

2016 and up GM LGX engine installation:

(Camaro/Cadillac/Etc.)

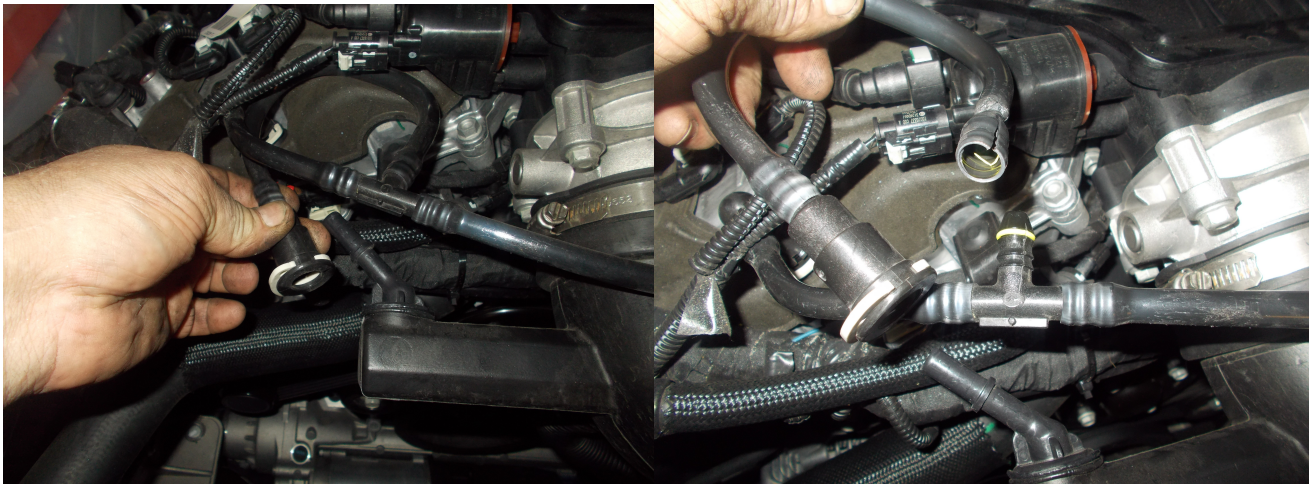
The LGX engine released for the 2016 model year on some GM platforms (Gen6 Camaro specifically for this installation) GM has deleted the most important portion of the PCV system in an attempt to keep oil mist from the intake air charge that causes intake valve coking issues. This has helped slow the rate of coking deposits, but has sacrifice engine longevity in doing so.

The PCV system is the only system that removes the damaging contaminants from the crankcase before they can settle and mix with the engine oil causing wear. Now that they have deleted using the intake manifold vacuum, the oil quickly becomes overwhelmed with the raw fuel, water vapor, sulfuric acid, and abrasive particulate matter all GDI engines have in far greater amounts than past port injection engines. So this system corrects this by adding back in the intake manifold vacuum as well as a secondary evacuation suction source while retaining an emissions compliant closed PCV system with far greater function than the factory system.

Here are the instructions:

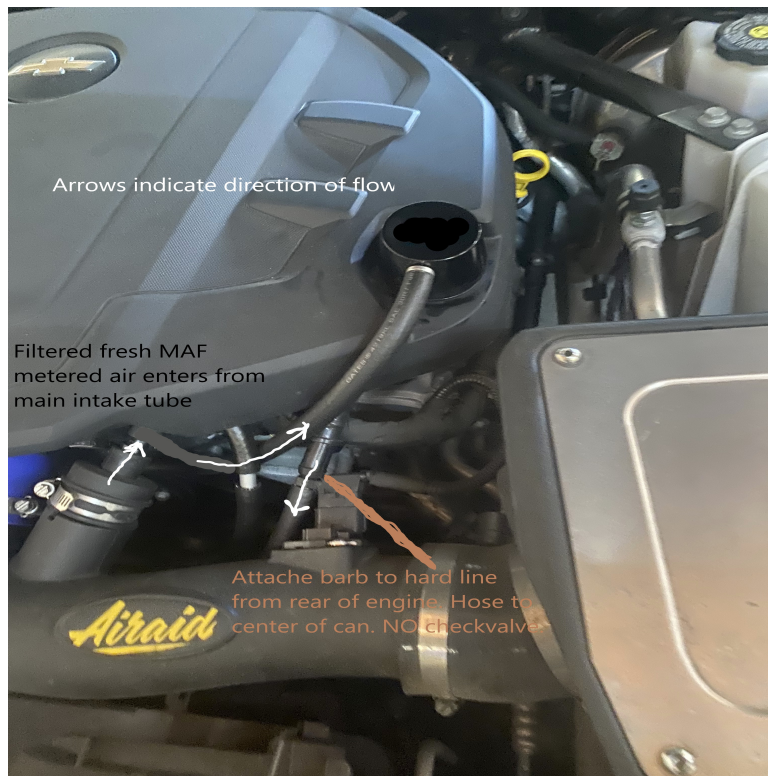
First, remove the stock oil fill cap and engine cover. There is one screw on the passenger side front of the cover and then it simply lifts off.

Then we will locate the factory lines on the sides of the main intake air bridge:



Above you will un-clip the cleanside line from the muffler and then carefully slit the end on the T and remove. Save this if you need to put back to stock in the future. Unclip both fittings of this tube that bridges each valve cover and using a large screw driver carefully pry up each barb from the valve cover. Drill with a 1/4" drill bit through so they flow without restriction, and clean and reseal back into the valve covers. Then reclip the hard line back onto each.

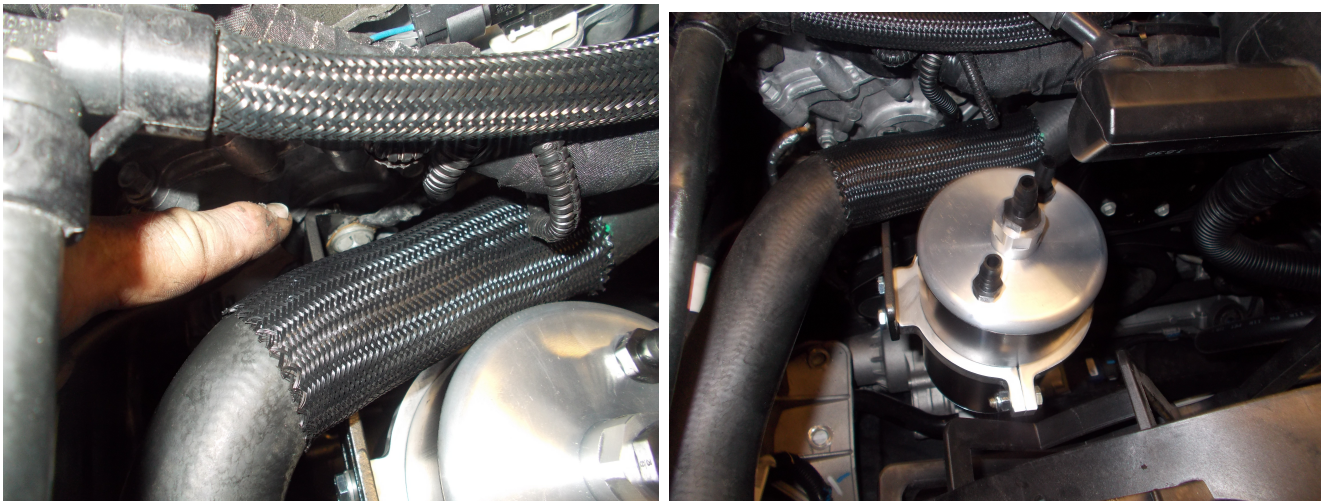
Cap the T and the muffler with the included vacuum caps, and that will now allow fresh/cleanside air to travel between each valve cover as it will now be



entering from the cleanside separator that will replace your oil fill cap:

Run a hose from the fitting you insert into the main intake air tube where the larger diameter hose that runs from the rear of the engine did connect and connect it to the CSS barb and cap the barb on the passenger side of the intake tube muffler as well. **Note!! If turbo or centrifugal SC make SURE to cap/plug any barb (there will be two) on the main air intake tube as this tube becomes pressurized with boost! The Venturi Vacuum generator will install at the inlet of the turbo, and the CSS will connect to the very end of the Air filter.**

Now we will move to the catchcan itself:



The bracket, a long L bracket will bolt to the 15mm headed bolt on the front of the engine cover behind and below the radiator hose as shown. Make sure the L portion faces toward the left side of the engine compartment with the cutaway up:

Note how the abrasion cover protects the radiator hose from can and bracket. Spread the clamp with a flat blade screw driver so the finish is not scratched when inserting the can.

Once the can is secured (use a 7/16 or 11mm wrench to tighten both bolts and the clamp to secure the can. (if a different model can, mount accordingly).

Now we are going to separate the dirty/foul side line from the main intake on the drivers side of the intake assy. And use a 1/4 NPT or 3/8 NPT tap to cut

threads into the hard line coming from the rear of the engine. Screw in the threaded barb fitting into the hose end. This will connect to the inlet, or center fitting on the can bringing the foul vapors from the crankcase.

The venturi valve side we drill into the main CAI or air intake tube as shown. This will run to one of the outlets (outer fittings) on the can with a checkvalve flowing away from the can inline. (pics on next page) This provides the evacuation suction when accelerating or at WOT.

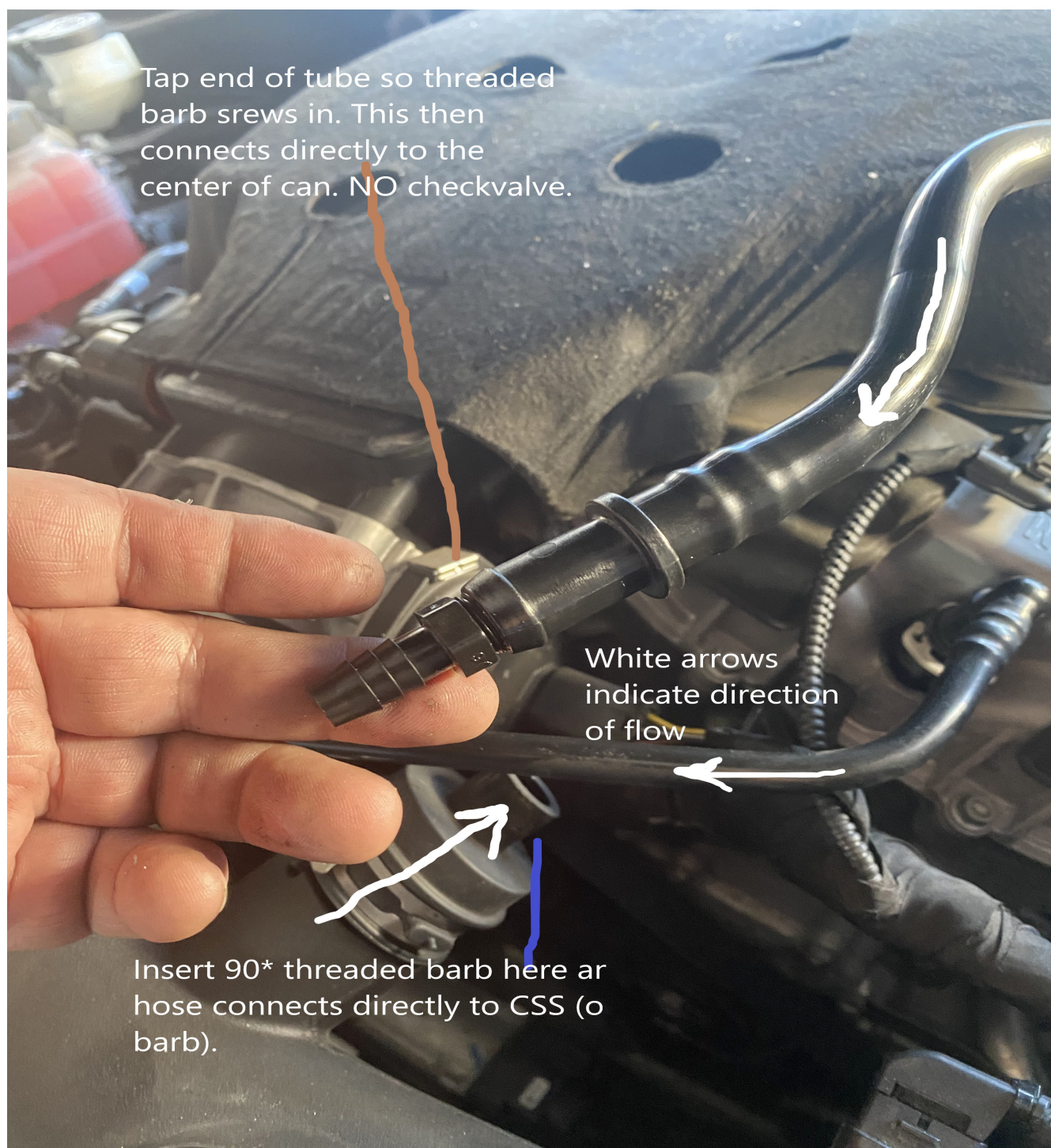
The second outlet from the can w/checkvalve flowing away from the can will connect to a 1/4 NPTx 3/8" barb you drill and tap into the driverside of the intake manifold snout as shown in the pictures. OR with a Supercharger or Turbo application a spacer is included with 1/8 NPT barbs for both BOV and the IM vacuum. This will provide evacuation at idle, cruise, and deceleration correcting the flawed design of the factory PCV system restoring full time evacuation and long engine life while removing the oil and other compounds from the intake air charge. This line MUST have the fixed orifice flow restrictor in line.

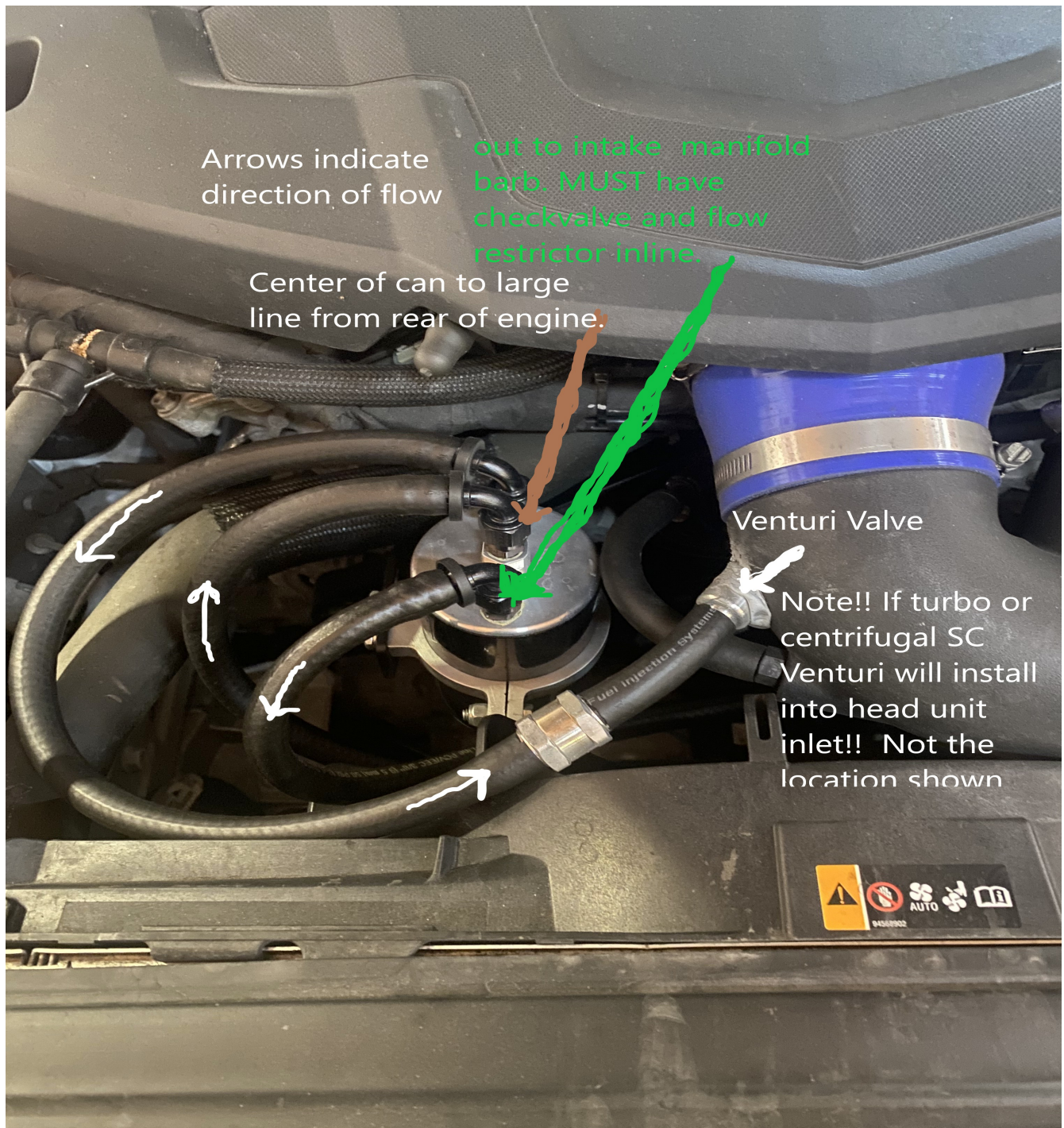


All lines tuck in so the engine cover installs back as stock, and only the

cleanside is visible:

NA the Venturi Vacuum Barb installs as shown on next page, NOTE!!: Turbo or centrifugal SC Venturi installs in the head unit intake tube and NOT in front of throttle body!





The picture above is for review to confirm your system is installed correctly.

Always check can every few thousand miles and drain and dispose of as with any drain oil. Never let the can overflow.