

## **Jed Clampett had no idea what he started when he struck Texas Tea, did he?**

Good ol' Jed Clampett went hunting to feed his family and ended up striking Texas Tea Black Gold and moved to Beverly Hills. Or so goes the story in the Beverly Hillbillies. Back then oil was oil and as long as it wasn't black as tar everything was good. But as technology advanced, engines began to run hotter, with higher compressions and computers. Then the green movement slowly changed everything.

This reminds me; what happened to the good old days when you knew the best stuff out there was a gold plated whatever? Now there's platinum, titanium, and what next? Superdoopermanium? Wait until they start changing the Olympic medals and gold is the measly runner-up award.

It was back in the sixties when we starting growing our hair, getting stoned and environmentally conscious that some scientists, as they sat out in their backyard talking to little animals, said, "Hey! They quit making dinosaurs a long time ago. This is a problem."

So they decided to start looking at alternatives, like synthetic oils. Much of this research began even further back in the thirties with a German scientist named Dr. Hermann Zorn. He searched for lubricants like natural oils but ones that didn't gel or turn to gum under gasoline engine environments. His work led to the invention of over 3500 esters, including diesters, polyolesters and banana oil (chimpanzees and apes declined testing the banana oil synthetics, although baboons weren't so smart. One look at their rear ends you'll know what happened there). Not good, not good at all.

Just a sidenote; this led to the testing by other Monkees in the sixties and this explains why they ran around so fast on their TV show always looking for washrooms.

Poor Dr. Zorn. Unfortunately he thought he was working for his company on a synthetic beer/bratwurst combination, which would have made him immensely rich, famous at Oktoberfest and a national hero. "Beer and bratwurst in the same glass without any gaseous side effects." Years later they found him wandering incoherently in Berlin's skid-row muttering, "Deichsel und mit getriebenen unterscheiden vermoche nach dem sie darstellen staubwolken au wirhelten."

Which literally translated means, "I was robbed." Especially after the war, when most German scientists defected to North America.

If you're wondering, synthetic oils weren't made by some mad scientist between Frankenstein's monster, stem cell research and inventing a cure for cancer and PMS - much to his depressive haranguing wife's disgust. Which of course made him wish he'd been single like Einstein yelling, "Eureka  $E=mc^2$ ." Which wasn't his

original solution to the Theory of Relativity, but to the perfect milkshake recipe. The milkshake idea fizzled out after he took out his backyard and half of Detroit in 1948.

Synthetic oils are ester-based substances, along with other additives, which far outclass any ordinary oils. Yes, I know, the first pantyhose were polyester-based and, oddly enough, the first polyester sweaters (the clue is in the name). Scientists soon realized that if you get pantyhose turning fast and hot enough (?), it turns into a rubbery mass called a fan belt. Hence was born the expression, "Get on yer bikes, girls."

This led eventually to SynLube in Vancouver in 1969. The only market at that time was selling their synthetic oils to the Lunokhod 1 Moon Rover and the US Moon Rovers. They soon realized that wasn't a very profitable, or large, market. Okay they did sell four quarts to the Americans for \$3,000,000,000 dollars US each, but after six trips to the moon the Apollo program was cancelled.

A small note to history buffs here, they also sold two quarts to the Russians, who at the time didn't make it to the moon and couldn't afford to pay in rubles, but ended up paying with 2,000, bottles of Vodka. "It'll be a delirious three months until we sober up and the Vodka runs out," said one SynLube official. "Three months?" the Irish spokesman replied, "what do you take me for, a tee-totaler?"

Although it does seem funny that with all those potatoes around the Irish never invented Vodka.

So, you ask, are synthetics really better? Here are some facts on synthetic oils to dispel the old Ford Model T tales your grandparents would have you believe.

1. Synthetics will void your warranty. Wrong. They meet and exceed industry API and ILSAC standards (we'll talk more later about those silly acronyms and what scientists get up to on their national conventions).

2. Once you switch to synthetic you can't switch back to conventional oil. Wrong. They are fully compatible, and provide superior engine protection.

3. Synthetics are good only in new cars. Wrong again. They're grr--e--e--at (as Tony the Tiger would say) in older cars. It's that superior protection thing again.

4. Synthetics need a break-in period first before switching your vehicle over. Oh buddy, we've fooled you again. Here comes the cattle prod for four wrong answers in a row. With modern engine designs, break-in periods are no longer required.

Any disadvantages to using synthetic oils? Yes. This, believe it or not, is straight out of Wikipedia; Potential stress cracking of polyoxymethylene plastics when mixed with polyalphaolefin particles (just a word to the wise here, no matter how many times you spell this out, the red underlining is all over the place from Word's SpellCheck, no wonder Bill Gates is going broke). And the rational thought to

most of us intelligent, reality watching TV public is “WHAT THE BLEEP?” (that went over my head faster than a 747 at the national cheerleading competition). Actually, what that means is, don’t use synthetic oil as car wax, dishwashing liquid or, unless you want to look like Phyllis Diller, Kojak, or Ilea (from the first Star Trek Movie), a shampoo.

Oh, and synthetic oils are not recommended in rotary engines. Here’s a little bit of trivia. Did anyone out there know that GM (Generally MadCorp) had built a four-cylinder rotary engine that was going to go into their Corvette advertised as “It sounded like a sewing machine, but out dragged a Mustang? (car, not the horse).” Mazda also bombed with their first R100 car with the rotary (Wankel in some parts of the world, wanker in many others) engine.

So why buy synthetics for \$9-\$19 per bottle, you ask, when “I can get a great buy on a case of twelve jugs of oil at my local grocery store for \$2.99”.

Not likely, you get what you pay for. Ever look closely at a container of oil? They all seem to have this funny starburst type stamp on them. Oil is rated by weight and by compositions needed to meet operating standards in various years of vehicles. Multi-grade oils were originally called All-Season oils. When you look at the can and read 5W30, that means in the winter the oil will pour out at the thickness of a 5 weight rated oil and in the summer with the thickness of a 30 weight rated oil. For many decades we had a few specific rated oils, mainly 5W30, 10W30, 20W50. Lately, with engine tolerances getting tighter and emission standards being raised, we’ve seen the advent of oils as radical as 0W60. Next year they’ll be bringing out 000W120 which will pour out like water when sitting overnight on the surface of Pluto and glug out like maple syrup when orbiting the sun for a week (I guess they’re still trying to sell a quart of oil to NASA at \$4 trillion. “Hey I just gotta sell them one bottle and I can retire like granddad”, said Ned Clampett).

Compositions were first rated, and for decades later, by the API (American Petroleum Institute). Every once in awhile the people there get together to have one of their swanky week-long soirees. Now, being scientists, they do mad scientisty things like put lamp shades on their heads (still a gut buster with that crowd), and decide to establish new oil standards for cars and RVs (wow! Riveting stuff of legends in the cutting edge hydrocarbon field). The current standard is SN - good for cars from 2011. The last standard was SM established in 2004. The one before was SL, for vehicles from 2001. So, if that can you’re holding says something like SD, it’s good for pre-1971 vehicles. In other words, nearly pure oil and not much else. Yup, you definitely get what you pay for.

But don’t get fooled by just the API ratings, there are others out there now. The newest ILSAC (International Standardization and Approval Committee) ratings are GF5 for 2010 vehicles and older. These are those scientists that weren’t invited to the API annual conventions and you’d think these folks with the wow-knock-their-socks-off name should pretty well have the market sewn up on oil ratings. Nope,

here's where it started to get crazy. Along comes the ACEA (European Automotive Manufacturers Association). Yeah? How does that make ACEA? I asked as well. The Europeans, still upset about the whole synthetic beer/bratwurst thing, and the Americans absconding with their scientists, decided to establish their own ratings.

Then VW came along establishing their own ratings for their vehicles. The current benchmark is 504.00 for gasoline and 507.00 for diesels. Yes, they are really mad about the beer/bratwurst issue, don't find lampshade jokes very funny and are trying to confuse the heck out of us.

Mercedes-Benz then joined the fray with their own ratings MB 229.1 to MB 229.51. Way too confusing to explain in less than 4000 words as these are Very Sophisticated Scientists, who won't even admit to being coolly upset by the beer/bratwurst issue. Last time I tried to talk about the hilarity of the lampshade stunt they hung up on me. And I'm not even going to mention JASO (Japanese Automotive Operating Standards Agency) or the other automobile companies joining the bandwagon en-masse. (PS no funny jokes about these guys at JASO, they know Karate!)

So if you own an RV, or towing any other vehicles with your RV, it would be wise to check with a certified shop to make sure the oil they use is meeting the various spec's required by your vehicle. If you're unsure, check your owner's manual (that's if you've still got it and not, like me, used it for toilet paper when stuck in the back country for four weeks). As for the supermarket oil that's a steal at \$2.99 for a twenty-litre pail? When you consider the cost of your average engine job - between \$4,000 and \$8,000 - that works out to about \$20-\$40 dollars for that cheap basically crude oil in a can. Not a bargain after all.

For more information give us a call at Gerry's Automotive (yes, I know, cheap unsolicited plug here) 1-604-826-0519 for quotes on engine rates, towing and oil spec's. Next article? Transmission fluids. And if oil had your head spinning, this will give you vertigo! So, until next time, (and as Jed would say) y'all come back now, y'hear?