



Intake Manifold Upgrade

2011-2019 FORD 6.7L POWER STROKE | 122018

INSTALLATION GUIDE

HS-MOTORSPORTS.COM

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Intake Manifold Upgrade

2011 - 2019 Ford 6.7L Power Stroke

IMPORTANT!

Please inspect and thoroughly clean all parts prior to installation. If you are unsure if you can install this product without contamination, please refer to a professional installation shop.

TROUBLESHOOTING

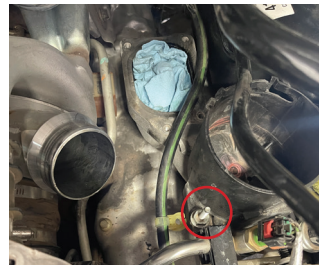
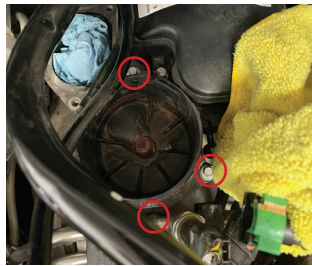
Please read and understand all installation instructions before proceeding with the installation. If you have questions during the installation of this product, please contact H&S Motorsports support at tech@hs-motorsports.com or (855) 623-4450.

STEP 1

Disconnect batteries

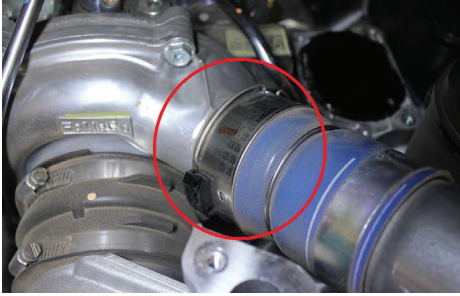
STEP 2

Unclip all the fuel lines from the upper fuel filter, taking care not to break any of them. Twist and remove factory fuel filter from vehicle being careful not to spill fuel. Set aside as you will re-install it later. This will help access some of the intake manifold bolts, and intake manifold removal. Cover open lines and ports so not to get dirt in them. Locate fuel line return hold down bolts on driver side valve cover as shown and remove them. Remove fuel support line bolt off factory fuel filter bowl. Now that these bolts are removed you should have enough flexibility in the return line assembly to remove the very forward bolt under that line that mounts the factory fuel filter cup. Remove the rest of the factory fuel filter cup bolts and remove filter cup.



STEP 3

Note: This could be an optional step depending on your skill level, or if you are upgrading the hot side pipe also. Locate locking clip on factory intercooler pipe at turbo as shown. Using two screwdrivers or pick tools, release clip by gently prying up under it from turbo side of factory intercooler pipe. Pull boot off turbo. Loosen clamp on intercooler pipe at factory intercooler. Remove factory turbo hot side pipe from vehicle and set aside.



STEP 4

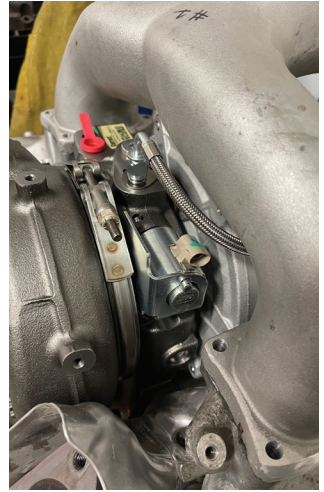
Unplug MAP sensor connector from top of plastic intake manifold assembly. Unclip all wiring harness connectors from plastic intake manifold. NOTE: Some 1/4 drive wobbly sockets will make this job much easier. Remove engine oil and transmission dipstick support bracket bolts. Remove all bolts mounting plastic intake manifold to engine. Remove plastic intake manifold assembly from engine and set aside.



STEP 5 2015 MODELS ONLY

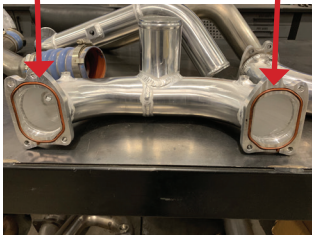
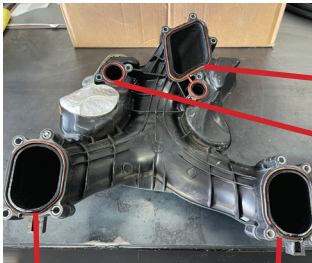
2015 Model year only with external oil feed line! Remove factory bolts and factory oil line assembly from turbo. Locate HSM 2015 oil line kit assembly. Lube o-rings with vaseline or grease and install the oil line kit as shown. Reinstall factory bolts and tighten. Install oil line bracket and zip tie as shown.

Note: intake was placed just to show clearance of oil feed line. Please follow remaining steps before installing intake.



STEP 5

Using a pick tool, remove all o-rings from factory plastic intake manifold. Clean o-rings and put a light coating of vaseline on them. Install all o-rings into HSM manifold parts and noise plate as shown.



STEP 6

Locate four M6-1.0x25mm flange bolts and dipstick bracket depending on model year (see photos) Install HSM high flow manifold assembly onto engine as shown. Install flange bolts into manifold holes and dipstick bracket (see photos). Tighten all bolts to 12 ft lbs. Install 1/4 bolt washers and lock nut into dipstick mounting holes and tighten. Remove factory MAP sensor from factory plastic manifold. Locate button head allen bolt. Apply a light coating of vaseline to the MAP sensor o-ring and install MAP sensor into port on HSM manifold assembly. Tighten allen bolt.



STEP 7

Locate HSM cast manifold part #2, five M6-1.0x25mm flange bolts, and 3" HSM straight boot. Coat boot with glass cleaner and install it onto manifold assembly on engine as shown. Install manifold assembly #2 onto engine and install flange bolts. Tighten bolts to 12 ft lbs, then slide silicon boot onto both manifolds and center it. Locate two 3.50 t-bolt clamps and install them onto boot. Center clamps and tighten clamps to **90 inch lbs.**



STEP 8

Locate HSM 2 bolt noise plate flange, make sure factory o-ring has been previously installed in it. Using the last two M6 flange bolts install it onto engine location by HSM manifold part #2 as shown. Tighten bolts to 10 ft lbs.



STEP 9

Re-install factory fuel filter cup and all previously removed bolts, tighten all bolts. Re-install upper fuel filter and fuel lines.

STEP 10

Re-install turbo hot side pipe assembly if it was removed, tighten all clamps.

STEP 11

Locate supplied heater hose support bracket. Remove factory pipe support bolt and install bracket as shown. Re-install factory bolt and tighten. Install zip ties to attach and support heater as shown.



STEP 12

Re-connect batteries. Turn key to the run position to prime fuel system, do not start engine. Repeat the key cycles 6-10 times. When fuel system has primed, start engine a check for leaks.

STEP 13

Enjoy your HSM High Flow Manifold Upgrade!





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