

Camaro and ATS 2.0T Installation Guide LTG Engine

First step is to remove the plastic engine cover. And any stock parts removed put in a box to save if you wish to revert back to stock at any time.



In the above left picture, you will remove the entire stainless braid and plastic tube assembly. Grasp and pull firmly and they will separate. The billet plug we supply will push into place and seal this as we are using a different routing for a more complete flushing and evacuation of the entire crankcase.

We will be removing the plastic barb fitting coming from the oil fill cap location: The billet adaptor with 1/2" barb will snap into the opening left and this will be the inlet for the fresh air from the main intake air tube. Use a pliers or small vice grips to remove the screw as it is an unusual head, then pry out with screw driver.



The rear most barb on the passenger side will run straight to the center of the can. No checkvalves. This you will also put a T in this hose and connect the 1/2" barb from the second billet adaptor barb. You will now run a 1/2" hose direct from the OEM barb on the air intake tube to the CSS barb (CSS replaces the stock oil fill cap). We include the OEM connector so you can save your stock tubes. A straight is



used and not a 90 as the picture on left shows.

Above right shows the plug in place and the plastic fitting and barb that you will snap on one of the connectors we include and run this straight to the center of the can with no valves inline.

Now, we will mount the can as shown to the center bolt on the front of the valve cover: Make sure to spread the clamp with a flat blade screw driver to avoid scratching the can!



Remove the allen headed plug in the side of the valve cover and replace with the diverter plug as shown.

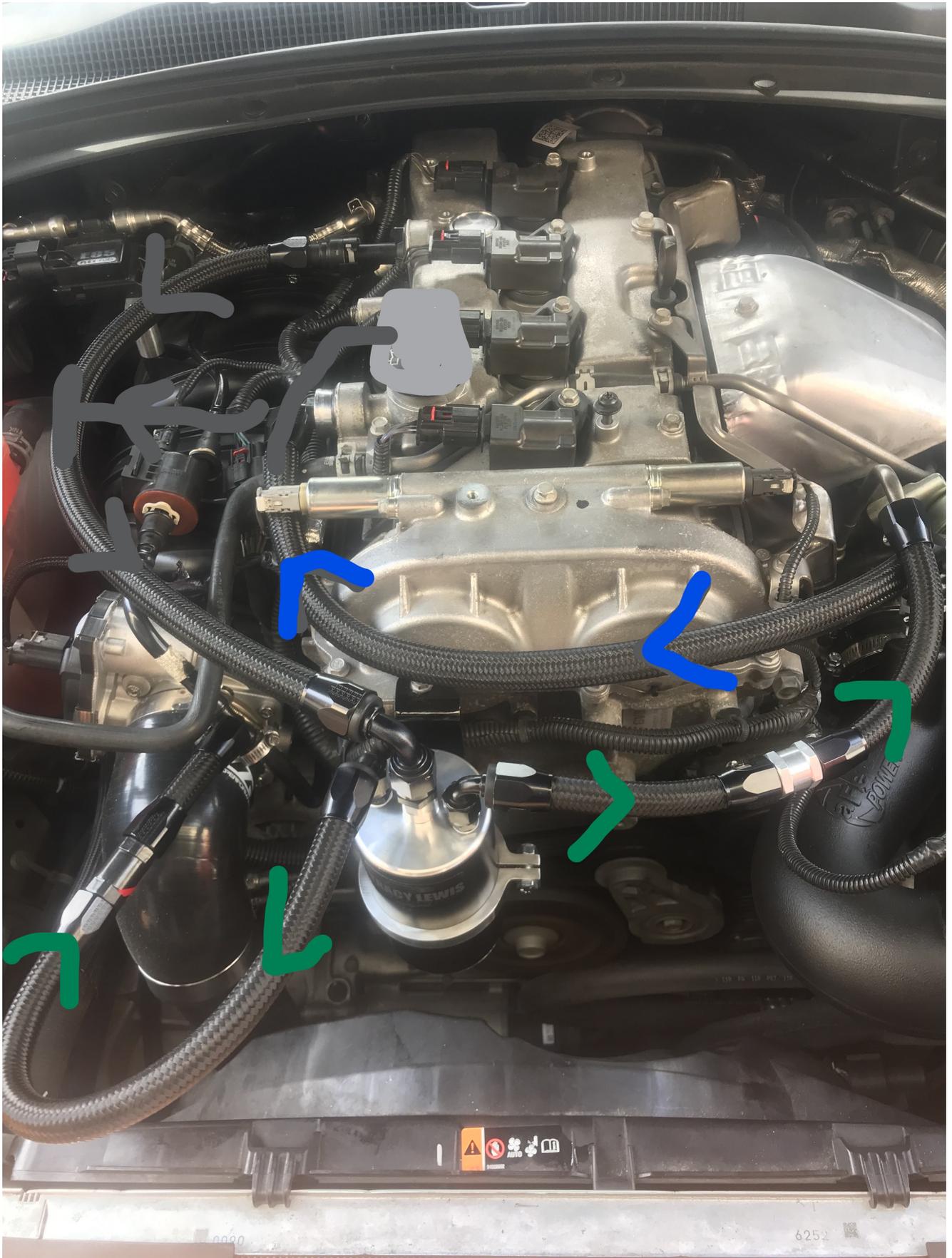


One outer fitting on can w/checkvalve flowing away from can will connect to the hard line coming from the turbo inlet. It is silver stainless steel. This takes 3/8" hose. Note the steel line can pivot. IF A big Boost build the Venturi Vacuum Valve will replace this and you cap the silver tube and connect to the Venturi as shown in the supplement!!

Top right is for this:

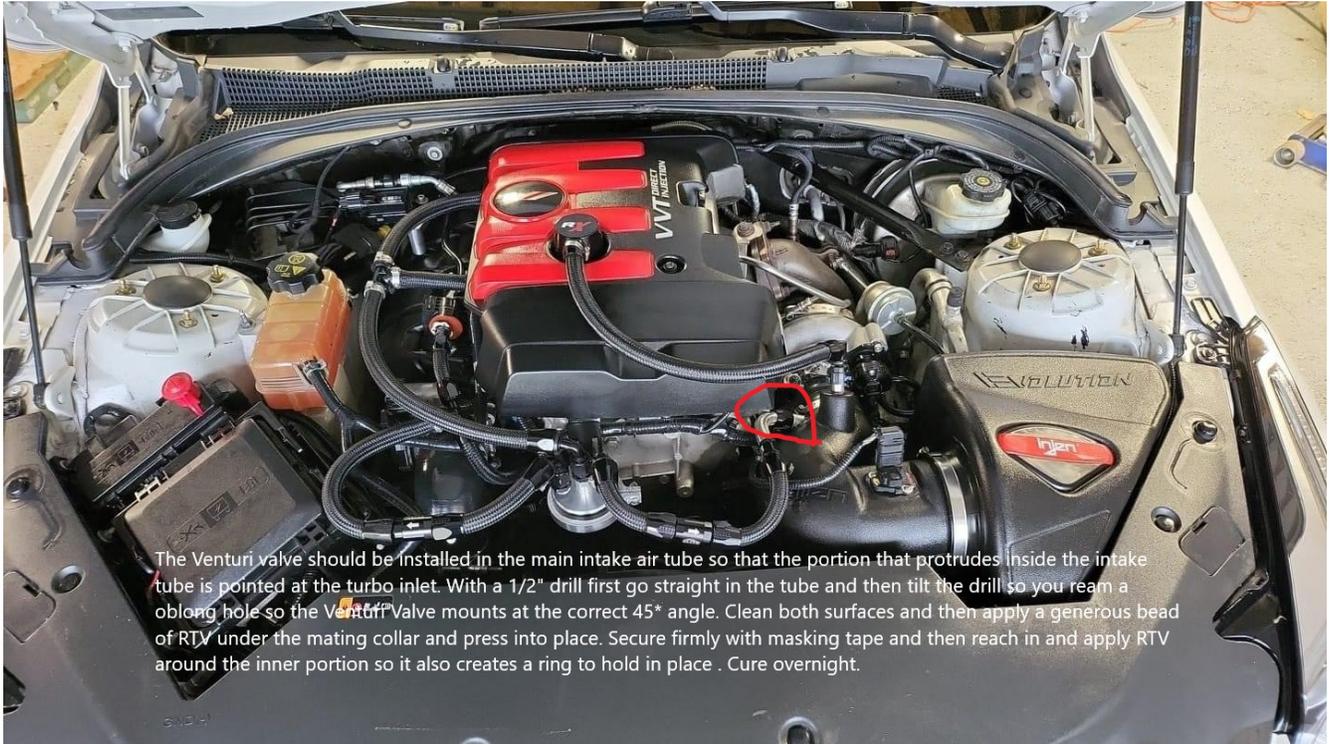


Now we have the intake manifold vacuum. This will provide evacuation suction on the crankcase when at idle, light cruise, and deceleration when there is no boost pressure present. This is critical as GM ONLY uses the turbo inlet suction so unless you were in boost, no evacuation takes place and this is when the damage and wear causing compounds settle and mix with the oil. So, we cut the hard plastic line that runs from the lower portion of the intake manifold to the evap solinoide. We install a T as shown and a high pressure checkvalve (with the black plastic barbs) flowing away from the can. This will also come with a flow restricting fixed orifice to place inline to regulate the amount of flow. Finally make sure the drain valve is closed, and start and make sure there are no vacuum leaks. Reinstall the plastic cover and install the oil cap last.



Venturi Vacuum Valve Option Supplement!!!

This is the best option no matter what as it generates far more vacuum than the OEM steel tube and is a must for a modified boost build.



The Venturi valve should be installed in the main intake air tube so that the portion that protrudes inside the intake tube is pointed at the turbo inlet. With a 1/2" drill first go straight in the tube and then tilt the drill so you ream a oblong hole so the Venturi Valve mounts at the correct 45° angle. Clean both surfaces and then apply a generous bead of RTV under the mating collar and press into place. Secure firmly with masking tape and then reach in and apply RTV around the inner portion so it also creates a ring to hold in place. Cure overnight.