Performance Air Intake Kit
Part Number: 827-787

2017-2025 Ford F-150 3.5L Turbo V6
2017-2025 Ford F-150 Raptor 3.5L Turbo V6
2018-2024 Ford Expedition 3.5L Turbo V6

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.

Last Revision KC05302025

Bill of Materials

Kit Number: 827-787

Line #	Description	Part Number	Qty
1	Air intake pipe	529-424	1
2	HPS Performance Air Filter	HPS-4298	1
3	Heat Shield	531-425	1
4	Heat Shield Bracket	530-437	1
5	Reducer Coupler, 3-1/2" - 4” ID, 3” Long	P3SR-350-400-L3	1
6	Straight Coupler, 3" ID, 3” Long	P3SC-300-L3	1
7	T-bolt Clamp, 108mm - 116mm	SSTC-108-116	1
8	T-Bolt Clamp, 89mm - 97mm	SSTC-89-97	1
9	T-Bolt Clamp, 79mm - 87mm	SSTC-79-87	2
10	Bubble Edge Trim	7750B2X1/16C	48 inches
11	Thin Edge Trim	75B7X1/16	28 inches
12	Bolt, M6 x 1.0, 20mm Long	HW-B6-20	1
13	Flange Nut, M6	HW-N6	1
14	Flat Washer, M6, 16mm OD	HW-FW6L	2
15	Spacer, M6, 13mm OD, 5mm Thick	94669A165	1
16	Ford IAT Sensor Extension Harness, 12” Long	1919-SSC-12	1
17	O-Ring, 10mm ID, 2mm Thick	102MMV	1
18	Zip Tie, Black, 8 inch	8 IN ZIPTIE	1

- **Before installing any parts of this intake kit, please read the instructions thoroughly.**
- **Verify the contents of this intake kit before disassembling your vehicle.**
- **Report any defective or missing parts to HPS directly. The HPS dealer you purchased this product from might not have the replacement parts you need.**
- **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 the 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.

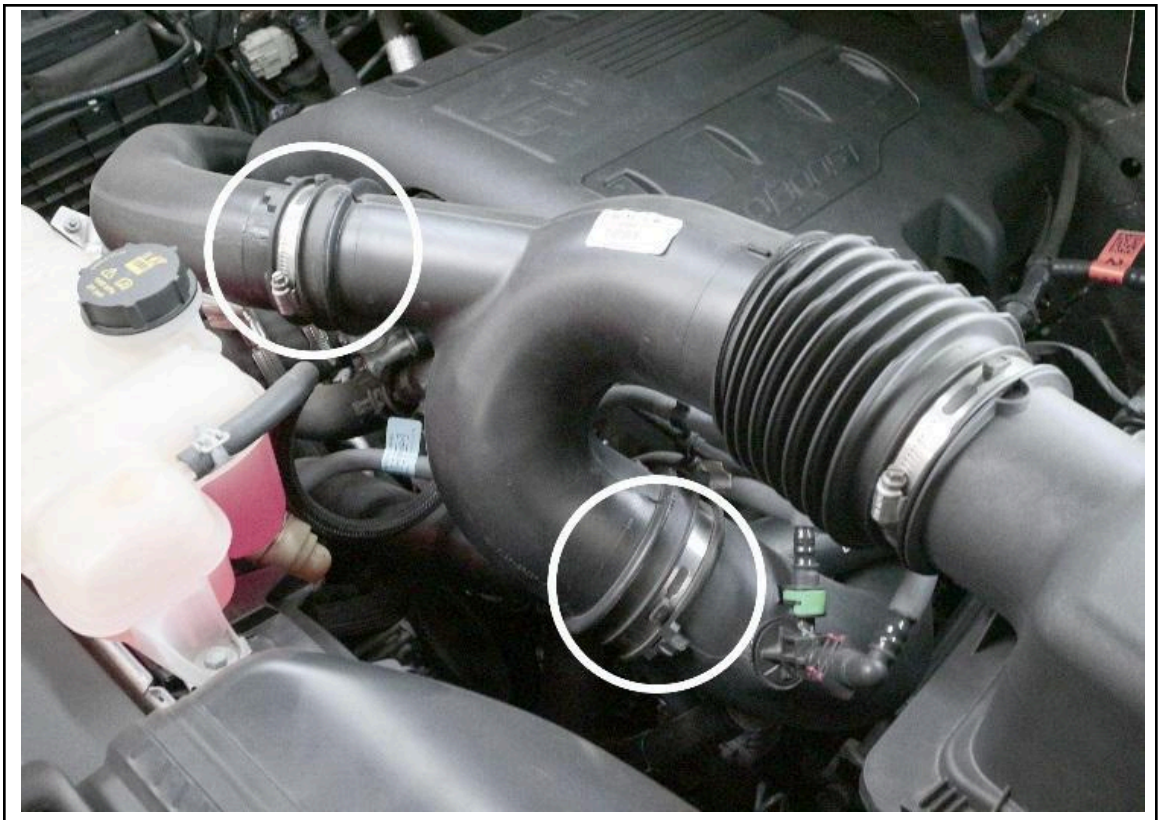
GETTING STARTED

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.

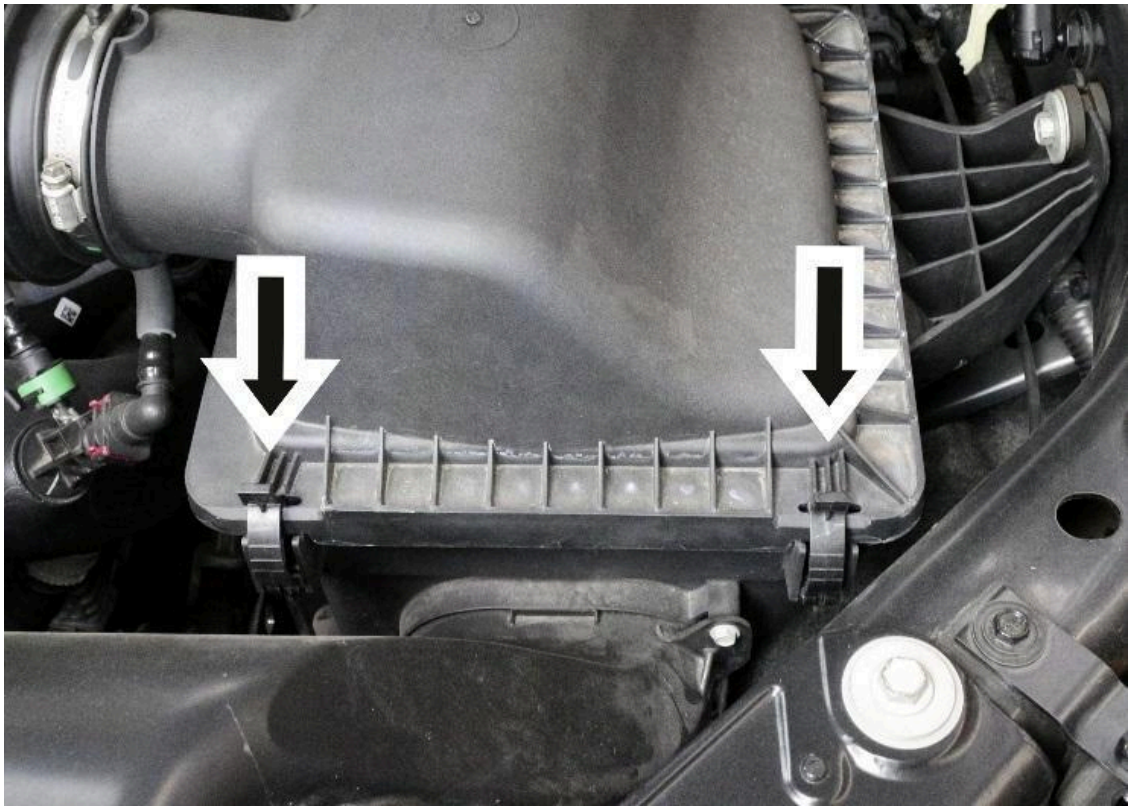
NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied 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. Disconnect the intake air temperature (IAT) sensor electrical connector.



3. Loosen the two hose clamps indicated in the image.



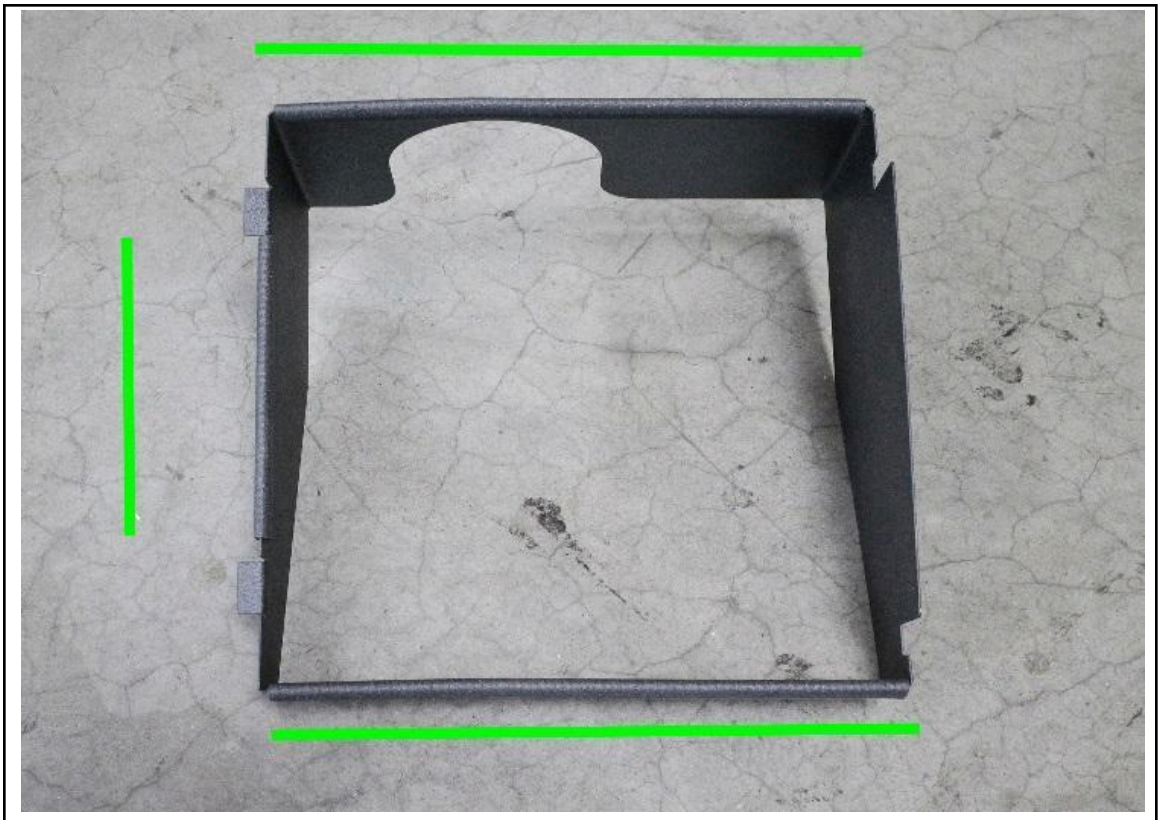
4. Unclip the air box buckles.



5. Remove the air intake tube and upper air box from the engine bay.



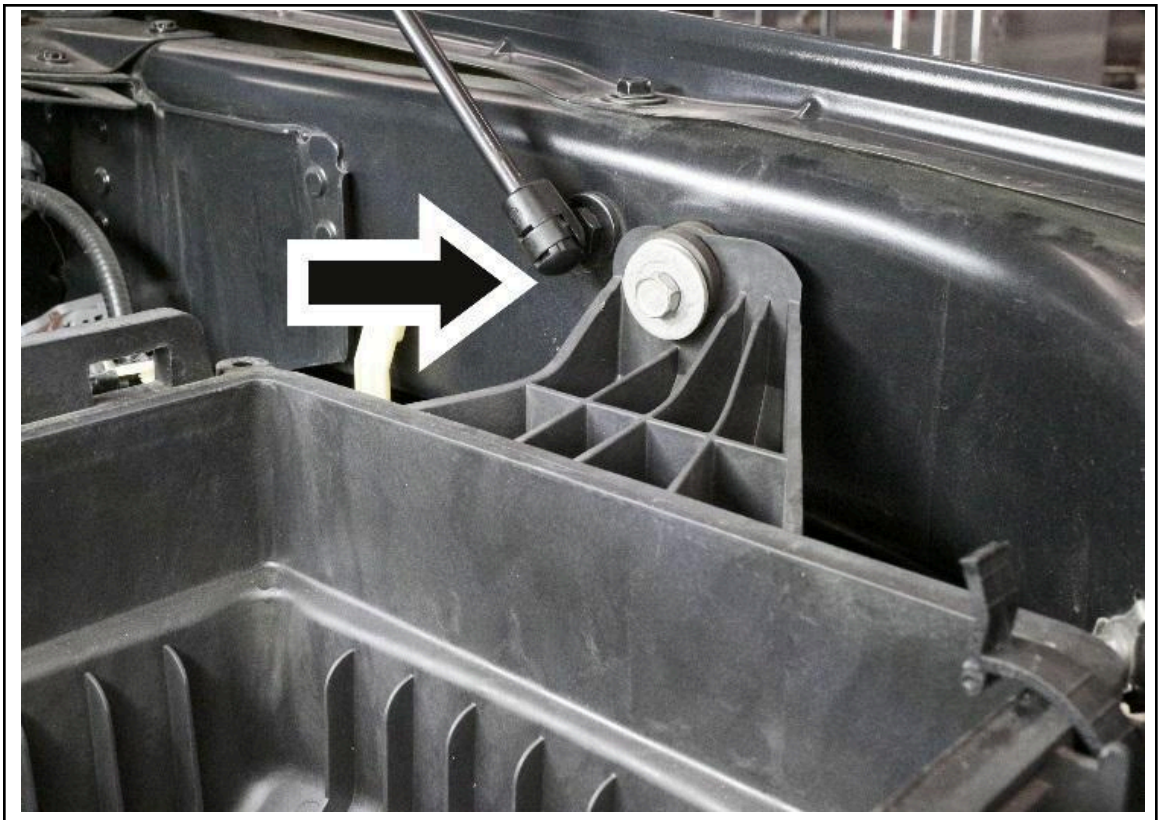
6. Remove the air filter from the lower air box.



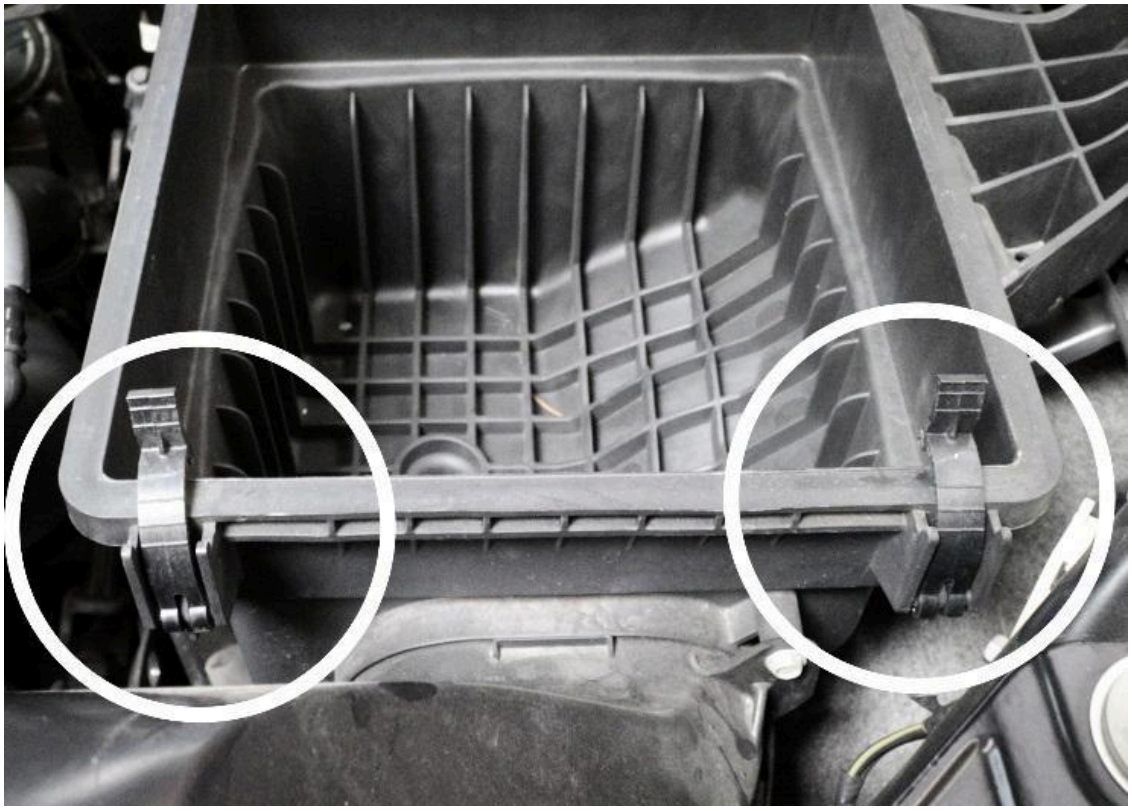
7. Install the thin edge trim onto the bottom side of the heat shield. Measure and cut to fit each section indicated above.



8. Install the bulbed edge trim along the upper perimeter of the heat shield.



9. Loosen and remove the bolt holding the lower air box.



10. Push the air box buckles up.



11. Place the heat shield onto the lower air box. Be sure to line up the two tabs at the rear as well as the front.



12. To install the bracket, reuse the factory lower air box bolt to secure it to the body. To secure the bracket to the heat shield, use the M6 hardware included in the intake kit. Be sure to install the 5mm tall spacer between the bracket and heat shield.



13. Install the silicone couplers onto the factory air intake tubes as shown. Secure the couplers using the provided T-bolt clamps.



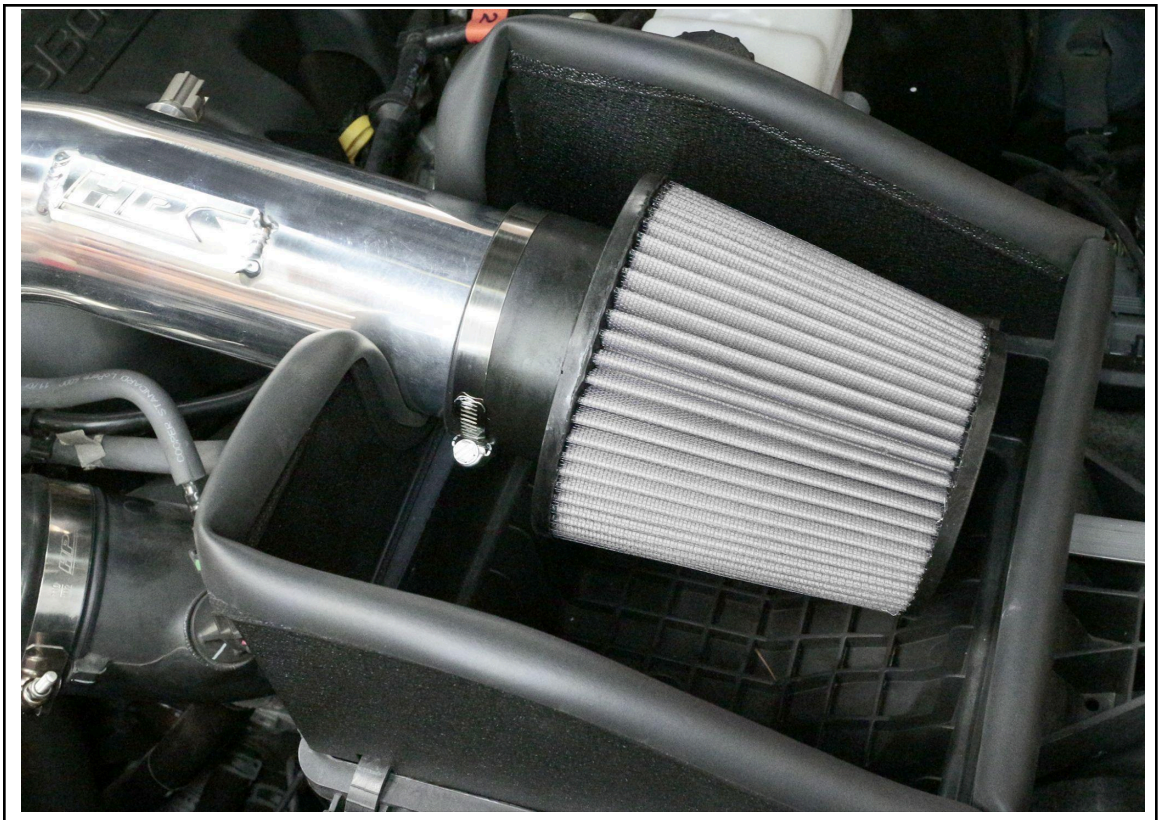
14. Remove the original IAT sensor O-ring and replace it with the O-ring provided.



15. Transfer the IAT sensor from the factory intake tube onto the HPS intake pipe.



16. Loosely place the remaining T-bolt clamps onto the silicone couplers, then install the HPS intake pipe into the couplers. Secure the clamps once you have positioned the pipe to your liking.



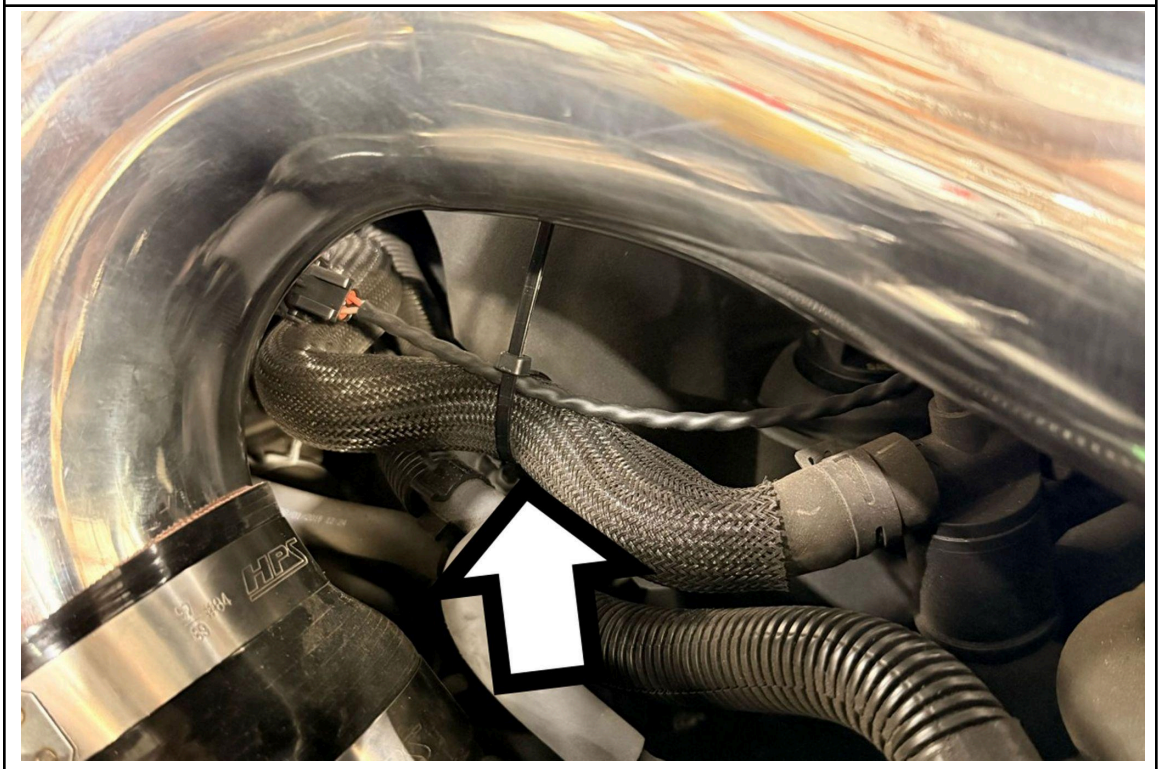
17. Install the air filter onto the end of the intake pipe.



18. Remove the tape from the stock IAT connector.



19. If the stock connector does not reach directly to the sensor, connect the provided electrical harness extension between the IAT electrical connector and the sensor.



20. If the extension was used, use the provided zip tie to secure the harness to the factory hose shown in the image.

FINAL STEPS

Once the intake has 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 the vehicle. 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.

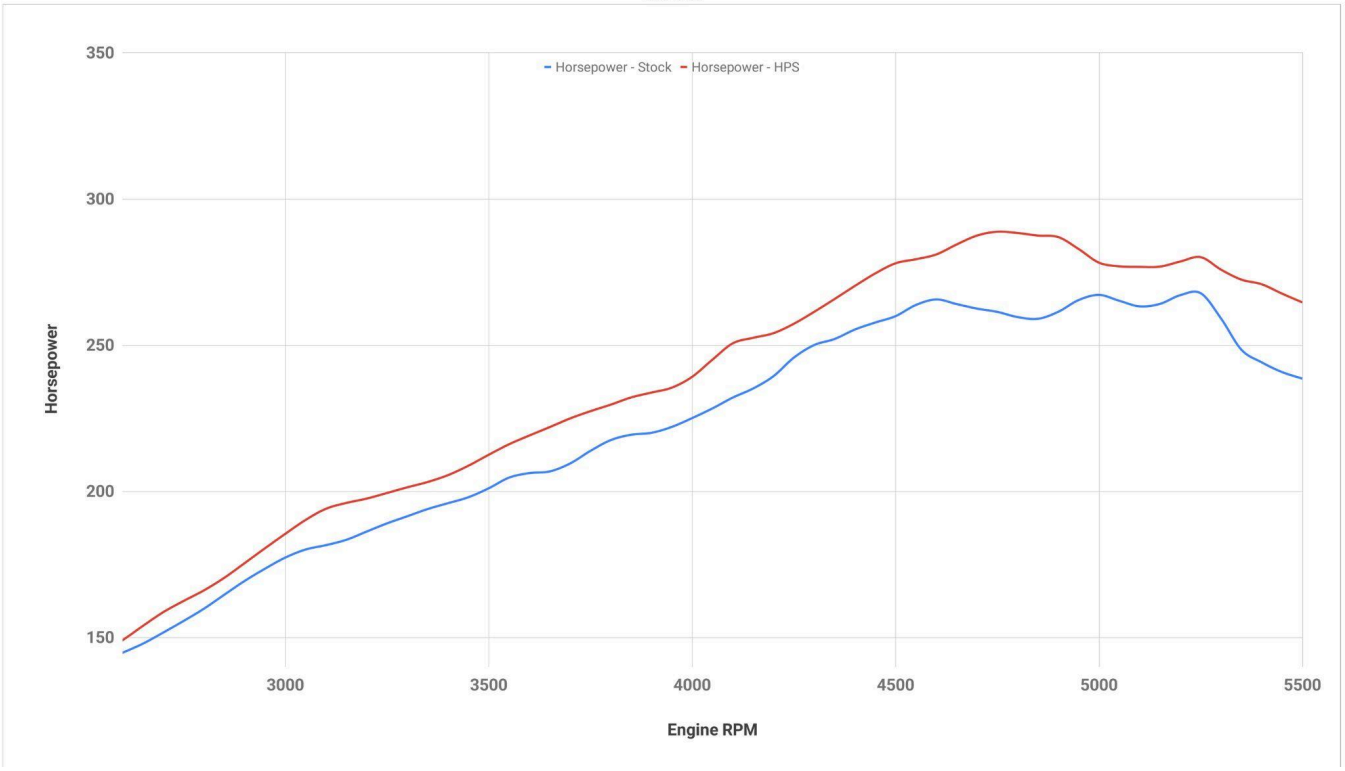
Periodically, recheck the alignment of the intake system and make sure there is proper clearance around and along the length of the intake. Failure to follow proper maintenance procedures may cause damage to the intake and will void the warranty.



HPS Performance Air Intake Kit with Heat Shield (827 Series)
2017-2025 Ford F-150 3.5L Turbo V6
2017-2025 Ford F-150 Raptor 3.5L Turbo V6
2018-2024 Ford Expedition 3.5L Turbo V6
Part Number: 827-787

Maximum Horsepower Gains = 18.1 whp @ 4500 rpm

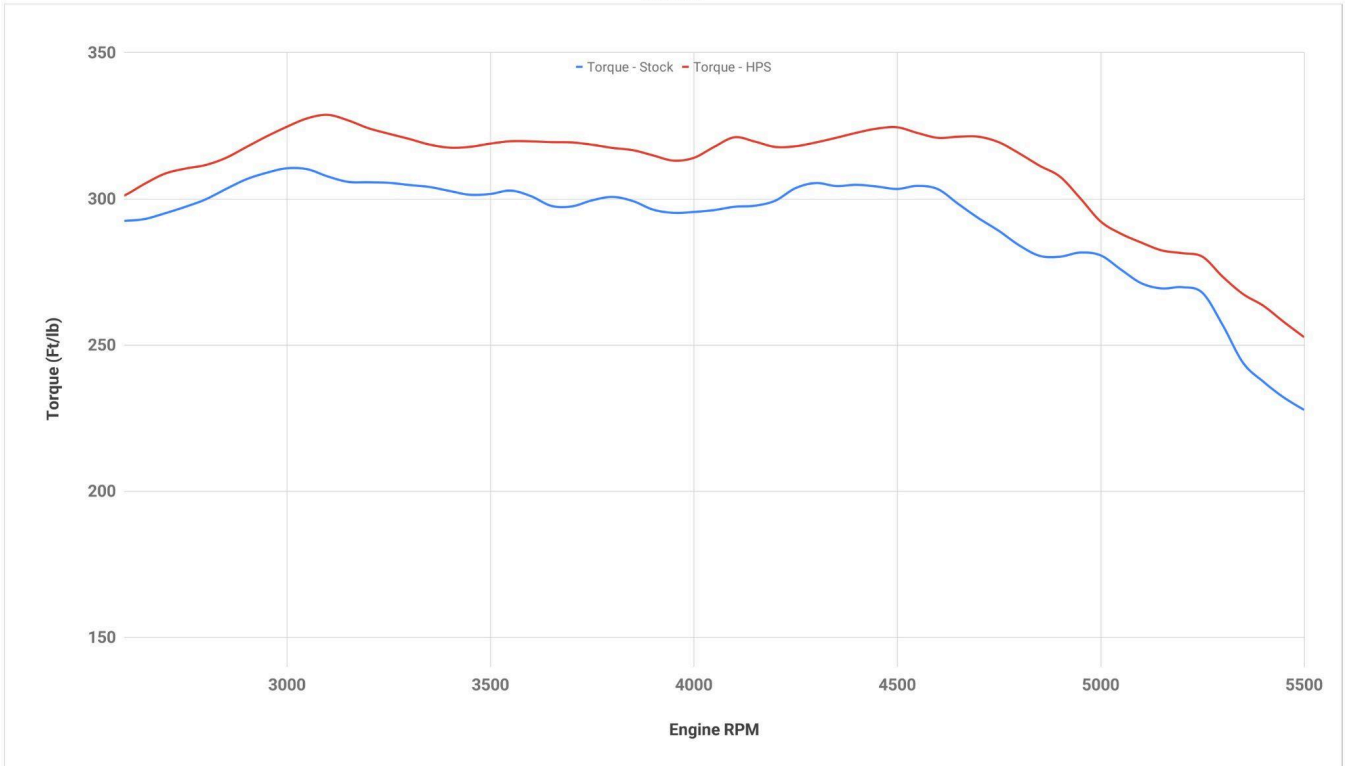
Tested Vehicle



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Maximum Torque Gains = 21.1 ft/lb @ 4500 rpm

Tested Vehicle



Also available for
2017-2025 Ford F-150 3.5L Turbo V6
2017-2025 Ford F-150 Raptor 3.5L Turbo V6
2018-2024 Ford Expedition 3.5L Turbo V6

	**HPS Performance Replacement Air Filter** **For Intake Kit 827-787** **Part Number HPS-4298**
	**HPS Silicone Intercooler Boot Kit** **For Ford Raptor 3.5L V6** **Part Number 57-1672**
	**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