Carbon vs. Particulate Cabin Air Filters
April 2013

Many of today's vehicles, including over the road trucks and some off-road equipment, come equipped with cabin air filters.

The original purpose of the cabin air filter was to remove solid contaminants like dust, pollen and soot from air entering the passenger compartment of the vehicle, but some can now remove gases and odors as well.

Cabin air filters should be changed every 12,000 miles (15,000 km) or yearly. If the cabin air filter fails or becomes clogged, the pollutant concentration in the interior of the vehicle can become six times that of the outside air.

Sometime you may see two different filters for the same application.

Often one of these filters contains activated carbon. The carbon cabin air filters still remove dust, pollen and other contaminants from the air, but they also adsorb exhaust fumes and unpleasant odors prior to entering the passenger area of a vehicle.

The charcoal in the filters is treated with chemicals and heat to give it specific odor-control properties. Charcoal traps odor-causing gases by adsorption (not absorption), and therefore holds the gases on the surface of the charcoal treated media. Because charcoal is porous, the filter has a very high capacity for trapping noxious gases.

The carbon filter may cost more than the filter without carbon and may not be necessary unless the vehicle is operated in an area that has slow moving traffic or strong odors.

The preceding information is available online at www.baldwinfilter.com/techtips.html.