

Time to Change the Oil in the MG

Posted by William Wright

So it is time for an oil change for our MG. Most of us change oil every 3,000 miles or in my case, once a year as it would take me several years to get to 3,000 miles. We usually just get the old reliable brand of oil and change the filter and away we go. Today I want to consider the options for the oil change I will do on my MGAs. Engines have come a long way over the last 60+ years, but that is no excuse to ignore the requirements of our older engines. Modern engine oils neglect crucial requirements of older engines:

The lower amounts of ZDDP¹ providing anti-wear protection in modern motor oils can lead to excessive and premature engine wear in older engines. Synthetic motor oils are excellent lubricants for the modern MG engine but can be harmful to older engine seals.

The design of modern engines and fuel economy concerns have made a push for thinner viscosity oils. Now, it is often hard to find the recommended 10W-40 or 20W-50 motor oils readily available for classic cars.

For our MG's it is recommended we use 20W-50 grade oil. The main reason these older British cars may need heavy oil is to maintain adequate oil pressure unless the engine has been rebuilt with tighter bearing clearances. Your MG engine was designed to use a specific viscosity of motor oil. An oil that's too thick or too thin can, for example, fail to adequately fill the clearances between the bearings, leading to wear. While modern oil technology is better, the oil's viscosity still plays a vital role in protecting your engine. When selecting an oil, here are a couple of considerations:

Viscosity Index: Oils with a higher number include a better synthetic base oil that provides more protection to critical components over a wide temperature range by maintaining fluid thickness and the necessary fluid barrier between parts. A low VI 20W-50 will be quite a bit heavier at normal operating temps than a typical 5W-50 or M1 15W-50.

Pour Point: This measures the oil's fluidity at cold temperatures and refers to the lowest temperature at which it maintains its ability to flow. Lower numbers are likely to indicate a better synthetic base oil. This may or may not be a factor for us in Connecticut as many of us do not run our cars all year long.

We would also consider the flash point of the oil. We associate higher flash points with the possibility of lower oil consumption. Although this is a rough correlation.

The ZDDP level in the oil should be 1200-1400 ppm for our engines. (This is for any older engine without a catalytic converter.) Without adequate additives such as ZDDP in our classic engines, it will quickly lead to lifter foot scuffing and cam lobe wear.

If you are using a 20W-50 without ZDDP, one 8 oz. bottle of additive will increase the ZDDP content of five quarts of the motor oil by 400 ppm. This equates to 1.6 oz. of additive raising the ZDDP concentration of one quart by the same amount.

Using racing oil in a street car is not always a great choice unless you perform frequent oil changes like my once-a-year under 500-mile change. Racing oils don't contain the same amounts of detergents, dispersants, or other ingredients needed for longer oil change intervals. Keeping the engine internals clean equals less wear, so oil needs to clear away byproducts and suspend them long enough that they reach the oil filter and get trapped.² Racing oils however often contain high zinc levels, and that zinc is beneficial to our vintage engines.

As a side note, you know our gearboxes use 30-weight oil.(20W-50) The non-overdrive MG gearboxes last forever with conventional motor oil and we haven't seen benefits to synthetics. We have seen overdrive gearboxes be very fussy about oil and wouldn't recommend synthetic.

Finally, the oils we are looking at are for regular oil changes. Breaking in the engine for the first 500 miles wears the cylinder-wall asperities, providing increased surface area for the rings to seat tightly. The result is maximum compression (i.e. power) and minimum oil consumption. Here we would use something like a Lucas Break-In oil which has 50,000 ppm Zinc!











Below is the chart of easily available options. I did not add a price as they fluctuate so much. I hope this is helpful for your next oil change!

Safety Fast!

1 Zinc dialkyl dithiophosphate (ZDDP) is the most common zinc-based additive used primarily as an anti-wear agent to prevent premature engine wear. It also provides corrosion and oxidation protection. ZDDP anti-wear additives are heat-activated, meaning they provide wear protection in areas of increased friction. As temperatures rise and surfaces come closer together, ZDDP decomposes and the resulting chemistry protects critical metal surfaces. When parts move during operation, any sliding or rolling motion takes place on top of or within the ZDDP anti-wear film, which reduces metal-to-metal contact.

2 Detergents "keep" your engine clean. High ester counts will work to not add any further deposits but it will not remove built-up deposits.

SAE 20W-50 High Zinc Motor Oil

Type	Oil Type Grade	Viscosity Index (VI)	Specific Gravity @ 60°F	Zinc ZDDP ppm	Flash Point °F	Image
Kendall GT-1® Competition Motor Oil	Conventional Motor Oil	139	0.883	1,190	446	
Lucas Hot Rod & Classic Car Motor Oil	Conventional Motor Oil	191	0.867	2,100	425	
Mobil 1 V-Twin	Synthetic Motor Oil	142	0.87	1680	414	
Castrol GTX Classic 20W-50	Conventional Motor Oil	124	0.888	1,400	417	
Millers Classic Pistoneeze	Conventional Motor Oil	133	0.833	1,130	392	
Comma Classic Motor Oil	Conventional Motor Oil	120	0.870	800	500	
AMSOIL Z-ROD Motor Oil	Synthetic Motor Oil	157	0.862	1,400	468	
Penrite Classic	Conventional Motor Oil	125	0.880	1600	428	
VALVOLINE VR1 RACING MOTOR OIL	Conventional Motor Oil	129	0.886	1400	442	
VALVOLINE VR1 RACING MOTOR OIL	Synthetic Motor Oil	154	0.886	1400	446	
(Hicks) Collector's Choice Motor Oil	Conventional Motor Oil	120	0.881	2000	350	