

## Performance Intercooler Piping Kit

Part Number: 17-102

# Ford 2015-2020 Mustang Ecoboost 2.3L

## **Installation Instructions**

For technical inquiries please email us at 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**

Part Number: 17-102

Description	Prep	Part Number	Qty	Check
Hot Pipe	1	529-324	1	
Cold Pipe	1	529-325	1	
T-Bolt Clamp for 2" Hose	2	SSTC-54-62	1	
T-Bolt Clamp for 2.5" Hose	2	SSTC-70-78	4	
T-Bolt Clamp for 2.75" Hose	2	SSTC-76-84	3	
2.5" Coupler x 3" Long	2	HTSC-250-BLUE	1	
2.75" Coupler x 3" Long	2	HTSC-275-BLUE	1	
2" - 2.5" Reducer x 3" Long	2	HTSR-200-250-BLUE	1	
2.5" - 2.75" 45 Deg. Reducer Elbow, 2" legs	2	HTSER45-250-275-L2-BLUE	1	

- Before installing any parts of this intercooler piping kit, please read the instructions thoroughly.
- Verify the contents of this intercooler piping kit before disassembling your vehicle.
- DO NOT INSTALL IF ANY PARTS ARE MISSING OR DAMAGED. CONTACT <u>tech@hpsperformanceproducts.com</u> 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 intercooler piping kit 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



#### 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 engine has run within the past two hours, let it cool down.

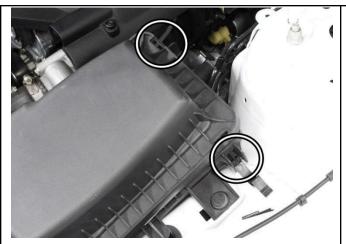
NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is re-connected. The anti-theft code is typically supplied 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.



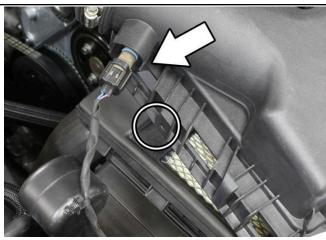
2. Disconnect the bypass valve recirculation hose and PCV connector from the factory intake elbow.



3. Use a flat-head (blade) screwdriver to loosen the clamp on the intake elbow on the turbo air inlet.



4. Unbuckle the clips on the air box.



5. Twist off the intake air temperature sensor from the air box. Next, pull off the cable tie from the air box indicated in the circle.



6. Remove the air box and intake elbow from the engine bay.



7. Remove the bolt attaching the lower portion of the air box to the body using a 10mm socket.



8. Remove the lower portion of the air box from the engine bay.



9. Loosen the hose clamp on the throttle body.



10. Loosen the lower hose clamp that's connected to the intercooler and remove the hose from the vehicle.



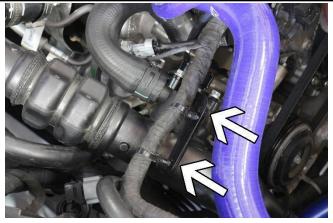
12. Remove the two bolts securing the reservoir and leave it aside to access the other lower hose clamp.



12. Loosen the hose clamp on the turbo outlet.



13. Loosen the hot side lower hose clamp.



14. Remove the two clips that are holding the wiring harness attached to the hot pipe assembly, Unplug the BPV wiring, then remove the hot pipe from the vehicle.



15. Transfer the recirculating hose and the stock bypass valve to the HPS hot pipe.



16. Insert the provided reducer coupler onto the turbo outlet along with the T-bolt clamps.



17. Insert the 2.5" coupler onto the intercooler inlet along with the T-bolt clamps.



18. Insert and secure the HPS hot pipe into the couplers.



19. Insert the hump coupler onto the throttle body side along with the t-bolt clamps.



20. Insert the 45 degree coupler along with the t-bolt clamps onto the intercooler outlet.



21. Insert and secure the cold pipe into the couplers.



22. Re-install and secure the coolant tank reservoir.

### **Final Steps**

Once the intercooler pipes have been positioned, tighten all of the clamps and secure all of the parts, then re-install the stock intake assembly back on the vehicle.

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 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.