

From The Bench: To syn or not to syn

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I was doing some “cursory research” about synthetic oil brands a few days ago to see if I should switch my wife’s daily driver over from mineral based oil. I personally do not have any qualms whatsoever from a scientific standpoint, but over the years I’ve heard a few “stories” from bench racers around the old beer cooler. Here are a few myths and facts from Royal Purple Tech Advisor Patrick Burris. The italics are my comments.

Myth: Synthetic oils cause seals to leak.

Fact: *Brand name* synthetic oils will generally not cause an engine oil leak. Synthetic oils possess a higher degree of natural solvency, which can clean and remove deposits left by *some* mineral based oils. The removal of extensive deposits can expose marginal or damaged oil seals that may then leak.

Myth: Synthetic oils are thinner than mineral oils.

Fact: Viscosity is a measure of the resistance to flow of the oil at a specified temperature. Synthetic and mineral oils of the same SAE viscosity will have similar flow characteristics. The difference is that a synthetic will retain its designated SAE viscosity through a much broader temperature span. *This is a good thing especially on the cold end of the spectrum such as getting you car started and reducing wear on a January morning in Minot.*

Myth: Synthetic oils are not compatible with mineral oils.

Fact: Automotive oils, whether synthetic, mineral or a blend, are compatible. However, it is a good practice to not mix brands or different base oil types unless there is no other option available.

Myth: Once you use synthetic oil you cannot switch back to mineral oil.

Fact: Switching from a mineral oil to a synthetic or vice versa is a routine occurrence and will not cause a problem.

Myth: Synthetic is only for new cars.

Fact: Synthetic oil can be used in any car or truck engine built or rebuilt after 1970. *I haven’t been able to track down the reason here. Does any reader know? Was that when neoprene (or viton) seals became available? Anyway Pat says, “regardless of the mileage as long as the engine is in good mechanical condition and not leaking or consuming oil, there should not be any issues with older engines. In the case of a leaker or oil burner, the only issue is cost---why pour in \$5 per quart synthetic oil just to see it drip on the driveway.*

Myth: You have to break your motor in on synthetic in order to run synthetic. *Good one huh! I had never heard this one before.*

Fact: *Pat says, “Synthetic oil can be used during break in, after, or even with mineral based oils. For new cars and trucks, wait until the manufacturer’s first scheduled oil change or a minimum of 2,000 miles (gasoline engine) or 8,000 to 10,000 (diesel engine). Some ASE certified technicians like JuniorDamato, who writes a column called “Auto Doctor”, recommends mineral oil during break in and the second oil change for a total of about 6000 miles before switching to synthetic oil.*

Myth: You can’t use synthetic oil in a diesel engine or rotary engine.

Fact: As long as you use the correct viscosity and correct API engine service classification, you can use synthetic oil in any engine *type*.

Myth: All synthetics are the same.

Fact: Not all synthetic oils are created equal. For instance, mineral based motor oil with a very good additive package can easily outperform synthetic motor oil with a mediocre additive package. Although additives are typically only 15 to 25 percent of the makeup of motor oil, they can impact a lubricant’s performance much more than the base oil. There is no easy way for a consumer to determine the quality of motor oil’s additive package. Price is often an indicator of quality, since the more advanced additive technologies cost more to produce. For more info log on to www.royalpurple.com

If you thought the above myths are all from the early days of when synthetics were just coming on the market, think again. Here's a brand new question that Junior Damato fielded in early December 2005.

Dear Doctor: I purchased a 2005 Dodge Hemi pickup. My dealer recommended the use of synthetic oil, yet another dealer I talked to said they had problems with synthetic oil in the hemi. I value your opinion on automotive matters. -Ron

Dear Ron: To date, I have never heard of or encountered a problem with the use of full synthetic oil in any type of internal combustion engine, especially street driven vehicles. I have no idea what the dealer was thinking when he said he has had problems with synthetic oil.