

# HOW MANY FILTERS?



Ralph Seekins

OK. How many filters are there in your car or truck, what do they do and how often should you service them? When I ask this question, I mostly get blank stares and an answer like: "How would I know?" So let's take a little tour through a typical modern vehicle and see what we can find.

First, an easy one for just about everyone – the engine oil filter. Burning gasoline or diesel fuel produces carbon, water and soot that eventually all end up in the engine oil. That dirty engine oil is pumped through different channels until it passes through the engine oil filter. The oil filter collects the particles and keeps them in place until the filter itself is removed and replaced. Lubricated surfaces won't last long without clean oil. My recommendation for Interior Alaska – a severe service location where cold, richer running vehicles seem to build contaminants faster than vehicles operated in milder climates – is to change the filter every 3,000 to 4,000 miles. That's exactly the interval I use since most of my trips are short and in those extreme cold temperatures.

Next - the fuel filter. This filter is a huge safety net for your vehicle. It's there to keep impurities like water, rust, dirt or other contaminants that for some miraculous reason show up in what we hoped was pure, clean gasoline or diesel from entering the downstream fuel distribution system. Rust can be caused by condensation and all sorts of junk can get in the fuel tank just from re-fueling. Here I recommend changing the fuel filter at least once a year.

The engine air filter is next. A good description of a vehicle engine is a giant air pump that pulls air in to mix with fuel and then detonates that mixture to produce power. Air almost everywhere has dust in it and it doesn't take a lot of stuff – particularly the highly abrasive dust in glacial fed river valleys – to cause major internal damage to an engine. The air filter will trap the dust in the filter media and help the engine run more efficiently. In Interior Alaska, I recommend a visual inspection of the air filter every time you change the oil filter – or, at a minimum – once a year.

Then, many cars today come equipped with a cabin particulate air filter. This filter cleans the air that entering the car by filtering out microscopic particles of pollen, molds, spores, bacteria, dust and toxic gasses – all of which can be sucked into a vehicle by just running the heating, ventilation and air conditioning (HVAC) system. The

filter in my car screens out particles down to 3 microns in size – providing a significantly cleaner and healthier driving environment. The cabin particulate air filter should be changed every 15,000 miles or once a year – more often if you drive a lot on dirt roads. If your heater or air conditioner isn't operating as efficiently as you think it should, it could very well be a clogged cabin air filter.

Some cars and trucks also have additional filters. For example, climate controlled seats, that either heat or cool your fanny, are becoming more popular in today's vehicles. Some use heated or cooled air to carry out their function. In that case, they generally have a small filter that needs to be replaced on occasion. Then, many of today's hybrids have filters that remove the impurities from the air used to cool the batteries and electronic components. And, some vehicles have positive crankcase ventilation filters that need to be replaced from time to time.

Your manufacturer's authorized dealer or a professional service facility, like our QuickLane Tire and Auto Center will have the information you need to properly address your vehicle's filter needs.

*Ralph Seekins has more than 42 years' experience in the automotive industry. He started as a mechanic, worked in sales, and for the past 35 years, has been the owner of Seekins Ford Lincoln.*