



## **Performance Shortram Intake Kit**

### **Part Number: 827-540**

**2000-2001 Ford F150 Harley Davidson 5.4L**

**1997-2004 Ford Expedition 5.4L**

**1998-1999 Lincoln Navigator 5.4L**

**1997-2003 Ford F-150 4.6L**

**1997-1999 Ford F250 4.6L**

## **Installation Instructions**

For technical inquiries please email us at [tech@hpsperformanceproducts.com](mailto:tech@hpsperformanceproducts.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: 827-540

Description	Prep	Part Number	Qty	Check
Air Intake Pipe	1	529-199	1	
HPS Air Filter	2	HPS-4303	1	
Heat Shield	3	531-200	1	
Velocity Stack 3.5"	4	HW-VS-350-600	1	
T-Bolt Clamp for 3" Hose	5	SSTC-79-87	1	
T-Bolt Clamp for 3.5" Hose	5	SSTC-95-103	5	
3" – 3.5" Reducer x 3" Long	5	P3SR-300-350-L3	1	
3.5" Coupler x 2" Long	5	P3SC-350-L2	2	
12mm Rubber Grommet	5	HW-RG12	1	
MAF 3.5" Adapter	5	ADAP-MAF-FORD V8	1	
6mm Bolt 25mm Long	5	HW-B6-25	4	
6mm Bolt 12mm Long	5	HW-B6-12	2	
6mm Flange Nut	5	HW-N6	4	
6mm Flat Washer 16mm OD	5	HW-FW6L	6	
8mm x1.25 Bolt, 32mm Long	5	HW-B8-32	2	
M8 x 32 Washer	5	HW-FW8L	4	
8mm Flange Nut	5	HW-N8	2	
19mm EPDM Hose, 27 Inch Long	5	EPDM-075	1	
12.7mm EPDM Hose, 5 Inch Long	5	EPDM-050	1	

- Before installing any parts of this intake system, 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@hpsperformanceproducts.com](mailto:tech@hpsperformanceproducts.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 system while the engine is hot.
- This installation may require removal of coolant lines that may be hot.
- For technical inquiries, please e-mail us at [tech@hpsperformanceproducts.com](mailto:tech@hpsperformanceproducts.com)

## **PLEASE READ CAREFULLY BEFORE INSTALLATION!**

This installation is not for the novice customer. Install this system with EXTREME caution! Misuse of this product can destroy your engine! If you are not well versed in the installation of intakes and if you are not mechanically inclined, please have a tuner shop install this kit.

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

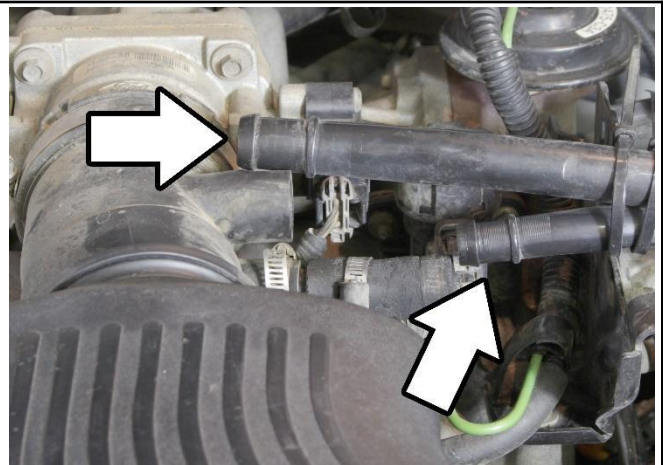
## **GETTING STARTED**

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.

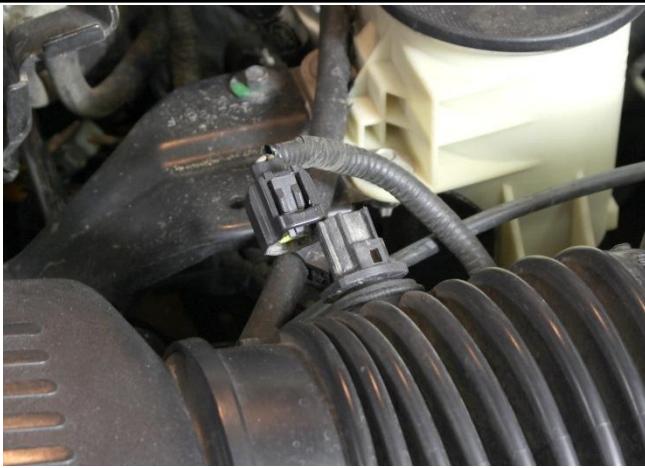
NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied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



2. Remove the engine cover by unscrewing the three bolts indicated.



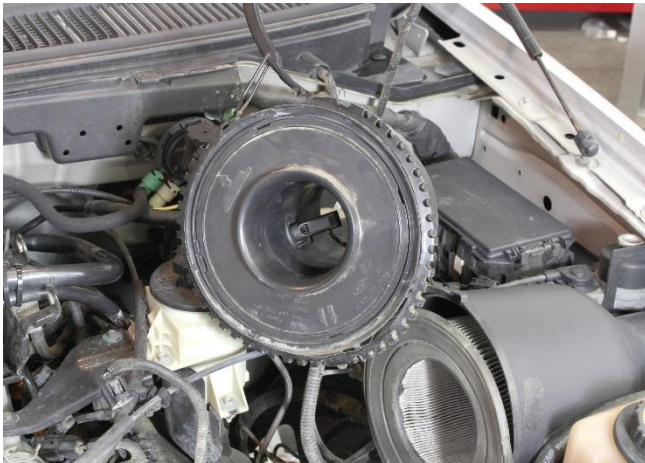
3. Remove both of the intake breather hoses from the intake pipe.



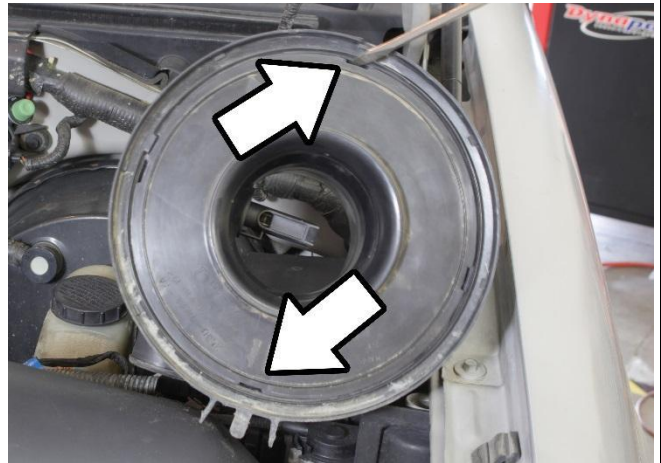
4. Disconnect the temperature sensor from the intake pipe.



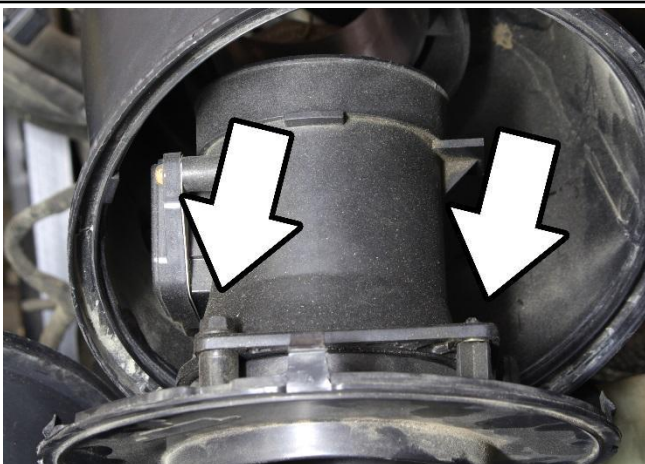
5. Loosen the clamps on the throttle body and the stock air box, then remove the factory intake elbow from the engine bay.



6. Unbuckle the clamp to separate the air box.



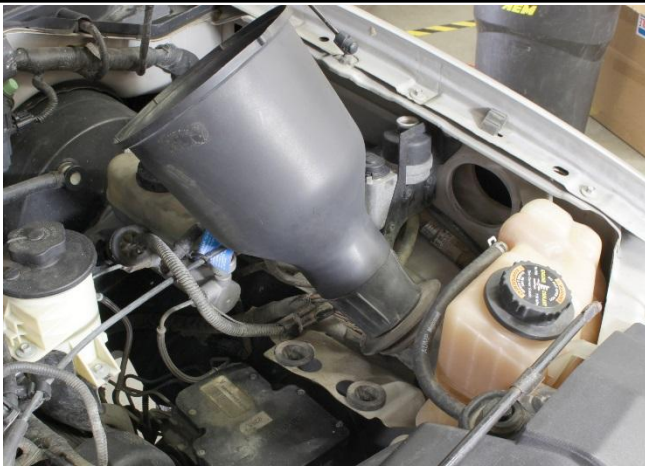
7. Using a flat head screwdriver, remove the mass air flow sensor housing from the air box.



8. Remove the two bolts to separate the mass air flow sensor from the housing.



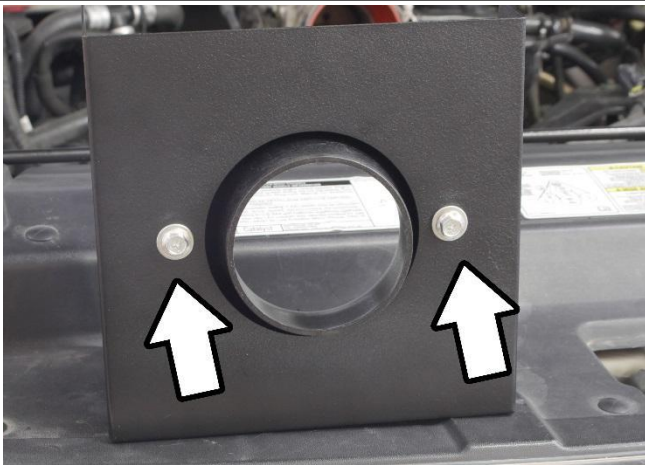
9. Disconnect the harness from the mass air flow sensor. Keep the MAF sensor in a safe place as it will be needed again later.



10. Remove the of the air box assembly from engine bay.



11. Press the silicone coupler onto the throttle body, along with the two T-bolt clamps. Only tighten the clamp on the throttle body for now.



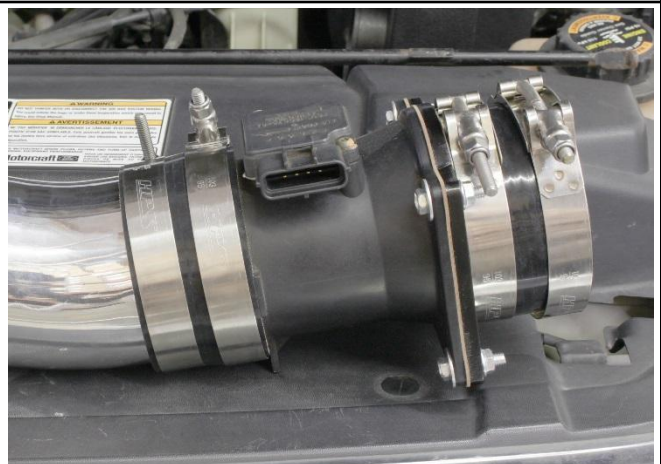
12. Install the velocity stack onto the heatshield using the 12mm long bolts and washers included in the hardware kit.



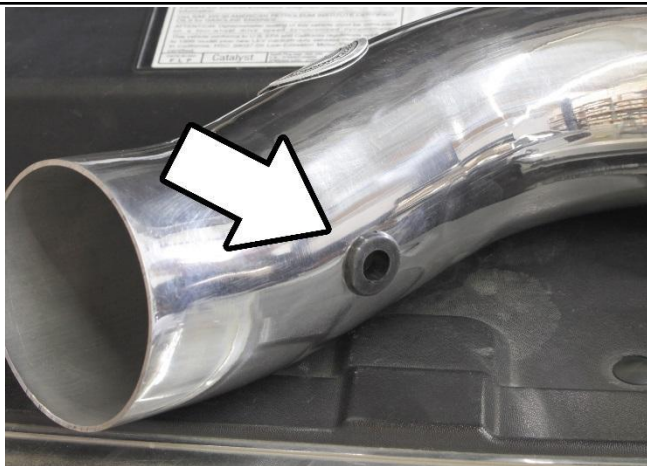
\*13. Vehicles equipped with cruise control remove the harness to install heatshield.



14. With the factory rubber grommets in place, sandwich the heatshield on using a bolt and washer on the top, then a washer and nut to secure it at the bottom.



15. Install the MAF adapter on the MAF sensor using the hardware provided, then install a coupler on both ends of the sensor as shown in the picture.



16. Install the rubber grommet included in the hardware pack onto the intake pipe and insert temperature sensor.



17. Insert the intake pipe into the throttle body coupler and the other side into the heatshield.



18. Disconnect and remove the breather hose located behind the throttle body.



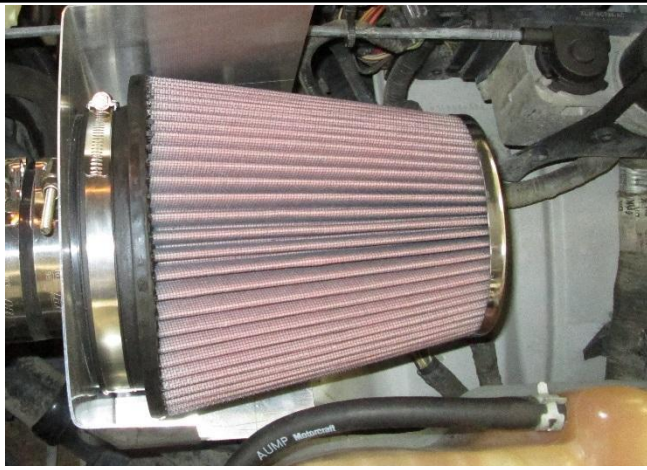
19. Use the EPDM hoses included in the hardware kit to replace the stock breather hoses.



20. Install the temperature sensor onto the pipe and reconnect the electrical connector.



21. Reconnect the MAF sensor harness back on.



22. Insert and secure the HPS air filter onto the velocity stack.



23. Re-install the engine cover.

### 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 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.

