



Upper Fuel Filter Relocation Kit

2011-2016 FORD 6.7L POWER STROKE | 121012

INSTALLATION GUIDE

HS-MOTORSPORTS.COM

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IMPORTANT!

Please inspect and thoroughly clean all parts prior to installation. Any small particle of dust or contamination can cause catastrophic failure to a fuel system. 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 if necessary when working on any vehicle.

STEP 2

Locate the factory upper fuel filter at the top of the engine near the driver side. Disengage the locking tabs on the two large fuel lines by squeezing the locks and pushing up. Disconnect the two large fuel lines from the factory fuel filter.

NOTE: Some residual fuel may still be present in the fuel lines. Have some shop towels/rags handy to clean up any fuel spillage that may occur.



STEP 3

After all fuel lines are disconnected from the factory fuel filter, carefully twist the filter counter-clockwise to release it from the factory filter mount as shown. Carefully pull up and remove the factory fuel filter from the vehicle. The factory fuel filter assembly can be discarded at this time.



NOTE: Some residual fuel may still be present in the fuel lines. Have some shop towels/rags handy to clean up any fuel spillage that may occur.

NOTE: In some custom applications, different configurations may be required. Never use thread sealant (tape or paste) with ORB style fittings.

STEP 4

Unlock and release yellow locking tab from Factory fuel feed line (the one with the injector return line connected to it), push down on release and remove injector return line extension fitting from line as pictured. Cut injector return line off at the push on hose fitting end of the factory extension fitting and discard extension fitting.



STEP 5

Locate HSM Billet Fuel Filter bypass housing, the two HSM post fittings and the injector return fuel filter screen fitting as shown. Make sure all parts are free and clear of any dirt or debris. Apply Vaseline or grease on all the o-rings and install the larger post fitting into the right port of the bypass block and smaller post fitting into the left (furthest away from the firewall) as shown. Install HSM fuel injector filter return fitting into the third port as shown. **Tighten all fittings down snug.** Install assembly into factory filter cup and push down into the cup, some fit very tight and some are looser. Do not be concerned either way, it is not crucial. (on some 2011 models you may have to loosen the clamp bolt on the factory filter cup for fitment). Clip factory fuel lines on and lock factory fuel lines in place.



STEP 6

Locate HSM Injector return line assembly, 1/8 to 1/4 inch barb reducer fitting, and the two supplied fuel injection hose clamps. (The 1/4 portion of this line may be cut to length depending on your application). Install 1/4 hose onto 1/4 hose barb with 1/4 fuel injection clamp and tighten clamp. Place a dab of oil on the 1/8 hose barb side, install supplied 1/8 hose clamp onto previously cut fuel injection return line and push 1/8 hose onto 1/8 hose barb until it all the way on barb and tighten clamp. Route line as desired to HSM filter return fitting and tighten 90 degree fitting to snug. Install protective hose covering and zip tie securely if needed.

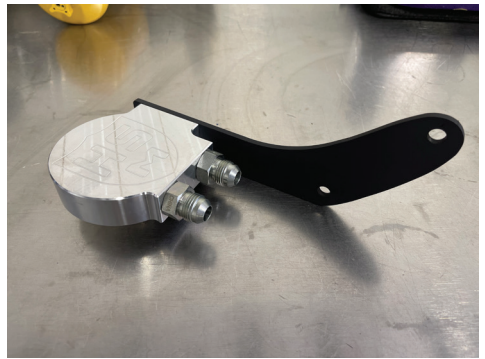
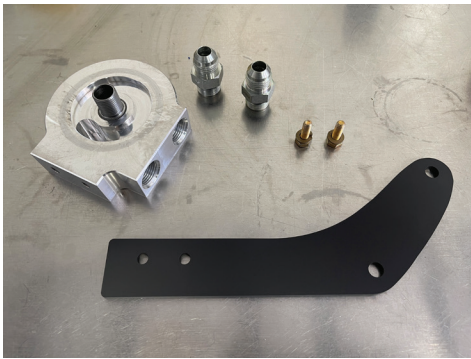


STEP 7

Locate billet HSM lower filter block, two -8an male ORB fittings, HSM filter bracket, HSM fuel line assemblies and remaining hardware. Make sure all parts are clear of dirt and debris. Put Vaseline or grease on ORB o-ring fittings and install into HSM billet filter block, tighten to snug. Install billet block onto filter bracket as shown using 1/4 bolts and lock washers, tighten bolts to 16 ft lbs. Remove factory shift cable bracket bolts on side of transmission and install HSM bracket on top of shift cable bracket for most models years, (some will be installed behind shift cable bracket if it does not fit on outside). Re-install factory bolts and tighten to 18ft lbs. Locate provided Baldwin fuel filter, lube o-ring and install onto HSM filter block hand tight.

FUEL HOSE INSTALLATION: THESE HOSES MUST BE ROUTED CORRECTLY FOR PROPER FUNCTION OF FUEL FILTER AND SYSTEM!!!!!!!!!!

NOTE: THESE FITTINGS HAVE A VERY HARD ANODIZED COATING ON THEM. IF YOU INSTALL YOUR HOSES AND EXPERIENCE A SLIGHT LEAK OF DIESEL FUEL AT THE FITTING PLEASE TIGHTEN THE FITTINGS UP FURTHER, THEY WON'T BE DAMAGED.

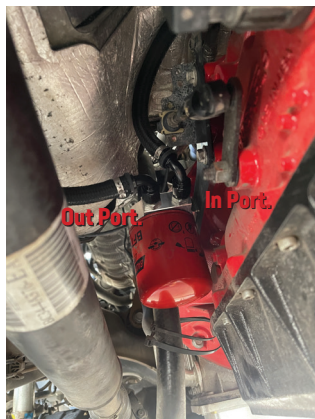


STEP 8

Locate a big size drain pan, (this step can be a little messy). Locate factory fuel feed line junction right to the side of the transfer case on the driver side of vehicle above front axle driveshaft. Unlock fuel clip as shown and disconnect fuel line. After it finishes draining locate HSM fuel line assemblies and make sure they are clear of all dirt and debris. The HSM fuel line with male quick connect fitting will lock into the factory female quick connect fitting, push and lock into place. Run this line to the "IN" port on the HSM fuel block (The port closet to the transmission) **DO NOT MIX THESE LINES UP!** Route fuel line as desired so is not kinked or rubbing on anything and tighten fitting.

NOTE: You may want to install both fuel lines loosely on the HSM filter assembly and test best routing for your vehicle. Also see which fitting may be easier to tighten first and last on HSM filter housing.

Locate HSM fuel line assembly with female quick connect fitting and install on factory male side of fuel line. Push and lock line in place, This line will go the "OUT" or outside fitting port on HSM fuel filter assembly. Tighten all lines and fittings. Zip tie lines with provided zip ties as desired.



STEP 9

Turn the key to the run position for 30 seconds and prime the system. Do not start the engine! Repeat this process until the system is primed, this may take 4-5 key cycles. Start engine and check for proper function of system. You may notice some noise from the factory fuel pump while the air is purged out of the system. This is normal. Now you can change your fuel filters with ease and much less mess!!

Enjoy your 6.7 Ford HSM Upper Fuel Filter Relocation Kit!!



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