I have noticed that some Corvair owners are driving their cars using a draft tube installation for ventilation.

Before I can go into crankcase ventilation any further, I must define and describe “blow by”: the leakage of combustion gases and unburned fuel that passes an engine's piston rings. There are three undesirable features that are a byproduct of blow by:

1. It destroys the lubricating qualities of engine oil.
2. It causes sludge and varnish to form.
3. It helps cause formation of corrosive acids which can damage engine parts.

The road draft tube has three major shortcomings:

1. It works best only when there is a pressure difference between the oil filter cap and the draft tube. This pressure depends on car movement and speed. When the car is moving slower than about 25mph, there is not enough vacuum to remove the vapors from the crankcase.
2. It passes the crankcase vapors directly into the atmosphere, releasing pollutants into the air.
3. At higher vehicle speeds, too much crankcase ventilation will increase engine oil consumption, because oil droplets are drawn out through the road draft tube.

The road draft tube was stock for 1960 and 1961 Corvairs. In 1962 it was replaced and called a closed PVC system. The 1962, 1963, and some 1964 and 1965 cars used a PCV valve (AC-CV 584C). All others used a metered (fixed) orifice. These metered orifices come in different sizes. Closed crankcase ventilation provides three benefits:

1. It promotes longer engine life by removing harmful vapors from the crankcase.
2. It eliminates crankcase vapors that pollute the air.
3. It increases fuel economy by recirculating all unburned blow by back to the intake manifold.

To improve on the closed PCV system, I made a few changes and they are as follows:

1. I used the PCV valve (AC-CV 584 C), removed the hose that went to the air cleaner, and capped the upper vent tube.
2. I replaced the oil filter cap with a Slant (BSO 84) which fits AMC 8 cyl, 1973-83 and AMC Jeep 8 cyl, 1974-89. Since the filter neck is bigger than the cap, I had a bushing made to fit the new cap.
3. I ran a hose from the new oil filler cap to the air cleaner.

So far, I found the two benefits of this system were less blow by and less oil consumption.

Happy Corvair Driving Days and LONGER ENGINE LIFE!

(Care to dialogue? If you have comments or questions about the above technical tip, and if you would like your comments or response printed in the newsletter, please email SCC editor at vargascorvairmonza@hotmail.com.)