

Regular Meetings are the 3rd Thursday of each month unless otherwise posted.

**BMCCF Meeting
August 20th
Temptations**

Eats Start @ 6:00 PM
Meeting Starts @ 7PM



BMCCF

The Cape Fear British Motor Club Welcomes all Marque, Models and Motoring Enthusiasts

For additions or submissions to the letter contact the editor:

Charlie Schaefer or
BMCCF@ec.rr.com

Visit the website:
www.BMCCF.org

Volume 17 No.7

THE HUB

August 2015

The Official Monthly Publication of the British Motor Club of the Cape Fear

President:

Steve Donatone
sdonatone@charter.net

VP:

Ron Foster
rrfoster2001@yahoo.com

Treasurer /Membership:

John Moore jmoore24@ec.rr.com
Caryl Finn thefinnsus@yahoo.com

Secretary:

Pam McMahon
ladyirish@aol.com

Webmaster:

Lynn Wilson
cwilson23@ec.rr.com

Newsletter:

Charlie Schaefer
BMCCF@ec.rr.com

Activities Director:

Eric Robinson
digieric41@gmail.com

Club Regalia:

Ralph Jannelli
www.fourth-gear-ltd.com

Sunshine Person:

Jacq Moore
lechef@ec.rr.com

Car Show Chairmen:

Eric Robinson
digieric41@gmail.com

The HUB is published and distributed Monthly by the Cape Fear British Motor Club.
Articles reflect the opinion of the author and are the property of the Cape Fear British Motor Club and may be reprinted by similar clubs providing the author and source is credited.

Deadline for submission of articles is by the end of the third week of the month prior to publication.

Prime Minister's Message:

The crew from England has returned and it appears everyone had a great time although they had to cut Peter Burr out of a very small car he attempted to drive (just kidding). Many thanks to Eric and Sue for making the terrific arrangements.

We had a very well attended breakfast meeting at the Cape Fear National golf course club house restaurant and I plan to try to set up another breakfast meeting later in the year. The high temperatures have made things difficult in terms of planning road trips but once the heat decreases to a more reasonable level we will revisit the trip to Snead's Ferry among other things. Keep in mind some local car shows are coming up as described in this newsletter.

I will soon issue an email asking everyone who has some club materials in their possession to advise what they have, how much and where it is being kept. The reason for this is to establish an inventory so we know what we have. Ideally, we may be able to create a single location to store our materials.

See you at our next meeting.
Steve



BMCCF - MINUTES

Temptations, a.k.a. the BMCCF Club House

July 25th, 2015

Caper Fear National Country Club



Meeting was called to order at 10 AM by President Steve Donatone.

38 folks drove to beautiful Cape Fear National County Club on a drop, dead gorgeous sunny day with a nice light breeze. Many brought their British treasures and the parking lot looked a bit like a car show.

The minutes of the June meeting were approved by acclimation.

Eric Robinson provided a car show update. He is planning a meeting of the car show committee chairs next week to obtain a current status on their activities. Eric will then inform the board of progress. Reminder: please volunteer to help with the car show activities. Contact the committee chair and offer your assistance. Opportunities include but are not limited to: publicity, raffles, goody bags, show field layout, parking clean up, sponsorships, and registration. See below for more information.

John Moore delivered the Treasurer's report. We are in the black for show expenses but we are also in the very early stages. We have \$9,158 in the checking account so we can absorb expenses if the car show is rained out.

Eric also discussed activities. The Sneads Ferry trip was cancelled due to the extremely high temperatures. Steve plans to re-schedule once this hot spell abates.

Ron and Linda Jones were acknowledged for organizing and hosting a wonderful day viewing a fabulous collection of cars followed by a lovely desert/gathering. Those who attended said the day was terrific!

Also acknowledged were Eric Robinson and Susan Zarutskie for organizing the England trip. All who attended were effusive in their praise and it seemed everyone had a different "favorite part" of the trip. Eric is being pressured to organize a 2016 trip and, although he did not officially kick off the registration, he did hint that a 2016 trip may be in the works. If Eric and Susan do go forward the word is – sign up early! Only 12 couples per trip.

Steve said Ron Jones suggested that an inventory of all club materials be undertaken. Steve will ask the board to meet to discuss the logistics. Once the inventory is determined then a discussion will take place about how to best manage - consolidate in one place, store in multiple places, etc. Carl Wilson suggested the club buy a small enclosed trailer and store everything there. Some discussion about mildew, where to store, who has keys. All to be determined after the inventory is completed. If you have any club materials of any kind, please respond when asked.

Back to car show activities – Karen Burr asked for articles to support the raffle. There is a limit of 20 items this year and the committee (Karen, Beth Foster, Robin Ward) are working hard to make each item impressive. Karen asked for donations which the committee will then combine into raffle “baskets”. For example, someone might donate a couple of restaurant gift cards, someone else 4 movie tickets and, with a few other items, these might be combined by the committee into one item. Karen suggested some things: restaurant gift cards, baked goods, autumn plants, seasonal wreath – obviously the items do not need to be car related. **IMPORTANT:** do not drop anything off at Temptations. Contact a committee member. The committee wants to acknowledge your donation and they also want to be able to combine your donation with others. Target date for donation items: no later than August 20th, the next BMCCF meeting date.

David Ward has 17 classes spoken for by sponsors although some have not actually given him a check. Have no fear – David WILL collect. Several classes remain to be sponsored however with some very popular classes still available. Contact David before your class is gone!

Judy Mebane said she is doing the goodie bags this year and has some stuff. Please ask around at your bank, grocery store, dry cleaners, auto parts stores, etc. for any items they would be willing to donate for goodie bags. Judy is very interested in info from those who have done goodie bags in the past to get ideas. **ACTION:** Please contact Judy as soon as possible with your ideas.

Mickey Finn said there is a new shop opened near Poplar Grove Plantation (same side of the street) called The British Connection which has many things British. Mickey has met the owners and they have invited the club to display some cars for their Grand Opening. Date to be announced and more info to come.

John Williamson said that Leland Under the Lights is on August 22nd from 3 PM – 8 PM. This is held at the Lowes at Brunswick Forest. Contact the North Brunswick Chamber of Commerce at 910.383.0553 for more information. Here is a link to information:

<http://www.nbchamberofcommerce.com/eventNEW.html?names=Leland> Under the Lights Car Show - August

Steve also discussed a fund raiser to be held at Porters Neck Golf Course on the same day - Aug. 22nd, 10AM – 2PM: A Brunch of Cool Cars. This is a fund raiser for the Popular Grove Animal Sanctuary. \$20 per car. They put on a free buffet breakfast, award prizes and have some neat cars. Contact 910.262.2228 or email erica@brushinup.com



Meeting adjourned at 10:25.

Respectfully submitted: Pam McMahon

BMCCF CALENDAR OF EVENTS



AUGUST

20th. **Monthly Club Meeting @ TEMPTATIONS EVERYDAY GOURMET 7.00 pm.**

SEPTEMBER

17th. **Monthly Club Meeting @ TEMPTATIONS EVERYDAY GOURMET 7.00 pm.**

26th. BMCCF Club Annual Car Show, Wrightsville Beach Park
(full details in due course).

The **Grand Strand British Car Club** would like to thank you for your past support of our car shows and wish to extend to you a special invitation to attend our **Third Annual Myrtle Beach Britfest 2015 Car Show** to be held on Saturday, October 3, 2015 at **The Market Common** of Myrtle Beach!

The **Myrtle Beach Britfest 2015** will be held at **The Market Common** (former Myrtle Beach Air Force Base) located on Farrow Parkway between Highway 17 Business and Highway 17 By-Pass in Myrtle Beach. In addition to all of the beautiful British cars, only a block away is The Market Common which boasts lots of shops, restaurants and a cinema so your weekend will be packed with fun for everyone!

Dash Plaques will be given to all early registration entrants and will be available for some late and “day-of” registrations. **Award Plaques or Trophies** will be presented to winners in each class. A Special Award for the entry with the “**Best Picnic Presentation**” will be given. Special “Britfest” t-shirts will also be available. Food vendors, restrooms, local restaurants, and shopping are available nearby all day!

Event Agenda for Saturday, Oct. 3, 2015:

9:00 – 11:00 am Show Field Open & Late Registration

1:30 pm Popular Voting Ends & Vote Tally Begins

2:30 pm Awards Presentation, Raffles, Etc.

Off-Road Trailer Parking will be available next to the show field.

If you would like to show off your British automotive beauty, then you need to fill out and mail a registration form today. Early registrations by Sep. 15 are \$25 first car entered plus \$15 for each additional car entered. Late registrations after Sep. 15 are \$30 first car entered and \$15 for each additional car entered. There are over 40 classes from which to choose. Register early and plan to stay all weekend to soak up the fun!

For more information contact **Rod Smith, Myrtle Beach Britfest Committee Chairman**, at jrodsmith@yahoo.com or tel. (843) 651-7644. Or visit our website at www.GrandStrandBritishCarClub.com. This will be a fantastic event, and we would hate for anyone to miss out on the fun!



A "Brunch" of Cool Cars

Saturday Aug 22, 10-2pm

TO BENEFIT POPLAR GROVE PLANTATION SANCTUARY

We are thrilled to announce that we will have our 2nd Annual Car show at Porters Neck Country Club. We have partnered with Poplar Grove Plantation to help save the Animals of the Poplar Grove Sanctuary.

Car entry is \$20.00. We will have Food Vendors, Prizes, Events for the kids, Live Music and a Vintage Market. Since Poplar Grove has decided to discontinue their car show this year, we hope to have a large amount of participation. PLEASE COME OUT AND SUPPORT.

Please contact Erica Haines for CAR REGISTRATION or if you would be interested in participating in the Vintage Market : erica@brushinup.com or 910-262-2228



BMCCF British Motor Car Show Raffle Time

Ok, folks, we're back and it's time we gave some thought to the upcoming **Raffle at our Car Show on September 26th**.

Look for gently used or re-giftable items, put together a gift basket, or actually purchase something! Remember, we want really great stuff – current or classic. It doesn't have to be car-related and maybe you have
cocktail hour in mind?
or an English tea?
maybe a picnic with your best fella or gal in the LBC?
restaurant gift cert (maybe club in with someone else)?
homemade baked goodies (keep in mind it might be hot that day and there are always hungry flying insects around)
autumn plants?
a new seasonal wreath for the front door?

Put on your thinking caps and get gathering. Call or email us if you have any questions or need suggestions.

Karen Burr 256-1289 HYPERLINK
"<mailto:karenburr@hotmail.com>" karenburr@hotmail.com
Robin Ward 343-8685 HYPERLINK "<mailto:dward4@ec.rr.com>"
dward4@ec.rr.com
Beth Foster 509-0732 HYPERLINK
"<mailto:ewfoster22@yahoo.com>" ewfoster22@yahoo.com

PS We need your items by the August club meeting (the 20th) so we can wrap.

PPS Please don't drop things off at Temptations – we need to know who donates what.

Thanks!

Karen Burr



Ron Jones's Brunswick County Airport Trip

By Ron Jones

I have attached several photo's taken during our BMCCF outing to **Billy and Rose Seguin's Car Collection** at the Brunswick County Airport. All who attended said they had a wonderful time.





A Happy BMCCF Family - Life is good!!!!



64th Summer Horseless Carriage Tour

By George Czerw

So, after sending out the email to everyone and not having received the favour (notice the British spelling!) of a reply from any of our car club comrades-in-arms, Sharon and I decided to make the trek out to Smithfield, NC on Wednesday morning. Our reasoning was that the trip could be a once in a lifetime opportunity to see over 70 of these venerable, antique vehicles actually being driven out on the highway, rather than just gawking over them as they sit in a museum. We had enough of that gawking in the museum stuff on the U.K. trip!



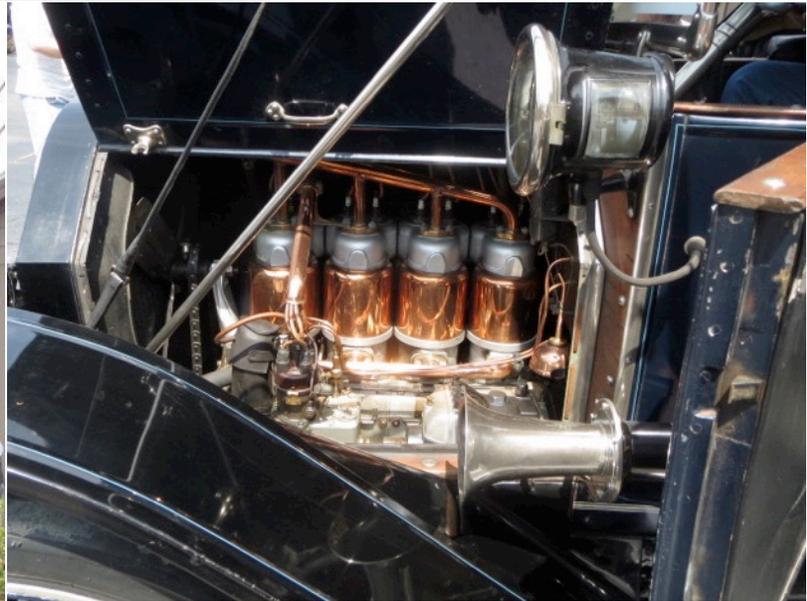
As we pulled into the parking lot of Holt Lake BBQ and Seafood, we were immediately greeted by the sights in pictures attached



REO drophead coupe



A running, fire-breathing Stanley Steamer!



A 1912 Cadillac touring car...



A magnificent Stutz



**A Dodge Brothers police
cruiser (Barney Fife would have loved this one)**



Two Locomobiles!

As an aside, after looking, gawking and snapping photos, we went into Holt Lake BBQ and Seafood and had lunch. The food was excellent and the portions were plentiful! If you're ever out that way, we highly recommend it.

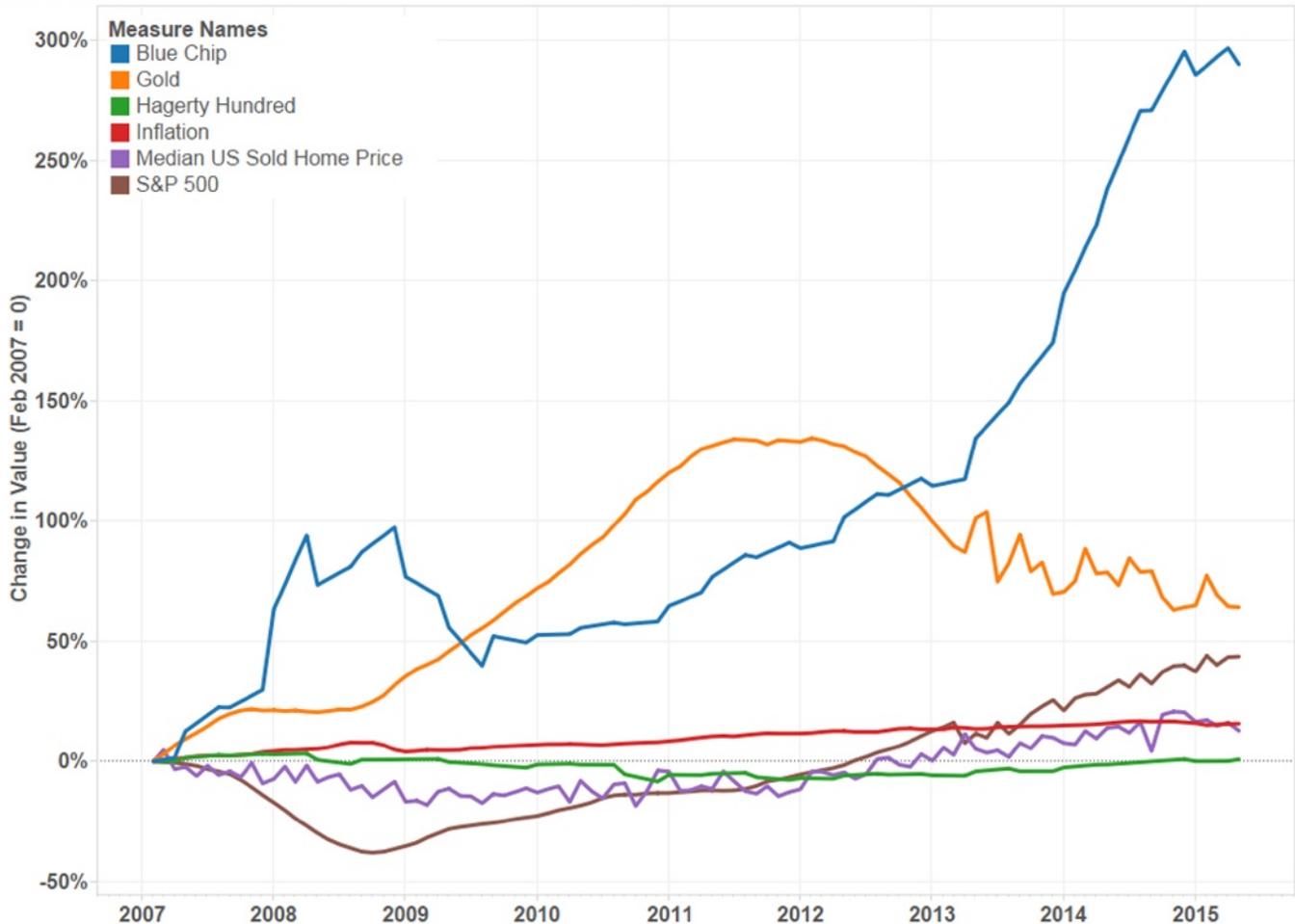
So whaddya think ...was the trek worth it???

“You betcha sweet bippie it wuz”

GRAPH OF THE WEEK: THE AVERAGE CLASSIC IS NOT AN INVESTMENT

From Hagerty - Andrew Newton

Collector Car Investment Performance vs other Financial Instruments



Last week's graph examined the value of the [Hagerty Hundred Index](#) (average condition #2 value of Hagerty's 100 most popular insured vehicles by year, make and model) since 2007 and showed that the average classic hasn't appreciated noticeably at all, and certainly hasn't made big returns for its owner when it has come time to sell. This graph drives that point home by showing the Hagerty Hundred against five other financial instruments, including "Blue Chip" collector cars, which we define as the 25 most desirable postwar classics and are both rare and towards the very highest end of the price spectrum.

The Hagerty Hundred has seen the least amount of change among these other indices. Perhaps most glaringly, it hasn't even kept up with inflation. People have of course sold a car for significantly more than they paid for it over the last few years, so it is possible to make money on one, but these people have typically operated at a much higher price point and in a smaller pool of rarer cars. The average classic car owner is still in it for passion and the enjoyment of tinkering and driving rather than any financial gain, while the "investment" and "speculation" in buying and selling classics have usually taken place with more expensive low-volume models. Cars are best left for fun. Investing is best left in the stock market.

1954 Bristol 403 two-door Saloon

Hemmings Daily - Tom Comerro

After WWII, the drop in demand for military aircraft forced the Bristol Aeroplane Company to seek out new business opportunities. Among the many ventures it undertook were the production of civilian aircraft, rocket propulsion systems and prefabricated buildings. It also decided to try its luck by building luxury automobiles, and formed Bristol Cars in 1945.



The first Bristol made was the 400, which took many styling and engineering cues from the Type 328 BMW. The six-cylinder 2-litre engines were BMW derived, with 18 pushrods that would cross the cylinder head. The mechanically similar 401 would follow, but as one would expect from an aircraft company, aerodynamics were significantly improved. The "Aerodyne" body brought with it recessed door releases, built-in bumpers and a body of aluminum panels over a light tubular steel frame.

The 401 would lead into the 403, an example of which appeared in the June 1977 issue of Hemmings Motor News. The 403 was the same car externally, with the exception of a chromed grille and "403" badges. The engine was improved with an 8.5:1 compression ratio, delivering 100 BHP at 5,000 RPM, 15 more than the 401. The top speed would exceed 100 MPH, and the 0-60 MPH run would clock in at about 13 seconds.

From the seller's description:

1954 Bristol 403 two-door four-seater saloon in regal red with beige leather interior. Triple carburetors, twin overhead camshaft Bristol motor. An extremely rare and valuable classic. \$4,200.

The car was advertised in Cornwall, England, and Bristol has never had much of an export market with their low volume, as you'd expect from a company that treated their auto division as a side trade. The 403 was made from 1953-'55 and had a production run of less than 300 cars. Spotting one in the wild would likely require a trip "across the pond," as Bristol abandoned the American market in the late 1960s.

It's difficult to gauge what one would be worth now, but the 1977 \$4,200 asking price would be over \$16,000 today. When the 403 was produced, it carried a factory price of \$5,600, so it was certainly not a car for the masses. Bristol would continue to make cars for a long time. Vintage racing fans are surely no strangers to the Arnolt Bristol cars of the mid-1950s. The manufacturer also started a line of V-8s in 1961 that were powered by Chrysler of Canada. These Chrysler-powered cars were made as late as 1994, and the new Blenheim (1993) and Fighter (2004) were made until 2011.

Despite bankruptcy in 2011, the company was purchased by Kamkorp Limited and announced an upcoming release of a new vehicle, their first since the Fighter was introduced in 2003. Like the originals, this new one will look to BMW for inspiration as the codenamed "Project Pinnacle" will feature a BMW powerplant. The new car is scheduled to be shown later this year as part of Bristol's 70th anniversary in car manufacturing.

Tip from Little British Car Co. Reader Tips Section

MGB Overdrive Installation Tip - By Barry Barnes

Very few overdrive MGBs were sold in the U.S.; however, the vast majority of the ones in the mid 70s on in England had overdrive. Increasingly, many of those units are finding their way to North America. When I did a performance rebuild on my 1978 B, I replaced my standard MGB transmission with an overdrive one.

My mechanic & I discovered that installing the transmission mounts to connect to the cross member were a nightmare. The manual says to hook them onto the butterfly-shaped apparatus on the cross-member, then bolt on the mounts to the transmission. We proceeded to do that. The front mount bolts went onto the

transmission just fine. However, because of the squared-off overdrive housing hanging down, access to the back bolts was impossible requiring us to hold the mount and the butterfly-shaped apparatus that connects the two mounts perfectly aligned over the target hole, then insert one finger with a bolt and lock washer balanced on the fingertip into a space not quite big enough for a human finger, start the bolt onto uncooperative coarse threads, then turn the bolt with that single finger, while holding it from falling off with a flattened bent screwdriver.

Finishing the operation off was worse, as there was no room for any type of wrench nor a socket. It took over an hour to get one side done but the opposite side eluded us completely! After over an hour and a half of this dropping the bolt & lock washer over and over, we finally gave up.

We abandoned the butterfly-shaped device and just bolted on the mounts which angle out in opposite directions at about 45 degrees. The car was on a lift, so we decided to get creative. We fitted the butterfly-shaped piece that connects the two mounts over one mount; because of the mount bolts angling outward, this butterfly piece wouldn't fit over the second mount's bolt.

We finally pulled an engine hoist under the car and used a 4 x 4 x 4 block of wood on top of the hoist arm to press up against the center of the apparatus. Gently using the hoist's hydraulics to raise the arm to push the block of wood to compress the motor mounts and to push butterfly apparatus UP and to the opposite side, we used two pry bars to gently guide the bolt on the opposite mount into the hole. Voila! In five minutes or less, we accomplished what we had been trying to do for over an hour and a half and no more sore fingers and dropped nuts and washers.

British Motor Car Graveyard

By Chuck Yaffle

Visited this site in Upstate NY where this guy has over 800 British cars. The guy who ran the business passed away several years ago and Ben is trying to bring it back to life. He has a lot of original parts that are under cover. He also seems very knowledgeable and can ship anywhere.

Check out some photos I took on the next page:

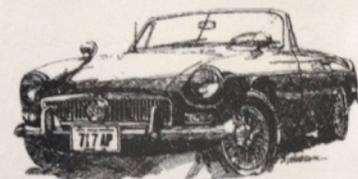
British Auto Salvage, LLC

600 Penfield Rd
Macedon, NY 14502

315-986-3097

www.britishautosalvage.com

ben@britishautosalvage.com





Which states require ethanol in your fuel? Fewer than you might think

Hemmings Daily - Daniel Strohl

Earlier this year, Hawaii became the second state to [scrap its mandate](#) that all gasoline sold in the state must have a certain amount of ethanol blended into it. Boaters and old-car enthusiasts who believe ethanol poses a threat to their engines cheered this move; at the same time, it made us wonder exactly how all 50 states have decided to legislate ethanol-blended fuel. Most of them probably mandate it by now, right?

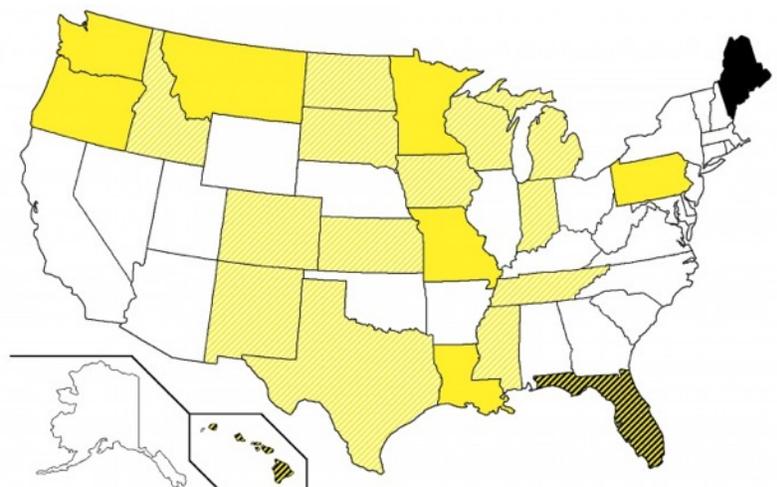
Nope. Only seven states require E10 fuel. That's down from nine total. And, in fact, at least a couple states' legislatures have brought up the idea of banning ethanol-blended fuel entirely.

Indeed, ethanol policies across the 50 states are all over the map, as we discovered after looking up each state legislature's record on the issue over the last 15 years. Some states investigated mandating E10 but couldn't muster enough support for it; some mandated it with exceptions; some have conditionally approved ethanol-blended fuels based on the EPA's stances; some haven't even considered the issue at all.

To be clear, many of the states have supported the use of E10, E85, and other ethanol-blended and alternative fuels through incentives and purchases of official-use alternative-fuel vehicles. But we kept the scope of our survey limited to ethanol-blended fuel mandates and bans that impact the general public.

Key: yellow—mandates ethanol-blended fuel; yellow/white—considered mandating ethanol-blended fuel; yellow/black—repealed ethanol-blended fuel mandate; black—banned ethanol-blended fuel (provisionally); white—no position. Infographic by Zach Higgins.

As you should be able to see from our map, Louisiana, Minnesota, Missouri,



Montana, Oregon, Pennsylvania and Washington all mandate ethanol-blended fuels. However, each state goes about their mandates a little differently.

Louisiana and Washington only mandate that 2 percent of the total volume of fuel in the state have ethanol blended into it, while the rest mandate E10. Minnesota, Montana, Oregon, and Pennsylvania mandate ethanol-blended fuel only if ethanol refineries in their states produce certain minimum amounts. And at least a few of the states—Minnesota, Missouri and Oregon—provide exceptions for older vehicles or for exempt premium gas from having to contain ethanol.

In all, 14 states have attempted to pass mandates—some of them multiple times—but failed. None have attempted to do so since 2009 except for Iowa, which has tried to mandate ethanol-blended fuels four times over the last decade.

As we mentioned before, Hawaii is one of two states to repeal its mandate. The other, Florida, eliminated its ethanol-requirement law in 2013. Hawaii's repeal came after at least two other attempts—in 2011 and 2013.

Four other states have also made attempts to do away with their mandates: Minnesota (2009), Missouri (2008), Oregon (2011, 2013, and 2015) and Pennsylvania (2015). Oregon's legislature has adjourned for the year, but Pennsylvania's remains in session.

From the extent of our research, half of the states haven't ever addressed ethanol-blended-fuel mandates for the general population. Gas station owners in those states and the other states without a mandate are free to sell whatever blend of fuel they feel their customers want: E0, E10, E15, E85, whatever.

On the other end of the spectrum, Maine's legislature has consistently expressed a desire to not just abstain from such mandates but to ban the sale of ethanol-blended fuels altogether.

In 2013, the state passed a law prohibiting the sale of corn-ethanol fuel provided at least 10 other states or a number of states with a total population of 30 million also banned the fuel. Similarly, Texas—which looked into mandating ethanol-blended fuels in 2009—and New Hampshire have in recent years discussed their own bans on ethanol-blended fuels. Rather than banning ethanol-blended gasoline outright, North Carolina this year has discussed simply doing away with the gas tax on all unblended gasoline.

So, just [as we've seen on the federal level lately](#), support for ethanol-blended fuels varies across the country and over time. By no means do those in power

operate under any sort of consensus on it, and for most of the country, customers still technically have the option to go ethanol-free.

Sources:

U.S. Department of Energy—[Alternative Fuels Data Center](#)

American Fuel and Petrochemical Manufacturers—[State Motor Fuels Specifications](#)

SEMA Action Network—[State Legislation updates](#)

EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT LED LIGHTS AND MORE

**Sent to us by Bruce Allcorn
From the Los Angeles Jaguar Owners Club**

I always liked the name of the old British Leyland enthusiast magazine, “*Safety Fast*”. Most of us enjoy a little romp in our Jags once in a while; by most also want to do so as safely as possible. To that end, the topic of this series of Tech Articles concerns how virtually any Jaguar owner can make their ride safer very economically with a switch to LED lights.

A Bit of LED History:

LEDs (light emitting diodes) were commercially viable as far back as 1962, but it would take several decades before their cost and durability proved them satisfactory for automotive applications. Early LEDs were not particularly bright, and only came in one color, red, limiting their use to things like digital wrist watches and calculators. As time went on, optics engineers were able to boost the light output, reduce cost, and package LEDs so that there were direct “plug and play” replacements for all kinds of applications, including cars. The advantages of an LED bulb over a conventional incandescent lamp as used in virtually all our cars are several. Lower power consumption, longer life, smaller size, less heat and on the safety side, much brighter output.

LEDs Come in Colors

As mentioned above, initially all LEDs were red, which limited their applications. Now LEDs are available in a range of colors. Applicable to our cars, the colors of interest are red, white and amber. It is important to match the color of the LED lamp to the color of the lens through which the light is projected.

Using white LEDs for all applications results in very washed out lights.....maybe a pink stop light will get attention, but it's not exactly the universal symbol for stop. LEDs cost the same regardless of color, so always match the LED color to the lens color.

Polarity

Retrofitting LED lights probably produces the greatest advantage on the older cars, many of which had only a single bulb per side for all rear functions. Later designs which incorporated two or three bulbs per side were certainly more visible. Most LED bulbs are polarity sensitive. So a stop and tail lamp made for negative ground will not work on a positive ground car. Fortunately, all the popular bulbs we need are available for either positive or negative ground, but be sure to specify which you need when ordering.

Some smaller bulbs, as used on the instrument panel, side markers, etc., don't seem to care about polarity, but it's best to specify what you need anyway. The bulb supplier will know if a particular size of bulb is polarity sensitive.

Automotive Bulb Anatomy

Most, though not all, bulbs used in our cars (other than headlamps and fog lamps of course) use common brass based bulbs with glass domes. There are a couple of "base-less" bulbs, called wedge bulbs, which are used mainly in the interior. These are all glass and have exposed power wires similar to bulbs used on miniature Christmas lights. Though similar in design there are many variations in base size and type, globe size and light output. Fortunately for Jag owners, few variations were used on our cars.

The largest bulbs, which we are used to seeing in stop/tail and turn signal lights (Photo 1), are common from 1948 to present. Note how the LED bulb in the photo mimics the incandescent bulb in size and shape, which makes physically swapping them a snap. These bulbs come in two flavors: Single filament which are used mainly for turn signals, and dual filament, which are used mainly for stop/tail functions. With the dual filament lamp (and matching wiring), it is possible to get two levels of brightness from one bulb.....low light for tail lamps and bright light for stop lamps. These two types are distinguished from one another by the number of contacts on the bottom and the staggered offset of nibs on the dual filament base (to insure that the bulbs can only be inserted in their sockets one way) Photo 2. Please note that while "dual filament" LED bulbs have the same base and contact anatomy, it is not possible to otherwise tell an LED is "dual" as each individual LED on the bulb is capable of shining at more than one brightness level.



Photo 1



Photo 2



Photo 3



Photo 4 – Exterior Lighting

Photo 3 and 4 show some of the other types of bulbs common on our cars. The small one with the screw in base is used on most early cars for dash illumination. These have been very difficult to find until recently in LED. In all cases, the LED equivalent bulb is shown on the left.

As can be clearly seen, LEDs differ greatly in construction compared to incandescent bulbs. Gone are the fragile glass globes (LEDs are remarkably robust without any protection), the fragile filament wires and its glass suspension bases. It's not hard to envision why vibration is a killer of incandescent bulbs. The LED on the other hand has what appear to be a series of mirror panels around the trunk and tip of the business end of the bulb. These are the LEDs which are wired through the center core. A typical automotive turn signal bulb will have around 18 LEDs. This arrangement helps the LED bulb distribute the light at all the important angles (and none of the unnecessary ones).

Some of the smaller LED bulbs have a frosted plastic globe. They're too small for multiple LEDs so the globes help spread the light in the correct directions.

STEP ONE: REPLACING THE STOP AND TAIL LAMP BULBS

Undoubtedly the biggest safety upgrade you can do for most any Jag is to replace the incandescent stop/tail lamps with LEDs. The improvement in brightness is on the magnitude of 4X and the cost is less than \$20 per bulb. If your car was made after about 1967, going LED is as simple as popping out the old bulb and popping in the new. Well almost...you have to get to the bulb first, but we'll cover that in a moment.

Note that I said "if made after about 1967"...why so? Because in 1967, the US government started to require separate turn signal lamps on all cars. Prior to that on many cars the two filament rear bulb did three jobs: stop, tail, and turn. Going to LEDs on cars that have only one bulb that does all three jobs requires a bit more work and will be explained later in the "Turn Signal" section. Many cars made the change to separate turn signal bulbs much earlier, so check the bulb functions if you have an older car. The XK Jags made the change with the later XK150s. The 120/140 and early small tail lamp 150s had the three function system, while the big lamp 150s had separate turn signal bulbs.

Now back to changing to LED stop/tail bulbs on later cars. First you have to access the bulbs. Normally that is by removal of a few screws from the outside of the car. If your car has screws in the lenses, that's how you get at the bulbs. If it doesn't, then likely the lamps are accessed from the boot and may be covered with carpet or cardboard (not to mention all the other debris you have in there). Open the boot and figure out how to get to the back of the lamp

assembly. When you do, you will see the wires going to each bulb. Have someone step on the brake pedal so you know which bulbs you need to change. Now you can usually remove the entire bulb/socket assembly by simply twisting the socket a quarter turn left or right. The whole socket, with the bulb, comes right out.

Once you have access to the bulb, grasp it gently by the globe, push it down about 1/16th of an inch and twist counterclockwise. The bulb should turn, release and pop out. Take care; the globe can shatter with too much force, best to wear some protective gloves. On all sockets, it's a good idea to check for corrosion around the base and on the contacts. The juice flows in the bottom contact and out through the base so both must be clean. You can buy a clever little socket brush at most auto parts stores (Photo 5).



Photo 5

If your car has boot accessed bulbs, install the new bulb, reinsert the socket and you are done. If you have the external lens type lamps, a couple more steps are in order. Check the lens for dirt and grime....these catch a lot of exhaust and tend to soot up. Wash in warm, soapy water. Also clean the back of the lamp (the reflector). This area is usually shiny chrome or plastic (or at least it once was). The reflector helps redirect the light which comes off the back of an incandescent bulb back in the direction where it will do some good. Interestingly, LEDs don't need reflectors as each LED panel can be made to project light in just one direction. Finally, give the gasket a little TLC with a soak in Armorall or similar. When reassembling, don't over-torque the screws or you may end up with a cracked lens.

STEP TWO – THE TURN SIGNALS

First let me state that incandescent and LED lamps live very happily together. It is not necessary to change every bulb on your car if you change some to LED. That said, after changing to LED stop/tail lamps, you may just decide to quit. The really important lights are covered. Of course, having much brighter turn signals would be good too, providing you use them!

So let's assume you want to move on with the turn signals, or you came here because you have one of those older cars where the two way bulb does three jobs, as mentioned above. Turn signal replacement, whether in solo lamps or in

combined stop/tail/turn lamps, is a bit more complex due to one of the advantages of LEDs, that is, they use FAR less power than conventional bulbs. Unfortunately, they use so little power that they won't make most original flashers flash!

I wouldn't get into the reasons why, but I know you love it when I talk details. The common flasher used in cars relies on a bi-metallic strip to connect and interrupt the current flow. The strip is coated on one side with a metal that expands a lot when hot (i.e. when heated by current running through it), and on the other side with a metal that does not. When no current is flowing, the strip is cold and bends to one side where there is a contact connected to the lights. When you turn on the blinkers, electricity flows through the strip to the contact and the lights come on. After a few moments of conducting juice, the strip heats up and bends away from the contact, the connection is broken, and the lights turn off...but then the strip cools down, bends back, makes contact.....this cycle repeats about 30 times a minute.

However, LED lamps draw so little juice that the bi-metallic strip never heats up and thus never breaks contact...usually the turn signal lamps will be on all the time. So what to do? Well there's the right way and then there's my way.

THE RIGHT WAY TO INSTALL LEDs FOR TURN SIGNALS

The solution is simple, at least in theory. You replace the old bi-metallic flasher with a fancy new solid state LED flasher. Photo 6. These work with transistors, not metal strips and they don't care how much or how little current is flowing in the circuit, they just flash.

All LED vendors sell these. Before ordering, check your old flasher to see if it has two or three terminals. Better yet, make a diagram of the terminals and all the markings next to them. You should see things like a + or – sign, the letters L or P or numbers like 49, 49a, 30, etc. These will help your vendor get you the correct flasher so you don't have to fool around rewiring stuff and insure that you put the wires back correctly even if the new flasher is not laid out exactly like the old one.

Now the installation of a new flasher may be a piece of cake for some and very intimidating for others. The flasher may be sitting up pretty in the engine bay or buried in a tangle of wires under the dash. If the flasher is visible, it may bother you to change that old silver Lucas can to a bright red plastic box (although I have seen some clever souls who manage to transfer the "guts" of a new LED flasher into an old Lucas can). So if flasher changing isn't for you, try My Way.

MY WAY TO INSTALL LEDs FOR TURN SIGNALS

You will notice that so far we have mainly been talking about REAR lights...that's because most of the danger, and therefore most of the benefit offered by LEDs, is in the rear. After all, you can see in front of you; it's what's behind you you have to worry about. So who says that the FRONT turn signals have to be LED?. You see here's what I discovered when going to LEDs on my Austin Healey.

When I changed all four turn signal bulbs to LEDs, but left in the original flasher, no flashie. However, when I ONLY changed the REAR lamps to LEDs, viola! Flashie. It seems that the two front incandescent turn signal bulbs pull enough amps to make the original flasher work just fine.

Now I can't promise that this little trick will work on every car, but if you want rear turn signal LEDs, don't care so much about the fronts, and don't want to mess with a new flasher, this is worth a try.

OTHER LED OPPORTUNITIES

Needless to say, any automotive incandescent bulb can be made brighter with the conversion to the right LED. Think of the opportunities: back up lights, side marker lights, boot and bonnet lights, interior and dash lights....oh my, wouldn't it be great to have the brightest glove box in town!?

This is where the truly practical and the truly obsessed tend to break ranks. Brighter stop lights? A no brainer. Brighter license plate lights? Well that's kind of a personal choice. However, one word of warning before you dive in. White LED bulbs are quite white in comparison to typical yellowish incandescent bulbs. So where these are visible together, such as across a dashboard, you may want to go one way or the other.

Continuing this example, you want to be sure you can get to ALL the dash bulbs before starting to change them out....some may require a bit more disassembly than you are willing to do. On my Mark 10, eight bulbs screw in right behind the drop down wood center panel. Two screws and it's open. However, the two lamps which are behind the speedo and tach require the entire upper dash be removed to access them! Not how I plan to spend my Saturday.

ONE MORE "MY WAY" LED PRODUCT

LEDs are so cool. They are so small and versatile. They use tiny little wires and can be hidden anywhere. They don't get hot and they last, well, longer

than I will. So it was only a small surprise to me that someone came up with a great LED product for cars....the LED light strip. Photo 7.



Photo 7

You may have seen those Christmas lights that are strung in clear plastic tubes? Well this product is essentially a 3' long floppy string of LEDs, spaced about an inch apart, and encapsulated in a half round clear rubber tube that has peel and stick adhesive on the flat side. The way cool thing is that this strip can be cut to ANY length without any rewiring! How is that possible you say? Well I know, but that story is too long for this article...buy me a beer sometime.

Anyway, think of those out of the way places that could use some light. In the case of my Healey, the center dash area carries all the switchgear, but has no illumination. So it gets dark and you can't find the light switch to turn on the lights so you can see the light switch....how's that for English engineering! The solution was simple. Cut a 10" strip of LED lights, stick them up under the dash overhang where they can't be seen and wire them to the panel light switch.

Many out to the way places could benefit...footwells, rear seats, under bonnet or boot. This stuff is really great. Photo 8 shows an engine compartment illuminate with LED strips. Photo 9 shows the effect in footwells.



Photo 8 – Engine Bay Lighting



Photo 9

SUMMARY

So that's it, more than you ever wanted to know about LED lighting. I would add one more thing. Due to their natural low power consumption, LED lamps can sometimes do funny things in a car designed for lamps that draw much more power. So it's good to have a techie on call. I have found the Tech Line at SuperBrightLEDs.com to be extraordinarily helpful, even going so far as to hook up lamps on a test bench to resolve some positive ground issues.

Finally as to cost. Small interior and similar bulbs will run \$2 to \$5 each. Larger stop/tail bulbs will run \$13 to \$18 each. Positive ground bulbs are at the upper end of the range. LED flashers are \$13 to \$16 each and the flexible light strips will run about \$22 for the 3' strip. So the investment to go whole hog is not insignificant, but then what does one rear end accident cost?

RESOURCES

Much of the information for this article, aside from personal experience, came from the websites of the two bulb suppliers.

Super Bright LEDs (www.superbrightleds.com) has a huge offering of automotive, home, garden and industrial LED products. The website can be a bit overwhelming at first. If you get confused, call the Tech Line, they are great.

They even selected the products I needed for my job and put them in a shopping cart for me. All I had to do was enter my payment info. When you open the site, click on the Blog button at the top (small blue square with a B inside) and then type in the Blog search box “Austin Healey”. You will find a great article (from which I “borrowed” freely) about installing LEDs in a '67 BJ8.

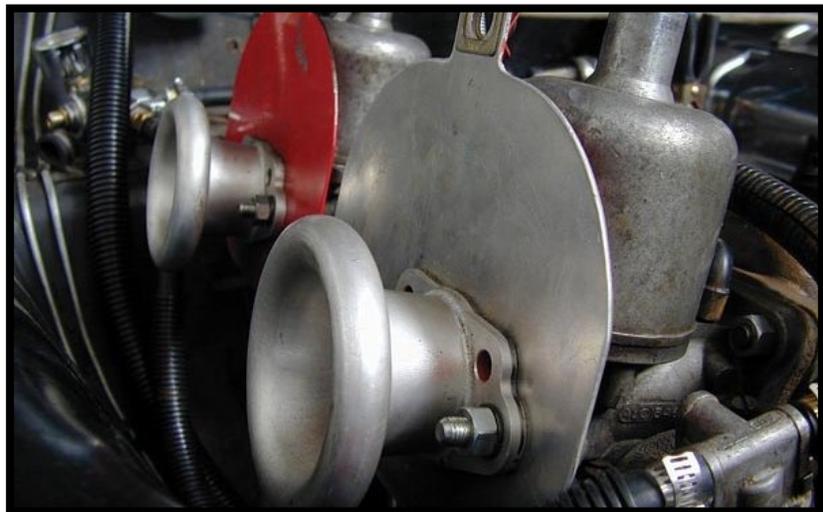
Moss Motors (www.mossmotors.com) also offers a limited range of LEDs and a worthwhile technical bulletin. At this time they did not have any positive ground products nor the screw in dash bulbs.

Word has it the XK's Unlimited (www.xks.com) will soon have a range of both positive and negative ground bulbs and the screw in interior lights. Check their website.

Understanding SU Carbs - Simple

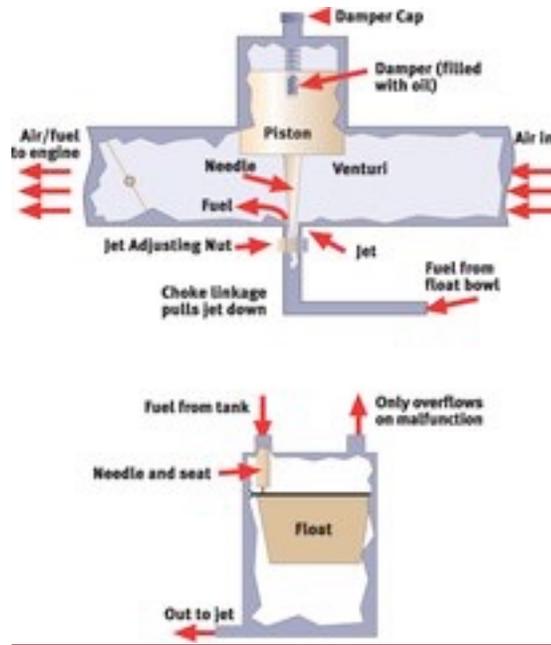
Classic Motorsports - Carl Heideman

No matter what the name on the valve cover, so many British classics rely on the ubiquitous SU carburetor: Jaguar, Triumph, MG, Rover, Rolls-Royce, Bentley, Morris, Austin, Sunbeam and so many more. And not only did almost every British manufacturer specify SU carburetors, but so did other companies. Volvo and Saab also used them, while Hitachi-built versions of the SU were used by Datsun.



Sure, Webers may be sexier and have more racing titles to their credit, but for normal use these SU carbs work well. While some people are quick to cast SUs aside and look for an upgrade, a little understanding and mild tuning can go a long way, whether the goal be increased performance, better drivability or improved fuel economy.

How They Work



Based upon a principle developed and patented by George Skinner in 1905, the SU (as in Skinners Union) carburetor changed very little until emissions regulations pretty much made them obsolete about 30 years ago. The SU is about as simple as a carb can get: it has very few moving parts, usually only one fuel circuit, and far fewer springs, balls and other complicated pieces than conventional carburetors.

All carburetors make use of the venturi principle. Daniel Bernoulli, an 18th-century Swiss scientist, used a venturi, a tube that is narrower in the middle than it is at either end, to discover that as the velocity of a fluid increases, its pressure decreases. As the air and fuel pass through the venturi's narrowed passageway in a carburetor, the mixture speeds up; the resultant drop in pressure is what causes the fuel to atomize.

The SU employs this principle differently because it varies the size of the venturi. Hence, the SU is called a variable venturi carburetor and is grouped with those built by Stromberg, Predator and Amal.

In the center of the venturi is a piston with a tapered needle affixed to its bottom side. The piston has holes positioned in it so that as air is sucked through the venturi, vacuum above the piston makes it rise. When it rises, not only does more air flow to the engine, but the needle allows more fuel to flow from the jet below. The needle is a precision piece, with nine to 16 specific diameters measured during the manufacturing process to ensure proper fuel flow throughout the range of air flow to the carb.

Thus, the SU self-adjusts to the air/fuel requirements of an engine. It only flows as much air as necessary, and the tapered needle ensures that a proper fuel mixture is obtained at any air flow.

This self adjustment needs a little help at two times: During cold starting and hard acceleration, when a richer-than-normal air/fuel mixture is needed. SUs handle these two situations differently, but again use very simple means.

Cold starting any engine requires more fuel in the mixture. With conventional carburetors, this is done by limiting air intake, or choking the mixture. SU carburetors do the opposite, increasing fuel flow to richen the air/fuel mixture without limiting air flow. Most SUs do this by lowering the jet, which allows more fuel to flow thanks to the needle's taper.

Conventional carburetors use an accelerator pump to squirt more fuel into the mixture on hard acceleration. Again, SUs take a different tack. The piston/needle assembly is damped via a plunger in an oil-filled tube, forming a sort of shock absorber for the carburetor. The damper slows and smoothes the movement of the piston. On hard acceleration, vacuum that would otherwise quickly lift the piston is redirected to quickly suck more fuel out of the jet. As the piston slowly continues its rise, the mixture returns to a more normal ratio.

Basic Tuning



A set of British wrenches and SU jet wrenches (top) are useful tools when working with SU carburetors. These are available from most British car suppliers for relatively low cost.

Assuming that the carburetors are in good condition and have properly sized needles in them, the tuning procedure is not as complex as most people think. However, before the carbs are touched, ignition dwell and timing must first be correct. It's a good idea to ensure valve clearances are correct as well. A quick check for vacuum leaks is next, and only once this is done is it time to move on to the carburetors.

Next, if there are two or more carburetors, they need to be synchronized. This can be done with either a dedicated synchronization tool or a short length of hose. With the engine running at idle—usually 600 to 1000 rpm—the synchronization tool is placed over the inlet of each carburetor to get a reading on its gauge. The idle screw is adjusted on each carburetor until each one gives the same reading on the synchronization tool.

The low-buck method is to substitute a 12- to 18-inch length of 1/4-inch or 5/16-inch hose for the tool. Hold one end of the hose up to the air inlet of each carb and the other end to your ear. When each carb emits the same noise through the hose, they are synchronized at idle. (Note that revving the engine slightly and periodically throughout the adjustment process helps to “clear out” the carbs.)

After the carbs are synchronized at idle, the throttle linkages can then be adjusted to ensure they remain synchronized throughout the rpm range. With just a little free play in the linkage, each throttle arm should start moving at the same time when the accelerator pedal is depressed. If not, the locking nuts can be loosened to adjust the linkage.

The idle mixture is set next. The conventional method, which is published in most manuals, works very well. First, each piston is lifted slightly, about 1/16-inch (usually a small screwdriver is helpful for this step). If the engine speed falls off, the mixture is too lean and the jet is lowered via its adjustment nut or screw. If the rpm rise, the mixture is too rich and the jet is raised. If raising the carb's piston causes the engine speed to rise by about 50 rpm before returning to its previous level, the mixture is just right. An alternate method is to use a vacuum gauge and adjust the mixture in each carb to get the highest vacuum at idle that is possible.

At this point, the idle speed can be verified to be correct and the tuning is nearly done. All that is left is the “choke” adjustment. As discussed before, SUs don't really have chokes, as they richen the mixture instead to allow smooth engine starting. This is usually accomplished through a linkage and cam that lowers the

jets and raises the idle speed. The linkage and cam only affect idle speed in the first two-thirds of the distance of choke cable travel; it increases the air/fuel mixture as well as the idle speed during the final third of travel.

The two steps to adjustment are to ensure that multiple carb setups have proper linkage balance between carbs, then to set the high-speed idle screws that touch the cams. High speed idle is usually around 1800 rpm.

Rebuilding Old Carburetors



Replacing the throttle shaft bushings requires reaming out the old bushings, installing new bushings, and reaming the new bushings to size.

If you look at the sidebar on common problems, you'll see that most problems related to SU carbs are due to wear or age. SU carbs are pretty easy to rebuild as there are relatively few parts.

Additionally, there are many competent rebuilders who can bring these carbs back to as-new condition for a reasonable fee—figure \$50 to \$75 to rebush each carb's throttle shaft and \$350 to \$500 to completely rebuild a pair. Polishing all of the external parts can add another \$100 to \$200 to the rebuild cost.

Except for throttle shaft bushing replacement, most enthusiasts can carry out repairs at home. Throttle shaft and bushing condition are paramount to tuning an SU, and there are three common solutions for fixing worn parts.

One is to replace only the shafts. If the old shafts aren't too worn, the bushings probably aren't too worn, and new shafts will go a long way to stopping vacuum leaks.

The second repair is to ream out the bushings 0.010-inch and install oversized shafts. This is a cost-effective solution, but can only be carried out once.

The third method is to completely remove existing bushings and install new ones, then replace the shafts with standard ones. As can be expected, there are increasing requirements in terms of the cost, skill and tools necessary for each of the respective steps. Many rebuilders will replace these components and let you do the rest of the rebuild.

The rest of the rebuild entails replacing the jets and needles in the carb bodies and piston assemblies, the needle and seat in the float bowls (and floats if defective), and replacing gaskets and rubber pieces.

For the car-show crowd, all cast parts should be glass-beaded. It is then usually a good idea to get the linkages and hardware replated in zinc, and to polish the dashpots (the chambers for the pistons). If you're a strict concours type, these were not plated or polished from the factory, but it seems most restored cars get them prettied-up anyway.

Don't want to fuss with old carbs? Brand-new SU carburetors are still available. Depending on the application and vendor, figure a brand-new pair starts at about \$550.

Performance Modifications



Comparison of earlier- and later-style throttle disks shows that the later-style disks have a spring-loaded poppet valve, which impedes air flow. Replace these with earlier-style disks in performance

There are not too many performance modifications necessary or possible for SUs. Aside from changing to larger carbs, about all that can be done is to change to needles with a different taper and make modifications to increase air flow around the throttle disk and shaft.

Most SU specialists carry a range of needles for changing the mixture characteristics throughout the range of air flow. While the fine-tuning of needles can be an onerous process, there are generally just a few categories of standard needles available. Labeled weak, standard and rich, they provide the levels of performance and economy their names imply.

While there are more than 800 needle profiles available, many tuners will just make up their own profile by chucking the needles into a drill press and then using fine sandpaper to sand in the profile they like. Of course, they spend a fair amount of time with a micrometer to ensure they've narrowed the needle (richened it) the right amount.

Filters and velocity stacks can make a difference in performance. Usually, K&N filters are worth one or two horsepower. TWM's velocity stacks can also offer a couple of horsepower, but usually cannot be effectively run with an air filter.

Finally, small improvements can be made to the carbs by improving air flow around the throttle shafts and disks. Carbs built after about 1968 feature throttle disks with a spring-loaded poppet valve that improves emissions, but the valve also impedes air flow. Fortunately, earlier flat disks can be fitted. For the radical tuner, the throttle shafts can be thinned and ovalized for an extra CFM or two of flow.

Why Keep Them?

So, why not just go to a Weber carburetor? For some, that's a good solution, but many are bound to their SU carbs thanks to racing regulations. And then there are those who believe that properly set up SUs can perform just as well as Webers on the street, but with easier tuning and better manners.

In fact, we're in the middle of dyno testing SU and Weber carburetors. Look for our findings soon.

New Vs. Rebuilt



Before you buy that box of carb parts, first price what the rebuild is going to cost. In some cases, you may want to consider new carbs instead.

Burlen Fuel Systems, the company that owns the rights and tooling to SU carbs, still makes and sells brand-new replacement setups. Available for most common British classics through the big suppliers like Moss Motors and Victoria British here in the U.S., these new carbs can be an excellent option.

However, the new carbs are not identical to the ones they are replacing. In most cases, many of the parts have been updated and thus are not interchangeable with the originals. As a result, if you go with these new SU carburetors, you won't be able to use the standard replacement parts. We've also seen a few easy-to-overcome quality problems with the new carbs, like choke linkages needing slight bending to work properly.

How do you decide whether to go new or rebuilt? Consider your goals and budget. If you have a common setup like an MGB with HS4 carbs, then you may find the new ones not only a good option, but cheaper than a professional rebuild. For example, a pair of brand-new HS4 carbs will set you back about \$550 to \$575. A concours-quality rebuild can cost about \$600 to \$700. (If refinishing the external parts is not needed, knock about \$100 or \$200 off that figure.)

On the other hand, sometimes it's more cost effective to rebuild the originals. New HIF4s run about \$1000 per pair, while again it's about \$600 to \$700 to rebuild them to concours condition. (Forgoing the polishing and replating work can save about \$100 to \$200 here, too.)

If “concours correct” is your goal, then there’s really no question and you’ll need to rebuild the original ones. (Don’t forget, however, that your car will be down while the carbs are sent out for a rebuild.)

Can’t decide whether to go with new or rebuilt carbs? Let your budget, situation and goals guide you.

Size Matters: Identifying SU Carbs

SU carbs come in several styles and sizes. Fortunately, there is a system for understanding the size of the carbs. Each carb is identified by one or more letters and numbers.

The first letter is an H or a V, which stands for Horizontal or Vertical. The SU carbs commonly used on European cars are all of the horizontal design. The next letter will describe the physical characteristics of the carb and usually describes the float chamber location: S stands for Side float or Short body, depending on which expert you call; IF stands for Internal Float; and D stands for Diaphragm jet.

The numbers require an understanding of fractions, as they indicate how many eighths of an inch over 1 inch the carb’s throat size measures. So, an HS4 carb is $1+(4 \times 1/8)$ inches, or 1 1/2 inches.

To put this together, an HIF4 (common MGB carb) is a horizontal, internal float, 1 1/2-inch carb. An HD8 (common XKE carb) is a horizontal, diaphragm type, 2-inch carb. An HS2 (common to Spridgets and Minis) is a horizontal, side float, 1 1/4-inch carb.

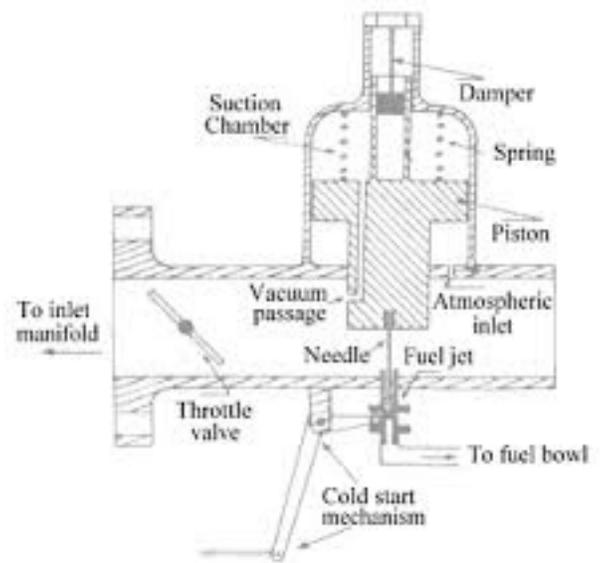
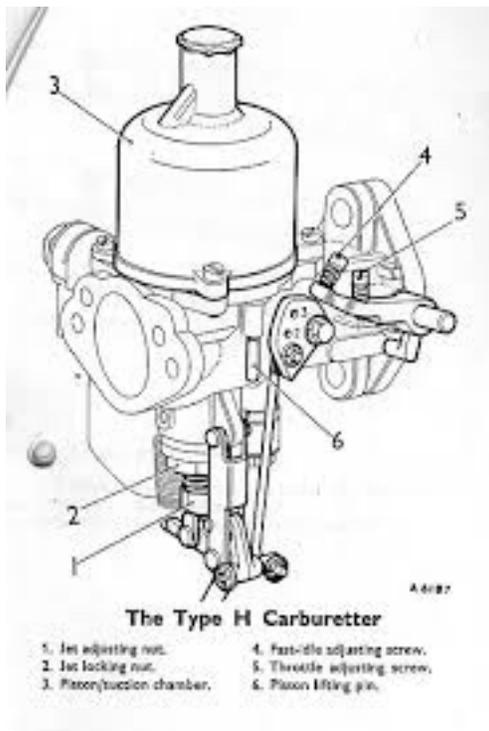
One exception to the “fraction” rule is the more modern HIF44, common to newer Minis. It is also called a “metric” SU because the float is measured in millimeters. (In this example, the horizontal, 44mm internal float measures about 1 3/4 inches across.)

In addition to size and type, there are a few other things to consider before you start buying used carbs on eBay. Some carbs have vacuum fittings, some do not. Carbs are often configured in sets of two or three and need to be kept in order for linkages to work. HS carbs may also have different float bowl angles. For example, Spridgets are 20 degrees, while Minis are 30 degrees.

If you had to pick from the various models, the HS version is probably the best one to go with, followed by the HIF models. The earlier H type carbs are pretty

good, but suffer from faster wear in the choke linkages and are a little more prone to leaks from the float bowls. HD carbs are more complicated, with a separate idle circuit and diaphragms inside. HS and HIF carbs aren't perfect, either: HS models are very prone to throttle shaft wear, while HIFs don't tend to wear at the throttle shafts, but are a bit more complicated and have more of a tendency to overflow if they get dirty.

How many carbs should you run? For most performance engines, one carb for every two cylinders works pretty well. How big? Unless your engine is pretty heavily modified, you'll probably do best with the stock size that came with the car. If you need a little more, jump up a quarter of an inch. If you've got a full-race engine with an excellent breathing head, go up half an inch.



BMCCF STUFFS FROM YOU:

From David Ward:

Can you identify this car?



**It's a (1936 MG SA)
Silly Goose**

From Merv Wilkinson (member suggestion) - Having attended this morning's meeting and after chit chatting (not canvassing!) with a few other members- it occurred to me that perhaps it might be worth throwing a practical idea out there-

The topic being the purchase by the club for the club of a light weight aluminum car trailer. At this stage , I'm just raising the concept as follows:
A new aluminum trailer , double axle , weighing 1100 lbs or so max. (they are out there) , so that it isn't necessary to have a truck to haul (i.e. a vehicle that can pull approximately 3500lbs).

Advantages :

- Not having to individually invest and potentially be concerned about storage to use it a few times a year!
- Convenience for all members to use
- Return on investment for the club - i.e. member usage fee(\$?) to be paid to the club
- Usable for club show hauling of equipment to/from the show

Possible disadvantages:

- Insurance liability costs , but perhaps this would be covered by the towing vehicle insurer?

I have often considered checking out other 'Brit. classic' cars within reasonable hauling distance , but not having a truck or trailer, this has sometimes hindered my pursuit -Perhaps a good thing as I don't have adequate garage space anymore!.

So I just thought it may be interesting to throw the idea out to members .

Sincerely,
Merv Wilkinson

P.S I would be more than willing to be responsible for the initial care and maintenance of the trailer - then perhaps rotate with some other members ?



BMCCF
Classified
Ads



From Bruce Allcorn - For Sale - Set (4) of Nexen 165/80R15 blackwall tires, less than 200 miles on them, \$175.00 for the set. Contact Bruce @ 910-619-4163

From Don Sorensen -For Sale - 1965 Mercedes. 4 door sedan, excellent condition \$ 5.500 call 910 791 3853

BMCCF Classified Information:

BMCCF Regalia - Ralph Jannelli - 704.351.0864
<http://www.fourth-gear-ltd.com>

BMCCF NAME TAGS

Official BMCCF name tags are required at all events or when you are representing the club.

Originally ordered name tags are now available from John Moore
\$5.50 Pin Clasp \$8.00 Magnet Clasp

AUTOWORKS, INC. Foreign & Domestic Auto Specialists

We service all types of vehicles From 1950's to Present Day

Emissions Testing, Front end alignment A/C repair

Carl Wilson (910) 791-5074

202 Antilles Ct. (In Dutch Square industrial park)

Wilmington, NC 28405

Free Advice to BMCCF Members

That's All Folks
Thank You
For your contributions to
this newsletter

