Passenger Car and Light Truck Gasoline Fuel Filters

Fuel filters today have changed significantly in appearance from those in the past. However, their purpose remains the same: to protect the fuel system by removing contaminants (rust, dirt, and other foreign matter) from the fuel.

The most significant change today, is that the majority of engines being produced are fuel injected. The filters used on these engines are exposed to much higher pressures than those of the past. Pressures in excess of 50 psi (345 Kpa) are normal. This pressure may still be present with the engine off and must be relieved prior to servicing the filter. Because of this retained pressure, extreme care must be taken while replacing these filters. The installation instructions provided with the filter or those available through the vehicle service manual must be followed in order to prevent pressurized fuel leakage resulting in possible fire and personal injuries.

The fuels have also changed. Besides the unleaded fuels, there are blends of gasoline, oxygenated compounds, various alcohols and others. Because of the various fuel blends available, care must be taken to insure the fuel system and filter are compatible with the fuel.

Fuel filters can be categorized into three general types: In-line, element/cartridge and in-tank. See typical examples on page 2.

**In-line Type:** So named because it is located in the fuel line between the tank and injectors or carburetor. The in-line types come in many shapes and sizes utilizing an assortment of connectors (quick disconnect, threaded, some which require gaskets, hoses and clamps) which are attached to the filter body at various locations and angles. Some filters have attached mounting brackets and fuel line supports. These are metal filters as well as plastic.

**Element /Cartridge Type:** This type requires installation into some type of housing in the vehicle fuel system. The housing is generally located in the carburetor itself, but may be located in or on the fuel pump or in the vicinity of the fuel tank. The elements may be pleated media, porous metal, or woven plastic.

**In-tank Type:** This filter is located within the gas tank. These are normally serviced in conjunction with the fuel pump assembly. In most cases special servicing techniques and tools are required.

Although fuel filters are virtually trouble free, they do need to be replaced at the intervals specified by the vehicle manufacturer. Fuel filters may be neglected due to lack of consumer knowledge of the location and the inaccessibility to it even
when the location is known. In some cases special servicing techniques and tools may be required. With regular servicing, costly break downs, service calls, and inconveniences can be prevented.

The Filter Manufacturers Council urges everyone to dispose of all used filters properly.

FOR ADDITIONAL INFORMATION, CONTACT:
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