HOW EFS REDUCES EXHAUST EMISSIONS

Gasoline is a liquid formed purely of carbon and hydrogen chains of different lengths ranging from C7H16 through C11H24. If you could burn gasoline as a vapor with a hot flame and plenty of oxygen, you would get nearly pure carbon dioxide and water as the combustion products. That is why you can burn natural gas, LP gas and kerosene indoors in the winter. Automobile exhaust, unfortunately, contains a lot more than carbon dioxide and water. The most important pollutants in vehicle exhaust include:

- Carbon Monoxide (a poison) - Carbon monoxide is formed because "combustion is incomplete". Not enough oxygen is available fast enough to react completely with the entire carbon chain.

- Nitrogen Oxide – The higher the cylinder temperature reaches, the more nitrogen oxide produced.

- Unburned Hydrocarbons - Because of long carbon chains and a very quick combustion phase, not all hydrocarbons participate in the reaction, resulting in unburned fuel or incomplete combustion.

- Diesel Particulate Matter (DPM) – DPM is produced during the combustion of diesel fuel. DPM's have a large surface area, where relatively large amounts of organic material from unburned fuel are adsorbed, including a variety of mutagens and carcinogens.

ECO-Fuel Saver helps reduce the two major components that are shown to be the common denominator in producing harmful emissions in engine exhaust. They are incomplete combustion (unburned fuel) and higher temperatures.

ECO-Fuel Saver allows for shorter carbon chains, so oxygen can react more completely at the point of combustion, to produce a more complete burn of the fuel. ECO-Fuel Saver also lowers cylinder and exhaust temperatures, which lowers a number of factors, including Nitrogen Oxide emissions.