

2017 Ford Fusion Sport Independent Install Part 2

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Ok before anybody starts yelling about blocking air flow I confirmed the filter is above the inlet for the fresh air and is NOT blocking air flow. Now all I have to do is slide the hose on the nipple and route it to the clean air filter oil fill breather on the motor.



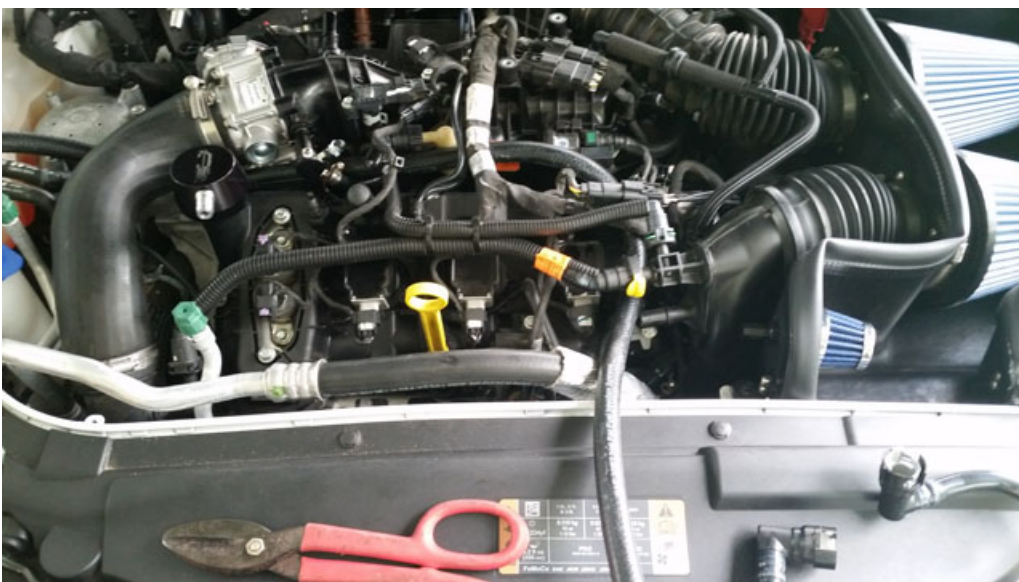


Now let's tackle the clean side first. Remove the current clean air side tube. Simply disconnect the two connector's one on the valve cover the other on the front side turbo inlet pipe. You will notice there is a MAP sensor on this tube. Carefully remove it from its mounting clips by gently spreading the sensor side clips and remove sensor (be careful not to damage the sensor). Set the factory tube aside in case I want to reverse the install at some point. Also included in the kit is a black nipple cover. Place this on the valve cover nipple where the connector came off. This connection is no longer needed as we will be feeding clean air to the engine from the breather filler cap.



There are a couple ways to remount this MAP sensor in the catch can layout. Tracy's video shows him rerouting it on the dirty side of the engine (there was NO clean air breather installed on that video) and I was going to mount it back in the clean side run like it was initially but decided to follow Tracy's instructions to the letter. Why reengineer something that is proven to work.

So what do we do with the turbo intake tube nipple? This now gets connected to one of the outside barb connectors on the catch can. I started this run from the catch can end cutting a short 4"-5" piece of hose and installing one of the check valves into the end of the hose. If you look at the check valves there is an air flow indicator on the valve. Check the valve by blowing on each end of valve to confirm air flow direction. The valve needs to be installed so the air is flowing away the catch can. In the case air should flow from the open hose end to the open barb on the valve. Now install this hose on to one of the left outer catch can barb (a little WD40 on the barbs helps). From here route the hose back to the turbo inlet barb and install one of the factory style 90 degree connectors included in the kit and connect to the open nipple. You can route this hose any way you like but I routed mine under the throttle body, along the valve cover under the wiring loom and finally to the turbo down tube. I found it easier to work with the full length hose when doing this as I could pull a couple extra feet forward allowing me to install the 90 degree connector then feed the hose back until I could connect the connector on the down tube nipple. Now make sure you have enough slack, cut hose to length and push on the open check valve barb. Success we now have the first suction run completed. We are done on the front side.





Now we remove the dirty side hose connected to the back valve cover and the intake manifold. Set this hose aside so we can revert back to factory later if needed. Now we will hook up the dirty side valve cover nipple to the center barb on the catch can. To do this simply install a 90 degree fitting on one end of the hose and route it to the center barb on the can.

Before you cut the length make sure you have enough slack to loop the hose without crimping it. I decided to run this hose toward the passenger side of the car looping to the center barb on the catch can. Lube the center barb with WD40 and push the hose in place.

Now remember that MAP sensor we have from the clean side? We need to get this back in the system to prevent codes. To do this we are going to cut the hose we just installed about from the dirty side valve cover about 3" from the 90 degree fitting and install the provided T-connector. Once installed you want the T point to the front of the car. Now we cut a length of hose long enough to allow us to reach the MAP sensor. Tracy's video shows him installing the MAP sensor directly into the end of the hose. Welcome to kick up number four. The MAP sensor on the F-150 must be bigger than the one on our sports. Remember that clean side hose with the MAP sensor mount? Yep I grabbed it, took a razor, and gently cut the tubing on both ends of the mount and removed the hoses. Now I took the MAP sensor mount and installed it into the end of the hose on our T. From here you simply install a cap on the other end of the mount. As I didn't have a cap I pushed on a short piece of hose and shoved a barb cap in the end creating a temp plug/cap. Dirty side done!





This leaves us with just the final vacuum hose from the intake manifold to the right catch can barb. Again we cut a 4-5" piece of hose, check the air flow of the check valve to make sure it flows air from the catch can and install it in one end of the hose. Now install the hose to the catch can with a little WD-40 on the barb. Now I routed my nose a little different, I loosened the AN nut on the right barb and aligned the barb with the firewall pointing towards the driver's side of car. I then installed the 90 degree connector from the kit, installed it on intake manifold pointing towards drivers side of car and looped hose to the check valve insuring no pinch or kink. Cut to length and push hose on check valve barb.



I guess I should mention I test fit the engine cover between each hose install to ensure I didn't have an obstruction or any sort. Man I love this drive by wire system no linkages or moving parts to get in the way.

As I stated at the beginning the kit includes the clean side breather that replaces the factory oil cap. Install is easy BUT this is a two piece item and I recommend separating them before install. The breather has an oil filler neck adaptor that you need to screw into the oil filler neck completely before installing the breather. Once the adaptor is installed the breather simply pushes into place.





Now we are going to route the clean air hose from the barbed adaptor we installed in the CAI to the breather cap barb. Lube both barbs with WD-40, install hose on the CAI barb the route the hose along the front of the car to the clean side breather. Make sure you leave enough slack in hose to allow a clean bend to the breather. This will give you enough slack to remove the breather and set it on the front air inlet cover when adding oil.



Project done. Catch can installed.

New simple/basic install:

The simple version. Left hose barb is valved and goes to intake manifold. Center hose barb unvalved and goes to dirty side aka back valve valve cover and right barb is valved and goes to the cold air intake tube that feeds the back turbo.



You will have to Tap the cold air tube. Tracy provides everything you need to do install. **When tapping just remember not to run the tap all the way in as it will create a threaded hole bigger than you threaded elbow!!!** Simply thread it enough to get threads in your tubing.



A look with the cover on.



What I like about the install is it looks factory and you can hardly notice it at all.



Routing the drain tube is up to you originally I routed it down behind the steering linkage and out the belly cover but when reinstalling this time I ran it down and out along the inner wheel liner and zip strapped it to the liner via a single hole I drilled to allow the zip tie through. Easy to reach for draining now.



All done and good to go.

2017 Fusion Sport Oxford White, 401A Driver Assist Pkg, Steeda Strut Tower Brace, Hood Strut Kit, Rear Sway bar, CAI Kit, Tracy Lewis Performance Signature Series Dual Valve Catch Can, Amsoil Synthetic 5W-30 Signature Series Motor Oil