# ISSUE 1, 2019

## Driving and Dashing

Winter fun in a British car



## Repair & Rebuild!

Save up to 30% on a wide range of products



Little Car Big Heart
60 years of Mini

REPAIR & REBUILD

SAVE 30%

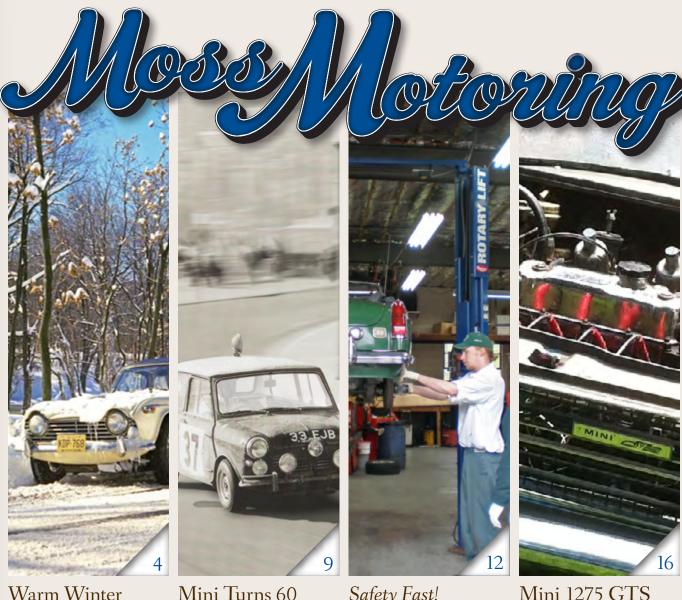
SALE VALID 1/7-2/1/19



Motorfest is more than a car show. It's a fun sports car reunion with friends from all over the country, good food you don't have to cook, and the doors of Moss Motors are open to you. We can't wait to show you around!

- British Sports Car Show & Awards
- Mazda Miata Show & Awards
- Moss Warehouse Tours
- Bounce House For the Kids
- Music Dj, Vendor Booths, and More!

A Great Summer Event!



## Memories

For most, snow and British cars do not mix. Ever. But that wasn't always the case.

#### On the Cover:

Rytis Petrauskas from Lithuania piloted his 1965 MGB the past two years in the Rallye Monte-Carlo Historique. Full story coming soon!

#### Mini Turns 60

Learn about the origins of one of the most iconic and delightful cars ever made.

#### Safety Fast! Inspection

Leave your worries (and your excuses) behind.

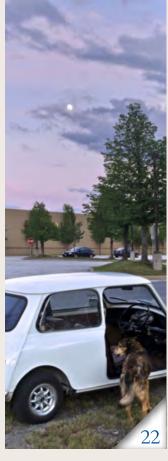
For a time, South Africa built perhaps the best Mini of them all.

## THERE'S MORE ONLINE!

The tip of the iceberg. That's what you're holding in your hands. The MossMotoring.com archive is chock full of stories and a wealth of technical advice. If you could just see the shelves and file cabinets of material we're gradually digitizing... holy smokes! But it is worth it!

Check out www.MossMotoring.com today!





#### **Small Towns**

Rethink your travel plans. Small Town America welcomes you!

#### Dog Days

Man's best friends make great Motoring Challenge companions.

Editorial contributions to Moss Motoring are welcomed and should be emailed to editor@mossmotors.com or mailed to Editor – Moss Motoring, 440 Rutherford St., Goleta, CA 93117.

Moss Motors assumes no responsibility for lost or damaged materials. Materials accepted are subject to such revision as required to meet the requirements of this publication. Unless otherwise specified, all correspondence will be considered for publication. All materials accepted become the sole property of Moss Motors, Ltd., which reserves the right to reprint/republish accepted materials.

© 2019 Moss Motors, Ltd.

Published by Moss Motors, Ltd., 440 Rutherford Street, Goleta, CA 93117 800-667-7872

Publisher: Robert Goldman

Moss Motoring Team:

Editor: David Stuursma
Editor-at-large: Kevin Flint
Creative Editor: Brandin Aguayo
Website Designer: Tyler Wright
Staff Photographer: Damon Schnepf
Contributors credited individually

## WRITERS AND PHOTOGRAPHERS: WE WANT YOU!

Share your experience, wisdom and talent with British car enthusiasts across the country.

Contributors whose work is selected for use in the magazine will receive Moss Motors Gift Certificates! Now, since there is no way to print all the terrific stories and tech articles that are sent to us, we will place relevant and first-rate submissions on MossMotoring.com for all to enjoy and benefit. Sorry, submissions that are published online are not eligible for gift certificates.

#### editor@mossmotors.com

The very best way to submit material is via email. Please attach digital photos at full size when possible. Film photographs and handwritten articles may be mailed to:
Editor – Moss Motoring
440 Rutherford St.
Goleta, CA 93117

#### \$200 Gift Certificates

Three- to four-page stories and articles (approx. 1800 words). This includes: technical/restoration articles, historic accounts, Club and Event experiences and anything that will inspire or entertain. Please include pictures for us to choose from—the more, the better.

#### \$100 Gift Certificates

Cover and main feature photography, general interest stories or medium-length tech articles.

#### \$50 Gift Certificates

Tech tips, cartoons, illustrations, humorous anecdotes and other odds-n-ends that help make Moss Motoring great.

#### Correction:

In the previous Moss Motoring it was stated the MGB was the first production monocoque chassis by MG, when in fact the honor belongs to the Magnette which debuted in 1953 and was designed by Gerald Palmer.

by Robert Goldman

## Moss Secrets... Revealed?

h yes, back in the day... Back in the day, we used to wait ten years after a car was out of production before creating a catalog. It wasn't so much a written policy as a guideline. The feeling was that no one would care about said vehicles until they had aged past their "disposable lighter" phase (use 'em up and throw them away). Fortunately, by the time Mazda put their iconic Miata out into the market, we had outgrown that thinking.

It only took us five years to figure out Mazda had something there, and we should start paying attention. What seems like only yesterday, in fact, happened 25 years ago. 2019 represents the 30th Anniversary of the Miata, and our 25th selling parts for them. As with the evolution of our British catalogs, the passing of years means each new Miata catalog offers a greater selection of mechanical repair and restoration bits.

At the risk of giving away the magic beans of classic sports car parts selling

strategy, if you can get in there early and get customers to remove all the original parts, to be replaced with accessories, then 20 years later you can sell them back all the original bits. Now I've gone and done it.

Speaking of giving away the farm, at the Motorfest Friday evening Pre-Party this June, we're going to do something a little different. You are going to be there, of course. This year's pre-party will be held at the nearby Pamplin Historical Park. For the evening's program, among other things, we will host an open Q&A session with members of Moss Motors' senior management.

As I write this, the first generation of classic British owners are passing out of the hobby. In recent years, within Moss, we have had several long-term staff retire as well. Several individuals, on whom we have all relied for their knowledge and enthusiasm, are no longer with us. Going forward, the connection between owners, clubs, and vendors needs to evolve. Sources

of knowledge may be more diffuse in future, but we all benefit, so long as the knowledge is not plain lost.

In my own limited contact with the market, little snippets of information, or the right question asked at the right moment, can have a profound effect. Two years ago, I was asked if Moss would ever get serious about Jaguar. I couldn't tell the questioner at the time, but his question helped affirm in my own mind we were doing the right thing in negotiating to buy XKs Unlimited.

More recently, at the JCNA International Jaguar Festival held in Santa Barbara, a Jaguar representative was asked about making higher level, more expensive "concours quality" parts. The question ended up with me. I had about one minute to answer, but was complimented by a couple folks afterward for my forthright answer. With Motorfest, I hope, we have a chance to strip away a little of the mystery of what we do and why.

Making obsolete parts for obsolete cars is a unique challenge. Here is your chance to work with us in mapping out our future together. Will we answer any and all questions, regardless of subject? As Captain Kirk once said: "You can ask." And even if we can't prove humans really did land on the moon, stick around until Saturday. There's gonna be one heck of a good car show on Saturday. That part I can guarantee.

мм



Last year we celebrated with Michael Grant as he transitioned to retirement. Michael headed our technical department and was with Moss for a total of 31 years. Along with his creativity and humor, Michael's Healey expertise and enthusiasm are sorely missed.

## Dashing through the Snow



There's something magical, and more than a little taboo, about driving a sports car in the snow. Onlookers think you're nuts and would never do that if it were their car. Or so they say as they continue to stare at the sight of it.

When I received the following story from Jamie Boss, I didn't mind that he didn't have any snowy photos to go with it. I can picture the snow covered scenes clearly in my mind through his words.

The frosty photos accompanying the story each have their own tales to tell, and I hope they bring back wintertime memories many of you I'm sure can easily recall.

Happy New Year from Moss Motors!

#### MULTI-TOOL



L ast year, my ancient lawn tractor finally died and left me without any way to clear my driveway. I needed something that was geared low to push snow. Something with more than twenty horsepower. I needed something that was small and nimble that I could maneuver into tight spots. Wait, what was under that cover? Yes, my little British car! I'll clean up the whole neighborhood!

- Cliff Maurer

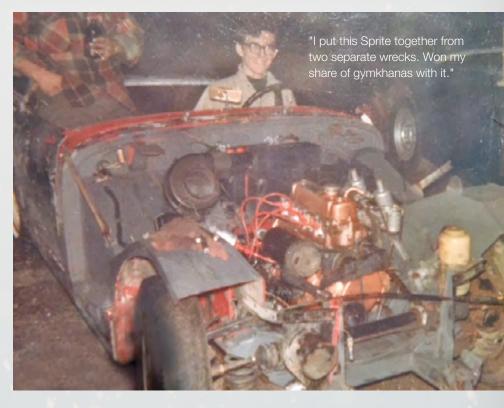
#### **HOMEWARD** BOUND

By Jamie Boss

ost young men in high school were passionate about something. It could be the young ladies. Definitely football. I even knew some who were passionate about math. I loved British cars. While some would read serious books for English class like Moby Dick, I preferred shop manuals with exploded views. Such was the depth of my passion.

In my sophomore year, I was blessed with the honor of working part time at a Triumph sports car dealership. I began with changing oil but soon graduated to complete tune-ups, new car prep, and doing whatever was needed to the various used sports cars in the front row line-up. I got to work on Alfas, MGs, Jags, an occasional Morgan, Sunbeams, and every Triumph made up to that point. I even worked on a Triumph Mayflower, much to my chagrin.

Calling it a dealership is a stretch,



as the building was a converted A&W Root Beer stand with a two-car bay added to either side. My boss, T. Paul Kelly, had been a salesman at Lee Circle, which was in the early '60s one of the premiere foreign car dealerships in New England. When Lee Circle

closed, Mr. Lee helped T. Paul put together a little Triumph dealership that was lovingly called "Sports Car Land." I practically lived there during my high school years.

As usual, I spent my Christmas vacation tinkering with the Austin-

continued...

#### ICE WHISKERS



ver the years, my wife and I have taken numerous trips around New England in our 1967 MGB GT. On the way back home to Rochester, NY from one of these journeys, we decided to stop for a couple of nights in Lake Placid. Since it was autumn and a little chilly in the mountains, this is what we found outside on our final morning.

—Allyn Wagner

Healey Bugeye Sprite that I reassembled from piles of parts from two different cars. On Christmas eve it was T. Paul, Jo-Jo and myself at the shop rebuilding S.U. carburetors and figuring out how to put a new top on a Morgan 2+2. Jo-Jo was probably in his midtwenties and was the main "wrench" during the day when I was at school. He was every bit as enthusiastic about British cars as I was.

#### Home for the Holidays

The snow had begun to fall on the almost deserted road. Most sane people were already snuggled safely in their homes, preparing for the joyous day of Christmas the next morning. Children were imagining what Santa was going to bring them and their parents were trying to do the last minute wrapping out of sight of prying eyes.

As our day was waning, we noticed a Triumph TR3 limping up the road at about 10 miles an hour. It barely made it into the lot. The snow was falling at a brisk rate and the driver, all bundled up in a car with questionable heat, hopped out and hurried to the showroom door.

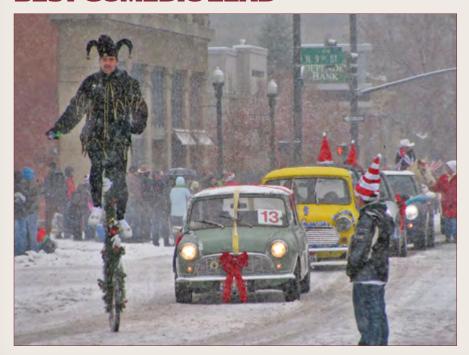
Shaking the snow from his military uniform, he said, "I'm on leave and headed to Boston to see my family for Christmas before shipping out to Vietnam in two weeks. I barely got off the turnpike when my clutch started slipping badly. Is there anything you guys can do to help me out? I haven't gotten paid yet, but if you can help me out, I promise I will send you a check next week for whatever it costs."

My boss, T. Paul, had a soft spot for a sad story. To most he was a hardheaded Irishman, but those who know him, knew he went out of his way to help those in need. "Sure," he said, "we should be able to get you going, one way or another. How long have you been driving?" The driver said he left

North Carolina early that morning and had been driving all day in bad weather. Turning to me and Jo-Jo, T. Paul said, "You guys up for this?" I looked at Jo-Jo and he looked at me and we both blurted out "Yes!" at the same time. T. Paul said, "Why don't you and I go down the road to the diner and get you something to eat while this crew gets your car up on jack-stands. They'll pull the transmission out and we will bring them back a Christmas Eve snack."

There was a sincere look of gratitude and thanks on the driver's face when T. Paul gave us the goahead. Jo-Jo and I got the TR3 into the shop while the man and T. Paul piled into the shop's TR4A demo, lovingly called the "Circus Wagon" because of its outlandish red, white and blue paint job. The two of them sped off into the snowstorm.

#### BEST COMEDIC LEAD



ur Boise Mini Club participates in the annual holiday parade. In 2010, the weather turned particularly festive and white! I do love my Mini but it's not the best winter driver.

—Realy Ann Wingert

#### With a little bit of luck

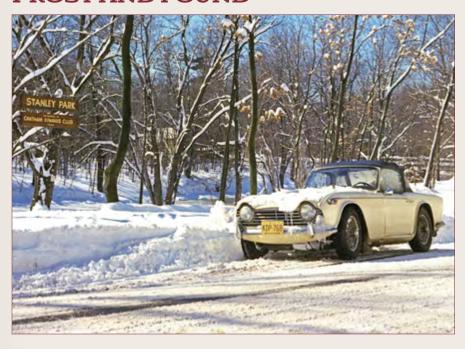
Our dealership was extremely small. We had no car lifts. Everything was done with a jack and four jack-stands. Unlike the Jaguar XKE, where you had to remove the hood, take out the front torsion bars and drop the engine on the ground to get at the transmission, the TR3 was easy to work on. The transmission came out from inside the car. Once jacked two feet in the air on stands, we pulled the passenger seat out and removed the transmission tunnel. It seemed like there were a thousand special screws that held it into place. It was more like eight or 10 on a side. You pulled up the rug, took the shift knob and boot off, removed all of the hardware holding the transmission tunnel on and voilà, it pulled right out. With the tunnel off, we could now work on the rear mount, transmission-to-engine bolts and other minor annoyances that popped up here and there. In no time the transmission was out, with the jack holding up the rear of the engine. Bear in mind that one "lifted" the transmission out by hand. It helped to be small. One person straddled the transmission from above, crouched low and lifted while the other wiggled it from side to side and pulled towards the rear to get the input shaft out of the clutch plate splines.

#### The Final Stretch

Leaving Jo-Jo to remove the clutch assembly from the flywheel, I went down into the cellar to search out a pressure plate, clutch plate and throwout bearing to finish the job. Finding all three on the shelf, I hauled them up to the bay and laid them out on the floor for Jo-Jo to see. "Damn," Jo-Jo said, "we lent Harvey the clutch alignment tool yesterday for his race car. How are we going to install this?" Thinking quickly, I pulled a long wooden dowel out of my toolbox and began wrapping the first inch with electrical tape. As soon as it looked right, I stuck the end into the pilot bearing and it fit just fine. I then wrapped the next three inches with tape until it fit into the splines of the clutch plate. Totally not in the official repair manual but it worked just the same. We smeared some white grease in the pilot bearing, popped in our makeshift alignment tool and installed the pressure and clutch plates. Lastly, we put in a new throw-out bearing and began re-installing the transmission.

The TR3 was the car of my dreams. It had that World War II bomber cockpit look, especially with the top down. Even 50 years later I can still picture my friend Ritchie driving down North Street in my hometown of Milford in his bright red TR3. The large steering wheel made it feel like you were driving a truck. The low door sills gave you the feeling of riding down

#### FROST AND FOUND



Tam one of the original co-founders of **⊥**the British Motor Club of Utah and am still driving at least two British cars, including a fully restored 1960 TR3A. This 1965 TR4A was one of the first two 4As imported. I know because I drove each of them from the impound area to the dealership. The second car was British Racing green, which I really wanted, but it was already spoken for, so I bought this white one. It eventually got all of the Group 44 Tulius engine modifications done. Unfortunately, I sold the car and I have wondered about its existence ever since. It had a serial number of CTC-58856L.

—Peter Gerity

If the current owner would like to say hello to Peter, send me a note.  $\sim$ Ed. the road on the seat of your pants. The short, straight shift lever fit perfectly into your hand. When you pressed hard on the gas pedal, the engine made this memorable sucking noise as the air screamed into the two S.U. carburetors. Everything about it made you feel connected to the car. You didn't just drive a TR3, you "motored" in it. While I owned many British cars in my life including a Bugeye Sprite, two MG Midgets, an MGA 1600 hardtop coupe, a TR6 and, of all things, a Berkeley roadster, I've never owned a TR3. I know there is one out there somewhere

with my name on it.

By the time T. Paul and our traveler came back, we were in the process of bolting down the transmission tunnel and reinstalling the rugs. In no time we had the seat in, adjusted the clutch pedal, and started her up to make sure everything worked. All was well in Triumph land.

#### Hard Work Pays Off

As the man thanked us again and again for our help, we could see that our efforts brought out an emotional response in him. A solitary tear ran

down his cheek. We watched as the TR3 motored off into the snowstorm on its way to Boston as we consumed the cheeseburgers and milk shakes they had brought us from the diner.

T. Paul did receive his check the very next week. I often wonder if our Christmas Eve traveler ever thought of his Christmas present during his stay in Vietnam. I think of his visit often.

MM

#### CHALLENGE ACCEPTED



I've had the same MGB since just before I got my drivers license 37 years ago. We have been through a lot and Moss has always been there to help out. The Motoring Challenge has been a really fun excuse to take lots of pictures with my B and find some fun detours, too.

—Graham Haber



### THE CHALLENGE CONTINUES...

The Moss Motoring Challenge is back for 2019! You'll find the list of this year's fun destinations on page 25. For instructions on how to play, and to register, visit MossMotors.com/Motoring-Challenge



ave you ever driven a Mini? Or sat in one? How frequently do you see one on the road? In the United States, maybe not often—yet in the UK they were once as familiar as hot dogs, fries and Coke. In other words, they were everywhere.

I bought my first new Mini in 1960, my second in 1962, went rallying in them in that same decade, and even saw them win the Monte Carlo Rally... three times. Even today, when most of the five million that were made have rusted away, I still see them regularly mostly because I am regularly invited to commentate at events for enthusiastic owners.

And yet, I have still never quite come to terms with the way that the original Mini was so small, that it was the first modern car to feature a transversely mounted engine, and was the first mass-produced machine to have front-wheel drive. Alec Issigonis (who conceived, but did not design all the detail—his team did that for him) takes the credit for that, although the major influence behind its invention was the Middle East War of 1956

when Israel and the Arab nations that surrounded it battled.

After that short-duration war. a massive worldwide oil shortage developed. Fuel rationing was imposed in several countries, including the UK, and tiny cars from Europe started selling like five-cent hamburgers. BMC's chairman, Sir Leonard Lord, suddenly found that he had nothing on sale that could match them.

Cue a typically short, explosive, and decisive meeting in 1957, at Longbridge, with his chief designer, Alec Issigonis, during which he apparently said something like: "Drop everything else you are doing, then go away and design me a new small car to beat the bloody Europeans. I don't mind what it looks like, but you will have to use an engine which is already in production here." And that was really all the 'Product Planning' that the new

Lord chose Issigonis because he was already famous in the UK as the designer of the post-war Morris Minor (which was currently Britain's bestselling small car), and he had recently been installed at Longbridge with his

own secretive little team to design and develop future BMC models. Issigonis had already conceived a front-wheeldrive version of the Morris Minor (which was never approved—the cancellation being one factor that convinced him to eventually leave BMC), and immediately settled on that for his new car.

Securing a BMC project code of ADO15 (ADO = Amalgamated Drawing Office), Issigonis's team started work in 1957, were ready to show off prototypes to their bosses in 1958, and saw the car launched in August 1959. It was not long before it became the most popular car in BMC's armory, and would remain in production until 2000. At first there were 'Austin' and 'Morris' types, using an 848cc engine, which only produced 34bhp, but a lot more variety-re-badging, re-engineering, and power boosting—would follow.

The Mini represented a complete breakthrough in automotive engineering, not only because it was a front-wheel-drive machine, but also because that engine was mounted across the line of the car (what is generally known a the 'East-West' layout), for this

allowed the machine to be shortened even more than hoped. When it was launched, it was only 120in. long, running on an 80in. wheelbase, and weighing a mere 1,380lb. Originally there was only a two-door sedan, with sliding (rather than wind-up) windows, and it sold in the UK for only £497, and in 1960 its PoE price in the USA was only \$1,295.

Minimal motoring? Yes, for sure—and that was exactly what Sir Leonard Lord had hoped it would be—but it was also technically advanced. Not only was the A-Series four-cylinder engine mounted across the car (it was the same basic engine as used in Bugeye Sprites, by the way), but the four-speed stickshift gearbox was mounted under that engine (in the sump, really), there was all-independent suspension by rubber cone springs, and—considering its size—an almost unbelievable package of four-seater accommodation.

Not that it was a fast car—nor even meant to be. Flat out, it might just reach 75mph. Later versions, such as the Cooper and Cooper S types, might nudge 90mph, but that was about the height of it. As to accommodations, there was just one instrument, mounted in the middle of the dashboard, the front seats were, shall we say, guaranteed to keep many chiropractors in business, and the build quality was decidedly



'iffy' at first. Both my Minis leaked, and suffered engine cut outs in heavy rain conditions, and overheating in hot weather was not unknown.

Maybe this was why the original Mini was slow to catch on when it was put on sale in the USA. Not only because it was so small, but because it seemed to be so easily intimidated in heavy North American traffic. Even so, when away from being overshadowed by big, growling, Fords and Chevys, and away from the freeways which made it feel so insignificant, the Mini was a much more attractive proposition.

Cute? Yes, 'cute' was a perfect word to describe this agile little machine, which could slip in and out of traffic hang-ups as if they were not there, handled better than any other road car on the market, and certainly punched above its weight when traction was needed on icy roads. Although no one in the USA, I guess, ever bought a Mini as their only car, British customers in the millions did just that.

Commercially and financially, of course, the Mini was a perfect case study for a Harvard Business School student, as there were times, for sure, when it was not making any profit for BMC, and there were times when demand was so high that other BMC models had to be quietly side-lined for weeks or even months at a time for Mini assembly to rule the roost at Longbridge and Cowley, where parallel production facilities were maintained for years.

Even so, like the VW Beetle, the Mini went on, and on, and on. But, like the Beetle (and, of more interest to people who read these pages, like the MGB and now the Miata) the Mini kept on changing, evolving and improving. Although the original 848cc Mini was listed in the USA until the late 1960s, it had already been supplanted by the more powerful Mini Cooper, and finally





parts suppliers found it more and more difficult to keep up with all the mass of changes which continued to be made. Even so, the A-Series engine continued (in MG Midgets, for instance), the transverse engine philosophy was adopted for other models (the Austin America appeared in 1968, for instance) and—most importantly—the original ground-breaking layout of a transverse-

by the 76bhp Mini Cooper S before final imports were made. Limited sales, new US regulations, and all manner of bureaucratic hurdles got in the way. And although the exhaust emission regulations could be met, it looked as if the car could never meet the barrier crash tests that were now being required.

Like the MGB, too, a comparison between the earliest and the late types showed that almost every facet of the car had changed over the years. Rubber cone suspension had given way to self-levelling water-based 'Hydrolastic' suspension, winding window glass had been adopted, most details surrounding the engine had been updated, allsynchromesh stick-shift gearing had been standardised, an automatic transmission was made available for some markets, and those of us based in the UK had also seen 'Riley' and 'Wolseley' badged versions appear, along with diminutive little station wagons, vans and even a sweet little pick-up truck version all going on sale.

There would be a lot more change to follow in the 1970s, '80s and '90s, but by that time British Leyland had been born, prospered, then hit hard times,

engine layout was taken up by car makers all over the world.

Having bought up the rights in the 1990s, BMW set out to re-invent a new-generation 'BMW MINI' in 2001. They retained the site of one of the old factories which had previously built 'classic' Mini body shells, and made an excellent job of keeping the name, and the marketing approach alive.

Nothing, however, could replace, or replicate, the character, and the sheer delight, of the original Mini, and although many of the 1960's cars have now succumbed to rust and neglect, there are still examples, looking, feeling, and behaving in the same remarkable way as ever, on our roads today. It will be a long time before a real Mini replacement ever takes to the road.



ЙM



dearly love my classic sports cars. I've had MGs in particular since 1967. Driven 'em, rallied 'em, worked on 'em, and raced 'em. Much more important to me, however, are the wonderful people I've gotten to know who also own MGs. It is for them that I write this request: be smart and be safe and get your car inspected every year.

The engineers at Abingdon designed our MGs to be road worthy, but never in their wildest dreams did they imagine the cars would outlive them. All cars deteriorate over time. Metals corrode, rubber hardens and cracks, moving parts wear and fatigue, lines clog, fluids break down, and so on. All of this adds up to serious responsibility on our part. Time has a way of slipping by without our notice. It's time to stop calling work done in 1995 a "recent restoration." We need to take safety seriously each and every year.

Some states have mandatory annual car inspections, and for good reasons. Unfortunately many states also exempt vintage cars from inspections—a policy I disagree with.

I've been involved with MGs and MG clubs for over 50 years, and have seen and heard of numerous vehicle failures. Failures of mechanical items, hydraulic lines, fuel lines, tires, etc., have happened—including with my own MGs. I recently had my '71 MGB inspected, and it was found that the fuel pump was leaking gasoline, something I had not noticed. With just a spark my car could have been toast! I could argue convincingly that I am qualified to inspect my own vehicle, but I know better. This is why I highly recommend that any LBC which sees road or track use gets—at minimum—a thorough annual inspection by a qualified mechanic who knows and understands our cars and their potential problem areas.

Before I am allowed to vintage race my MGTD (or let my daughter Rachel race it) it has to pass a strict vehicle technical inspection at the track. Does your MG undergo any inspection before you drive it? Probably not, unless it doesn't start, and then you have to take a look at it. Maybe you are qualified to inspect your own MG, and maybe you do inspect it, but most folks are driving enthusiasts not mechanics. We need to build into our hobby the discipline of appreciating and participating in the art of the inspection.

When I belonged to the Central Jersey Centre MG Car Club, one of our members who owned a garage with three car lifts invited us one day a year

to inspect our MGs and to do some minor work on them. Holy Cow-some of the deficiencies we found were accidents waiting to happen!

Consider having your local club stage a "Safety Inspection Day." As an alternative, suggest having a club meeting where a qualified individual gives a presentation on "How to do a safety inspection of your LBC." These actions could help save someone from having a really bad day down the road. мм



Central Jersey Centre MG Car Club had a Safety Inspection Day hosted by New Vernon Coach & Motor Works in New Jersey.

## Wiper Motor Repair

By Mike McPhail



Photo series uses the Moss Motors TR3 R&D vehicle.

hen I got my barn-find Healey 100 back in the 20th Century, it had been off the road for a long time. One of the many nonoperative components to be dealt with was the wiper motor. Okay, what do you expect to get for \$3500?

Applying 12 volts to the wiper motor on the bench pegged the needle on my battery charger, so to avoid meltdown, the clips were quickly removed. The ancient contraption had not even budged. Removing the cover revealed a pristine mechanism and little wear on the brushes. The grease had turned to glue, paralyzing the gadget!

A thorough cleaning in mineral spirits had the wipers running like new. These old wiper motors are very simple and can often be made to work well with a minimum of effort. The first thing to check is the operation of the wiper linkage. Unscrew the nut that attaches the wiper motor to the tube that houses the cable. Remove the three little nuts holding the motor to the body and disconnect the wiring, noting which wire goes where. On all but very early cars, the green-black wire connects to terminal 1 and the green wire goes on terminal 2. The black wire is chassis ground and connects to the cover screw marked "E". More than one model of wiper motor was used over the years, but they are all quite similar.

With the wiper arms removed, the entire wiper motor assembly should easily pull out of the tube, spinning the wheel boxes as it goes. Difficulty in this operation would indicate a severe shortage of grease, or even worse, bent tubes. The tubes can become bent when the chrome nuts holding the wheel boxes defy removal. Bent tubes can be straightened by driving a suitable sized Phillips screwdriver into the end. The kink will only be at the ends near the wheel boxes. Be sure that you note the position of the tubes and wheel boxes for correct reassembly.

Once the cable can be reinserted and removed with ease, direct your attention to the motor itself. Apply 12 volts to terminal 2 and ground to terminal 1 with the cable attached. The cable should move in and out of the motor without much drama. If you are using an old timey charger for power, expect to draw about three amps. If you have one of those fancy six-cylinder Healeys, or a Sprite, check the parking mechanism by removing the ground when the cable is half extended. The motor should park when ground is subsequently attached to the motor body.

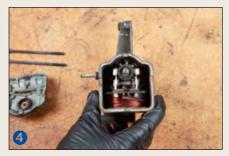
Of course, you probably wouldn't be doing this if the dumb thing was working! So, grab a cold one and let's take this contraption apart. 1 Use a nut driver to remove the four screws holding the gearbox cover, exposing the drive mechanism. 2 Go ahead and cut the rotten old wire to the parking adjustment... that's the cap that spins around letting you stop the wiper arms anywhere in the sweep. Consider marking the position of the cap, since you really don't want to change it much.















We've got more tech articles by Mike McPhail. Search "Pint Size Project" on MossMotoring.com.

On most models, there is a copper brush that grounds the wire on the cap to keep the motor running after the dash switch is turned off. This is how the park feature works. Sometimes the brush breaks off or has been lost. I have one or two old motors that work fine. except for this missing component. The Healey Hundred never had a parking feature, and it is kind of fun to see if I can work the switch just right to park the wipers. But I digress.

3 Next, you're going to pull the e-clip and remove the brush, after which the cable and connecting rod can be removed. The gear should come out in order to thoroughly clean it and the case. To do this, just turn the case over and drive out the little circlip with a small punch. Pop out the gear and move on to the motor.

4 There are two long machine screws through the cover plate that hold the motor onto the gearbox case. Remove these (and the terminal screws) and the cover will come off easily, exposing the armature and brush holders. Pulling the motor case away from the gearbox will now send the armature crashing to the floor, and the brush holders flying. **5** Had you not lost them, you would have found two tiny graphite brushes in the silverplated holders, connected by a pair of

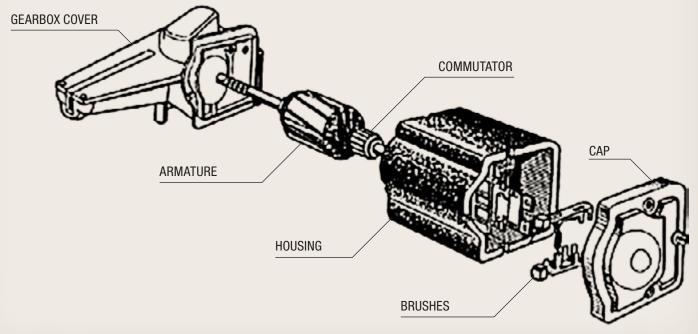
microscopic insulators and an incredibly fragile little spring.

Take another round trip to the fridge, then begin searching for the lost parts, as they will definitely be needed for reinstallation. Check the resistance between terminals 1 and 2, expecting about 12 Ohms. There should be no continuity between the terminals and the case. Passing the multi-meter test means there is a distinct possibility that you will be able to drive in the rain again.

You're almost done! Clean up the commutator and solder a new parking wire to the motor, routing it around the field coil so as to line up with the little hole in the gearbox body. Replace the brushes with Moss 854-720.

**6** Carefully reassemble the motor. Replacing the brush holders will require a steady hand, good lighting, and a kiss from lady luck.

The steel motor body should be painted before reassembly and grease applied to friction areas. There is an adjustment for armature end play that probably won't be needed, unless you lost some more of those tiny parts. Solder the new wire to the cap and test the assembly one more time, then do a little rain dance. You're ready for it! мм



## GRRAT ILLU

By Michael Kotowski

y friend was among the last group of passengers to fly on the now retired Concord supersonic jetliner. He told me that as the aircraft was gathering speed and climbing toward cruising altitude, an illuminated sign on the bulkhead announced, "You are now traveling faster than a .45 caliber bullet."

"And there I was," he said, "Sitting with my legs crossed and sipping a Bloody Mary. Can you believe that?"

Well, yes. Yes I can. After having had similar existential experiences regarding the subject, it occurs to me that speed is merely an illusion—at least the sensation of speed is an illusion. Actual speed as measured by a police officer's radar gun is another matter.

Even my four-year-old grandson is familiar with perceived versus actual speed.

"We need to walk fast, William. We're meeting your mommy for lunch in ten minutes and we'll be late if we don't hurry up."

He tells me, "But Grandpa, I am walking fast. Really, really fast!"

When I look down at his legs that are clearly moving three times faster than mine—a blur of canvas sneakers and corduroy—I realize he's right. He is walking fast.

In the case of the Concord—and my grandson, too, I'd say—proximity to the ground is probably the primary factor for distorting the sensation of speed. Regarding the Concord, secondary factors no doubt include minimal ambient sound and a modest sensation of motion within the cabin.

So, how exactly does this work? And more importantly, how can we best optimize this illusion when we're behind the wheel of our favorite sports car? I'm quite happy borrowing the



popular quote: "It is more fun to drive a slow car fast." And when my "fun zone" is somewhere between 35 and 70 mph, for the most part it's all nice and legal.

I would add that the size of the vehicle is another factor in creating the sensation of speed. So too is the degree of our participation. Running up and down through the gears adds an element of speed and exhilaration that an automatic transmission fails to deliver. You can probably see where I'm going

Ladies and gentlemen, I present to you the Classic Mini: poster child of illusionary speed. A miniature body supported by tiny wheels mere inches from the ground? Check. Plenty of participation required of the driver? Check. And an arguably underpowered motor providing plenty of noise? Check and check.

Regarding the participatory factor in all this, there are few automobiles that require—demand actually—greater participation from its driver. Driving a Mini is more like riding a motorcycle, requiring a full 80% of your attention. It takes both hands and both feet to keep the car between the ditches. Best not try sipping a latte or texting a buddy while piloting this miniature automobile on anything but a large, dry lakebed.

I often take my Mini 'Rosebud' on a romp through secluded, tree-shaded roads, with tight turns and a 40 mph speed limit that provide a perfect venue for some spirited afternoon driving.

It is at once both comical and humiliating to be gripping the steering wheel with all of my might while bipping the throttle for a downshift and powering through a tight turn with my sticky track tires seemingly on the edge of adhesion, only to see in my mirror a gardener in a pickup truck piled with lawnmowers and grass clippings inches from my rear bumper.

Doesn't he know how fast I think I'm going? MM

#### Made in South Africa

## The Mini 1275 GTS



n the past, the fabric of Mini history was thought to have been pulled asunder by the 1969 separation of John Cooper Racing from BMC. In reality it was kept intact, however, you had to travel to South Africa to find this small but important link in the Mini's sporting legacy.

When the little 'Orange Box,' the original Mini so named for its paint color, was first unveiled, the guest list included John Cooper, maker of Formula 1 racing cars. Cooper was so taken with the Orange Box that he ordered nine works cars for his engineers to modify for racing and one to drive himself. In addition, Cooper turned to his pre-war motor racing friend, Alex Issigonis, to propose a joint venture between BMC and Cooper Racing. Cooper modifications increased engine capacity, had a higher gearing ratio at the top end, and increased braking to compensate for the increased power. The exterior of the Orange Box was left largely unaltered. It is from these cars that the legend of the Mini Cooper was born.

The Austin-Morris Mini Cooper was the pride of BMC. The success of the Cooper, however, could not reverse the significant financial difficulties that lay ahead. By 1962, plans were in the works for the merger of BMC and Leyland Motors. At

one point the new company, called British Leyland, was the largest auto manufacturer in the world.

British Leyland was infected by an Empire mentality. After World War II, Austin and Morris auto companies as well as Leyland had spread worldwide, with assembly lines manufacturing CKD (completely knocked down) cars throughout the world. The concept was that the larger, more valuable components would be manufactured in the UK and shipped overseas to be assembled by local workforces, thus lowering labor costs and building product loyalty. British Leyland assembly lines were as far flung as Australia, New Zealand, South Africa, and Peru, as well as in European countries such as Belgium, Italy, and

Spain. The Australian, South African, and Italian facilities had especially important associations with the Mini Cooper: in Australia it was the 1275 GT police cars, in South Africa the GTS, and in Italy the Innocetti 1300.

Unfortunately, the association of Leyland with John Cooper Racing collapsed in 1969 and in order for Leyland to remain in the lucrative sporty small family cars market, the first significant changes were made to the Mini in almost 15 years. In the UK, the Mini Clubman 1275 GT was introduced to satisfy the sporting drivers in the English market. The 1275 GT, was originally manufactured in the UK, but by 1971, CKD containers had arrived for assembly at the South African Blackheath plant.

The Austin and Morris operations of BMC, and later British Leyland, were the early mainstays of the South African auto industry. In 1955, the Austin Motor Car Company had begun assembling the Austin Cambridge at the Cape Town Blackheath plant. In 1961 when the Austin and Morris Coopers were introduced into Cape Town, the plant assembled several hundred Coopers from CKD parts. However, changes were afoot. By 1966, the Cooper blocks were being cast locally in two, one-ton electrobuckets at the Gering Foundry in Elise River and were bored at the milling facility



at Blackheath. Thus, when the 1969 decision to drop the Mini Cooper line altogether was finalized in England, Blackheath was already well positioned to custom manufacture their own 1275 S blocks.

The Blackheath plant also assembled a range of other Leyland vehicles—from Land Rover to Jaguar, to Triumph, and even the Morris Minor. With the introduction of the English Clubman 1275 GT in 1971, the Blackheath facility now both manufactured and assembled complete cars in South Africa using a limited number of English components and steel from the Pressed Steel facility in Pretoria, owned by Budd Motor Company USA.

The flat nose version of the 1275 GT, had many features in common with the Cooper S. The engineers at Cape Town, led by Ralph Clark, had been tweaking the Cooper 1275 S for five years for South African racing purposes. This group immediately turned their attention to the creation of a 1275 GTS-which would

become known locally as the Leyland Cooper. This level of modification was possible because British Leyland South Africa was a wholly owned and privately listed subsidiary of British Leyland, so they had the corporate privilege which allowed them to take actions in South Africa that would not have happened had they been part of British Leyland UK.

At the South African plant, they started by increasing the bore of the block and shortening the stroke, highly polishing the combustion chamber, cross drilling the crank, and adding aluminum pistons and new steel-alloy valves. After all was said and done, the GTS tested one MPH faster than the Cooper S. In addition, a large 35-litre fuel tank replaced the two small tanks, larger 8 1/4-inch disc brakes were sized to 12-inch tires, and a heavy-duty oil pump replaced the oil cooler. Indeed, the Cooper by Leyland advertisement which read: "For little old ladies, it ain't." hit the mark.

Beyond the improvements to the power aspects of the GTS, the car also received a new dash with a small glove compartment, an instrument panel with the first tachometer in Mini history, a leather-clad steering wheel, and a key-locking steering column instead of the center console key location. Mechanically, a new dual-circuit braking system was added and the new enlarged brakes meant the disappearance of the vacuum assist master cylinder. New bucket seats with headrests also were designed for the South African Minis, unfortunately forgetting that the front seat would then not tilt forward to allow access to the back seat. Finally, the overall appearance of the car was changed by the addition of chrome strips to the front grill, tinted glass, and exterior rearview mirrors on both left and right.

By 1973, the new GTS was acclaimed as the 'New Cooper,' and became the choice of racing aficionados





in South Africa, while the base model with its 1000cc motor was produced for the general public as the 'people's car.'

Given all the accolades about the GTS, one wonders why it hides in the annals of Mini History. The answer lies in understanding that the fame of the 998cc and 1275 S Coopers came from their success on world-recognized racetracks. The first Coopers were small, powerful, winners of race after race and rally after rally. They were the hit of Europe. The GTS on the other hand began at a time when the Republic of South Africa was being racially divided into Bantustans, and Europe was sanctioning South Africa because of the racial policy. The GTS and other Leykor works cars were made by local talent and raced only in South Africa. The very name "Leykor" itself shows the impact of the South African politics at the time. Levland did not wish to be associated with the racial policies but they did wish to do business there, so they created the name Leykor out of Leyland and Korpporatse, the Afrikans word for Corporation.

Leykor products never made it onto the world racing stage. However, they dominated the major South Africa tracks at Kyalamini in Johannesburg and Killarney in Cape Town. Although both of these tracks were world-class Formula 1 tracks, they were no longer

recognized by the outside world due to Apartheid sanctions. The concurrent economic collapse of British Leyland and the rise of Apartheid conspired to keep the GTS in South Africa alone.

As the GTS was making history on the South African tracks, the financial base of British Levland was unraveling. The conservative English government decided against shoring up British Leyland any further and feelers were put out for buyers. Ford and GM bid on parts of the assembly lines, DAF Trucks offered to purchase Leyland Trucks, and Volvo vied for part of Leyland's bus business. In 1983, British Leyland was dissolved and a private company, the Rover Group,

came into being. The major benefit to come out of this was that in 1991 Rover retooled and manufactured a run of 1,050 Mini Coopers in the RSP (Rover Special Production) Division. The English-made Cooper was resurrected for a time, and interestingly enough the majority of the RSP Coopers were sold in Japan. The RPS Cooper had a classy wood-grained interior and a fuel injection system. The block was inspired by the 1275 S block, refitted with South African GTS improvements.

In 1994, the remaining portion of Rover, including Land Rover, was sold to BMW who quickly shipped Land Rover off to Ford and focused instead on development of the all-new MINI.

Records show that 4,210 of the Mini GTS models were sold between 1972 and 1979, and they kept the legacy of the Mini Cooper alive, albeit 12,000 miles from Longbridge. **MM** 

#### Mini Carriage Works

John Schein and his son John operate a small enterprise importing Minis and Mini parts from South Africa, Father and son first became involved with Minis in 1986 while living in England and they have never wavered in their fascination with the little Orange Box. They can be contacted at MiniCarriageWorks.com.





e celebrated our 30th wedding anniversary at beautiful Vogel State Park, where many years ago we had taken one of our first camping trips. One afternoon we took a short diversion from waterfall hiking to eat at a pizza shop in downtown Blairsville, Georgia. We chatted about how fun it would be to travel the country using only back roads and visiting small towns like this one. At the time, our modern car had over 150,000 miles on it and was not in the greatest of shape. As a joke my husband Glenn said, "Wouldn't it be funny to drive across the country in the old MG? It only has 47,000 miles on it." The car he was talking about was sitting on the side of our house next to the trashcans, wasn't even running, and hadn't for years. To his great surprise, I said, "That would be fun!" Adventuring in the MG appealed to me. It was Glenn who wasn't quite so sure right away.

Glenn would have never considered himself an MG kind of guy. This little car came into our lives from

a good friend who knew that I thought it was cute, and one day it appeared at our house and never left. As many of you who have worked on British cars know, there are very few things in common with the Midget and the muscle cars that my husband grew up working on. Nevertheless, he found in the trunk an old service manual that had been half eaten by bugs. It became his Rosetta Stone.

After many attempts to understand and adjust the SU carburetors, the little engine came to life. Glenn called me outside and said, "Let's go for a ride." The two of us slid into the two tiny bucket seats and off we went. The car ran rough from the two-year-old gas in the tank and the mis-adjusted carbs, but it ran. Once we cleared our neighborhood and were on the open road, Glenn hit the gas pedal... and the motor promptly quit. We coasted onto the shoulder. Glenn popped the hood, did a quick survey of the engine he still didn't fully understand, and spotted the obvious problem. The distributor thing had fallen out of the block and was

dangling next to the engine, hanging by the plug cables. This became lesson number one: Never leave the driveway without tools.

Later, back in the driveway while Glenn worked on the car, I was dreaming of places we should travel in this adorable convertible. I grew excited by the idea of traveling to small country towns and all the potential adventures that lay ahead of us. Together we made the decision that we would attempt to drive the little MG on a multi-state adventure.

Over the next few months Glenn worked on the car's roadworthiness. With our limited budget I couldn't do all the cosmetic things I wanted to do. They took a back seat to the mechanical things that needed to be done such as brakes and tires.

The top was original and in sad shape. We attempted to stitch parts back together and hoped that with good weather the top wouldn't be needed. After all, the great appeal of this little car is driving with the top down. It's a blast!



Beach towns are my favorite places to visit here in Florida, so I steered our plans for our inaugural trip up US 1 and A1A along the east coast. How far should we go was the next question. We decided to shoot for Connecticut because that is where Glenn is from and, after hearing so many family stories, I had always wanted to see his hometown.

The decision was made. Time to start planning. We quickly learned the cost to stay in hotels was going to be way over our budget so from our discussions we had to change plans from hotels to camping. My first thoughts about camping: "Ugh, no!" In order for this trip to take place, two things had to happen; one, I did not want to sleep on the floor. I wanted a cot, no, a double cot for two. And second, bathrooms would have to be reviewed positively online (clean and

modern). Both of my requirements were met after much searching and reading campsite reviews.

#### PACKING STRATEGIES

On a Florida spring day, we did our first "test pack." We put all the things that we wanted to take on the trip on the driveway and attempted to put them in this little car. Nope, wasn't going to work. No matter how we tried, half of what we intended to bring was still on the pavement. Our first trip would take us 14 days to travel to Connecticut and back and we needed to bring as many supplies as possible. This is where we got creative. We found that even though the car is very small, there are lots of "nooks and crannies" that provided more space than just the suitcase and trunk. An example of the "extra space" were the

front fenders. They became the storage space for extra towels and camping gear that was easily pushed up and toward the rear of the car. I was given the task of packing two week's worth of clothes for two in a single small leather suitcase secured to the luggage rack. When it was all said and done we had crammed everything that we "needed" into the car. A full size 10' x 12' tent, a double cot, two sleeping bags, pillows, all of our clothes, camping gear, and a portable bathroom...plus a very small tool bagall were packed successfully! We used every square inch! We did leave the glove box free as our souvenir space. (Yes, I wanted to be sure to have some space to bring home trinkets!)

The day came for us to start our first adventure! Our little MG needed a name, and rhyming with Midget we named her Bridget. Glenn screwed her nameplate on the front and off we went. This first trip would take us almost 3,000 miles up and back. Glenn brought the title with us just in case something catastrophic happened and we need to sell her to get a plane ticket home. But that never happened. From small town to small town we went and almost everywhere we stopped we met people that asked about our little car and why we were doing this trip. Our answer was always the same: "We love visiting small towns!"

As we made our way north driving in this packed little car together, it was our minds that found the space and time to think and reflect and appreciate life. Or, just for fun, we'd count the few









cars going by and play travel games like we did as kids. We found country fairs, markets with locally grown food, and even a small traveling circus. More than once we met small town mayors who took time out of their day to tell us about their communities and steer us toward a bite to eat. Modern interstate life cruises right by many of the best opportunities and attractions.

Somewhere around day three we learned lesson number two: Old convertible tops leak. The beautiful weather we left behind in Florida quickly became rainy, and then cold. Out of the 14 days of the trip, it rained 11. We started our trip in balmy 82 degree weather, and when we camped in Connecticut it was 27 degrees. But Bridget was a trooper. In the cold or the rain she kept on going, her three little windshield wipers slowly clearing the way for the sights of the roads ahead.

Traveling through North Carolina we were suddenly caught by a major thunderstorm. Sliding under an overpass, we rode out the storm. After several minutes a headlight appeared in our rear view mirror. A man on a motorcycle stopped to share our concrete umbrella. We began to talk with this man who, with a very thick Russian accent, told us he was traveling across the US by himself on his motorcycle. We exchanged traveling stories for almost an hour before the rain began to let up. We took pictures together and added his story to the many encounters we had with unique people throughout our trip.



#### **NOT A VACATION - AN ADVENTURE!**

Bridget makes friends everywhere she goes. She's even helped us get invitations to local swimming holes. We have taken three adventures in her to date: the East coast beach trip, the Blue Ridge Parkway, and an adventure along the gulf coast up to Oklahoma and back. Each a little different from the previous, but they all had three things in common. Each day we set up camp in a new small town, we stay off the interstate, and we hold hands on the little shifter that vibrates and bounces with every bump in the road. We have met so many people and experienced wonderful little towns. We have been to many places that the average traveler will never see, from the Red Neck Grand Canyon in Georgia to remote Skinny Dip Falls in North Carolina-both were well worth the trip! Maybe this little car wasn't

designed to camp out of, but it can, and maybe it doesn't have all the bells and whistles of all the newer more powerful cars of today, but we don't mind. Surprisingly, we have found this type of traveling relaxing. We hope to continue these trips and eventually see all of the beautiful United States of America from the panoramic view of our little British car.

By the way, we paint Bridget a new color every so often so you never know what color she will be. However, two things stay consistent, her nameplate on the front, and a sign that says "Glenn and Jane Adventures" on the rear. We look forward to seeing you on the back roads! MM

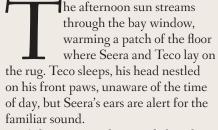












A few cars pass by outside but she disregards them, sits up and stretches out her front legs, shaking her head a little bit to ready herself. She knows I'm due home soon. Seera stands up and shakes again, jostling Teco out of his dreamtime, he watches as Seera runs to the dog door and scoots through. Then, slowly, he gets his old bones up and gamely follows along.

The big truck pulls in to the driveway and Seera runs to the gate, standing up with her paws on the spot where all of the paint has been rubbed off from countless days like this.

"Hi girl!"

Seera's head is poised to be rubbed. She revels in the attention, then drops to the ground when I throw the bolt and push the gate open. Teco arrives and I crouch down to scratch their ears.

The best part of the day has arrived for all of us. Soon we'll go for a short drive to a field or a trail or just along a dirt road. Every few days we go up to the farm to say hello to the dogs there, Echo and Callie, and all of us, dogs and humans alike, enjoy the sights and smells of the country.

Today we're not going far—just to the big field by the river. When the door of the truck is opened, Seera jumps to the seat in one leap, then makes a second hop to the back seat. Teco needs a quick lift to get to the floor of the truck, then he climbs his way to the front seat. He is getting old, but still loves to get out into the fields and roam.

Late in the summer a new car is delivered to the house. It is very small. The tires are the size of a riding lawn mower's.

"Hey pups! Let's go for a ride!"
I open the gate and Seera runs to the truck, standing eagerly next to the door, but I head toward the new little car and open it up.

"Hop in!"



Teco cocks his head in a questioning look, but Seera quickly runs over and pokes her nose inside. It smells interesting, like old leather and horsehair, and after considering the smell, she tentatively jumps up onto the front seat. It's a much easier jump, as the seat is so low to the ground compared to the truck. Seera springs easily to the bench seat in the back to let Teco climb in the front. That's his place and Seera seems to know that. Both of the dogs sit tall in these small seats and look around, watching the trees sweep by as the tiny car zips along the back roads to one of the trails that we like to hike along.

The Mini becomes the main transportation to our daily walks. Teco enjoys the ease with which he can get in and out and Seera likes the smooth back seat where she can lay down when she's tired after a good day of running in the fields.

One day, everybody loads up into the Mini and we drive up and over the hills to another house. Both dogs eagerly jump to the driveway to meet up with Juno and Matsu, who sniff and greet them with curiosity. Juno is playful and she and Seera race around the two small cars in the driveway. Matsu, even though he is the youngest, is more aloof, like Teco, and quietly regards the other dogs and people as everyone prepares for the upcoming drive. When a woman called their names, Juno and Matsu obediently race over and scramble into a low, red car with a silver octagon on its hood.

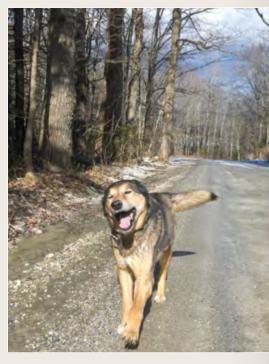
Soon both cars are racing along the back roads. Seera rests her head on my shoulder and gazes out the window. Teco sits and watches the red car ahead of us. It doesn't have a top on it, so the passengers can all stick their heads up in the wind. Both Juno and Matsu are cozied up in the front alongside the woman driving—Matsu with his head on the doorsill, Juno with hers held up high, enjoying the breezes. The Mini catches up to the MG on the downhills, but the MG separates itself from the

less-powerful car when both of them climb up the winding roads.

After a while, the dogs are getting itchy to run around, and they're rewarded as the vehicles pull into a dirt parking lot by a lake. Everyone tumbles out of the cars for a long spell of running and exploring along the criss-crossing paths that circle the lake. The humans stroll and chat, while the four dogs venture out and back, picking up all of the scents that their ancestors used to be so keen on. Teco would wander the farthest away and sometimes Seera would join him, but she'd routinely circle back just to check in before pointing her nose away again. Juno and Matsu zeroed in on noises and odors off to either side but also checked back in when called.

After a great excursion, the two little cars once again zoom about the mountain roads and end up at a friendly restaurant where there are three more small cars parked—another MG, but painted deep green, a yellow squarish Triumph, and a low, sleek black Healey 100. The egress from the cars is more orderly this time, and the dogs are aware they must behave. The leashes are hooked up and the four dogs are tied to a fence in the shade of a tall hedge. Another dog, Roscoe, is already there, and all the furry companions greet each other before settling down









to snooze while the group sits at a table talking, eating, and laughing.

There are more outings like that during the fall, but eventually winter sets in, the Mini gets stowed in the garage, and the big truck carries Teco, Seera and myself to their walks. Teco has to be lifted all the way to the seat now, and Seera doesn't make the jump all the way up, but climbs up from the floor like Teco used to do.

The Mini came out of the garage late in the spring, as the snow took its sweet time to melt. When the roads finally cleared we took a lot of

drives catching up with lost time. It must have been a little odd to them, I would find some seemingly random destinations, we'd stop numerous times, and I'd get out and snap a picture of the Mini next to a sign or building or some strange structure. Eventually we'd get somewhere new and take a walk through a park or out in the middle of nature.

Sometimes we'd visit the woman with the red MG and go for an exhilarating drive, punctuated by a long walk or an afternoon at a roadside pub. Juno and Matsu had a new sister, Tamaki, who was young and curious, but my dogs preferred to keep close to me.

That summer we took a long trip in the Mini, stopping at many places and visiting friends. We stayed at the lake where I had been going my whole life, and we spent days soaking up the sun on the porch of the family cabin.

Time has passed since Teco and then Seera left my side and this earth, but when I pull the Mini out of the garage and go on drives—long and short, near and far—I picture them with their eyes on the scenery, noses smelling the breezes, happy to be near me, wherever I'm going. \*\*M\*\*M



## **2019 MOTORING CHALLENGE POINTS GUIDE**

**Register to Play!** | MossMotors.com/Motoring-Challenge | Here you'll find instructions, details, and more!

>> Destinations/Scenes		Out of This World			> Moving Targets	
Antique store	□ 1	ot. (Signs or scenes of oute	(Signs or scenes of outer space)		Biplane	□ 4 pt
Basketball court in use	□ 1	ot	•	_ 1 pt.	Blimp	□ 9 pt
Beehive	□ 1				Bulldozer	□ 2 pt
Best friend's house	_	ot		_	Carnival ride	☐ 3 pt
Chance encounter		ot			"Just Married" car*	5 pt
Cheap! used car lot		ot.			Skater	□ 2 pt
City limits*		ot.			Schoolbus	□ 3 pt
DMV (ya gotta go sometime!)*		ot			Seaplane	□ 5 pt
Fall Foliage	_ 1	nt		- "	Snow Skier	5 pt
Favorite Mexican restaurant*	□ 1	nt. Writer's Koad Block	-		Water Skier	□ 5 pt
Flea Market*	□ 2	nt. Action verb	L	☐ 1 pt.	Wienermobile	□ 9 pt
Fruit orchard	□ 1	Alliteration	L	☐ 1 pt.		
Garaj Mahal	□ 3	nt. Anagram (4)		☐ 4 pt.	State/Province Parks and Histor	
Hardware store	_ 1	Assonance (3)		☐ 3 pt.		
Holiday lights	2	ot. Conflict (2)		☐ 2 pt.		
Horse ranch	□ 3	t Foresnadowing (5)		□ 5 pt.		3 pt
Hot yoga studio	_	ot. Malapropism (4)		☐ 4 pt.		3 pt
Manufacturer of fun		ot. Metaphor		☐ 1 pt.		
Mom 'n' Pop shop		Needs editing (3)		☐ 3 pt.		3 pt
Music store	□ 2	()xymoron (3)		☐ 3 pt.	<del></del>	3 pt
Off the beaten path	□ 1	Portmanteau (3)		☐ 3 pt.		3 pt
Outstanding architecture	□ 4	Simile		☐ 1 pt.		3 pt
Perfect timing	□ 5					3 pt
Place the locals go	□ 1	•	· • 1		Abb Nestalais	
Pumpkin patch	_	•		□ 1 n+	Nahhh Nostalgia	□ 0 ml
Railroad trestle	□ 3			☐ 1 pt.	Brings back memories	☐ 2 pt
Rose garden	□ 3 □ 1			☐ 1 pt.	Came here as a kid	☐ 1 pt
Scenic route*	□ 1 □ 2			☐ 1 pt.	Don't make these like they used to	☐ 1 pt
				☐ 1 pt.	High school football game	☐ 1 pt
Sign of respect* Silly selfie	□ 2 □ 3			☐ 1 pt.	My first car	☐ 1 pt
•			Armageddon	☐ 1 pt.	My first dream car	☐ 3 pt
Slice of Heaven	□ 4	N Rat Vau'va Navar Ca	en This Before		Rite of passage	☐ 2 pt
Summit	□ 6	Jl.		_ 5 pt.	Scene from a song	☐ 3 pt
Tailor*	□ 2				What I wanted to grow up to be	☐ 1 pt
Thai restaurant		λι.			National Parks Services Location	ns
The beach				_ 0 pti	Wilding and Control 2004	5 pt
Toy store	_	ot. Mother Nature at He	er Finest			
Trampoline in use						
Victorian home		ot		_ 3 pt.		
Video store (good luck!)	□ 5					J pt
Volleyball court	_ 1 _			_ 3 pt.	Challenge Spirit Bonus	
Wildlife reserve*	□ 3	ot		_ 3 pt.	(Moss jury awarded)	
<b>▶</b> Best Bumper stickers!		> Moss Motors Locati	ons			_ 15 pt. (max
<u>.</u>		ot. Goleta, CA Warehouse &	t HQ	□ 5 pt.	>> Recruiter Bonus!	
		ot. Petersburg, VA Warehou	ise -	□ 5 pt.	Challenge new Challengers	□ 2 pt
	2	)T.				

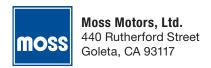
■ 25 Points: Moss Motors Driving Cap

After you've registered and earned 25 points, send an email to MotoringChallenge@MossMotors.com with a photo of your point sheet or a link to your Trello board, along with your home address, and we'll send you a free hat!



#### Prizes (Most Points)

- Tist Place British Car: \$250 Moss Gift Certificate
- ▼ 1<sup>st</sup> Place Miata/MX5: \$250 Moss Gift Certificate
- \* Next 50 runners-up \$50 Moss Gift Certificate



PRESORTED STANDARD U.S. POSTAGE PAID MOSS MOTORS, LTD.

