



**Performance Air Intake Kit
(Includes Upper Hot Side Charge Pipe)
Part Number: 827-733**

**Mazda 2004-2005 Mazdaspeed Miata 1.8L Turbo
(Left Hand Drive ONLY)**

Installation Instructions

For technical inquiries please email us at tech@hpsperformance.com

In the email, please include the following information for faster response:

- Year / Make / Model / Engine of your vehicle.
- If it is a fitment issue, please include pictures showing the fitment problem.
- If there are missing parts, please list the part number(s) from the bill of materials on the 2nd page.
- Optional but recommended – Your contact phone number and preferred call back time.

You can also give us a call via 626-747-9200 for tech support Monday-Friday, 9:00am-5:00pm Pacific Time.

Bill of Materials

Kit Number: 827-733

Line #	Description	Part Number	Qty
1	Air Intake Pipe	529-932	1
2	Upper Hot Side Charge Pipe	529-933	1
3	Turbo Outlet Pipe	529-934	1
4	Heat Shield	531-936	1
5	"Z" Bracket	530-906	1
6	"L" Bracket	530-618	2
7	"C" Bracket	530-371	1
8	Straight Relay Bracket	530-935	1
9	HPS Performance Air Filter	HPS-4335	1
10	Reducing Coupler, 2.50" to 2.75", 2.25" Long	P3SR-250-275-L225	1
11	Reducing Coupler, 1.50" to 1.75", 3" Long	HTSR-150-175-BLK	1
12	90 Degree Oil Resistant Elbow Coupler	CH-827-733	1
13	Aluminum Hose Union, 3/4" OD	AHU-075-BLK	1
14	Embossed Clamp, 16mm - 27mm	EMSC-16-27	4
15	Embossed Clamp, 35mm - 50mm	EMSC-35-50	1
16	Embossed Clamp, 40mm- 60mm	EMSC-40-60	2
17	Embossed Clamp, 60mm - 80mm	EMSC-60-80	3
18	Bolt, M6 x 1.0, 16mm Long	HW-B6-16	5
19	Bolt, M6 x 1.0, 12mm Long	HW-B6-12	4
20	Allen Bolt, M8 x 1.25, 20mm Long	91292A147	2
21	Flange Nut, M6	HW-N6	7
22	Flat Washer, M6, 16mm OD	HW-FW6L	10
23	Rubber Vibration Mount, M6, 1/2" Tall	HW-RM6-50	1
24	Rubber Vibration Mount, M6, 5/8" Tall, Male to Female	HW-RM6-062-MF	1
25	EPDM Hose, 3/4" ID	EPDM-075	8 inches
26	EPDM Hose, 3/4" ID	EPDM-075	11 inches
27	Silicone Vacuum Hose, 6mm	HTSVH6-BLK	15 inches

28	Bubble Edge Trim	7750B2X1/16C	55 inches
29	Thin Edge Trim	75B7X1/16	6 inches

- **Before installing any parts of this intake kit, please read the instructions thoroughly.**
- **Verify the contents of this intake kit before disassembling your vehicle.**
- **DO NOT INSTALL IF ANY PARTS ARE MISSING OR DAMAGED.**
CONTACT tech@hpsperformance.com IMMEDIATELY.
WE ARE NOT RESPONSIBLE FOR ANY DAMAGE CAUSED DUE TO IMPROPER INSTALLATION.
- **Installation requires moderate mechanical skills. A qualified mechanic is highly recommended.**
- **Do not attempt to install the intake kit while the engine is hot.**
- **This installation may require removal of coolant lines that may be hot.**
- **For technical inquiries, please email us at tech@hpsperformance.com**

PLEASE READ CAREFULLY BEFORE INSTALLATION!

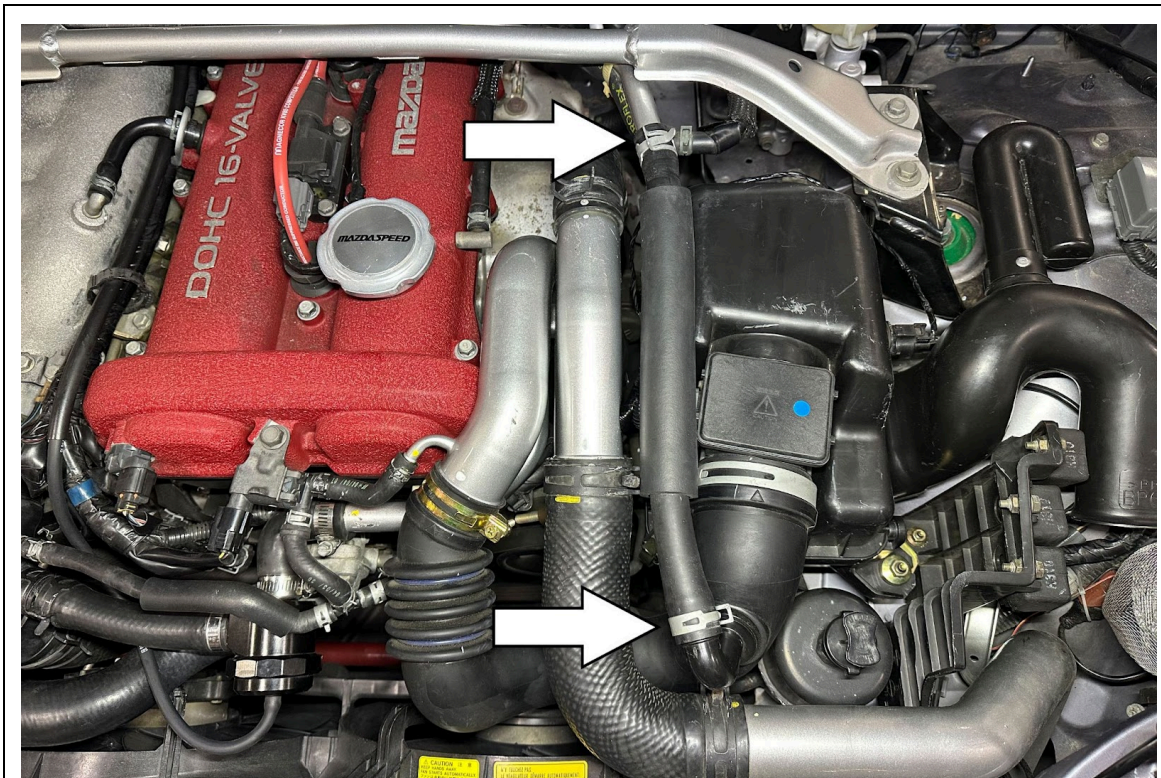
This installation is not for the novice customer. Install this product with EXTREME caution! Misuse of this product can destroy your engine! If you are not mechanically inclined, please have a professional automotive mechanic install this kit.

NOTE: HPS holds no responsibility for any engine damage that results from misuse of this product.

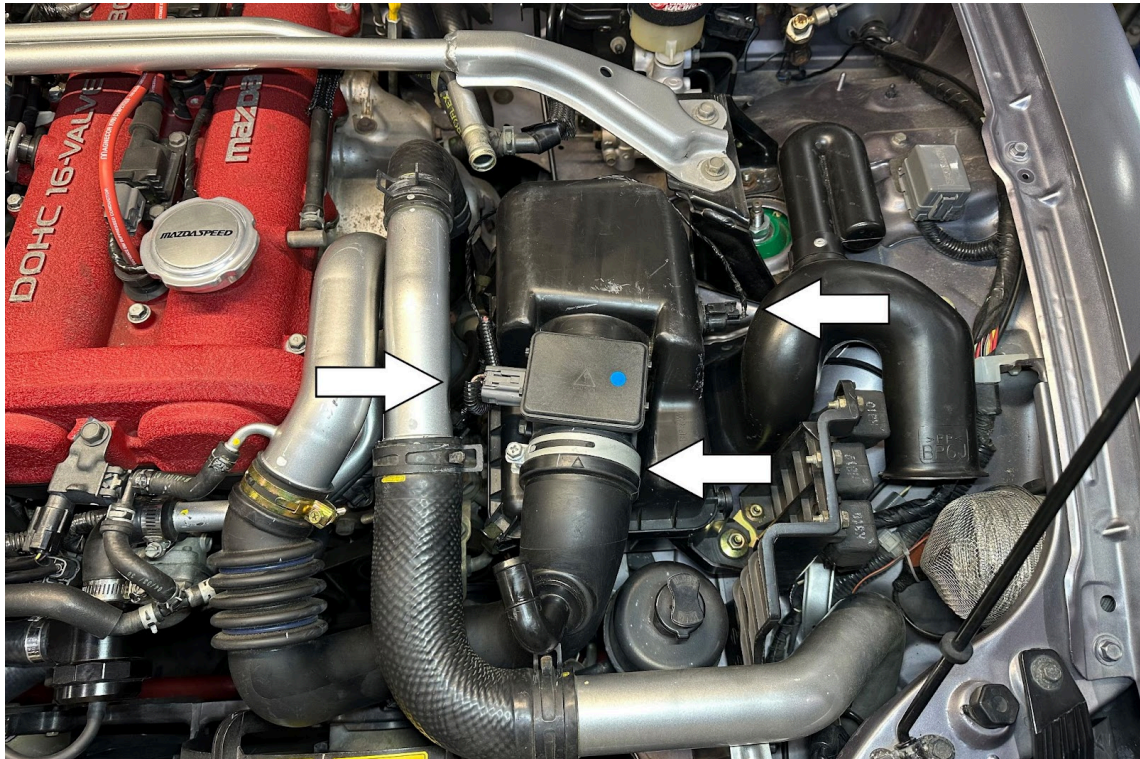
GETTING STARTED

1. Turn the ignition OFF and disconnect the vehicle's negative battery cable. If the engine has run within the past two hours let it cool down.

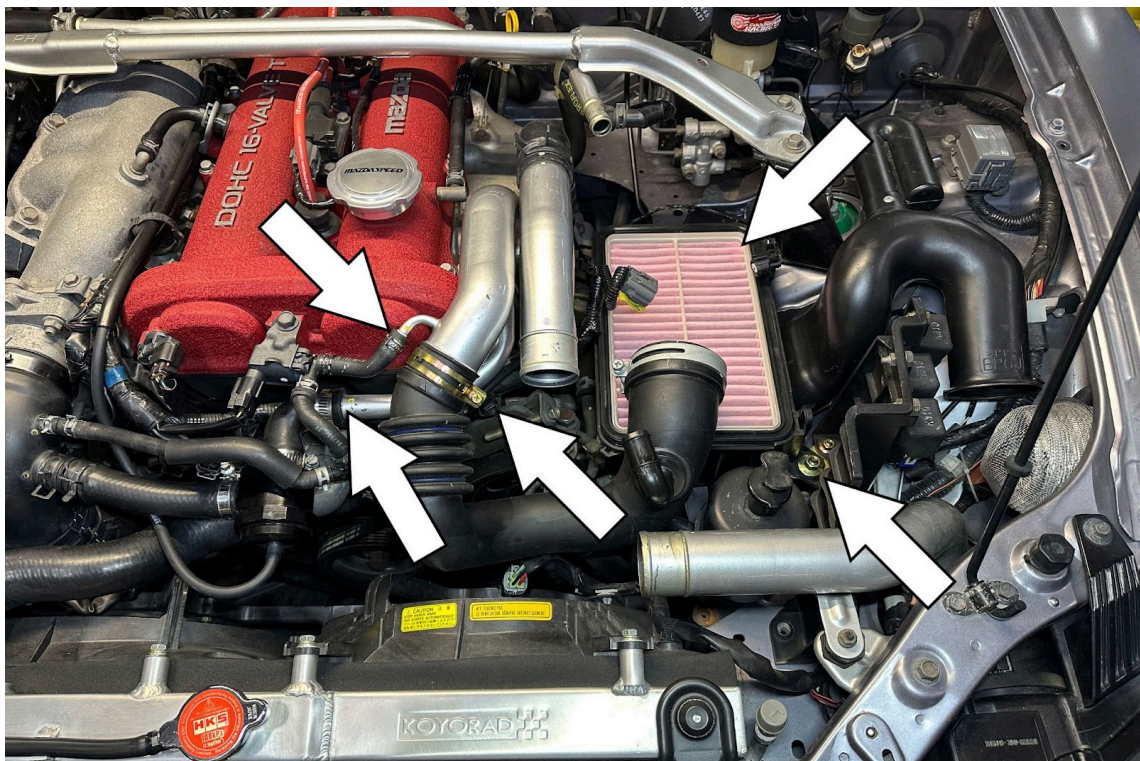
NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied with your owner's manual. In the event your vehicle's anti-theft code cannot be recovered, contact an authorized dealership to obtain your vehicle's anti-theft code. We also highly recommend NOT discarding any stock parts after the installation.



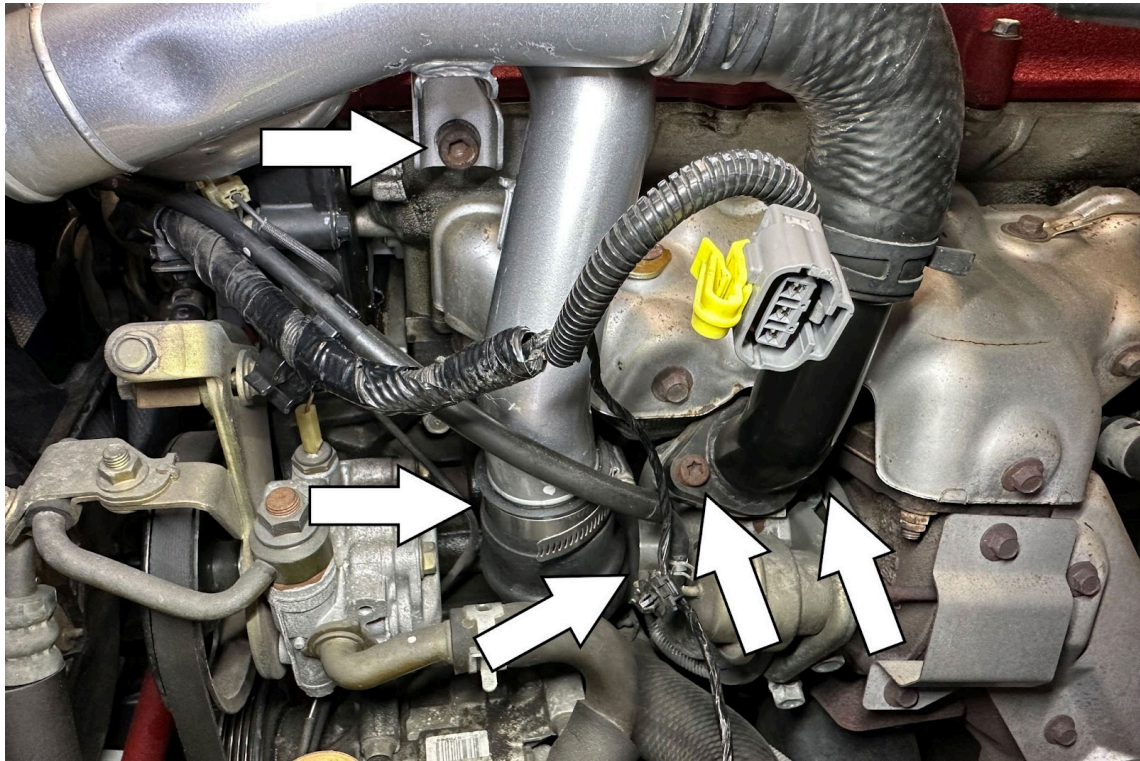
2. Remove the PCV hose from the vehicle.



3. Unplug the mass air flow sensor and the intake air temperature sensor. Then loosen the intake hose clamp and remove the upper air box assembly.



4. Disconnect the hoses connected to the intake pipe. Remove the air filter and uninstall the air box mount nut indicated above to remove the lower air box assembly.



5. Remove the intake pipe mount bolt, turbo outlet bolts, and loosen the turbo inlet clamps to remove the turbo intake and turbo outlet.



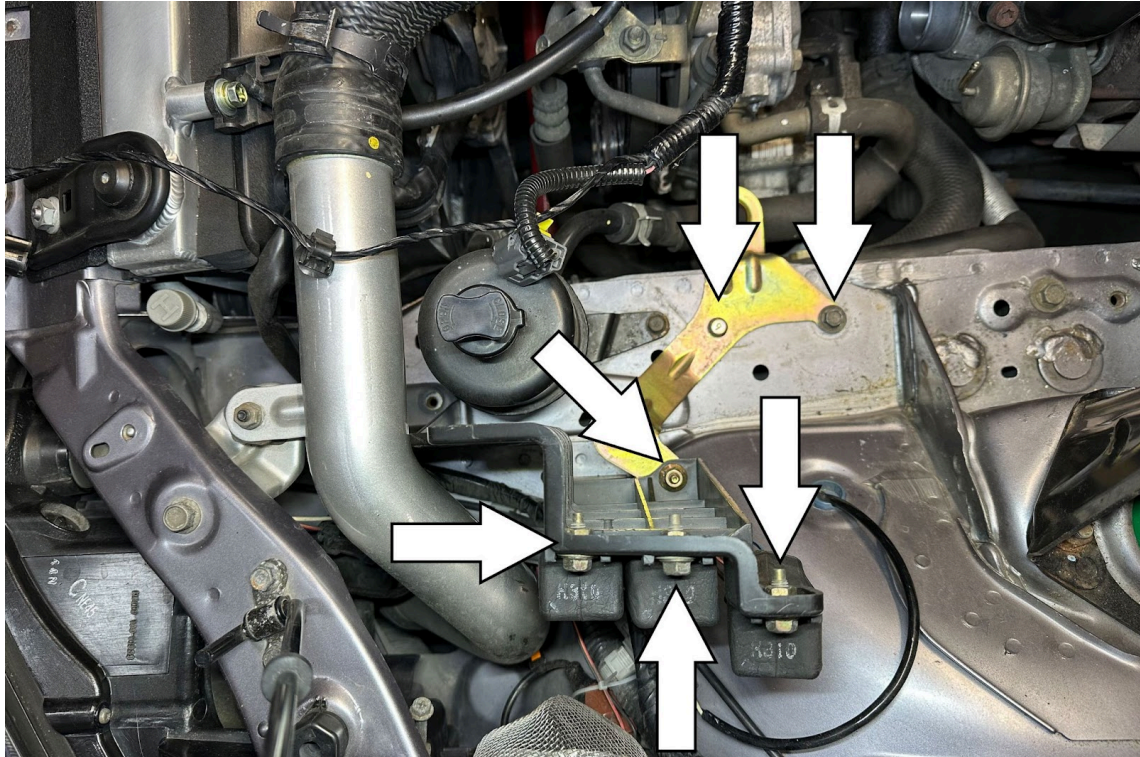
6. Disconnect the turbo wastegate vacuum hose.



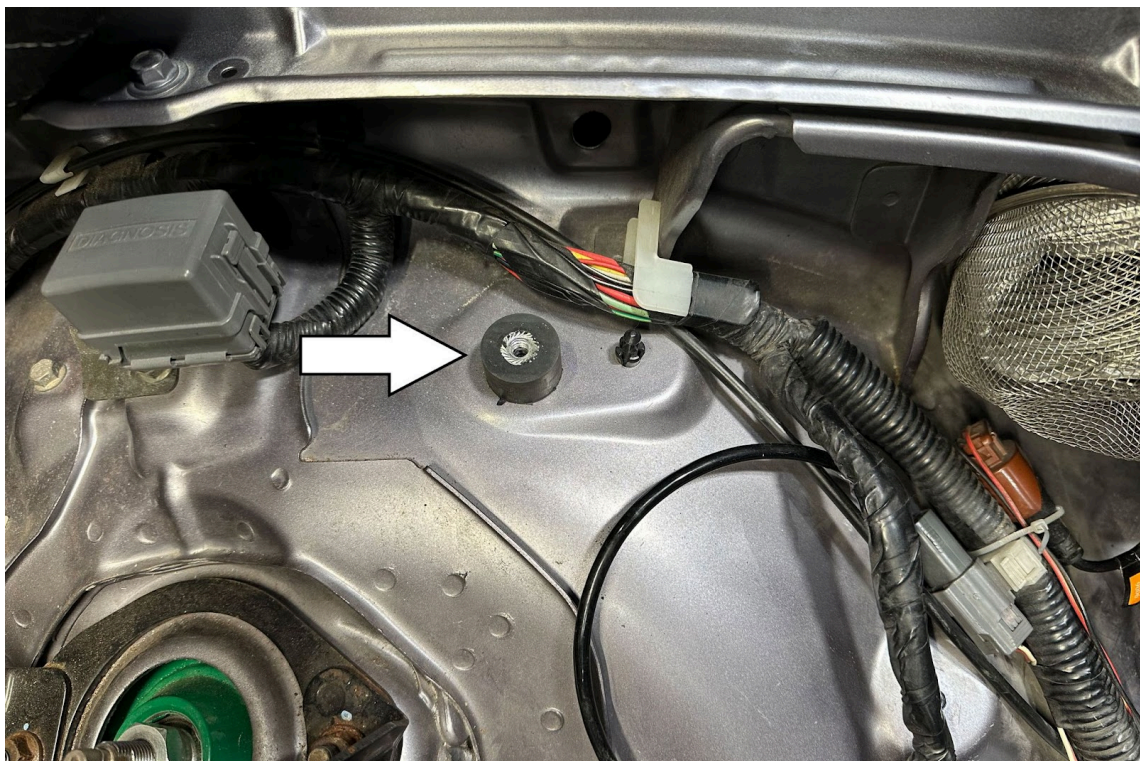
7. Remove the three bolts holding the splash guard in place.



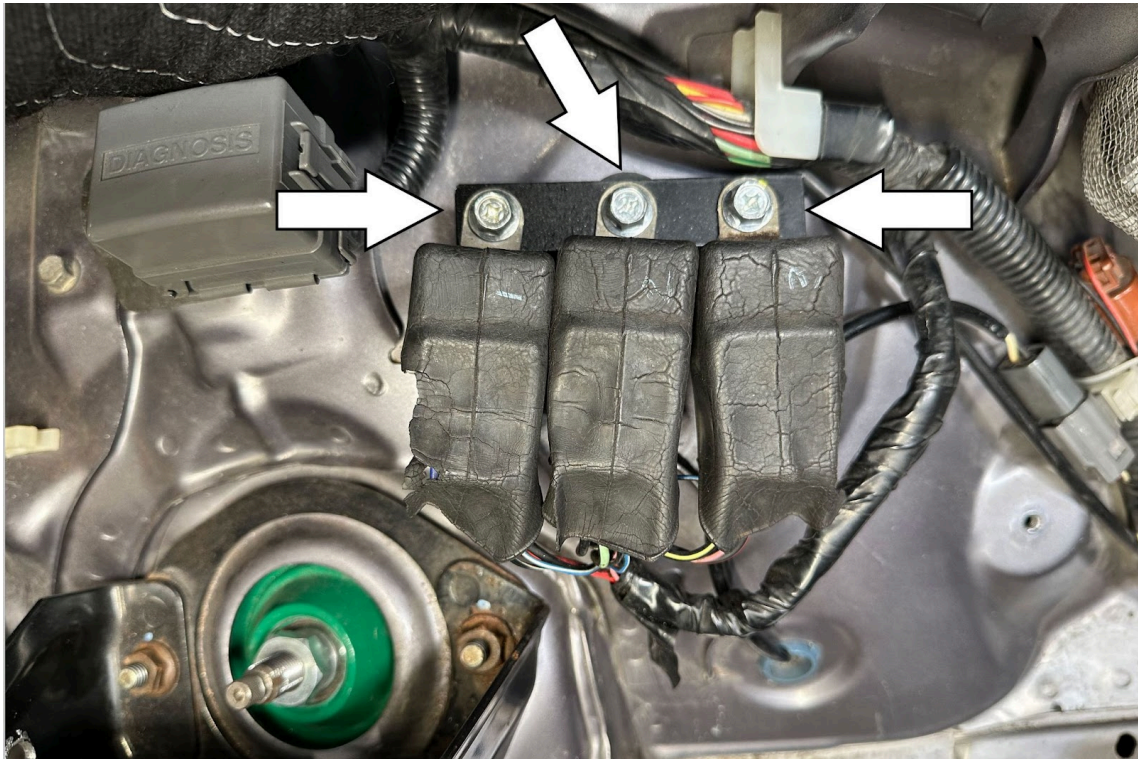
8. Depress the top hose clamp to disconnect the coupler from the upper hot side charge pipe.



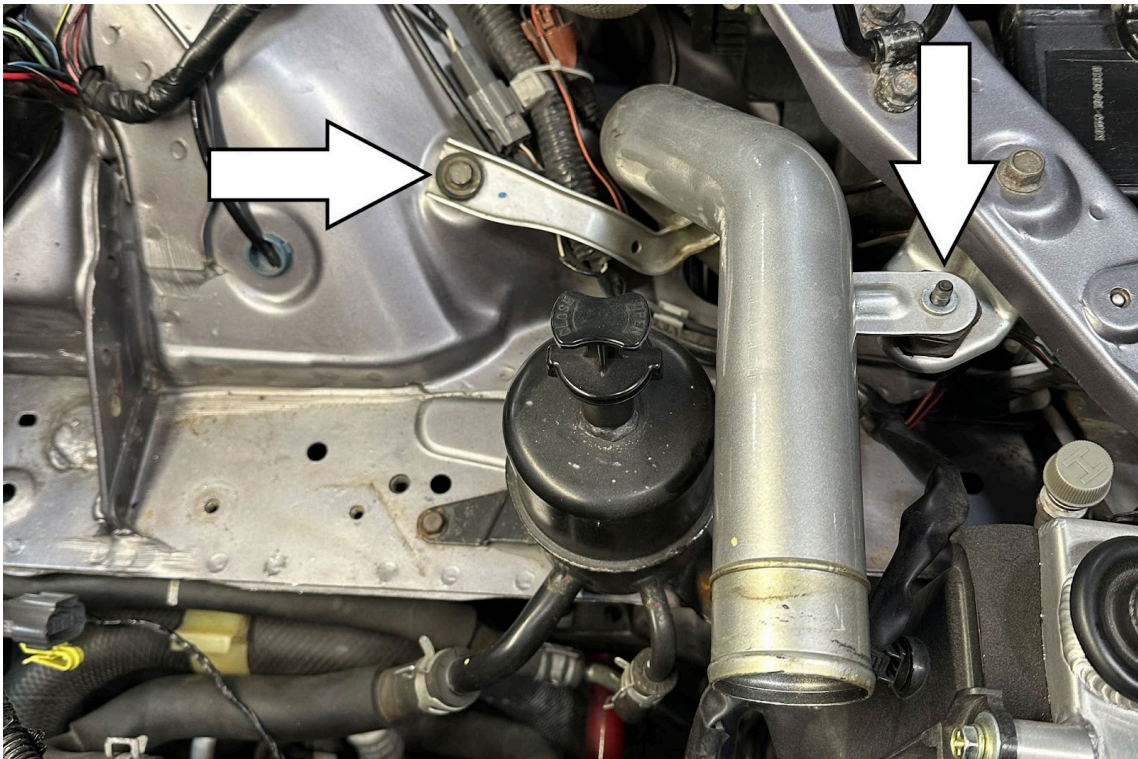
9. Uninstall the three relays from the plastic heat shield and remove the lower intake box bracket.



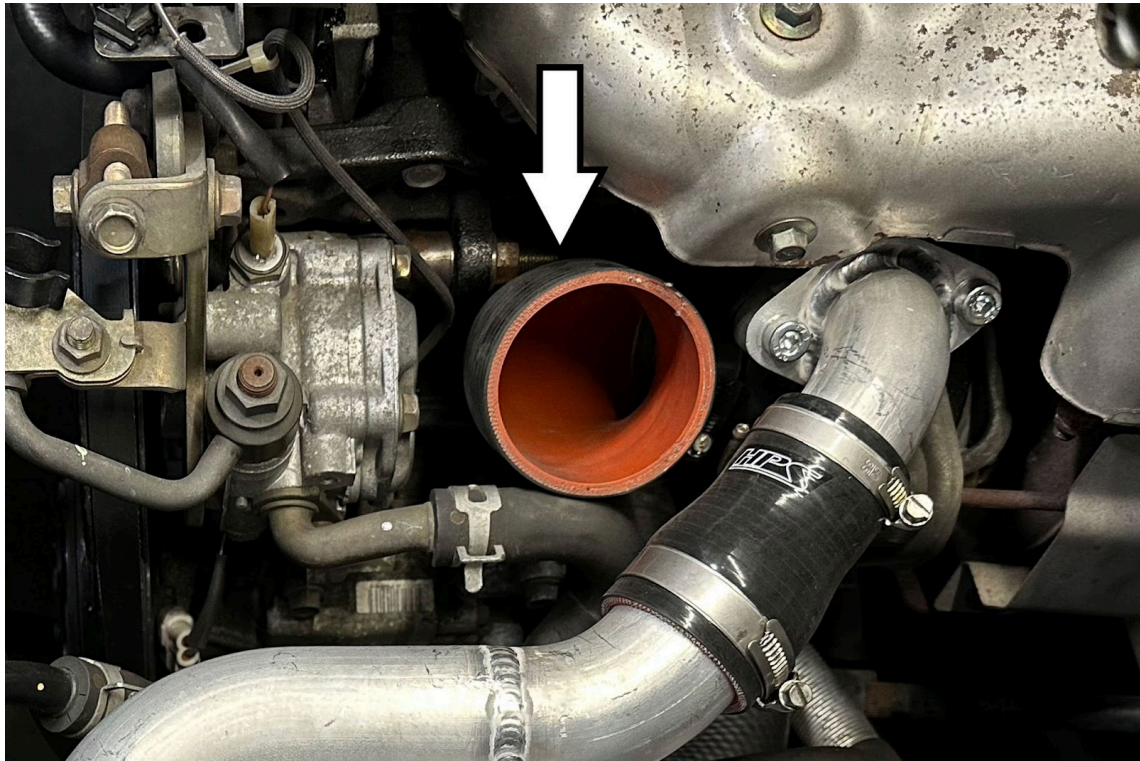
10. Install the provided 5/8 inch thick rubber vibration mount onto the driver side inner fender.



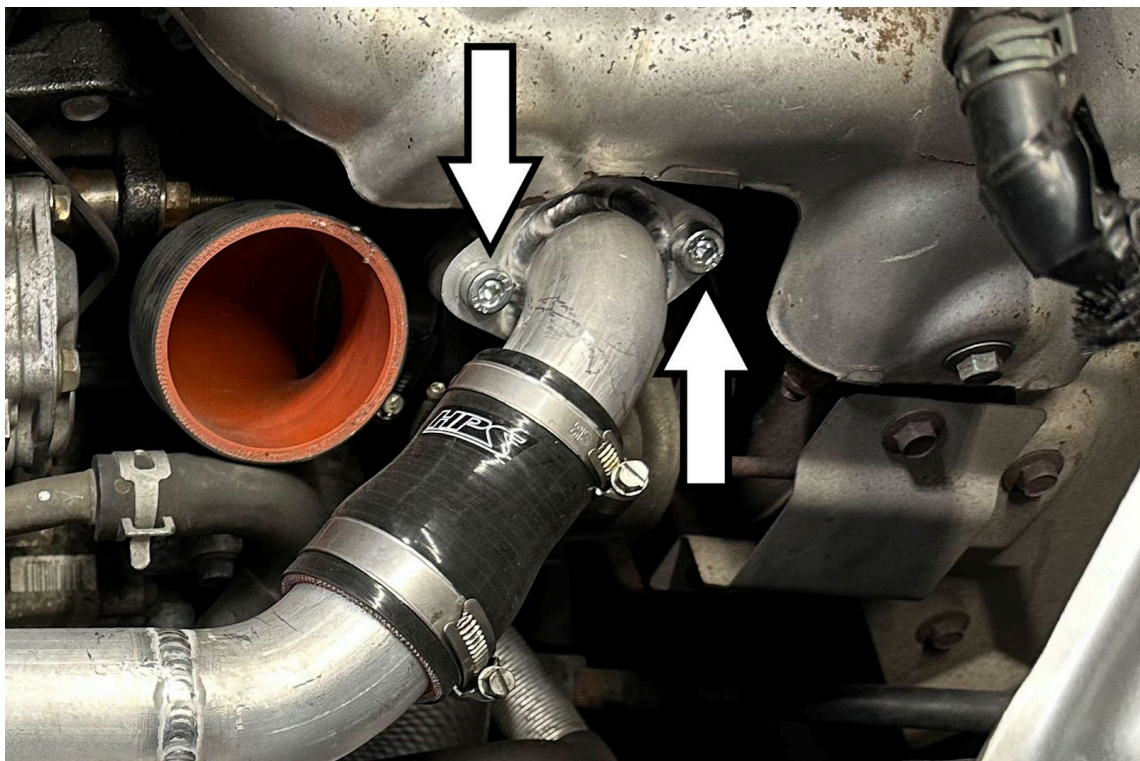
11. Use the provided flat bracket to mount the two outer relays using two 12mm long M6 bolts and nuts. Then, mount the middle relay and bracket onto the previously installed rubber vibration mount using a 12mm long M6 bolt.



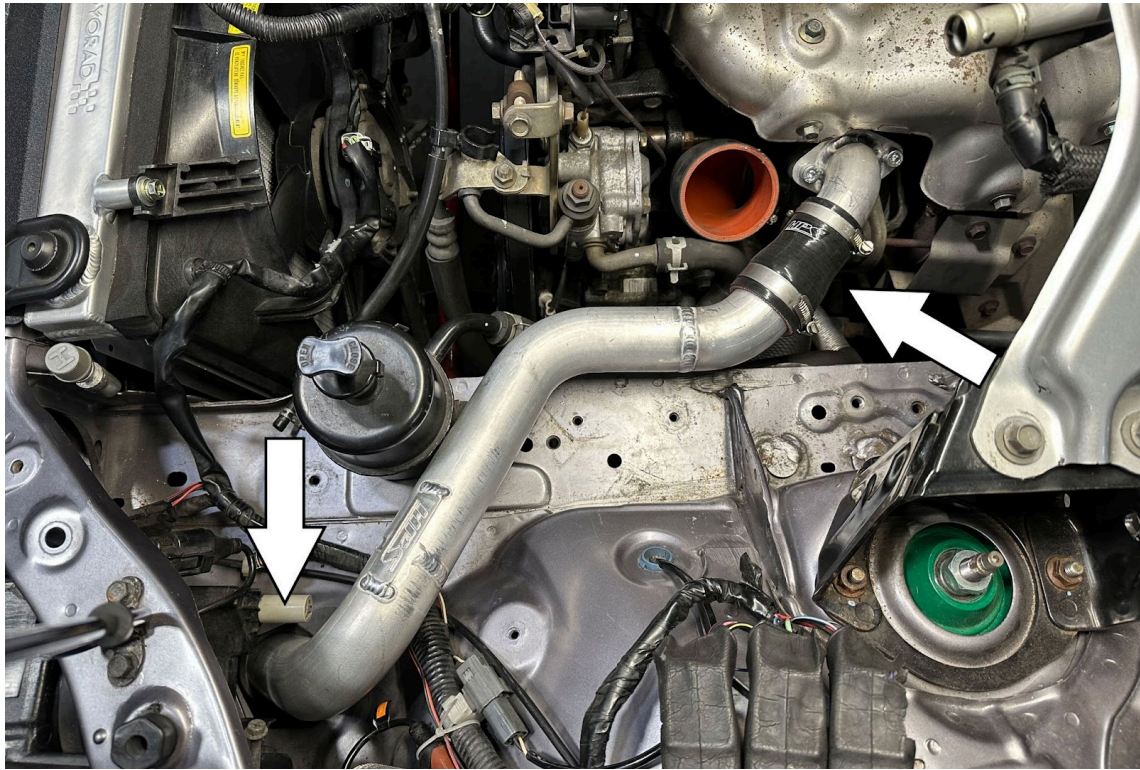
12. Remove the intercooler pipe mounting bolt and nut as shown above to remove the upper hot side charge pipe from the vehicle.



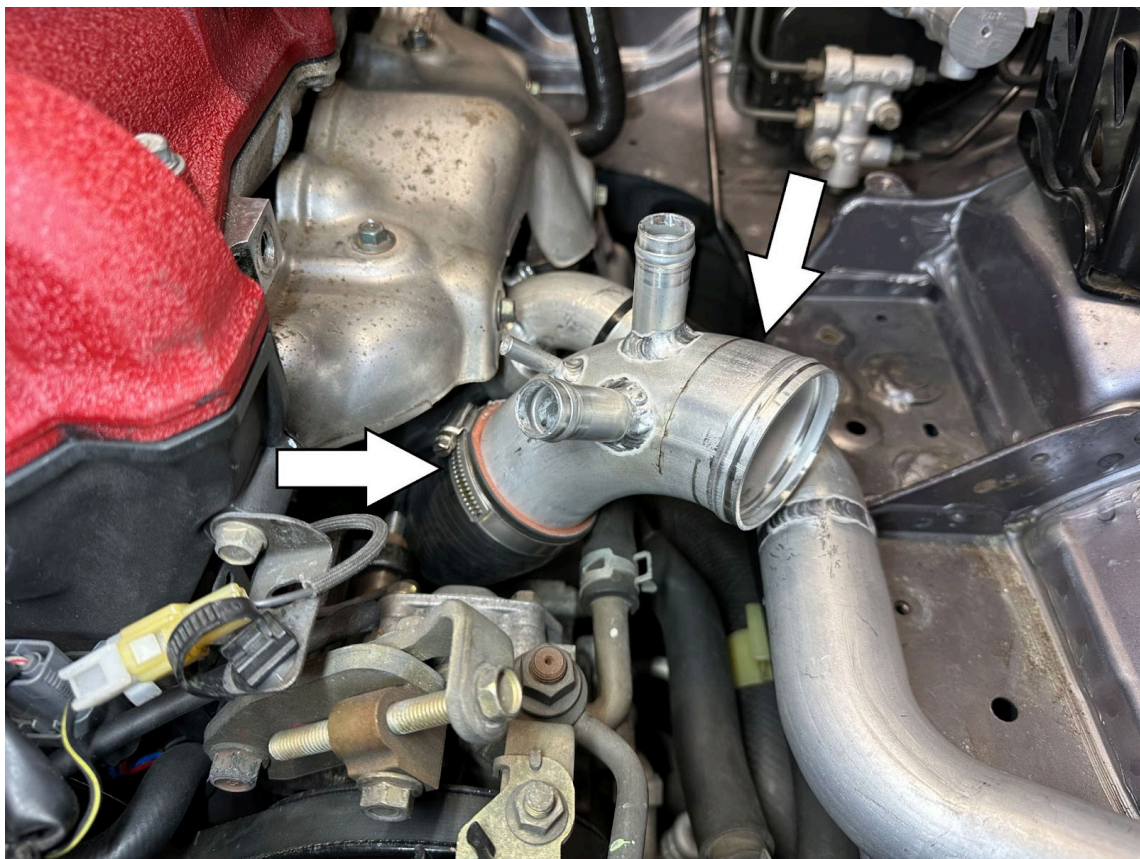
13. Install the provided 90 degree reducing coupler to the turbo inlet using the provided 40-60mm clamp.



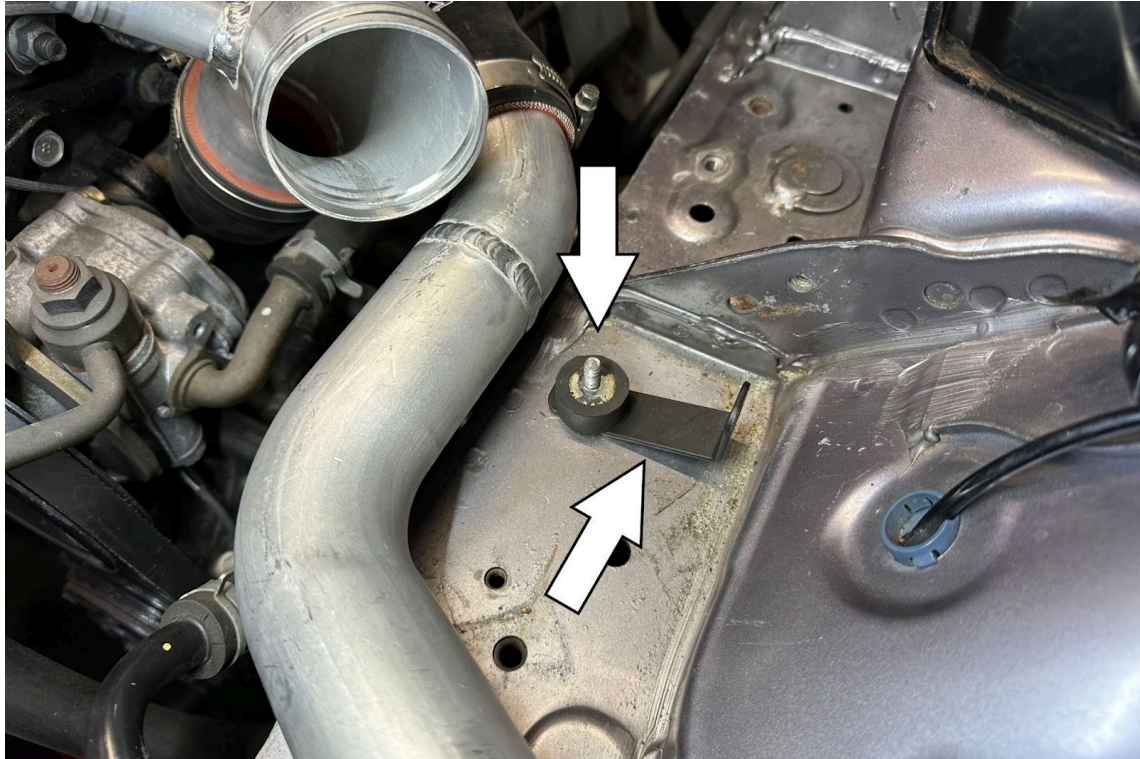
14. Secure the turbo outlet pipe using the factory gasket and the two provided Allen bolts.



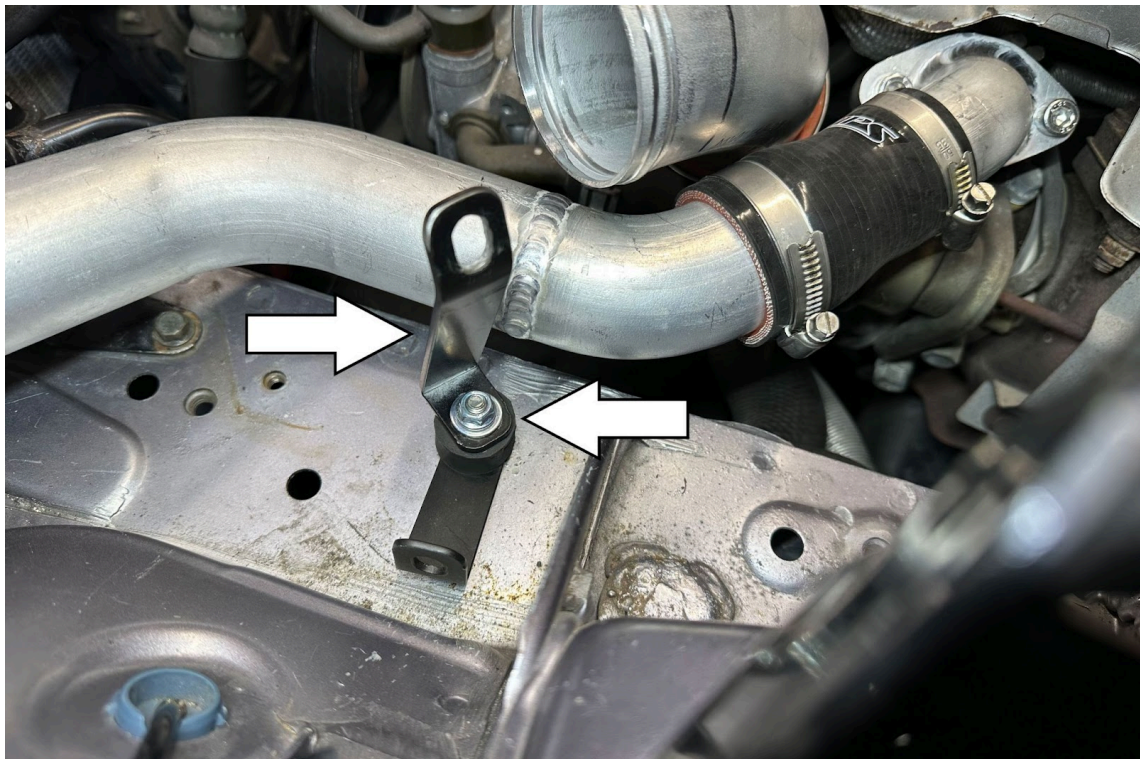
15. Slip the HPS upper hot side charge pipe into the stock coupler and secure it by reusing the original clamp from step 8. Then secure the other end to the turbo outlet pipe using the provided reducing coupler, 35-50mm clamp, and 40-60mm clamp.



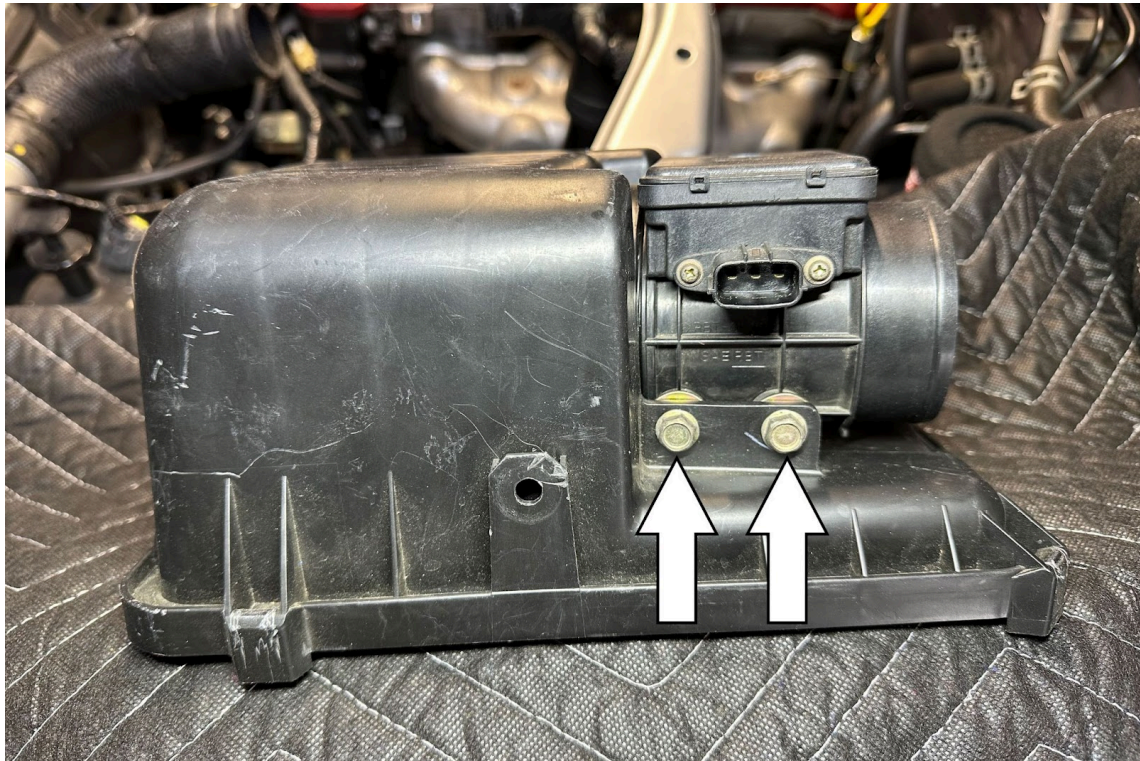
16. Install the intake pipe into the 90 degree reducing coupler and secure it using the provided 60-80mm clamp.



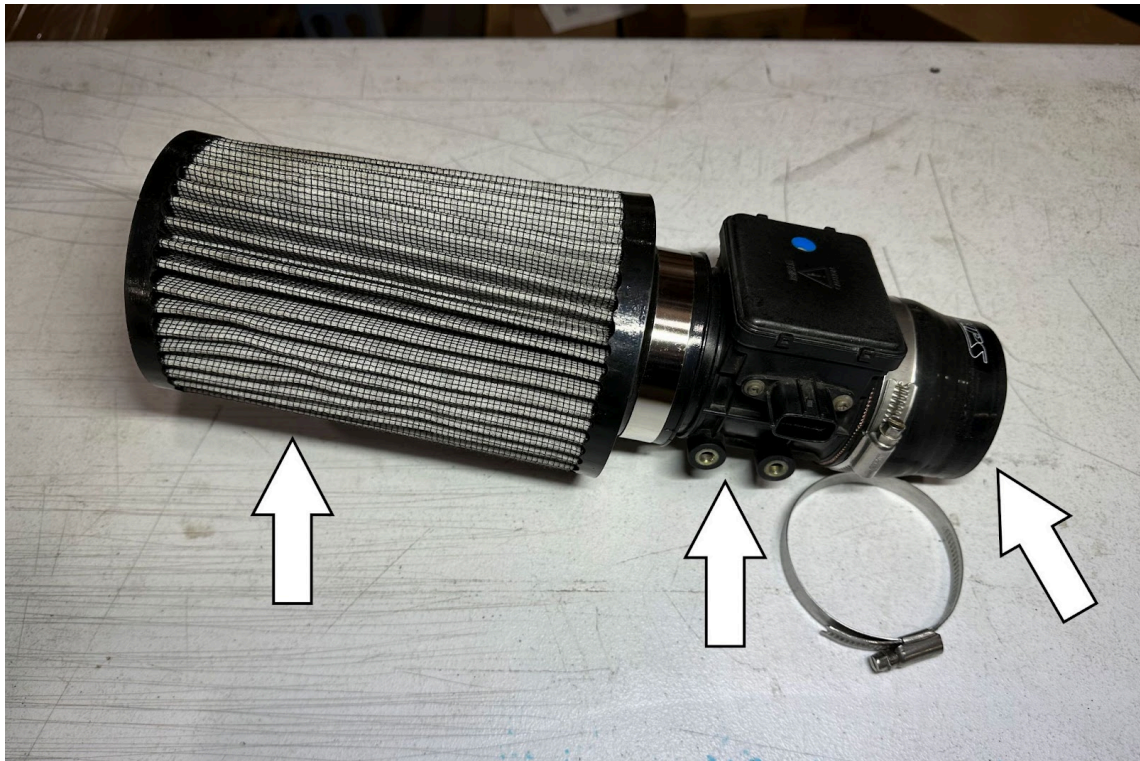
17. Secure the provided "C" bracket using the 1/2 inch thick rubber vibration mount as shown above.



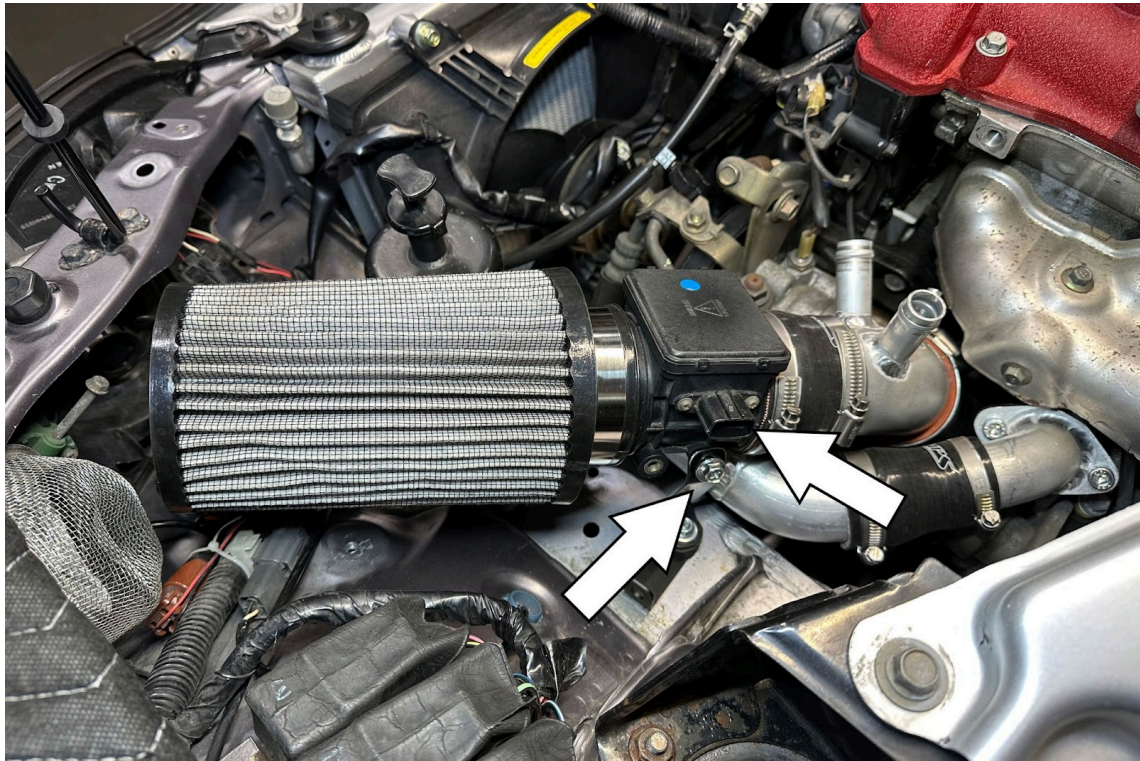
18. Install the provided "Z" bracket using the provided M6 nut and washer.



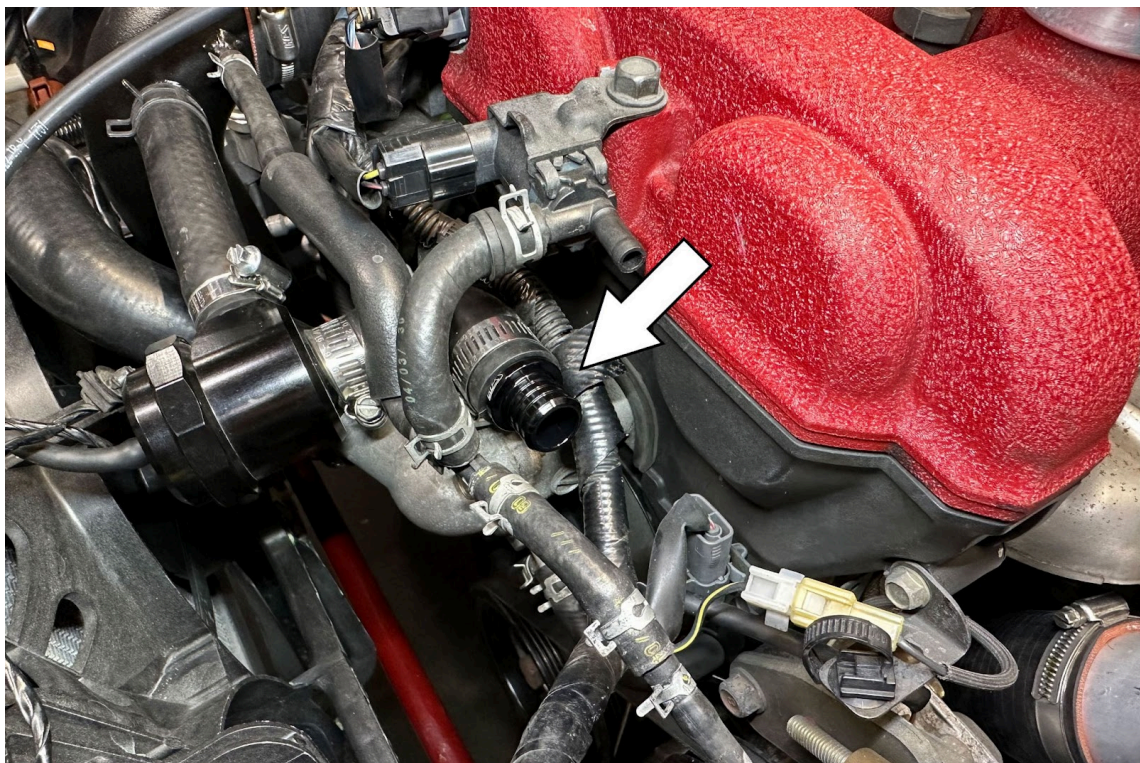
19. Uninstall the two fasteners holding the MAF sensor to the original intake air box.



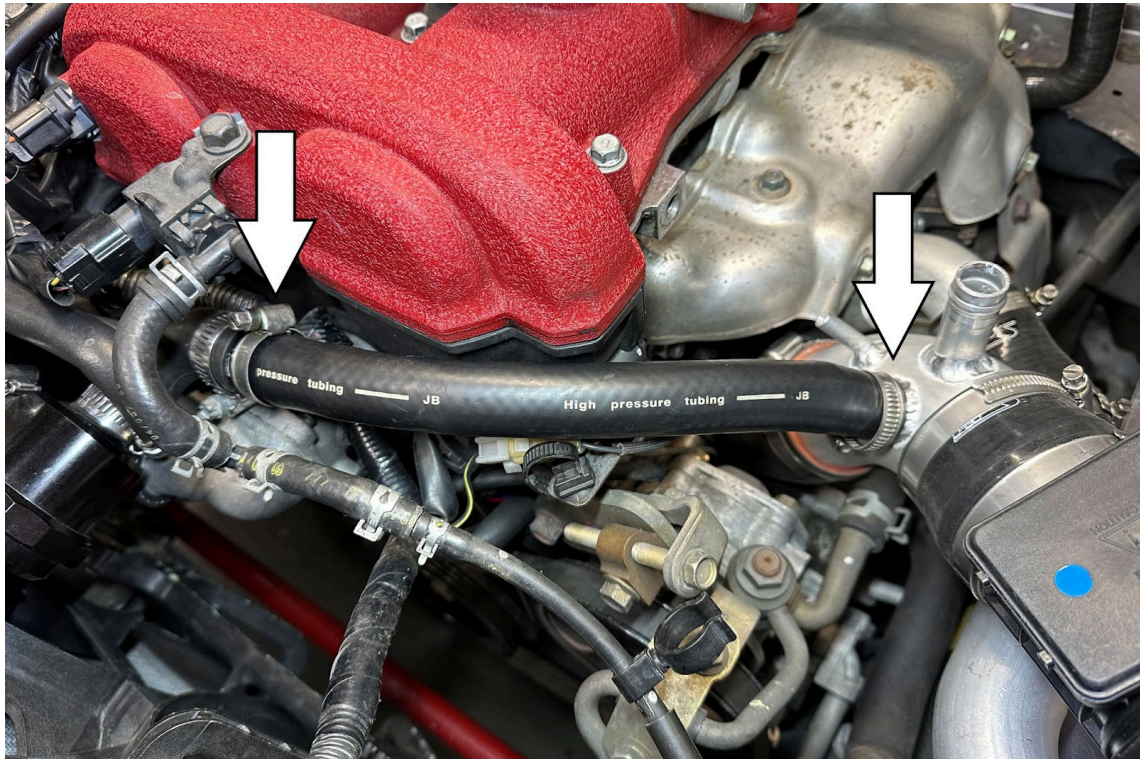
20. Install the provided air filter and reducing coupler onto the MAF sensor using the provided 60-80mm clamps in the orientation shown above.



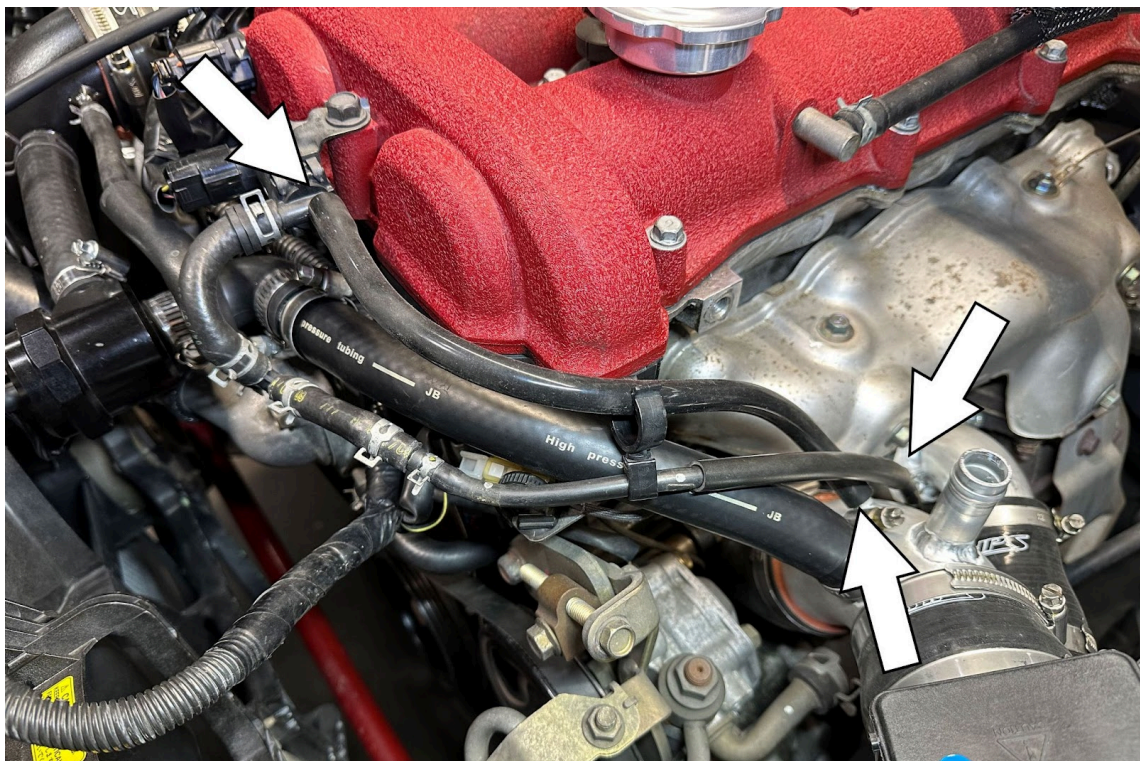
21. Using the second 60-80mm clamp, secure the air filter and MAF sensor to the intake tube. Use the provided 12mm long M6 bolt and washer to mount the MAF sensor to the "Z" bracket.



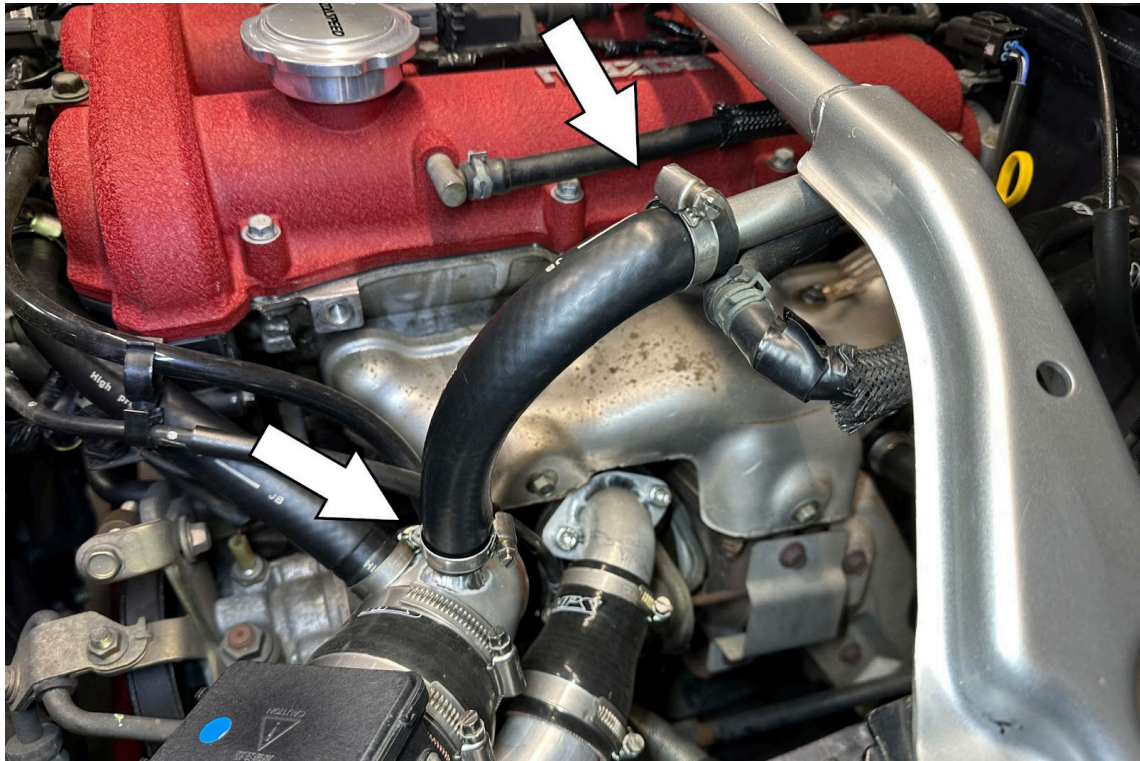
22. Install the 3/4 inch hose union onto the blow off valve recirculation hose using the factory clamp.



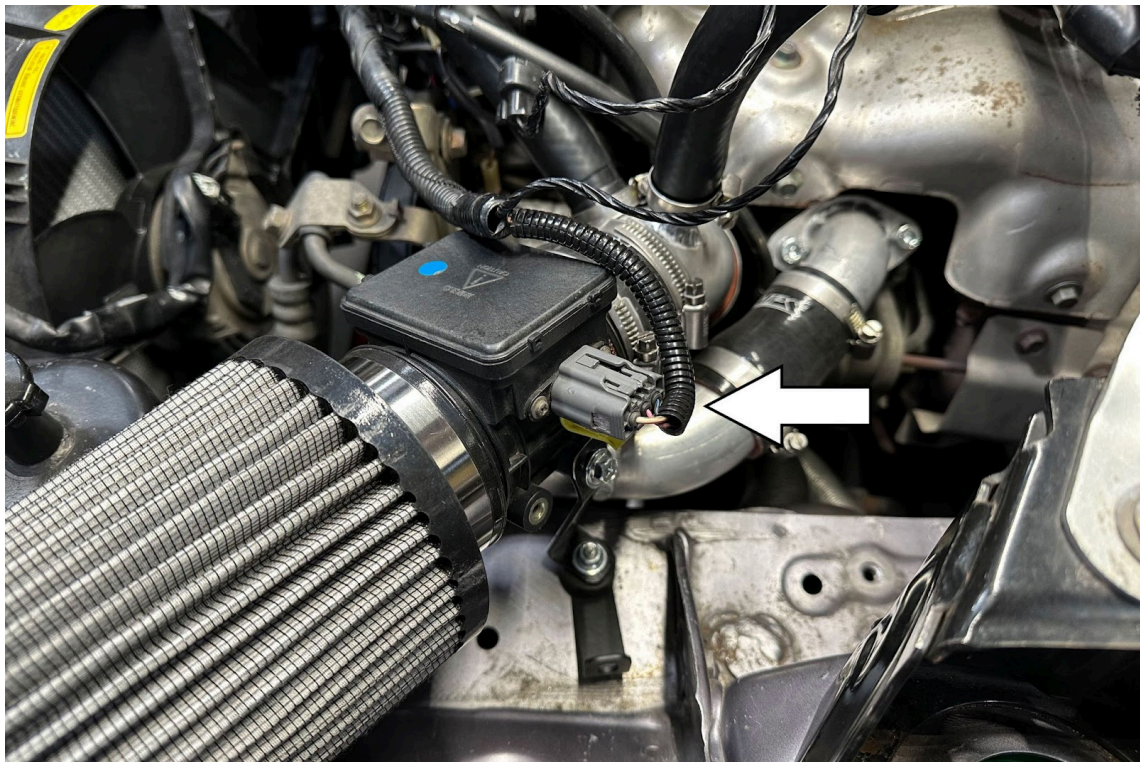
23. Connect the provided 11 inch long EPDM hose from the hose union to the intake pipe. Secure the hose using the provided 16-27mm clamps.



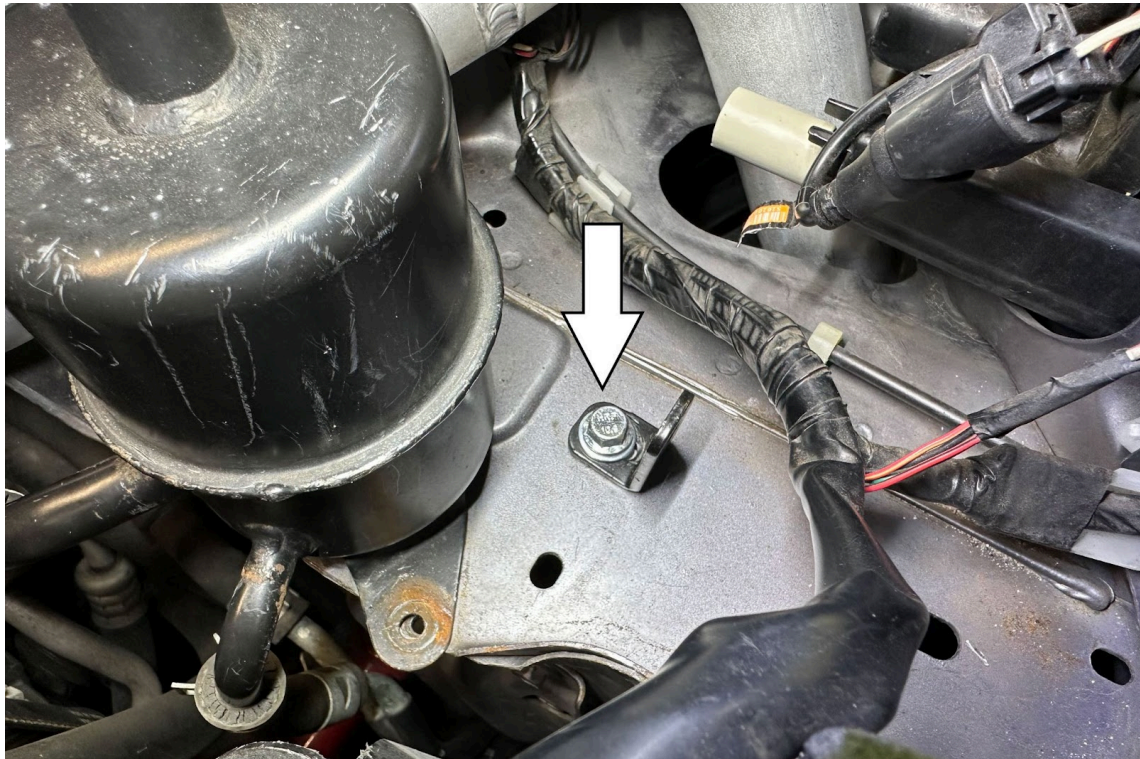
24. Attach the 6mm vacuum hose from the vacuum switching valve to the intake pipe. Reattach the vacuum hose back to the turbo.



25. Connect the 8 inch long EPDM hose from the tube on the strut bar to the intake pipe. Measure the amount of hose needed and cut the hose to length. Secure the hose using the provided 16-27mm clamps.



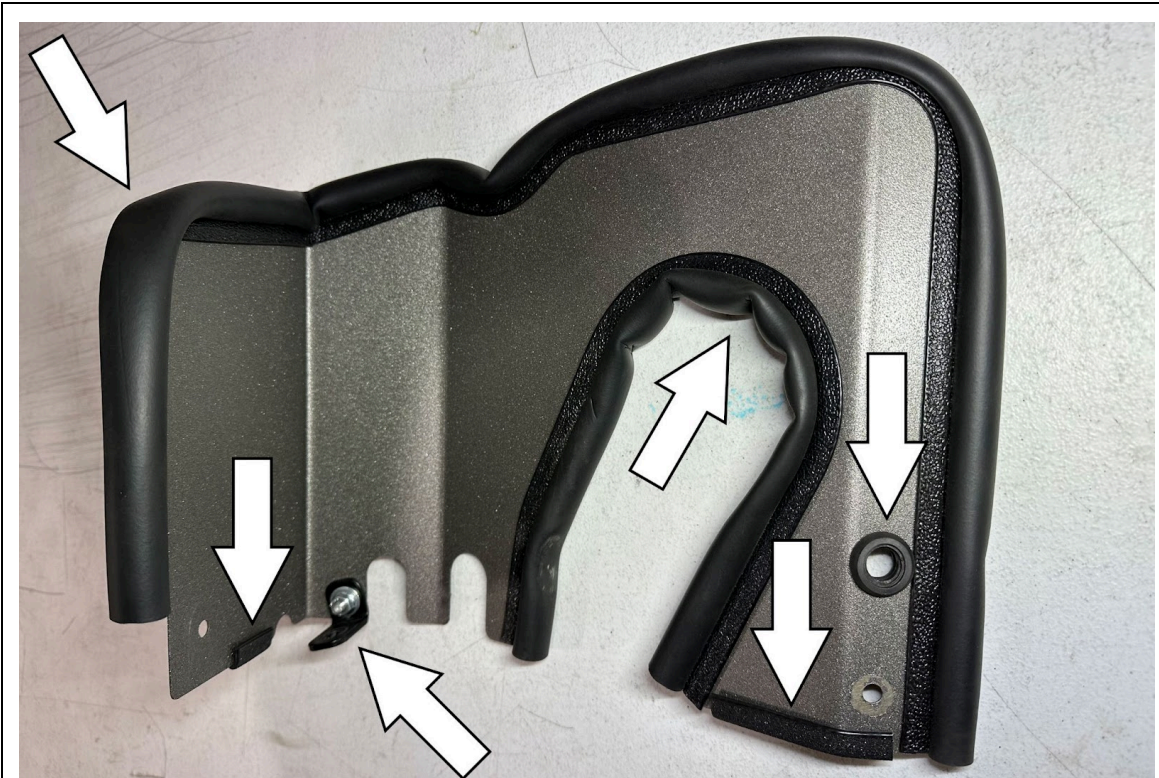
26. Connect the MAF sensor.



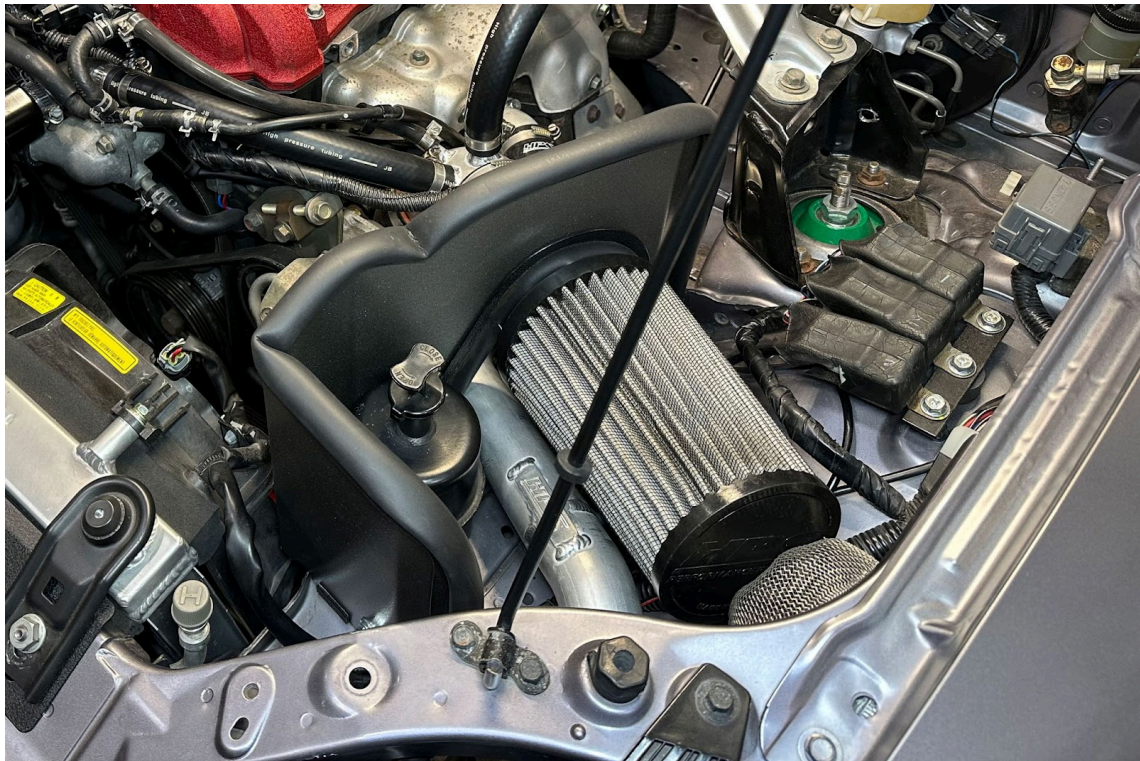
27. Install the short leg of the "L" bracket to the frame at the front of the power steering reservoir using the provided 16mm long M6 bolt and flat washer.



28. Pull out the intake air temperature sensor and rubber grommet from the upper air box assembly.



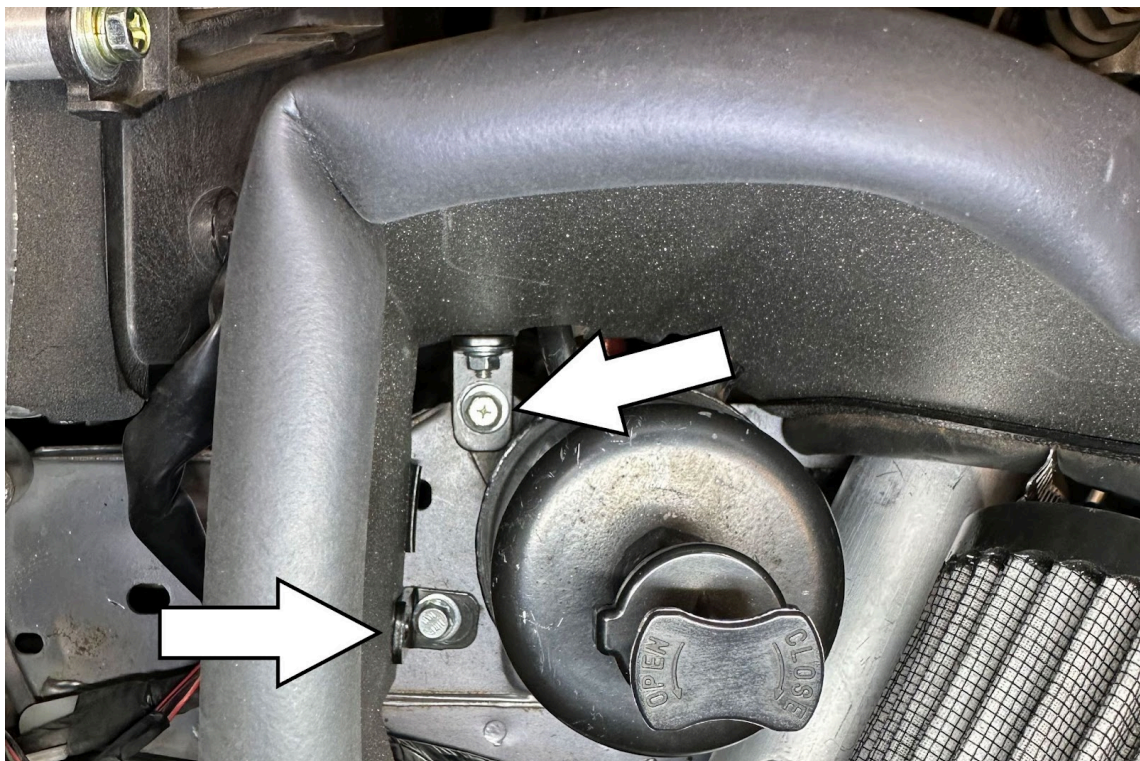
29. Install the stock rubber grommet into the opening on the heat shield. Install the bubble edge trim onto the heat shield as shown above. Next, install the thin edge trim to the bottom of the heat shield as shown above. Install the shorter leg of the second provided "L" bracket onto the heat shield using the provided 16mm long M6 bolt, nut, and two washers.



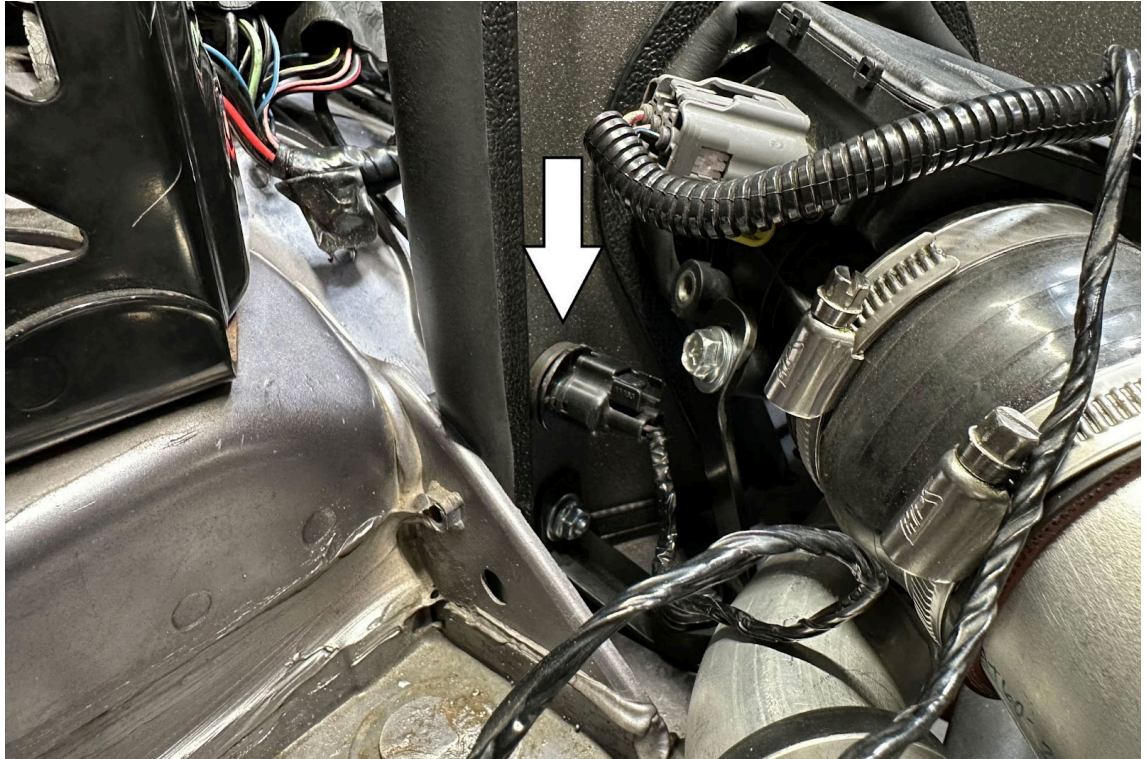
30. Slip the heat shield over the intake and the intercooler pipe as shown above.



31. Attach the heat shield to the "C" bracket below the MAF sensor using the provided 16mm long M6 bolt, nut, and two washers.



32. Attach the heat shield and the "L" brackets to the mounting points next to the power steering reservoir using the provided nuts, bolts, and washers.



33. Install the intake air temperature sensor where the rubber grommet was installed on the heat shield and reconnect the sensor.

FINAL STEPS

Once the intake and charge pipe have been positioned, tighten all of the clamps and secure all of the parts.

Upon completion of the installation, reconnect the negative battery terminal before you start the engine. Double check to make sure everything is tight and properly positioned before starting the vehicle.

Start the engine. Let the car idle for 3 minutes. Perform a final inspection before driving. 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 may be causing leaks or rattles and correct the problem.

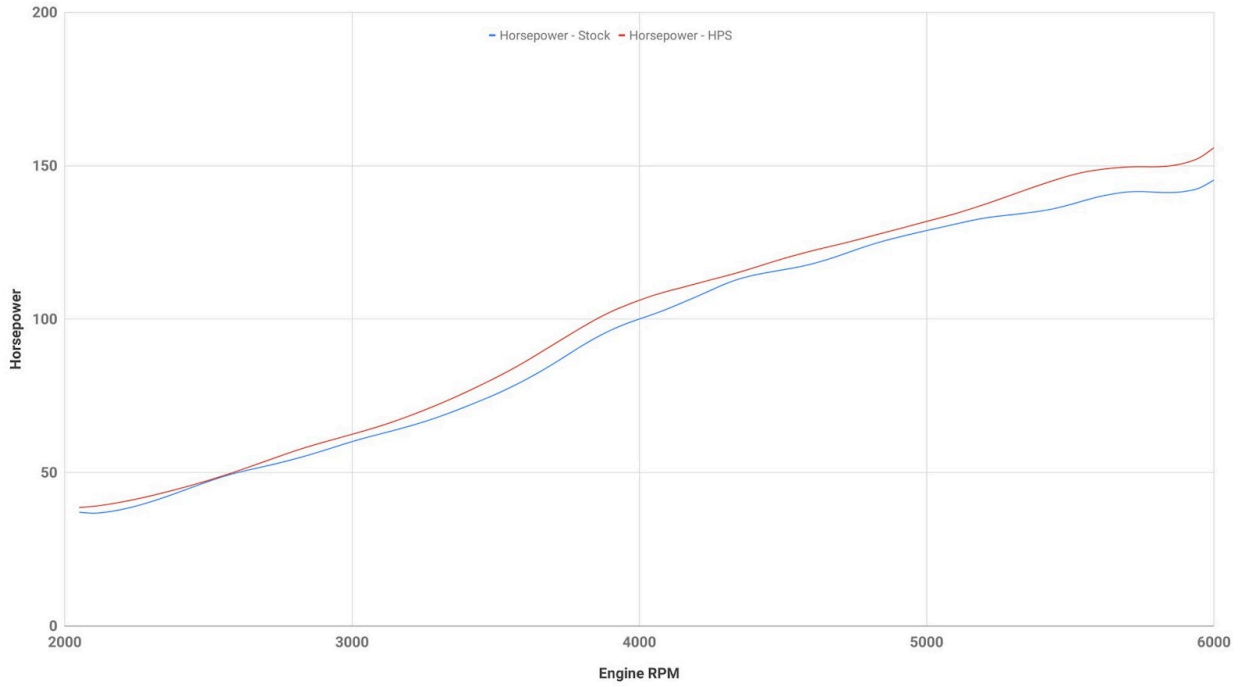
Periodically, recheck the alignment of the intake and charge pipe to make sure there is proper clearance around and along the length of the pipes. Failure to follow proper maintenance procedures may cause damage to the intake and charge pipe, thereby voiding the warranty.



HPS Performance Air Intake Kit with Heat Shield (827 Series)
2004-2005 Mazda Miata Mazda Speed
Part Number: 827-733

Maximum Horsepower Gains = 9.5 whp @ 5500 rpm

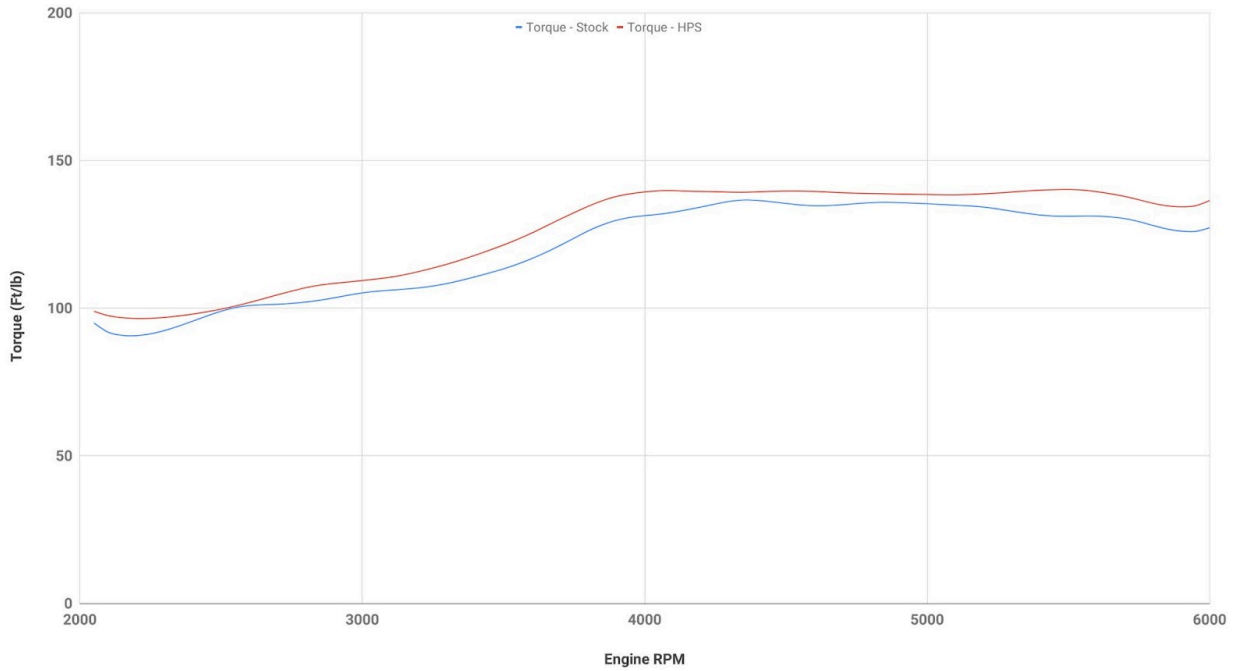
Tested Vehicle: 2004 Mazda Miata Mazda Speed



HPS Performance Air Intake Kit with Heat Shield (827 Series)
2004-2005 Mazda Miata Mazda Speed
Part Number: 827-733

Maximum Torque Gains = 9.1 ft/lb @ 5500 rpm

Tested Vehicle: 2004 Mazda Miata Mazda Speed



**Also available for
Mazda 2004-2005 Mazdaspeed Miata 1.8L Turbo**



**HPS Performance Throttle Body Cold Side
Charge Pipe Kit**
[Part Number 17-151](#)



**HPS Performance Hot and Cold Side
Charge Pipe Kit**
[Part Number 17-152](#)



**HPS Performance Replacement Air Filter
For
2004-2005 Mazda Mazdaspeed Miata 1.8L
Turbo Air Intake Kit**
[Part Number HPS-4335](#)



HPS Performance Air Filter Cleaning Kit
[Part Number HPS-AFRC](#)

Contact an authorized HPS Performance dealer or
visit us at hpsperformance.com for more details