



Ralph Seekins

# POSITIVE CRANKCASE VENTILATION (PCV) VALVE

A young University student owner who had recently purchased a used vehicle asks: “What function is served by a PCV valve and when should it be replaced?”

The full name for a PCV valve is “Positive Crankcase Ventilation” valve. It’s a one-way valve within the positive crankcase ventilation system that allows the gasses that build up in the engine crankcase to recycle back into the engine and then be burned. The gasses are those that blow past the piston rings during the high-pressure combustion process – commonly called “blow-by.” As engines age and cylinder wall and piston ring wear increases, blow-by also increases.

A plugged PCV valve can result in a rough idle and poor mileage. Two good reasons to get it replaced. Another thing that can happen in the winter is for condensation to build up in a PCV valve and then freeze the valve in the “shut” position. When this

happens, the internal crankcase pressures can build up and then cause oil leaks at other parts of the engine – including out of the dip stick tube or through gaskets that then should be replaced. Many folks have feared the worst when oil shows up inside the engine compartment only to find that just the PCV valve needed to be replaced and a little oil needed to be cleaned off the engine surfaces. This cold weather freezing phenomenon, by the way, has been the cause for a whole bunch of unnecessary repairs due to simple inadvertent (or perhaps not so inadvertent) misdiagnosis.

Most manufacturers have published recommended schedules for replacement of their vehicles’ PCV valve. Your owner’s manual should include that schedule or you can more than likely look it up on the internet. Our recommendation is to follow that manufacturer’s schedule at the very least. However, due to

the severe weather conditions encountered in interior Alaska, we recommend inspection at every oil change. It is our experience that, when regularly inspected, it is good to replace the PCV valve almost twice as often as recommended. It’s a small expense but it can prevent a much more expensive and inconvenient repair later on. And, in accordance with Murphy’s Law, repairs seem to pop up at the most inconvenient times.

Now, I know that we continually tell you to look things up in your owner’s manuals. After more than 40 years in this business, I know that a whole lot of you don’t have an owner’s manual for your vehicle. Either you bought your vehicle used and the manual wasn’t in the glove box or you put the manual somewhere where it would be safe and now you can’t find it. In that case, in today’s electronic world, you can more than likely find the manual on line somewhere. We know how to do that and, if you want some help locating where to find the information you need, we’ll be glad to help you with absolutely no obligation. Just stop by our Quick Lane Tire and Auto Center here at the dealership and one of our folks will help you – again, with no obligation. We won’t try to sell you anything and will be glad to help you in any way we can to find out how to take better care of your family vehicle.

Good luck and safe driving.

*Ralph Seekins has more than 40 years' experience in the automotive industry. He started as a mechanic, worked in sales, and for the past 32 years, has been the owner of Seekins Ford Lincoln Mercury.*