

A Chapter of the North American MGB Register
A Zone of the Vintage Triumph Register

BRITISH MOTOR CLUB of UTAH

www.BMCUTAH.org

February 2016

Volume 27 Number 2

2016 BMCU Pre-Season Potluck and Planning Dinner

Saturday, February 6 at 6pm.

**The South Valley Unitarian Church (same place as last year)
6876 South Highland Dr.
Cottonwood Heights, Utah**

What to bring?

You - without you, we've got nothing; spouse, partner, LBC friends etc are good too.

A yummy dish to share - without food, we can't have a dinner! HELLO!!!
Bring your own beverages (you don't need to share).

Ideas - Without new ideas for events, tech sessions, drives and tours, we will end up like some other clubs, just polishing our cars.

Mark your Calendar - Don't miss out!

-Roger Davis



Doug Jensen
(theoilspot@allwest.net)
has planned a tech session for the morning of Feb 6 at 2875 Highland Loop Circle, Woodland Utah (near Kamas). See his original email from 21 Jan. Check your email for any additional information.

MG Guru, John Twist on ETHANOL-FREE GASOLINE

Note: This week we (Just British Online Motoring Magazine Jan 15, 2016) are very pleased to have a piece from John Twist of University Motors on the dangers of ethanol, or alcohol, in modern gasoline. Those of us who drive classic British cars, especially ones with original fuel system components, need to be aware of what modern fluids can do to our rides. We appreciate John letting us reprint this article from his most recent newsletter.

"Nearly all of the gasoline sold in the United States contains 10 percent ethanol, which can safely be used in all of today's gasoline-burning cars and trucks." (From <http://www.ucsusa.org>) The operative word is "today's." Ethanol is a cleaner burning fuel than gasoline. It is created from biomass, especially corn. Arguments rage about the true environmental impact of growing corn to create ethanol versus drawing crude oil from wells and then refining it. But for now, ethanol is here to stay. Modern cars are designed to use this newer fuel, our MGs are not.

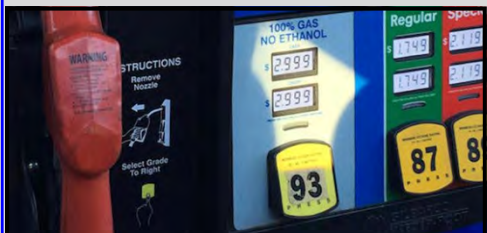
This ethanol enhanced gasoline can wreak havoc with our MG fuel systems. Just last week I had a new SU carburettor float fail I suspect it was the gasohol. This E10 causes our fuel systems to corrode; SU and Stromberg brass metering needles turn green when lying unused. Some have complained that earlier gasoline tank sealers have

lifted off in sheets, clogging the fuel pickup at the bottom of the tank (therefore starving the engine for fuel). This E10 gasohol boils at a very low temperature. We hear from MG owners much more now about hot hard restarts. In some southern climates, running an MGC is all but impossible without great modification. And, MG mpg (miles per gallon) suffers a bit as alcohol doesn't carry the same energy per volume as gasoline.

A gallon of gasoline has about 33 Kwh (Kilowatt Hour) of energy (about 113,000 BTUs) while a gallon of ethanol has about 22 Kwh of energy (about 76,000 BTUs). Somehow, that E10 gasoline yields about 112,000 BTUs. Midgrade (89 octane) E10 gasohol costs just over \$2.00 per gallon in Grand Rapids today. That works out to about 52,000 BTUs or about 15 Kwh per dollar. Consumers Energy sells a Kwh from 9¢ to 22¢ depending on the time of day (Remember those smart meters they fitted to your house? Electricity from noon to four, especially in the summer is sold at that higher rate.). So Consumers sells electricity from about 4.5 to 11 Kwh per dollar. But that's not the whole picture. Our internal combustion engines can deliver ONLY 1/3rd of that energy to the flywheel, and that's in a "perfect" engine. Another third is sent down the exhaust, and the remaining third is sent into the radiator. If we use a figure of 1/4th efficiency then that gasoline is only delivering about three Kwh per dollar. But that's not what I came to warn about.

Use fuel stabilizers. Mike and Forrest, here at UML are fans of Startron additive, available at NAPA and other auto supply stores. It claims to negate the bad effects of the alcohol in the gasoline. Mike swears by it. (Mike note: I run it in my chainsaw, weed whipper, generator, snowmobile, diesel pickup truck, toothbrush.) But there is another option!

There are hundreds of stations offering ethanol-free gasoline across the USA and Canada. Find them at www.pure-gas.org. [Note: Pure-Gas also has apps for iOS and Android to help you find ethanol free gas on the road.]



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The history of the ethanol in gasoline debacle is a lesson in politics, lobbyists, vested interests, money (ours being wasted directly and indirectly) and government subsidies (robbing taxpayers). Net environmental benefits do not exist. Damages to our LBCs do. I think damages and repair costs due to government-mandated ethanol should be a deductible expense on taxes.

- Personal editorial opinion

Send me (editor: robbfoye@gmail.com) your opinion and information on this subject and you can be in the newsletter too.

“Why am I getting weird readings on shiny metal?”

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Non-contact infrared thermometers can be very useful in establishing baseline operational information on engine, drive train, brakes, bearings and cooling systems on our LBCs when things are running well. Then they can help find and diagnose what went wrong when things aren't going well. They can be a preventative tool too - are left and right wheels the same temperature after driving? If not, why not? What about temperature differences across radiator cores? How hot is the float bowl? Are both the same? Relative and actual temperatures can be useful. Fun stuff.

As great as the IR thermometers are, strange and wonderful mysteries can appear to happen. Objects give off infrared wavelengths of light (essentially heat) that we can't see but that IR thermometers can interpret. Emitting infrared is just one way objects can give off/lose heat.

Below is some information from thermoworks.com (Not a BMCU endorsement). This source, and others, can help us get the most accurate and consistent readings. The information below is brought to you through the wonders of “copy and paste” and editorial whimsy. Check out their website for their complete info. -editor

The Limitations of Infrared (IR) Thermometers

Infrared thermometers can be very useful when used in the right way and put to task in the right applications. However, before you can develop confidence in their ability to give fast (and accurate) temperatures, you must understand their limitations. IR thermometers:

- Only measure surface temperatures and NOT the internal temperature of materials.
- Require adjustments depending on the surface being measured (emissivity* of surface material).
- Are not thought to be as highly accurate as surface probes measurements of the same surface.
- Can be temporarily affected by frost, moisture, dust, fog, smoke or other particles in the air.
- Can be temporarily affected by rapid changes in ambient temperature.
- Can be temporarily affected by proximity to a radio frequency source.
- Do not "see through" glass, liquids or other transparent surfaces - even though visible light (like a laser) passes through them (e.g. if you point an IR gun at a window, you'll be measuring the temperature of the window pane, not the outside temp).

Why am I getting weird readings on shiny metal?

Substances with very low emissivity* ratings, like highly-polished metals, tend to be very reflective of ambient infrared energy and less effective at emitting their own electromagnetic waves. If you were to point an infrared thermometer with fixed emissivity at a stainless steel pot filled with boiling water, for example, you might get a reading closer to 100°F (38°C) than 212°F (100°C). That's because the shiny metal is better at reflecting the ambient radiation of the room than it is at emitting its own infrared radiation.

Some infrared thermometers have fixed emissivity settings of (usually of 0.95 or 0.97) to simplify their operation while leaving them suitable for most material surfaces. But other infrared thermometers come with adjustable emissivity settings, so you can more accurately prepare your thermometer for the type of surface being measured, particularly when measuring non-organic surfaces.

*Emissivity

Emissivity is a measure of the efficiency in which a surface emits thermal energy. It is defined as the fraction of energy being emitted relative to that emitted by a thermally black surface (a black body). A black body is a material that is a perfect emitter of heat energy and has an emissivity value of 1. A material with an emissivity value of 0 would be considered a perfect thermal mirror.

For example, if an object had the potential to emit 100 units of energy but only emits 90 units in the real world, then that object would have an emissivity value of 0.90. In the real world there are no perfect "black bodies" and very few perfect infrared mirrors so most objects have an emissivity between 0 and 1.

Below are great ways to get a reading on non-organic surfaces with an infrared thermometer that has fixed emissivity.

Using a "Patch" to Get an Accurate Measurement at Low Emissivity

Another way to get an accurate temperature measurement on a material with a low emissivity rating is to "cover" it with something with a high emissivity rating and let it come to temperature.

A polished metal skillet, for example, can be covered with a thin layer of oil, which has an emissivity rating of 0.95. Be sure to allow time for the oil to come to temperature before taking your measurement. But once they are the same temperature, the highly emissive oil makes checking the skillet temp a snap.

The temperature of other metals can be measured more accurately by spraying a spot with flat black paint or by applying a few pieces of black electrical tape and allowing it to come to temperature (both have an emissivity rating of 0.95). When using this method, however, be very careful that the field of view for your measurement does not extend beyond the blackened spot or your reading will be skewed by the surrounding metal.

If you have an inexpensive IR thermometer like I do, where the emissivity rating can't be adjusted (typically set at about 0.95 for most uses) then using a "patch" as described above for shiny metals and the like works well.

The good news for LBC people is that rusted metal and oil have ratings in the range of 0.95. Rust and oil-covered surfaces are quite common in most LBCs.

For those with adjustable IR thermometers then the tables can help provide more accurate readings.

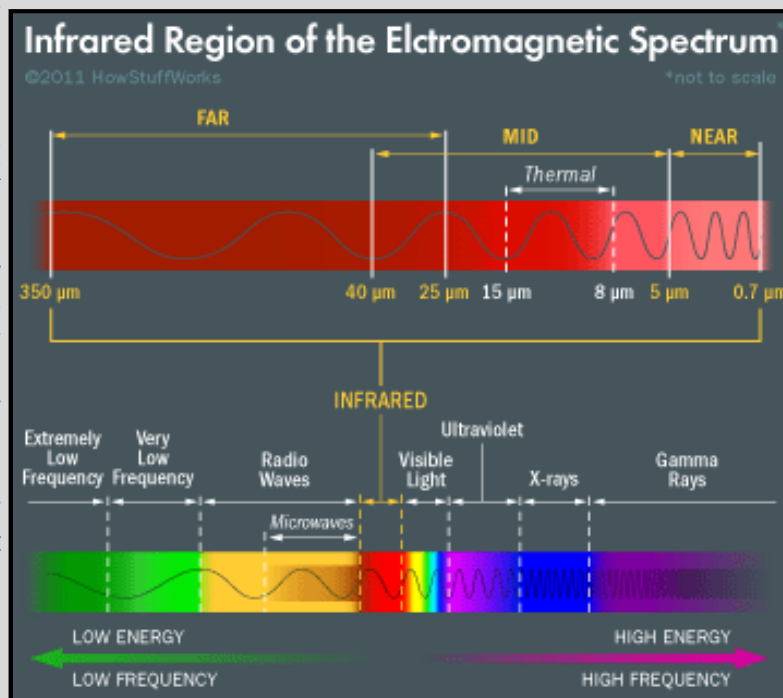
My polished chrome valve cover needs a patch, my flat black painted radiator tank does not.

There are other aspects of IR thermometer usage that affect accuracy of the measurements, e.g. distance, angle, consistency of the measuring point, temperature range, etc. It's always good to read those pesky instructions.

On the technology front, there are now thermal imaging cameras for your smart phone in the \$200 price range.

-editor

Emissivity ratings	
Aluminium: anodised	0.77
Aluminium: polished	0.05
Brass: highly polished	0.03
Brass: oxidized	0.61
Chromium: polished	0.10
Copper: polished	0.05
Copper: oxidized	0.65
Galvanized Pipe	0.46
Iron: heavily rusted	.91-.96
Stainless Steel	0.59
Stainless Plate	0.34
Steel: galvanized	0.28
Steel: rolled freshly	0.24
Tin: burnished	0.05
Tin:tin-plated sheet iron	0.06
Oil	0.95
Paint: oil, black, flat	0.94
Paint: oil, black, gloss	0.92
Paint: aluminium	0.45
Paint: 3M, black velvet coating 9560 series optical black	1.00



The **Eaglewood Festival of Speed** is much more than a car show...

July 1st, 2016, Friday 7:00 pm - 9:00pm Festival of Speed at Eaglewood.

North Salt Lake hosts an impressive and eclectic display of vehicles on the best golf course along the Wasatch Front. We invite collectors, owners, restorers, and racers to gather from **7 pm to 9 pm** along the 10th hole at Eaglewood to show off their wheeled and winged treasures to hundreds of admirers and fans. This is an informal event, so it's **FREE**, there is **no registration**, and it lasts long enough in the cool of the evening to get a good look at every vehicle and to make and renew acquaintances.

Exhibitors please come at 6:00 pm.

Eaglewood Golf Course is located at **1110 Eaglewood Loop in North Salt Lake, UT 84054.**

The **2015 Festival of Speed** was bigger and better than the year before...**268** vehicles of which we have photographs. At 6:00 pm the automotive onslaught began and cars crowded onto the golf course from both ends. They were relentless for about 3/4 hour.

By 8:00 pm the mountain breeze brought cool and refreshing evening air. It was a pleasant way to spend a summer evening enjoying great vehicles and nice people on the most scenic golf course in the state.



The variety and quality of the vehicles were terrific. A few cars were spotted cruising the boulevard and couldn't get in for which we apologize. We'll find a fix for this and expect the upward trend to continue in 2016. Many thanks to Jeff Greenland and Ron Christensen for taking photos. (Great photos from past years)

Check out their website: <http://www.eaglewoodfestivalofspeed.com>

British vehicles are always well represented, including some that we don't see at other events. In addition, I like checking out non-LBC cars of the same vintage as ours which back when, were sharing the road at the same time our cars were new (actually we were newer then too). Eaglewood F of S is a play on words with the more famous "Goodwood Festival of Speed" held in England at Goodwood House in West Sussex in late June or early July each year.

BMCU member Bruce Oblad is the organizer of this very enjoyable event.

-editor



Lucas Calendar

February 6, 2016: Planning Dinner, 6876 South Highland Dr., 6pm. Roger Davis

March 2016:

April, 2016:

May 28-30, 2016: Memorial Weekend Tour, Montpelier, ID, Jim Stover.

June 18, 2016: British Field Day Liberty Park SLC, Jon Hermance

July, 2016:

August, 2016:

September, 2016:

October, 2016:

November, 2016: End of Season Dinner

Don't forget impromptu events too.

The Btrish Mootr Culb of Uath wlcmoes anynoe who onws or is a fan of clsaic Btirish cras and tkrucs. Mmbeherisp is fere. If you are not a mbemer and wulod lkie to jion, go to our Cnto-cat pgae and let us konw!

<http://BMCUTAH.org>

If you would like to attend any of our events, you must adhere to the following rules:

1. Show Up!
2. Have fun!

Please send ideas, suggestions, comments, articles, and/or photos for the BMCU Newsletter to the editor: robbfoye@gmail.com

British Motor Club of Utah



This is not what I meant when I said I wanted my daily driver to be red and white!

-editor

Are you on the BMCU email list? If not, go to our BMCUTAH.ORG website under **CONTACT**. You can reach our fantastic webmaster, Drew Frink, by email, webmaster@bmcutah.org or at 801-450-7493.