Catch Can Installation on a C7 Corvette with Z51 and Dry Sump Option

We have received a ton of questions regarding the correct installation of a Catch Can on a C7 Stingray with the Z51 option Dry Sump Only.

With all the great improvements General Motors has done with their baffles in both the valve covers and where the crankcase dirty side is evacuated, there is still a lot of oil that enters the Air Intake from (2) two different locations.

#1 The oil sump tank, similar to the C6 Z06 dry sump tank
#2 The Valley Cover (dirty side) - We'll use the Elite E2 Catch Can to address this issue

There are countless images on the Internet of oil found inside a C7's Intake, here are a few:
For many reasons, we **DON'T** want to completely delete GM's current PCV System, we just want to improve its functionality and performance.

**The 1st thing to address** is the Clean-Side. **The Clean-side** solution addresses that small amount of oil vapor that enters the intake air charge upstream of the throttle body during WOT operation when the intake manifold vacuum is not present.

The **Clean side solution** allows 100% MAF metered air entry while trapping the oil during wide open throttle operation and allowing it to return back into the valve cover as soon as the throttle is lifted.
Simply installs as a direct replacement for your stock Oil Fill Cap allowing you to delete and replace the stock OEM hose.
At 1/2 the cost of the plastic hollow GM unit, our aluminum clean-side separator incorporates an internal coalescing material. Simply unscrew the top for a quick inspection or cleaning.

The Passenger's Side Valve Cover has two fittings that join the vent through the dry sump tank and also connect to the air box pictured below, this is where the Clean-Air Separator is installed.

The **Clean-Side Separator** will trap the oil that "burps" and will hold it and prevent it from being ingested. Any oil trapped with find its way back during full vacuum or normal deceleration or idle.

Added to the **Elite original Catch Can**, or New **E2 Catch Can**, this is your **COMPLETE** PCV Oil Ingestion Solution.
Now addressing the real problem area, the **Dirty Side**. Shown below, the filtered Mass Air Flow (MAF) fresh air enters the driver's side valve cover through this Main Air Box Line shown above. We'll leave this line untouched.

The best set-up/installation will utilize the 2nd Generation E2 Catch Can with Dual Exit Ports and (2x) Check Valves. Shown below with Electroless Nickel Fittings or Black AN Fittings.
This U shaped fitting shown below runs from the Intake Manifold Vacuum Barb down to the Valley Cover Barb. We'll remove this U-shaped fitting and Splice in the E2 Catch Can here.
Mount the E2 Catch Can here, using the supplied G8 Bracket.

Mount Catch Can Here

Catch Can Bolted in Place
Now let's look at the connections on the (2) Exit Port Catch Can, pictured below:
Now we simply connect the Center Port on the E2 Catch Can to the Valley Barb "A" (and since it already is a check valve, no additional valve need be installed here)

Now Connect (1) of the Side Exit Ports to the Vacuum Barb "B" left open after removing the U shaped stock tube, WITH a check valve flowing away from the can (this is to ensure no mixing and reversion)
Finally, the 2nd Exit Port will connect to the newly drilled and installed 3/8" Hose Barb fitting in the Stock OEM Coupler "C"