LUBRICATION MYTHS

Myth: Small, higher revving engines run hotter than larger engines. **Fact:** Not so. Engine temperatures depend more on the number of accessories operating, vehicle weight, driving conditions, ambient temperatures and condition of the cooling system.

Myth: SAE 20W-50 or SAE 10W-40 grade motor oils are best for smaller engines. Fact: Wrong. General Motors, Ford, Chrysler and most import manufacturers have not recommended this grade for several years. An SAE 20W-50-grade oil won't flow fast enough to give good lubrication in cold weather, particularly at start-up. Also, neither SAE 20W-50 or SAE 10W-40 oils are energy conserving. Most auto manufacturers recommend an SAE 5W-30 or SAE 5W-20 grade for new cars, but check and follow your owner's manual.

Myth: I broke in my engine on Brand X; I can't switch brands.

Fact: First, be sure that during the break-in period you use the same high quality (API SL) oil which the manufacturer recommends; special break-in oils are not needed or recommended. Second, you can change the brand oil used any time, just continue to use the same high quality level recommended by the engine manufacturer.

Myth: You can't mix brands of motor oil.

Fact: Mixing brands is not the best practice because the additive systems in each may be different and when mixed may not function as efficiently as desired. However, no serious problems will occur if you must add a different brand of equivalent quality between oil changes. It is very important to maintain proper oil level.

Myth: Motor oils can cause sludge.

Fact: True, poor quality oils can contribute to sludge. Sludge deposits are formed by a combination of dirt, soot, partially burned fuel, oxidized motor oil, leaked coolant and condensed water vapor produced during combustion. These bad guys are usually present, and a good motor oil keeps them separated so they are drained with the oil and not deposited in the engine. Using a good quality oil and regular oil and filter changes will prevent sludge.

Myth: Paraffinic base oils can cause wax buildup and sludge.

Fact: Not true. All high quality petroleum motor oils are made from paraffinic base oils. In spite of its name, "paraffin" does not mean candle wax. The stability of paraffin molecules makes paraffinic base oils more resistant to the chemical changes that can take place in an engine than other types of base oils. That means less sludge, varnish and corrosive wear with a high quality paraffinic base motor oil.

Myth: My car manufacturer says I'm supposed to use their branded oil to protect my warranty.

Fact: Warranty cannot be tied to the use of a specific brand of oil; however, it can be tied to the use of a specific quality level of oil. Use of a lesser quality oil is construed as abuse, and abuse is not covered by the warranty. CITGO SUPERGARD[®] motor oils exceed the performance requirements of the API SN Category and the ILSAC GF-5 specification, which the car manufacturers use to recommend service fill oil.

Myth: My engine will benefit if I use supplemental additives. **Fact:** Today's performance standards were established with major input from the engine manufacturers and are designed to provide the protection needed under severe conditions. Supplemental additives are not needed and are not recommended. In most cases they dilute the additives already present and reduce the quality of the motor oil. Use of supplemental additives may endanger your engine warranties.

Myth: The "normal" oil change intervals recommended by the car manufacturers are conservative and I can safely extend them.

Fact: The normal change intervals in the owner's manuals are not conservative today. Engines have become more demanding of the oil, but recommended intervals have not shortened. By the definitions in the owner's manuals, most of us drive our cars in "severe" service for which change intervals are about half as long as the normal intervals. Stop-andgo, short-trip, around-town driving creates very severe conditions for the engine oil. We advise against exceeding OEM engine oil drain interval recommendations for your type of service.

Myth: Motor oils made with certain base stocks are better than others.

Fact: High quality mineral oils can be produced from petroleum feedstocks by a number of different refining processes. Motor oil manufacturers carefully select additives that will provide the desired performance. Engine oil formulations must complete rigorous testing to obtain an API license. Always look for the American Petroleum Institute (API) "donut" and "starburst" on quart containers of motor oils. These symbols mean you are buying quality motor oils that meet the requirements set by the API.

Myth: The "Energy Conserving" label on oil is just a marketing gimmick. I never see fuel savings.

Fact: The American Petroleum Institute has set specific fuel economy standards for engine oils. In order for an oil to be labeled "Energy Conserving," it must show specific improvement in fuel economy over a standard reference oil in the same engine operated under controlled conditions. Only those oils meeting a specific level of improvement over the reference oil can be licensed as "Energy Conserving."

Myth: Brand X motor oil is the best because my engine shows higher oil pressure. Fact: The viscosity of engine oil has a direct effect on engine oil pressure. Oils with higher viscosity may show higher oil pressure. Therefore, your engine may show higher oil pressure when using an SAE 40 grade than an SAE 20 oil. Oil pressure is also affected by temperature. Shortly after start-up, your engine may show higher pressure in winter than in summer. Quality oils, of the same viscosity grades, would be expected to give the same engine oil pressure under similar operating conditions.