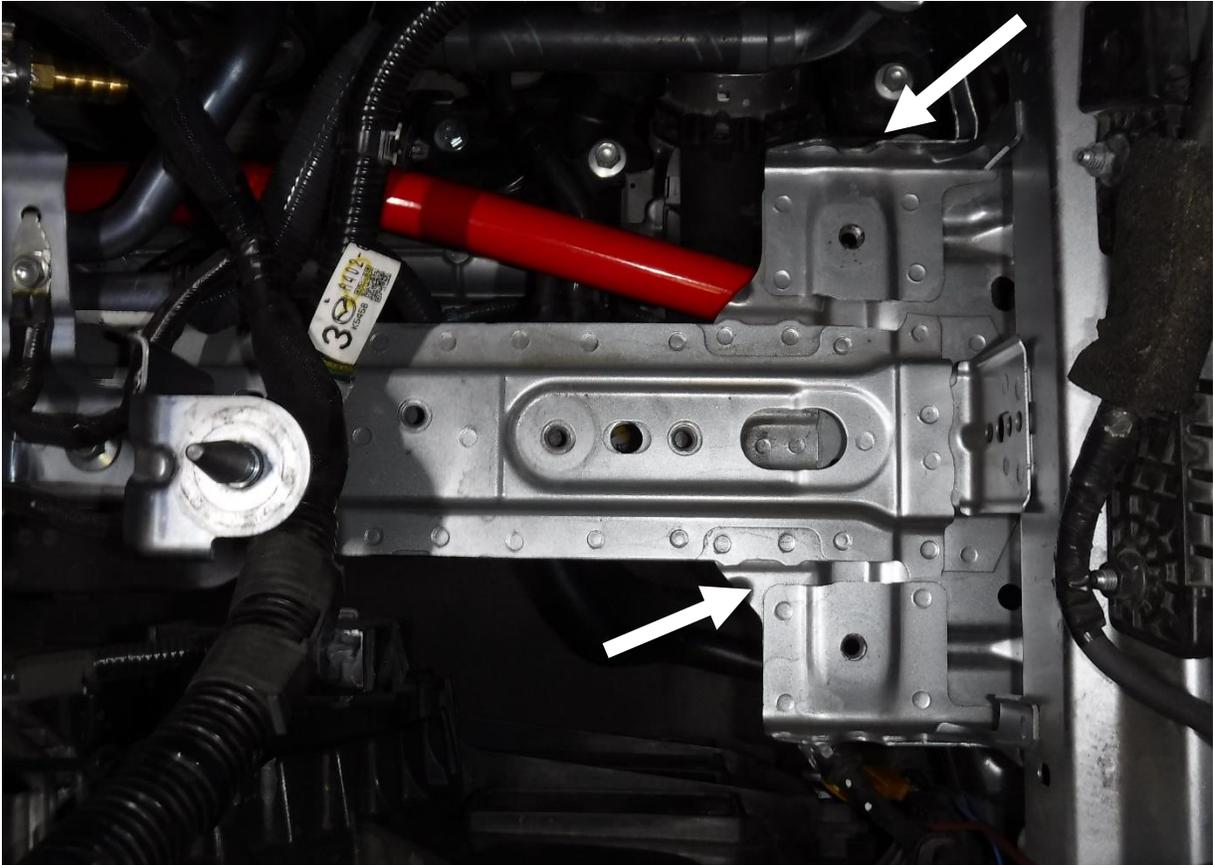
3. Disconnect all vacuum hoses from the air box and intake tube.
4. Remove the airbox and intake tube from the vehicle.



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.



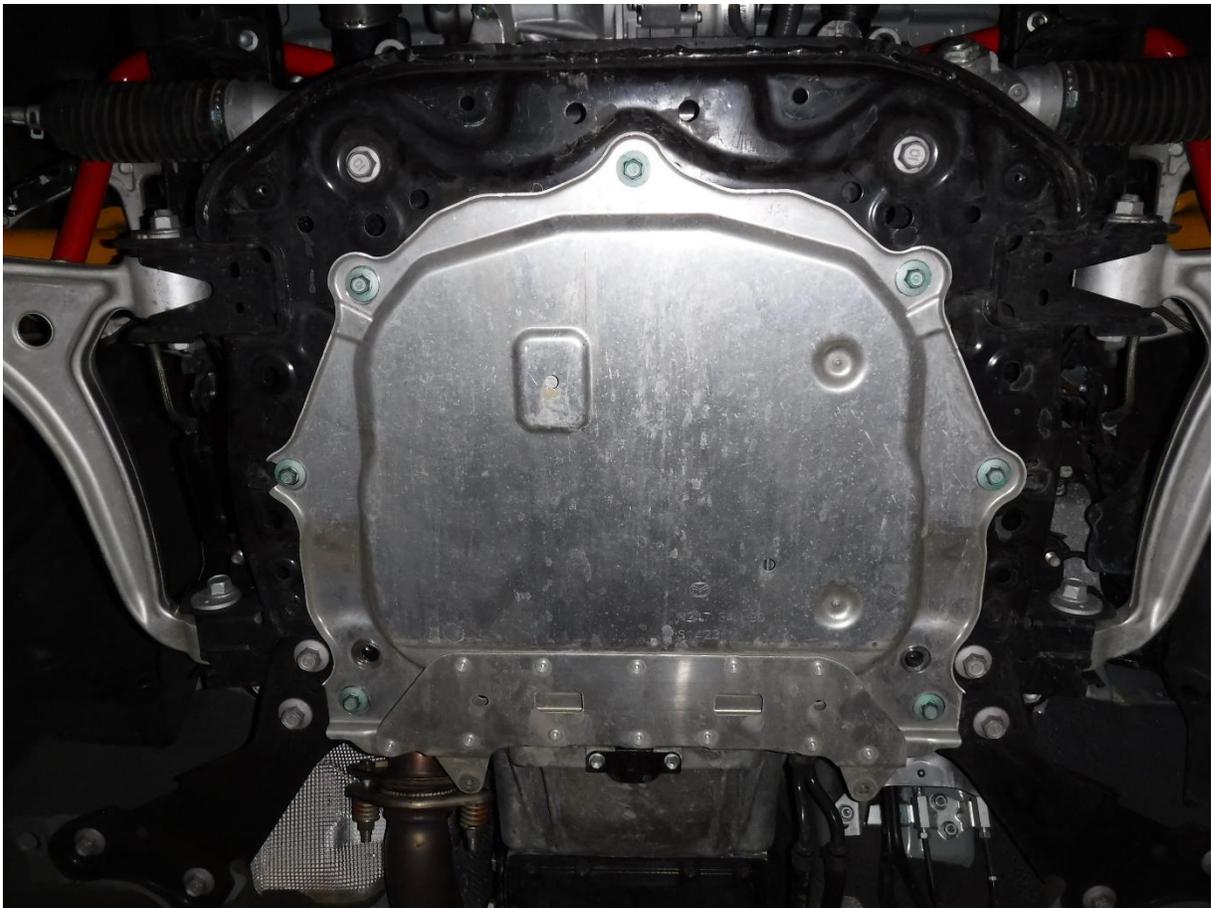
9. Disconnect recirculation valve connection by sliding the yellow locking tab back on the connector, on the front of the turbo, then press the black tab to pull the connections apart.
10. Loosen the clamp connecting the upper hot side intercooler tube to the turbo.
11. Disconnect the upper hot side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



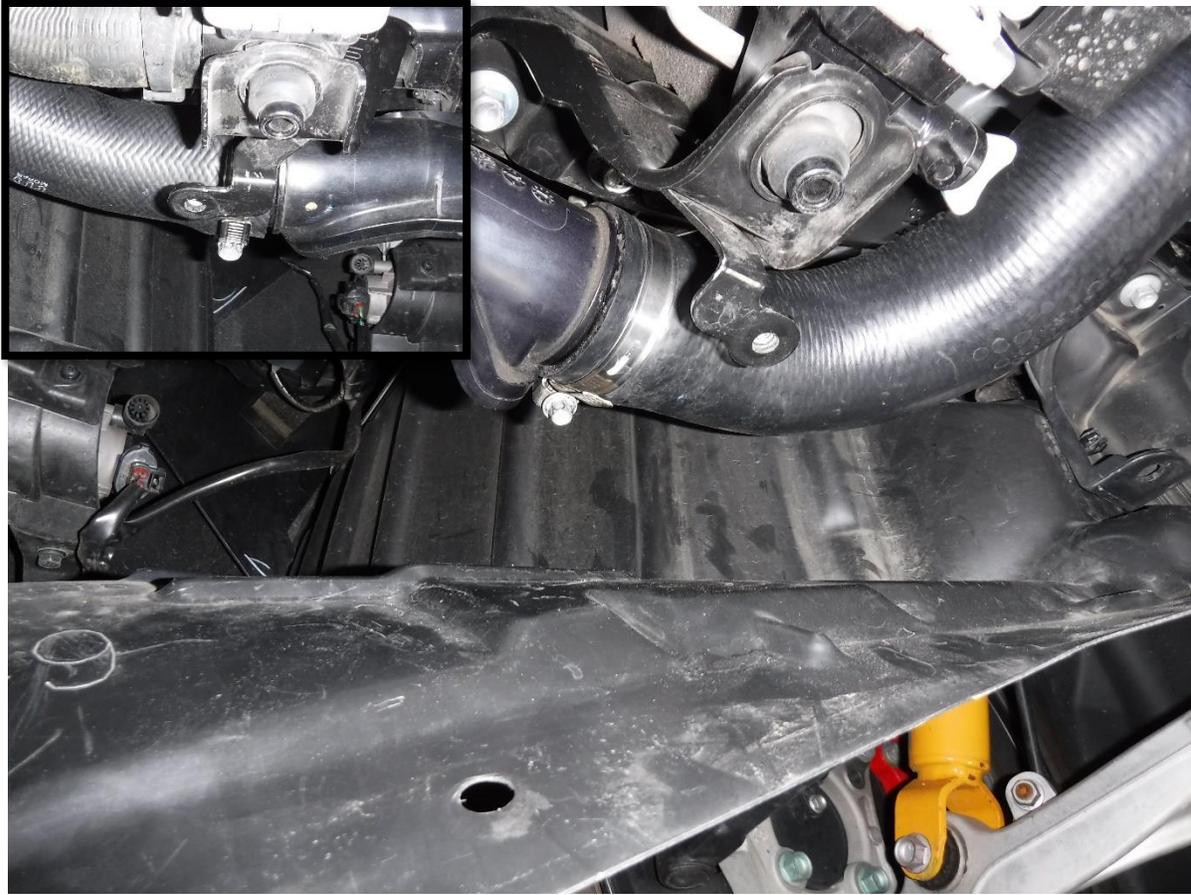
12. Remove the two (2) screws that secure the hot side intercooler tube plastic adapter to the vehicle.



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 mounting 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.



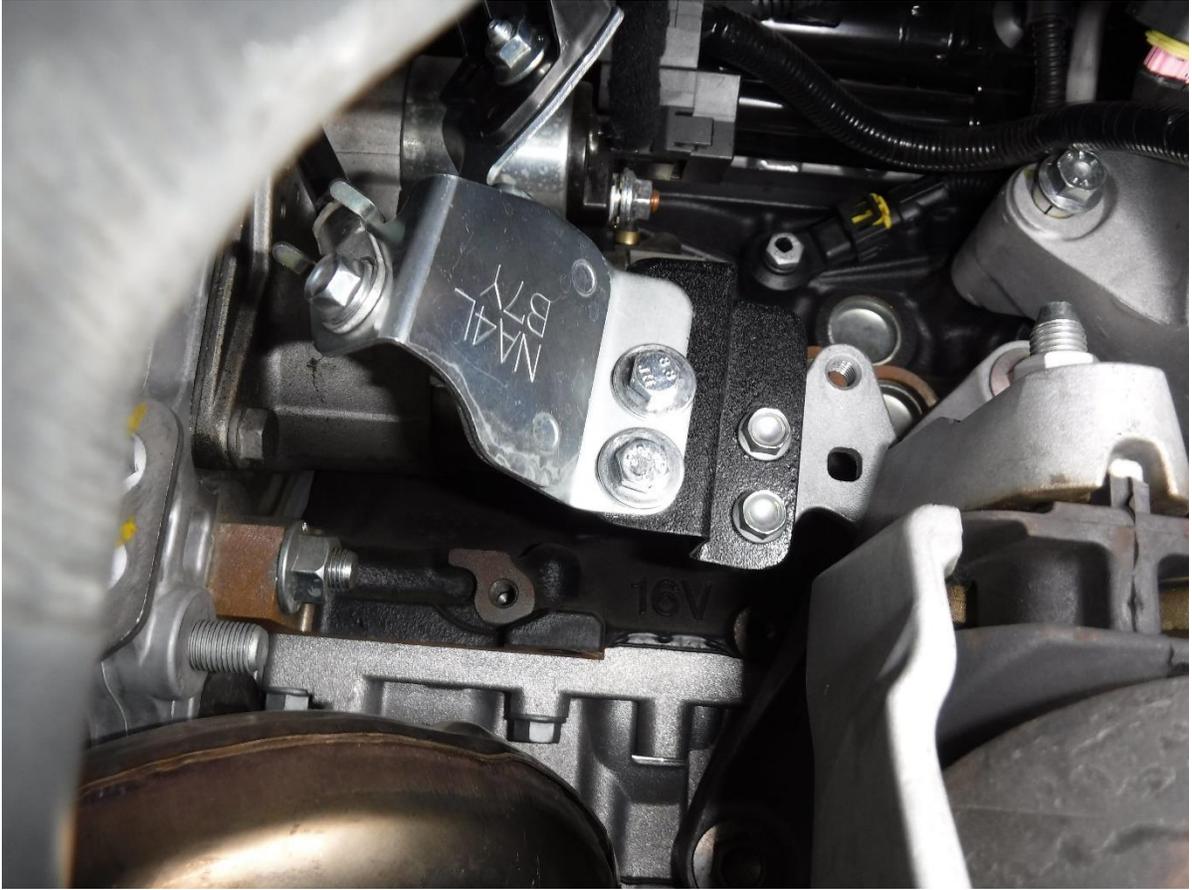
21. Disconnect both quick connect adapters from the cold side intercooler tube plastic adapter.
22. Release the locking tab on the factory breather tube and disconnect it from the plastic adapter.
23. Remove the two (2) mounting screws that secure the cold side intercooler tube plastic adapter to the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



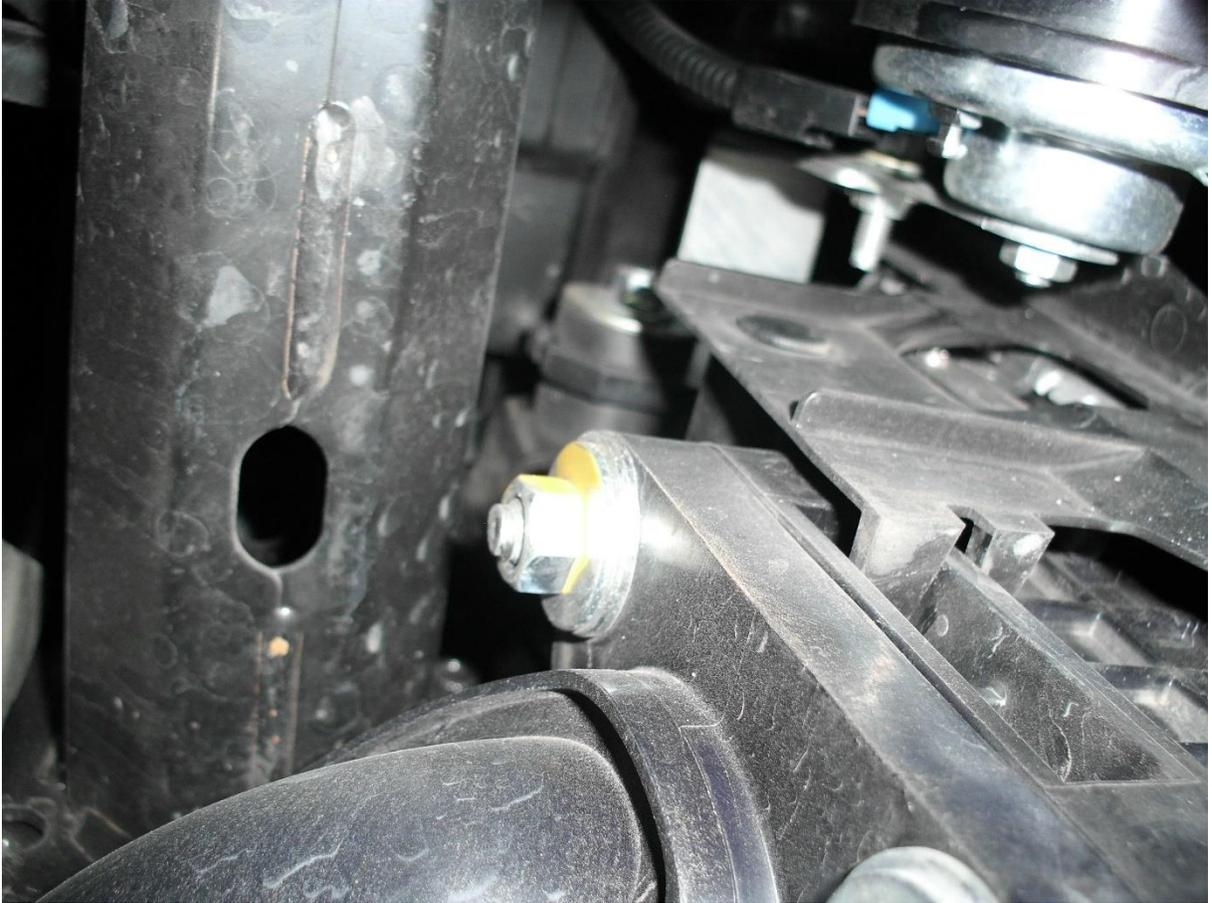
25. Behind the passenger side tire, remove the three (3) clips securing the plastic cover and the inner fender liner to the vehicle.
26. Lift the back of the fender liner and remove the last clip and remove the plastic cover from the vehicle.



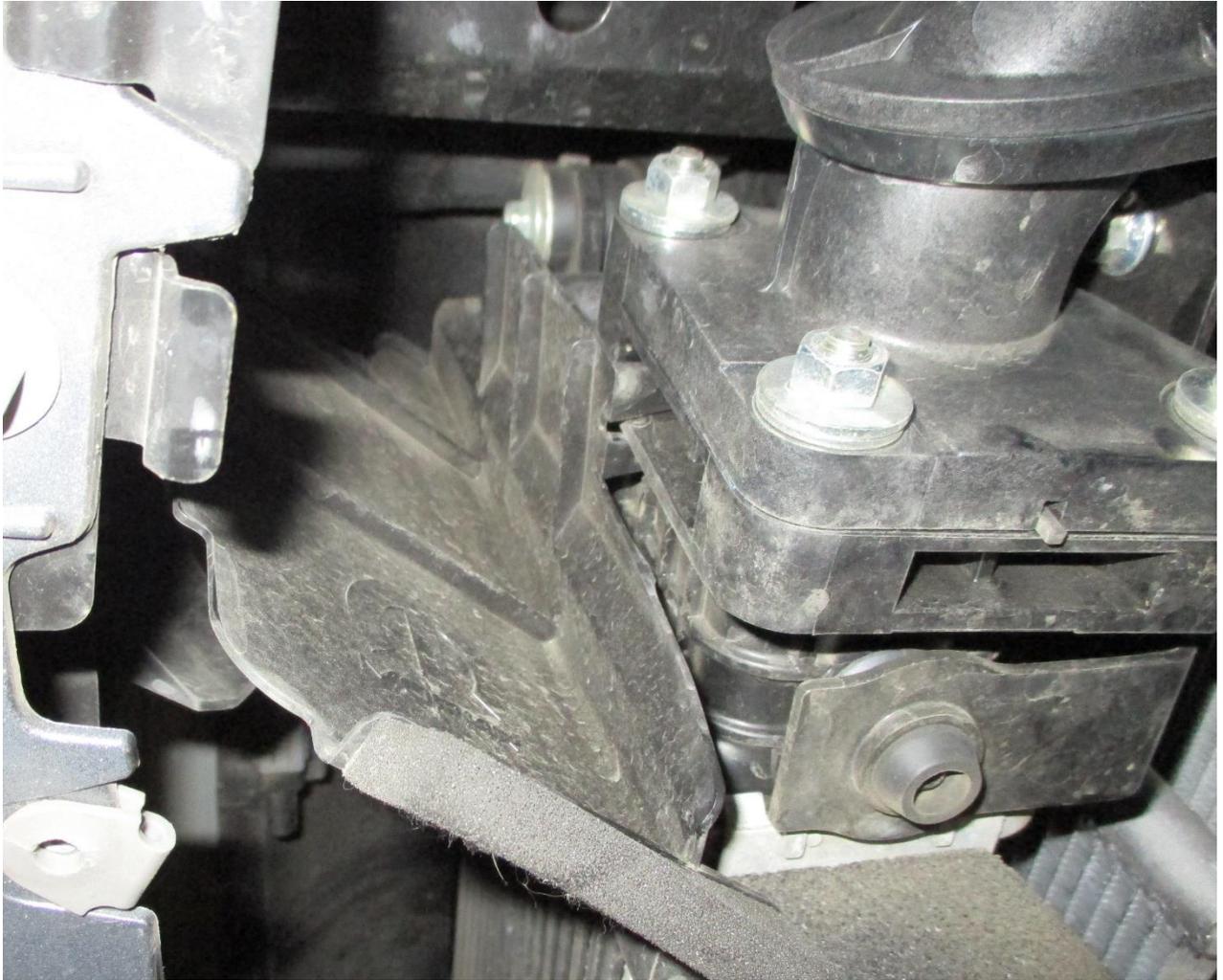
27. Unlock the locking tab on the MAF sensor connection, then disconnect the MAF sensor from the upper cold side intercooler tube.
28. Remove the two (2) screws securing the wire harness bracket to the engine.
29. Remove the two (2) screws securing the upper cold side intercooler tube to the engine.
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 two (2) of the supplied M6 x 1.0 x 20mm screws and M6 washers then tighten.



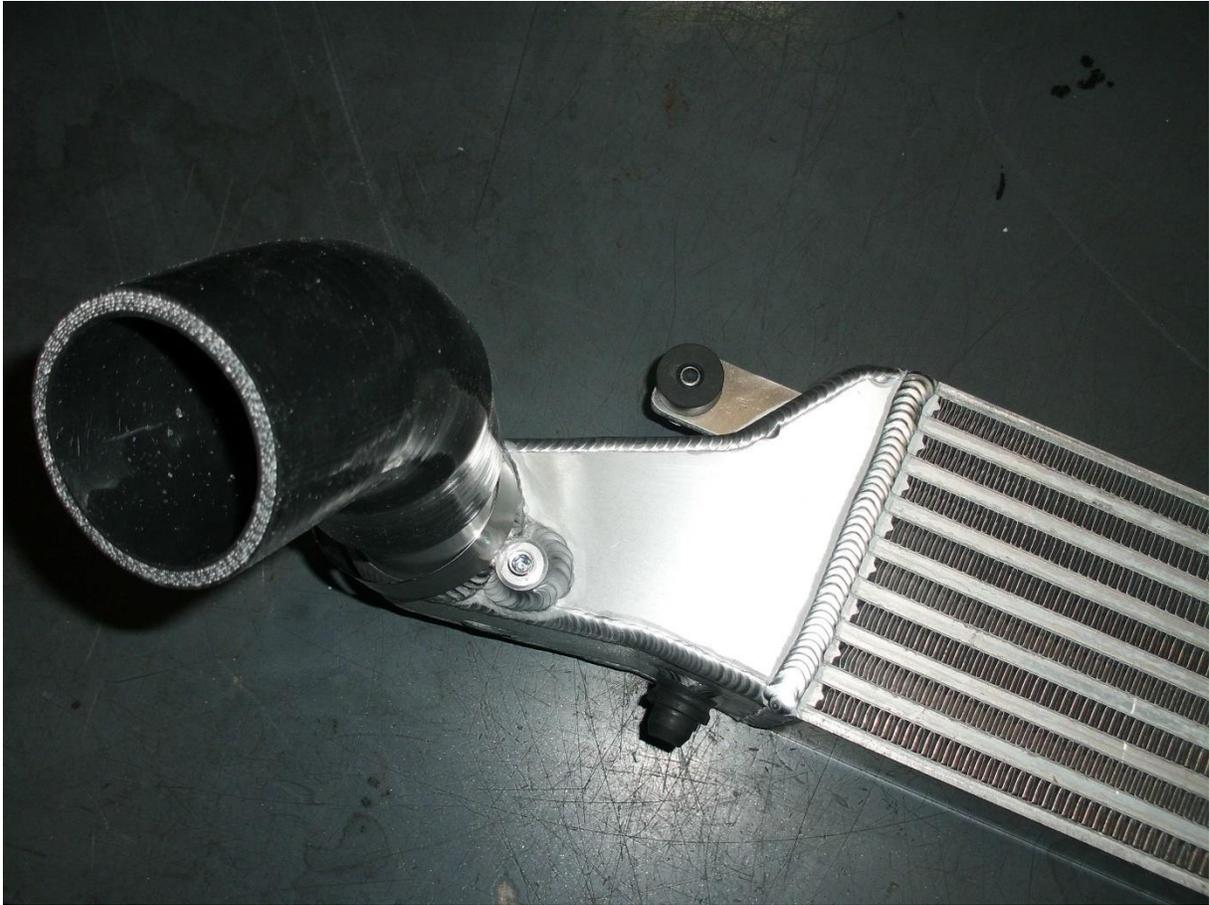
33. Remove the plastic air deflector, horn, and intercooler mounting bolt from the passenger side.



34. Remove the plastic air deflector and intercooler mounting bolt from the drivers side.

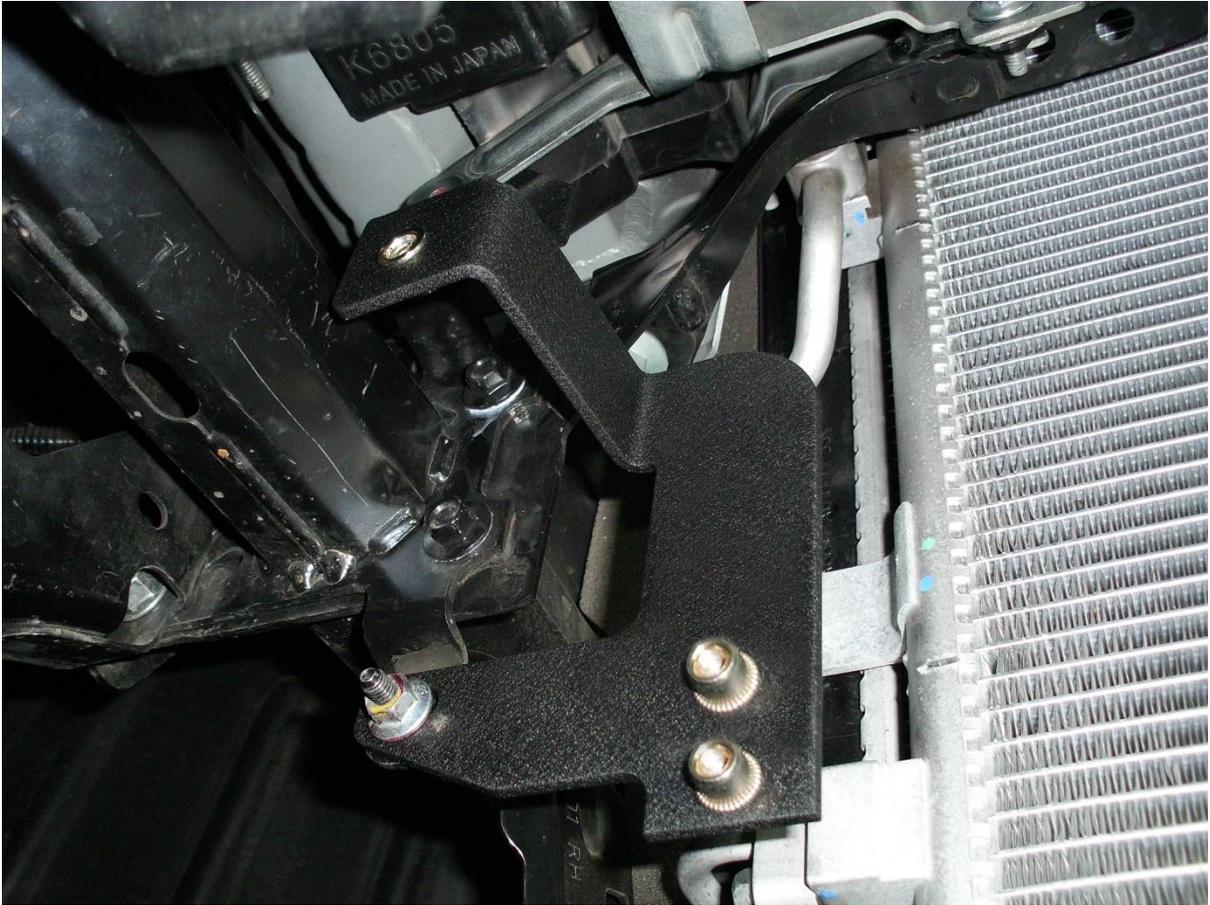


35. Remove the intercooler from the vehicle.
36. Remove the factory intercooler brackets from the vehicle.

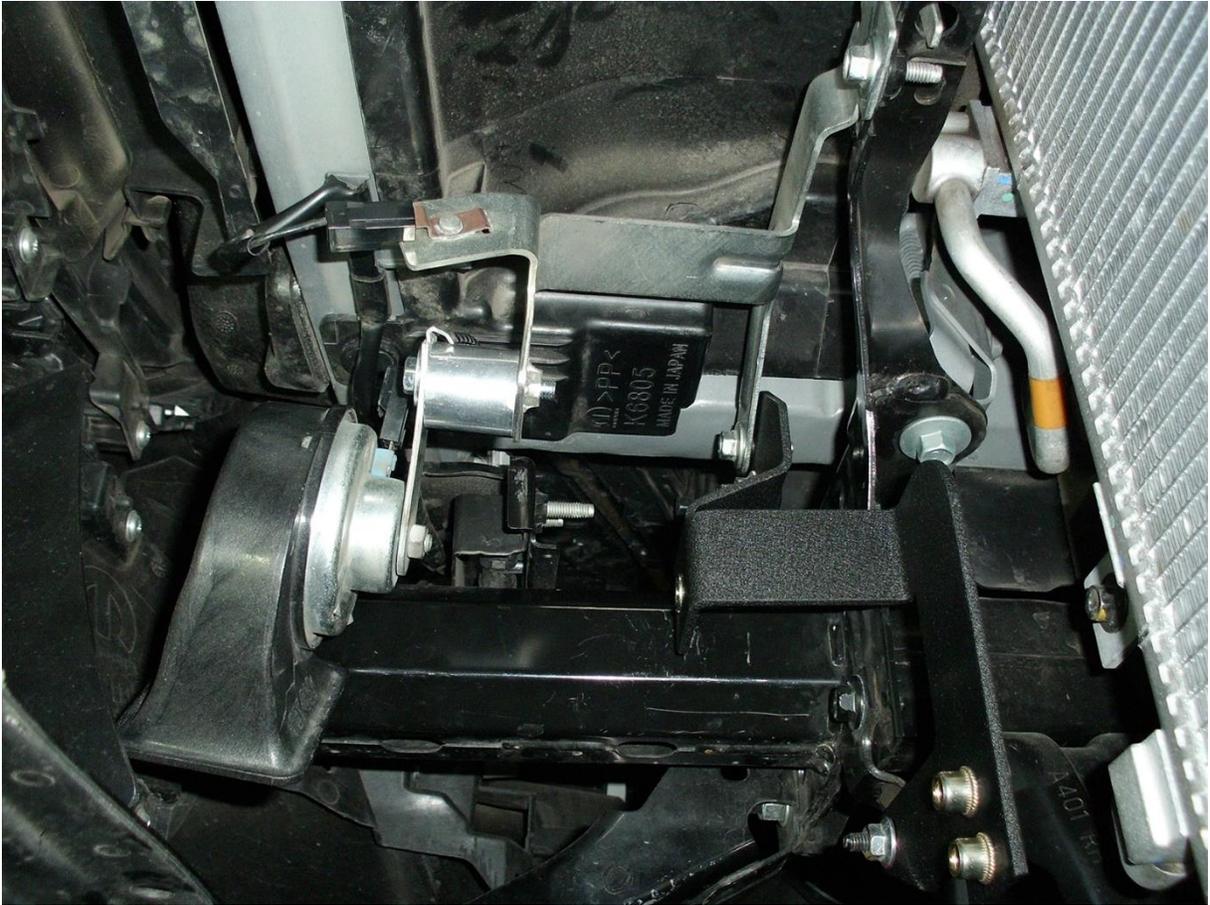


Note: Be sure to use thread sealant on the plugs, sensors, or fittings to prevent any leaking

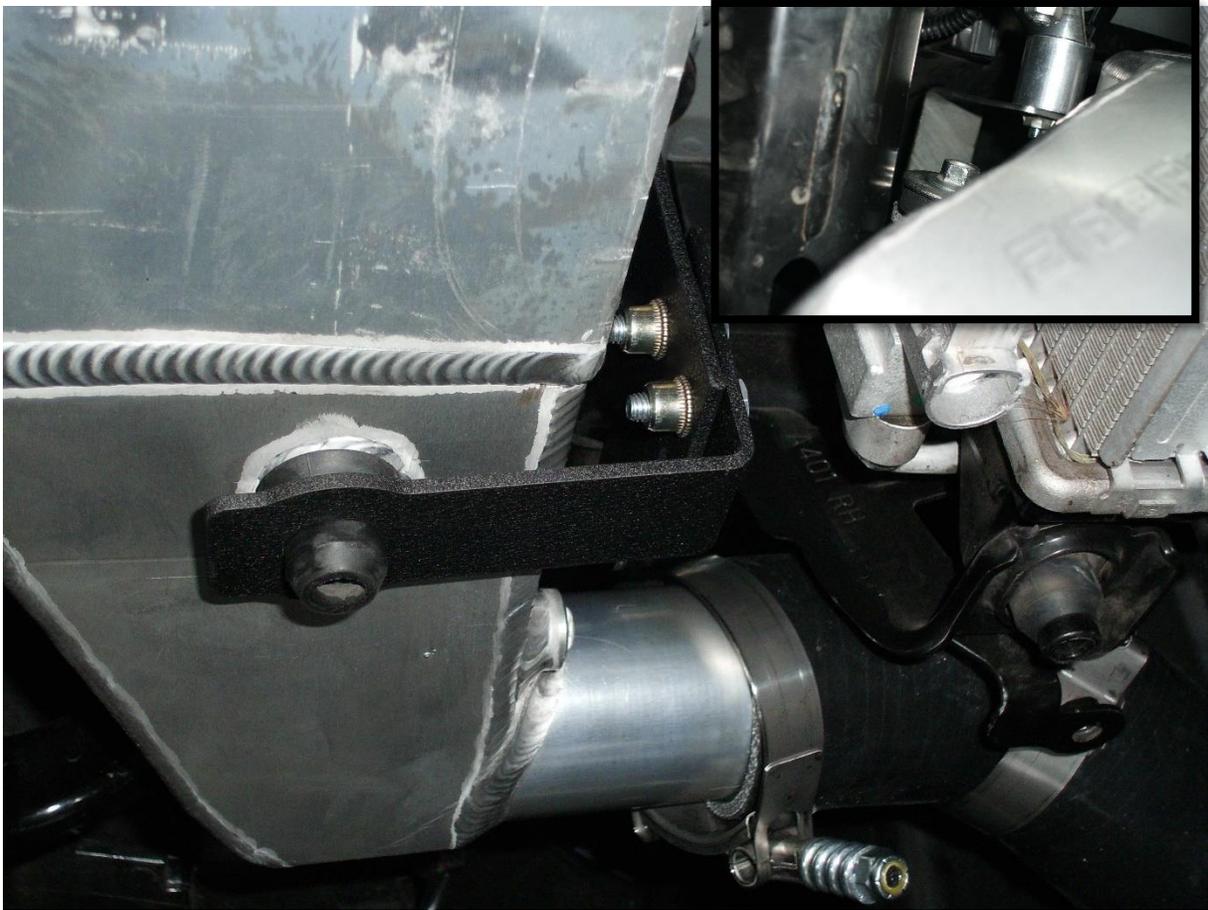
37. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the fitting on the back side of the supplied aFe intercooler and tighten.
38. Transfer the upper and lower mounting grommets from the factory intercooler to the aFe intercooler.
39. Install the supplied 2-1/4" x 3"L x 45° couplings along with two (2) of the supplied 2-1/2" clamps onto the intercooler inlet and outlet (do not tighten clamps yet).



40. Install the supplied aFe upper intercooler mounting brackets into the vehicle (do not secure to the vehicle yet).
41. Measure the distance between the top mounting points of the aFe intercooler and match the mounting distance between the aFe mounts on the vehicle then ensure the brackets are straight and secure the brackets to the vehicle using the factory nuts.



42. Secure the factory horn mount to the aFe upper intercooler bracket using the factory screw.
43. Install the supplied aluminum spacer along with the horn and supplied M6 x 1 x 40mm bolt and one (1) M6 washer onto the horn mount (do not tighten yet).



44. With some help, install the aFe intercooler into the vehicle using the factory mounting bolts at the top.
45. Install the supplied aFe lower mounts into the vehicle and secure them to the upper mounts using four (4) of the M6 x 1.0 x 20mm screws and M6 washers.



46. 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

47. 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 oil to prevent it from tearing during install.

48. Install the MAP sensor on the aFe upper cold side intercooler tube.

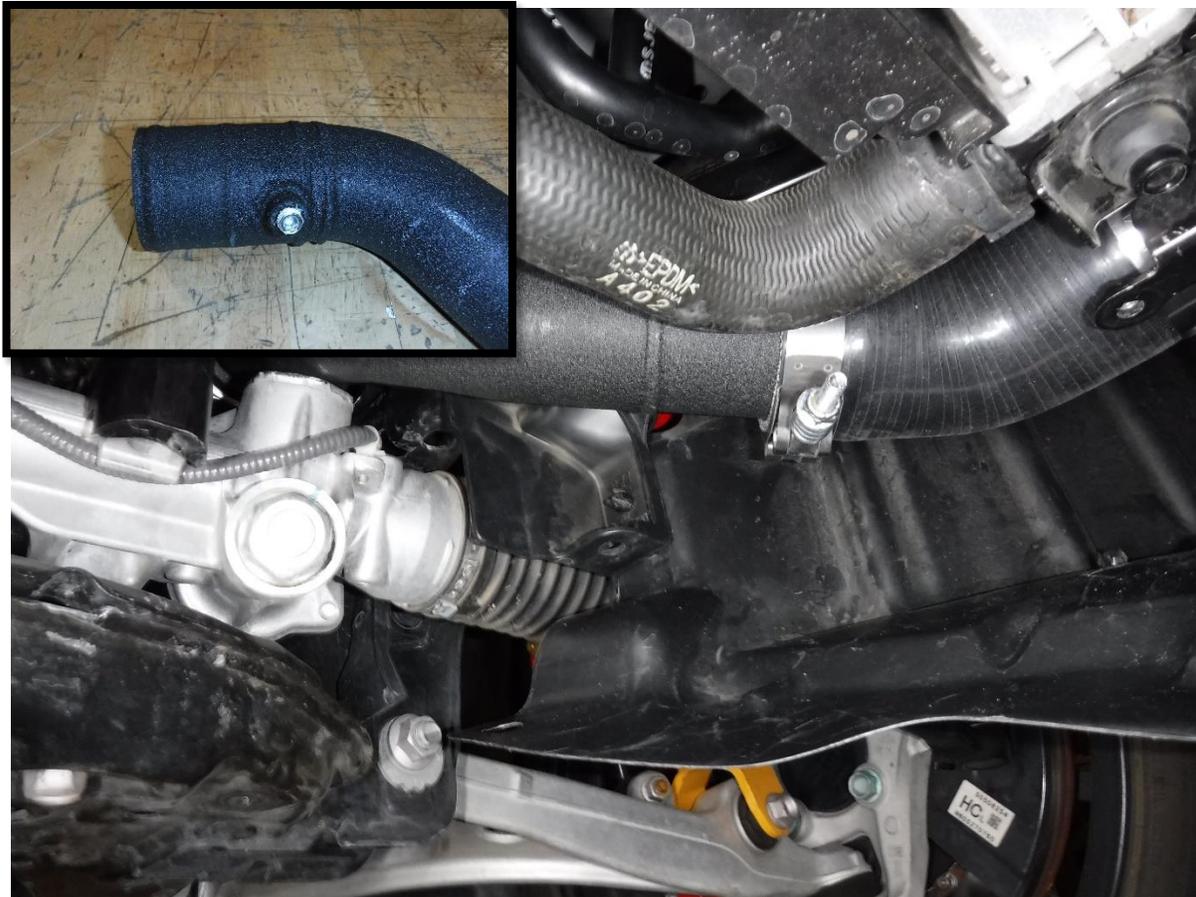
49. Secure the MAP sensor to the aFe upper cold side intercooler tube with the factory screw.



50. 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).
51. Install the aFe upper cold side intercooler tube with coupling onto the throttle body along with the supplied 2-1/4" clamp (do not tighten the clamp yet).



52. 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.
53. 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).
54. Connect the aFe lower cold side intercooler tube to the aFe intercooler coupling from Step 39 with one (1) of the supplied 2-1/2" clamps (do not tighten the clamp yet).
55. Connect the factory breather tube to the aFe lower cold side intercooler tube and press the locking tab, pull on the connection to be sure it is secure.
56. Ensure the tubes are not touching anything, then tighten all the clamps.
57. Reconnect the MAP sensor.
58. Reinstall plastic cover from Step 25.



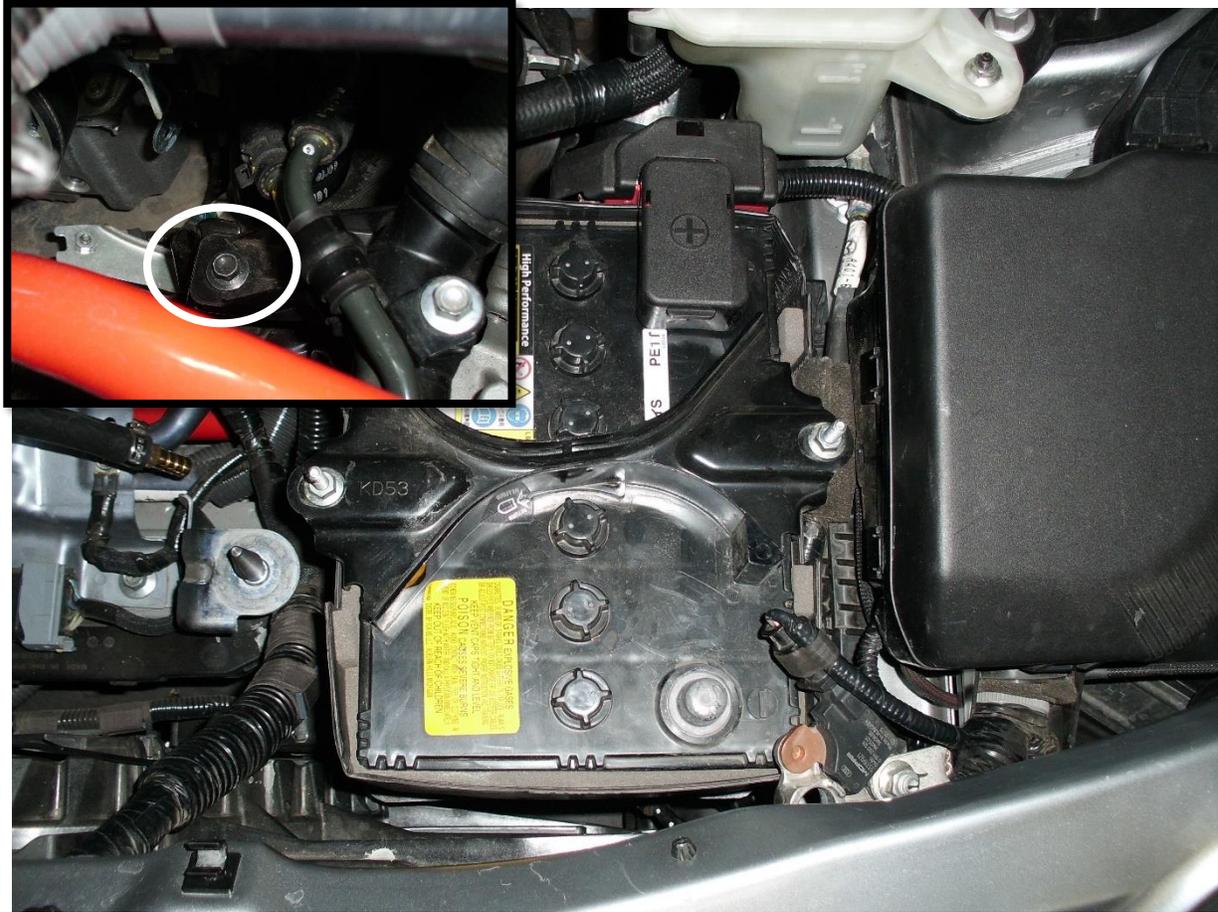
59. Install the supplied aFe lower hot side intercooler tube along with one (1) of the 2-1/2" clamps into the aFe intercooler coupling on the hot side.
60. Install the supplied 2-1/4" x 2-1/2"L coupling with one (1) of the supplied 2-1/2" clamps onto the aFe lower hot side intercooler tube (do not tighten the clamp yet).

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

61. 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.



62. 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).
63. Install the aFe upper hot side intercooler tube into the coupling from Step 60 along with one (1) of the supplied 2-1/2" clamps from the top (do not tighten the clamp yet).
64. Connect the coupling from the Step 62 to the turbo along with the supplied 2" clamp (do not tighten the clamp yet).
65. Ensure the tubes are not touching anything, then tighten all the clamps.



66. Reinstall the lower radiator hose mounting bracket screw from Step 19.
67. Reconnect the recirculation valve connection and secure the locking tab.
68. Reinstall the battery tray, wiring harness to the battery tray, battery, and battery hold down.
69. Reconnect the positive battery cable.



70. Reinstall the intake system back into the vehicle.
71. Reconnect all the vacuum lines.



- 72. Reinstall the skid plate.
- 73. Reinstall the belly pan.



74. Reconnect the negative battery cable.

Install is now complete!

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

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Warranty

General Terms:

- aFe warrants their products to be free from manufacturer's defects due to workmanship and material.
- This warranty applies only to the original purchaser of the product and is nontransferable.
- Proof of purchase of the aFe product is required for all warranty claims.
- Warranty is valid provided aFe instructions for installation and/or cleaning were properly followed.
- Proper maintenance with regular inspections of product is required to insure warranty coverage.
- Damage due to improper installation, abuse, unauthorized repair or alteration is not warranted.
- Incidental or consequential damages or cost, including installation and removal of part, incurred due to failure of aFe product is not covered under this warranty.
- All warranty is limited to the repair and/or replacement of the aFe part. To request Return Goods Authorization ("RGA"), email RGA@afepower.com or call (951)493-7100. Upon receipt of the RGA, you must return the product to the address provided in the RGA, freight prepaid and accompanied with a dated proof of purchase and the RGA. Upon receipt of the defective product and upon verification of proof of purchase, aFe will either repair or replace the defective product within a reasonable time, not to exceed thirty days.

Product Category	P/N Prefix	Warranty duration
Direct OE Replacement Filters	10, 11, 30, 31, 71, 73	Life of the vehicle
Racing Filters	18	1 year
Universal	21, 24, 72	2 years
Air Intake Systems	50, 51, 54, 55, 75	2 years
Exhaust Systems	49	2 years
Intercoolers & Intercooler Tubes	46-2	2 years
Intake Manifolds	46-1	2 years
Differential Cover	46-7	Life of the vehicle
Exhaust Manifolds	46	2 years
Throttle Body Spacers	46-3	2 years
Fluid Filters	44	90 days
Pre-Filters	28	2 years
Heavy Duty OE Replacement	70	2 years
PowerSports OE Replacement	81, 87	2 years
PowerSports Intake Systems	85	2 years

No other warranty expressed or implied applies nor is any person or advanced FLOW engineering authorized to assume any other warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.



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