

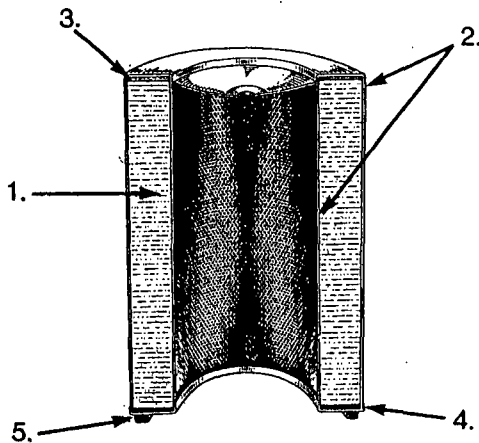
changed every 10,000 miles or at tune-up time. More frequent replacement may be necessary if the vehicle is subjected to lots of dust or off-the-road travel.

Heavy Duty Air Filters

Heavy duty air filters come in a variety of shapes and sizes. They all have a minimum efficiency rating of 99.9%. These filters are much larger than light duty types, so a tighter, more efficient paper can be used, while still letting enough air pass through with minimum restriction.

Servicing Heavy Duty Air Filters

1. Heavy duty pleated paper—provides minimum of 99.9% efficiency for maximum engine protection.
2. Plated perforated or expanded metal inner and outer bodies—protect paper and strengthen filter assembly.
3. Adhesive plastisol—permanently bonds paper to metal end caps.
4. Plated metal end caps—will not warp or rust.
5. Low compression—set silicone gasket is permanently bonded to the end cap. May be used over and over again, even after cleaning.



(Figure 39) Features of Heavy Duty Air Filters.

Because of the wide variety of heavy duty air filters available, we will only cover the basic procedures of servicing them here. Their replacement time or service schedule may be

based on a number of factors: miles traveled, hours of operation or restriction reading. The restriction reading, or pressure drop of these filters is almost always measured in inches of water.

A U-tube monometer is hooked into the clean or engine side of the filter, the engine is operated at maximum speed, and the restriction is noted. A round dial type gauge can also be used to determine the restriction reading. This gauge may be permanently mounted in the dashboard of the vehicle.

If these methods are not convenient, heavy duty air filters may be replaced on a routine time or mileage basis.

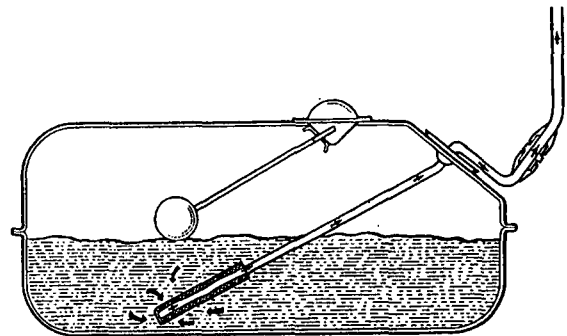
THE FUEL FILTER

A carburetor has many small passageways and intricate parts which can be damaged by dirt particles. A dirty carburetor can cause faulty performance and eventually complete engine shutdown, so the fuel must be as clean as possible to ensure smooth operation of the vehicle.

There are a number of ways in which contaminants may enter the fuel system of a vehicle:

1. Unfiltered fuel may be pumped into the vehicle tank.
2. Tank caps may be loose or sealing gaskets may be faulty.
3. Rust—a powerful abrasive—may flake off from the fuel tank and fuel lines.
4. Contaminants or dirt particles may be left in the tanks or lines during the manufacturing and assembly process.

Types of Gasoline Filter Systems



(Figure 40) In-tank Fuel Filter.