



## Fuel & Air Intake: Air Filter



**Description:** The typical air filter is a disposable, pleated-paper element with a sealing gasket made of synthetic material. Filters come in two main types: the panel style as used on most fuel-injected cars and the radial style, which is usually used on carbureted vehicles.

**Purpose:** The air filter traps dirt particles, which can cause damage to engine cylinders, walls, pistons and piston rings. The air filter also plays a role in keeping contaminants off the airflow sensor (some fuel-injected cars) and sometimes in cleaning the air that enters the crankcase for crankcase ventilation. The air filter also serves as a silencer for your car's intake system. Your car's engine can use more than 10,000 gallons of air for every gallon of fuel burned, so it's easy to see how big a job the air filter has.

**Maintenance Tips/Suggestions:** Although your car owner's manual may specify an inspection interval for the air filter, it's really best that it be checked at every oil change. Dirty and dusty driving conditions will require more frequent filter replacements, so keep this in mind. Driving with a dirty filter restricts the air entering the engine, and if severe, can impact fuel economy and performance. If you decide to change the filter yourself, always do so with the engine off. Never start or run the engine with the air filter out of place. Most filters can be easily replaced by removing snap clips, a clamp or several screws. Make sure you use the filter specified for your car's engine; do not try to make a filter fit. An improperly fitting filter can allow unfiltered air into the engine, causing engine damage.