



Replace Cabin Air Filter

by [Larry Carley](#) copyright 2019 AA1Car.com

A cabin air filter is like a filter on a home furnace or air conditioner. It removes dirt, dust and pollen from air that enters the passenger compartment through the vehicle's HVAC (heating ventilation and air conditioning) system. The filter also helps keep the A/C evaporator clean. This allows the A/C system to cool at peak efficiency and reduces the buildup of contaminants on the evaporator that contribute to the growth of microbes that can cause musty odors.

Cabin air filters can keep dust, dirt, pollen, mold spores, smoke, even germs and viruses out of your car. The filter can also trap these particles that are INSIDE your vehicle if you set your climate control system control to RECIRC.

Most dust filters will trap many particles as small as 0.3 microns, while catching 95 to 99 percent of particles in the 1 to 3 micron size. The diameter of a human hair is about 100 microns, so we are talking very small particles that can be trapped by these filters. By comparison, a COVID-19 virus is about 1.3 microns in diameter, so it would fall into the range of particles trapped by these filters too.

Some cabin air filters are also "combination" filters that also remove odors, diesel fumes and other pollutants. Combination filters typically have a layer of activated carbon that reacts with airborne chemicals and traps them before they can enter the cabin. The fibers in the filter media may also be electrostatically charged so they will attract and hold dirt and contaminants more efficiently. This type of filter typically costs more than a standard cabin air filter.;

Does Your Car Have a Cabin Air Filter?

Cabin air filters were introduced back in the mid-1980s in Audi and other European luxury vehicles. The first domestic applications date back to 1994 (Ford Contour & Mercury Mystique). Today, cabin air filters are found in almost 80% of all new vehicles.

The best way to determine if your vehicle has a cabin air filter is to look in your owner's manual. Check the index for Cabin Air Filter, or look in the section that lists scheduled maintenance items.

How to Replace Your Cabin Air Filter

Refer to your vehicle owner's manual for the exact location of the cabin air filter and how to replace it. Most are located either behind the glove box, or behind a small access door or cover at the base of the windshield in the engine compartment. On some applications, two filters are used in a stacked arrangement. This allows for easier filter replacement in tight quarters. Some cabin air filters are also designed to fold in the middle to make removal and installation in tight quarters easier.

If your cabin air filter is located behind the glove box, you may have to lower or remove the glove box to replace the filter. On some applications, this may not be necessary if there is room to pull the filter out from under or behind the glove box. Refer to your owners manual for the exact procedure to replace your filter.



The cabin air filter is often located behind the glove box. This requires lowering the glove box to access a panel or door on the HVAC unit. The filter is located behind that door.



*This is what a really dirty cabin air filter looks like. This one had not been changed in 8 years!
The filter was so dirty that it was obstructing airflow through the heater and A/C.*



You can see how dirty the old filter is in comparison to the new filter.

If your cabin air filter is located at the base of the windshield in the cowl area, it is usually located under a cover or panel. To access the filter, open the hood and look for a removable panel or cover on the passenger side of the cowl area.. It may say CABIN AIR FILTER on it. On some cars, a large plastic trim panel in the cowl area may have to be removed to reach the filter.



Filter replacement typically takes 10 minutes or less on the easier applications. But on others, it takes longer depending on how much disassembly is required (the glove box or console may have to be removed to reach the filter). As a rule, no special tools other than maybe a screwdriver are required to remove the glove box or filter cover.

When you install the new filter, make sure it is positioned correctly and seals tightly against its enclosure. Some filters will have an arrow indicating which way the air should flow through the filter. If there is an arrow, the arrow should point DOWN.

How often should a cabin air filter be replaced?

A simple dust only filter should last two to three years or up to 30,000 miles depending on operating conditions. More frequent filter changes may be required in dusty areas. Combination filters that also trap odors should be replaced yearly or every 15,000 miles. Refer to the vehicle owner's manual for specific service interval recommendations.



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