MOG LOG

NOVEMBER 2020

The only car club in the area devoted to a car currently built by Britons, for a manufacturer owned and managed partially by Britons.....THE British car club!

MORGAN MOTOR CAR CLUB

PRESIDENT
EDITOR
TREASURER
MEMBERSHIP CHRMN.

Judi Boyles
8422 Garland Road
Dallas, TX. 75218-4333
214/321-1648

secretarytexmog@att.net

WEB ADDRESS:

www.TEXMOG.COM

REGALIA
Jeff Smith
2720 Wexford
Plano, TX. 75093
jsmith6844@gmail.com

HISTORIAN
Bill Boyles
8422 Garland Road
Dallas, TX. 75218-4333
214/321-1648
secretarytexmog@att.net

This is to acknowledge that many of our "research" articles come from the Texas MG Register Club's *"BACKROADS"* newsletter and the Washington, D.C. Morgan Club's *"ROUGHRIDER"* newsletter.

To steal ideas from one person is plagiarism, to steal from many is research.

THANKS YA'LL

2021 DUES REDUCTION

We finally got all the board members, officers, and appointed executives together to review our dues structure and the reduced activity during the past year.

After reflection, dues are temporarily reduced for 2021 to $20.00.

Also, printed MOG LOGs are presently not an option. Suspending printing saves money during the virus and also the health of the Editor (and the Historian) from having to go to the printing center. The printed issues may be restored soon and activities planned again.

This is perhaps the lowest dues of any Morgan Club that publishes a newsletter, much less monthly by MMCC.

We have a slight advantage over the others in that our car is still produced after 112 years.

But then we have no National Club to send dues to – or support. Stay with us for 2021.

RUNNING On.....

AND STILL RUNNING FASTER THAN COVID-19....HOPE YOU ARE TOO....

Like everyone, my mask has become a fixture on my face, I even find myself driving in the car with it on. If the weather ever turns cooler, that mask might be handy to keep my face warm and free from wind burn. Who am I kidding, 82 in mid-November doesn't seem to yell of frosty mornings and chilly refreshing November afternoons. DST has come upon us with a crash, along with the leaves falling like mad all over everything Does anyone want to get away from it all with a nice afternoon drive? I sure do.

Walking Archee, my dog, yesterday and trying to come up with something pithy to say to all of the readers I just drew a blank. At two in the afternoon the sidewalks and streets were empty of other persons airing their dogs or just walking. We are all holed up even on the prettiest days. One neighbor was having a masked and socially distanced group in his back yard, looked like fun. It's been a good thing to have sports on TV to watch. The baseball, basketball, football and auto racing have filled much time, but now it looks like we are into rodeo, ice skating, bowling, random golf tournaments, and corn hole to occupy our minds.

Aren't we glad to see our favorite advertisements on TV again? That is except for the few I can't stand like the GMC truck Christmas present one. Olshan, been in business for over 8 years and has been saying that for at least 10, Joe Namath pushing senior medical insurance, and Tom Selleck encouraging you to get reverse mortgages are a return to normal. I have begun to analyze certain commercial messages though, but that is another topic.

See, I managed to fill the page with random thoughts.

Wish I could say I will see you at the next dinner meeting, well I can say that but we just don't know when. STAY WELL – DRIVE YOUR CARS IF YOU CAN

THE PREZ, etc.

the Prez

MORGANS...ROAD CANDY

CALENDAR OF EVENTS

NOTE: New entries and revisions are in italic type
Entries in bold type are official MMCC events

Check the Calendar entries often for changes of dates, events and other alterations or updates

2020

Nov. ? Dick Hawkins host

Dec. ?

Maybe a drive to the park area where we go for ABCD for a BYO-food, drink, and chairs to sit 6' apart would be fun. We could park in the food truck parking lot and sit on the grass facing the lake. Let me know if anyone is game for this on a Saturday or Sunday afternoon in November or December.

Secretarytexmog@att.net

Small-Block In 1955, Chevy introduced the small-block, a high-compression pushrod V-8. It displaced 265 cubic inches (4.3 liters) and had 162 to 195 gross horsepower. More than 100 million have been made, and 62 years later, the small-block continues to power Camaros, Corvettes, pickups, and SUVs. Today's version features variable-valve timing, direct fuel injection, and cylinder deactivation, and the only resemblance to the original is its signature 4.4-inch bore spacing.

SPEEDING

An ode to our favorite form of civil disobedience. by P.J. O'Rourke

Many are the blessings of the automobile: independence, mobility, freedom. But the greatest of these is freedom! While going too fast.

Speeding is art. At 120 mph, you're in Vincent van Gogh's *The Starry Night*. At 60 mph, you're in Ohio.

Speeding is poetry. "Triumphing over Death, and Chance, and thee, O Time," as John Milton, lead-foot-*avant-la-lettre*, put it in his poem "On Time."

Speeding is literature. "... a fast car, a coast to reach, and a woman at the end of the road," per Jack Kerouac.

Speeding is the source of America's greatest contribution to global culture—the car chase.

Without the car chase, the world would lack for touchstones of beauty, form, grace, and perception. The Keystone Kops. *Bullitt*. The Aston Martin DB5 in *Goldfinger* driven by the only real James Bond, Sean Connery. The happy ending of *Thelma and Louise*. *Mad Max*. *The French Connection*. *Smokey and the Bandit*.

The 1970s were the golden age of speeding. Credit goes to the two great patrons of the Speeding Arts, Richard Nixon and Jimmy Carter, who instituted and enforced the creative stimulus of the double-nickel speed limit [see "Autobahn of America, The"].

Even before that new limit was established, we witnessed the era's most moving (and fastest-moving) exhibition of performance art. The Cannonball Baker Sea-to-Shining-Sea Memorial Trophy Dash [see "C"] was composed and directed by *Car and Driver*'s own Brock Yates and Steve Smith and acted out between the Red Ball Garage in New York and the Portofino Inn in Redondo Beach. Running time: 35 hours, 54 minutes.

"Stay Alive—Drive 55" also brought speeding to the masses. Lowering highway speed to the pace of a fat arthritic cheetah let even the most timid and normally law-abiding American feel the rebel thrill of being Robert Mitchum in *Thunder Road*.

And it built character. Speeding was a moral commitment to nonviolent—unless you crashed—civil disobedience. Put the pedal to the metal and you were fighting for Truth (cars are fast), Justice (speed traps are bogus), and the American Way (way, way faster than 55 mph). Every speeder was a Mahatma Gandhi with the wind blowing through his hair, if Gandhi had had any hair.

But that was long ago. Now speeding is dead.

Speeding wasn't killed by police radar or laser guns or automatic cameras recording license-plate numbers. Speeding was killed by math. There are 2.7 million miles of paved road in the U.S. and 263.6 million registered motor vehicles.

When those vehicles are all on the road—and they all are—just look at the traffic! Divide miles of road by number of vehicles and the space you have to drive too fast in is 54 feet.

The problem was evident as early as 1994 in the O.J. Simpson white Bronco low-speed chase.

There are a few lonely country roads left. But they're full of hikers, joggers, bicyclists, and participants in Ironman triathlons. Fitness fanatics are swimming in the roads.

Yes, you can go to the track. And the hamster can go to its wheel. And the gym rat can go to his treadmill and dial it up to "the Flash." It's fun. But it's not freedom.

illustration by VIN GANAPATHY

FYI

With a majority of states and businesses mandating face coverings to prevent the spread of the novel coronavirus and more research emerging that supports wearing them, masks have become an essential commodity.

Now, masks of all shapes and styles as well as other types of reusable coverings can be easily purchased online and in a number of stores nationwide.

But the increased dependence on the coverings has sparked countless questions. Chief among them: How do I take care of my mask so it continues to be as effective as possible?

"If you're reusing a mask over and over again without caring for it in between, that becomes just as dirty as you touching something dirty and then putting it back on your face," said Jade Flinn, a nurse educator for the Biocontainment Unit at Johns Hopkins Medicine.

What are the general guidelines for proper mask care?

For cloth masks, which have exploded in popularity in recent months, all three experts say daily washings are a must.

"Treat your mask like your underwear," Flinn said. "You want to change it every day."

What happens if my mask gets sweaty?

Beyond saliva, face coverings, especially cloth and surgical masks, can collect sweat. And a moist mask is a compromised mask, Knight said.

"You want the air to pass through the mask, because you do not have a tight seal around the face like a fitted N95 does," he said. "If the mask is saturated with fluid, then that fluid is in the fabric of the mask, and air is not going to pass through that."

Instead, Knight said, air may start flowing through the gaps between the edges of the mask and the wearer's face.

"That defeats the purpose," he said. "While yes, it will still catch any contamination coming from your mouth to some extent, it's just not as effective."

How do I wash my cloth mask?

The widely recommended method, which has also been promoted by the Centers for Disease Control and Prevention, is simple: Throw the dirty mask in with your regular laundry.

In line with the CDC's guidance, all three experts said to run your washing machine using warm or hot water. Some washing machine models also have a sanitizing cycle.

Regular laundry detergent is an effective cleansing agent, but Mullans pointed out that certain detergents can leave residue on fabric. This may lead some people to develop skin irritations. For those with sensitive skin who could also be more at risk of developing "maskne," or acne caused by wearing a mask, Mullans suggested buying a fragrance-free, hypoallergenic detergent. (She uses Arm & Hammer's Free & Clear for sensitive skin.)

Cloth coverings can also be properly cleaned through hand-washing. The CDC recommends that people use bleach intended for disinfection, mix a solution with cool or room-temperature water and soak the mask for five minutes. The mask should then be rinsed thoroughly with cool or room-temperature water.

Another way to hand-wash calls for warm or hot water and laundry detergent, the experts said.

But Knight said it still may be best to use a washing machine if possible.

"The challenge is there's no one hard and fast rule," he said, noting a lack of large-scale studies on the best hand-washing methods for decontaminating masks. "There's so many different ways to hand-wash. Some people are scrubbing very vigorously, some people are not, some people have stronger hands. If you hand-wash an item five times, you'll probably wash it five different ways."

Once your mask is clean, stick it in your dryer on the highest heat setting. "We know that bacteria and viruses, they really don't like that higher heat," Flinn said. In the absence of a dryer, masks can be air-dried.

What's the best way to store a mask?

Flinn encouraged people to make sure clean masks are stored in places where they cannot potentially be exposed to contaminants, or spread any contaminants already on them.

For example, masks should probably not be hung on the rearview mirror of a car, Flinn said. "If I'm hanging that in my rearview mirror and then I have the air conditioner blasting, is what's on that mask now blowing around inside my car?" she said.

A similar strategy should be applied to short-term storage, such as when you need to briefly take off your mask while outdoors, Knight said.

"You just have to remember that the outside [of the mask] is likely contaminated," he said. "You want to remove the mask from the ear loops. You can fold it, keeping the inner parts touching each other."

Knight stressed that people must remember to wash or sanitize their hands immediately after handling their masks.

"If you covered the outside of your mask with coal, for example, or some fluid that's easily transferrable and you handled that mask, by the end of the day your hands would be completely covered with it. Because we cannot see the contamination, it's easy to forget that it's there."

How do I know if my single-use mask needs to be thrown out?

Examine it closely, Knight said. If it is visibly soiled or smells, you should no longer be using it.

Flinn said people should also pay attention to the quality of the mask. "One of the things that we see, especially in the surgical masks or the N95 masks, sometimes the ear loops start to degrade, so it's not creating that good fit," she said. "You can see the fabric itself starts to fray." That means it is time to switch to a new mask.

allyson.chiu@washpost.com

BUYING SECONDHAND

Morgan

ALTHOUGH there is only a small, and specialized, demand for Morgan sports cars, there is one very good reason why we should survey the marque in this series – that the waiting list for new ones is about seven years long! It would be easy enough to suggest that Morgan, at Malvern Link, are building yesterday's cars for today's customers – it would be more accurate to suggest that at the moment they are building them for mid-1970s customers.

The current Morgan is a classic while it is still in production, for the general design, chassis layout, and styling have not altered since the first four-wheeler models were introduced in 1936, though there seems to have been almost constant change in engines, and transmissions. In every way, a Morgan is a traditional type of sports car built for traditional customers, and it would be fair to say that it has no competitors. If you are in the secondhand market, either you want a Morgan or you do do not – there are no half measures.

To keep this survey down to manageable lengths, however, we have limited analysis to the 1.6-litre four-cylinder models built since 1968, and the 3.5-litre Rover V8-engined car announced later in 1968. Both cars are still in production.

Defining the pedigree

In the period considered, there are Morgan 4/4s and Morgan Plus 8s – four-cylinder and eight-cylinder cars respectively. Although the wheelbase of the eight-cylinder Plus 8 is 2in. longer than that of the 4/4, all cars are built on the same separate chassis frame, which is of simple ladder-type construction, with those famous, and unique, Z-section side members (not channel, or box-section).

The front suspension of all Morgans is a coil and sliding pillar system (invented before the First World War, and only changed in detail since then), which is nominally independent, but so very stiffly sprung as not to make much difference, while rear suspension of the live axle is by half-elliptic leaf springs, and lever-arm hydraulic dampers.

Steering on all cars is by a worm and nut system, there are front wheel disc brakes and rear drums, and centralized chassis lubrication is ensured by a once-daily dab on a little button in the driver's footwell, which actually forces a modicum of engine oil through pipes to parts of the front suspension.

In 15 years, total 4/4 production stands at around 4,000 cars, while about 2,300 Plus 8s have been built. In almost every week at Malvern Link, nine or 10 new cars are completed.

Engines

In January 1968, the 4/4 1600 (an updated version of the 4/4 Series V) was introduced, with two versions of the cross-flow 1,599 c.c. Ford Kent engine, one having 64 bhp, the other (the Competition) 84 bhp, and these were backed by a four-speed, all-synchromesh, single-rail Ford gearbox. From the autumn of 1970, however, the lower-powered engine was dropped.

There was no other change until the beginning of 1982, when Morgan dropped the Kent engine, and introduced a choice of engines in its place. Customers could either have the 96 bhp Ford CVH single-cam engine of 1,596 c.c. in carburettor form (as used on the original Escort XR3 and – now – the 1984 model Fiesta XR2), or the Fiat 131 twin-cam of 1,585 c.c. and 98 bhp.

The Plus 8 was conceived around the light-alloy Rover V8 of 3,528 c.c., which has been used in every car built. In its original form it was rated at 143 bhp, but from the beginning of 1977 the uprated SD1 type of engine, with 155 bhp (DIN) was fitted instead. In each case, the engines have had two SU carburettors, and been identical in all but detail with the units being fitted to Rovers of the day.

Transmissions

All the Ford-engined 4/4s have had the excellent all-synchromesh Ford gearbox, and from the spring of this year the latest Sierra-type of five-speed unit became standard. The rare Fiat twin-cams, for their part, have the appropriate Fiat gearbox, which has always had five speeds.

The Rover-engined Plus 8 transmission situation is more complex. At first, the Plus 8 was introduced, with the seperate, centrally-mounted, Moss gearbox (from the obsolete Plus 4) retained. This had four-speeds, no synchromesh on first gear (and precious little on the upper ratios), and was rigidly connected to the engine by an alloy tube.

From May 1972 this box was discarded, to be replaced by the four-speed, all synchromesh, Rover 3500S gearbox, which was in unit with the engine. Finally, from January 1977, at the same time as the uprated SD1-type engine was standardized, the new five-speed all-synchromesh SD1 gearbox was also fitted. This is still standard on current-model Plus 8s.

Body style and choice

All these Morgans have the same basic style of body shell, which is 1930s in outlook, and is built up on a wooden skeleton frame. There are two-seater open sports versions of all types, which have a small stowage area behind the seats. However, there is also an open four-seater version of the four-cylinder cars only, the rear seats being placed up above the back axle. Because of the rear seat position, there is no luggage space of any nature in a four-seater Morgan.

SPECIFICATION AND PERFORMANCE

	4/4	Plus 8 4-speed	Plus 8 5-speed
Tested in *Autocar* of:	Not tested	12 Sept 1968	15 July 1978
Specification:			
Engine size (c.c.)	1,599	3,528	3,528
Engine power (DIN bhp)	86	143	155
Car length	12ft 0in. (4/4)	12ft 3in. (Plus 8)	
width	4ft 8in.	4ft 9.5in.	5ft 2in.
height	4ft 4in.	4ft 4in.	4ft 4in.
Boot capacity (cu.ft.)	2-seat 4.5 cu.ft., 4-seat Nil		
Turning circle	– approx 40ft 0in. –		
Unladen weight (lb)	1,625	1,979	2,128
Max. payload (lb)	430	430	430
Performance:			
Mean maximum speed (mph)	102*	124	123
Acceleration (sec):			
0-30mph	–	2.3	2.2
0-40mph	–	3.5	3.5
0-50mph	–	5.2	4.6
0-60mph	10.0*	6.7	6.5
0-70mph	–	8.6	9.0
0-80mph	–	11.8	11.4
0-90mph	–	14.5	15.4
0-100mph	–	18.4	20.2
0-110mph	–	25.7	31.0
0-120mph	–	42.9	–
Standing ¼-mile (sec)	17.2*	15.1	15.1
Consumption:			
Overall mpg	31*	18.3	20.5
Typical mpg – easy driving	40*	24	26
– average	34*	20	22
– hard driving	28*	17	18
Mpg at steady 70 mph		26.3	23.9
Fuel grade	4-star	4-star	4-star
Oil consumption (mpp)	n.a.	500	600

**Estimated figures*

CHASSIS IDENTIFICATION

	Series	Chassis No.
4/4 1600 models		
January 1968: Model introduced to replace Series V model, chassis and body the same, but engine became 1.6-litre cross-flow Ford Kent unit.		
First chassis numbers: 2-seater	B	1600
Competition 2-seater	B	1605
November 1968: 4-seater version of Competition introduced at: Competition 4-seater	B	1740
October 1969: Plus 8 facia style adopted at:		
2-seat	B	2014
4-seat	B	2031
Competition 2-seater	B	2017
November 1970: Standard power engine (64 bhp) discontinued, all cars now with 84 bhp. From:		
2-seat	B	2276
4-seat	B	2081
January 1974: Models continued unchanged. Chassis numbers at this point:		
2-seat	B	3198
4-seat	B	3198
January 1977: Aluminium-panelled body style optional. From:		
2-seat	B	3905
4-seat	B	3905
January 1982: Change of engine, from Ford Kent ohv, to choice of Ford XR3 (ohc) or 1.6-litre Fiat twin-cam. At chassis number	B	C6000 (Ford) F6000 (Fiat)
March 1983: 5-speed Sierra-style gearbox on Ford-engined cars, from: XR3-engined cars	B	C6255
Plus 8 Model		
September 1968: Rover V8-engined model introduced, as direct replacement for TR-engined Plus 4. With 2 in. longer wheelbase than Ford-engined 4/4 but same basic style/engineering. With cast-alloy wheels, only 2-seater body. Original cars with separate 4-speed Moss gearbox:	R	7001
May 1972: Moss gearbox discontinued. Cars now built with Rover 3500S all-synchro box in unit with engine. No style changes. From:	R	7482
October 1973: Higher axle ratio (3.31:1-vs-3.58:1) and wider tracks, from:	R	7660
October 1975: Sports lightweight version of same body style made available, from:	R	7983
January 1977: Sports lightweight discontinued, and light body panels now optional for any order. From:	R	8186
Uprated (155bhp) Rover SD1 engine, and all-synchro 5-speed gearbox adopted, with different facia, bumpers, etc. From:	R	8200
March 1982: Automatic choke Stromberg carburettors on Rover engine, from:	R	9067

ENGINE AND BODY AVAILABILITY

Engine	Ford Kent ohv	Ford Kent ohv	Ford CVH ohc	Fiat Twin-Cam 2 ohc	Rover V8 ohv	Rover V8 ohv
(DIN bhp)	64	86	96	98	143	155
2-seater Open	1968-70	1968-81	1982-83	1982-83	1968-76	1977-83
4-seater Open	1968-70	1969-81	1982-83	1982-83	–	–

Note: The same basic body style has been used throughout the 15-year period. Morgan have never supplied the Plus 8 as a four-seater.

Opposi
There is
externa
distingu
Plus 8 (
the 4/4
picture
alloy w
the Plus

APPROXIMATE SELLING PRICES

On this occasion, we cannot publish charts of values, for two main reasons. One is that there is still a multi-year waiting list for new Morgans (more pronounced on four-cylinder rather than Rover V8-engined models), which means that unscrupulous buyers can sell a delivery mileage 4/4 for more than they paid for it. The other is that Morgan values have more to do with condition than with age.

4/4 models: A Morgan restoration expert, Melvyn Rutter, of Little Hallingbury, near Bishop's Stortford, tells us that almost *any* car with a current MoT certificate, that is a reasonable runner, is worth more than £2,750, but that any early 1970s 4/4 in good average condition and in regular use is worth more than £4,000. A late 1970s car is certainly worth up to £6,000, while a very recent XR3 or (more rarely) Fiat-engined 4/4 usually sells for up to £8,000. The current new-car price of a 4/4 2-seater, for those who prudently ordered some years ago, is £7,861 for an XR3-engined 2-seater – we have certainly heard of delivery-mileage premiums of £500 to £1,000 being achieved in recent months.

Plus 8 models: The same sort of reasoning applies to these cars, as to 4/4s, except there no longer seems to be a delivery mileage premium, as the market for large-engined Morgans has sagged in recent years. Nevertheless, a barely road-legal Plus 8 will usually fetch £3,000, complete with serious body rot, while the other extreme is the £8,000-£9,000 usually needed to buy a low-mileage 1981 model. You should not need to pay up to £10,000 for any secondhand Plus 8, unless it is very special, in magnificent condition, or is literally straight out of the showroom. The Plus 8's new-car price, at the time of writing, is £10,496.

SPARES PRICES

	4/4 Ford Kent	4/4 Ford XR3	4/4 Fiat T.C.	+8 Rover V8
Clutch pressure plate (new)	– *	– *	£22.88	£68.50
Clutch driven plate (new)	– *	– *	£30.78	£38.75
Propellor shaft universal joint repair kit	£9.17	£9.17	£9.17	£11.62
Back axle assembly (exchange)	£355.00	£355.00	£355.00	£495.00
Brake pads – front (set, new)	£14.45	£13.65	£13.65	£17.65
Brake shoes – rear (set, new)	£16.26	£16.26	£16.26	£16.26
Suspension dampers – front (pair)	£27.00	£27.00	£27.00	£27.00
Suspension dampers – rear (pair)	£55.00	£55.00	£55.00	£55.00
Radiator assembly (new)	£107.55	£115.00	£115.00	£151.73
Front wing panel – Steel	£127.92	£127.92	£127.92	£140.49
Front wing panel – Aluminium	£186.58	£186.58	£186.58	£203.28
Bumper, front (new)	£82.76	£82.76	£82.76	£82.76
Bumper, rear (new)	£82.76	£82.76	£82.76	£82.76
Windscreen, laminated (2-seater)	£153.45	£153.45	£153.45	£153.45
Windscreen, laminated (4-seater)	£165.15	£165.15	£165.15	n.a.
Exhaust system complete	£124.41	£106.54	£115.14	£330.50

** Parts supplied through a Ford dealer, not by Morgan. All the above prices include VAT at 15 per cent.*

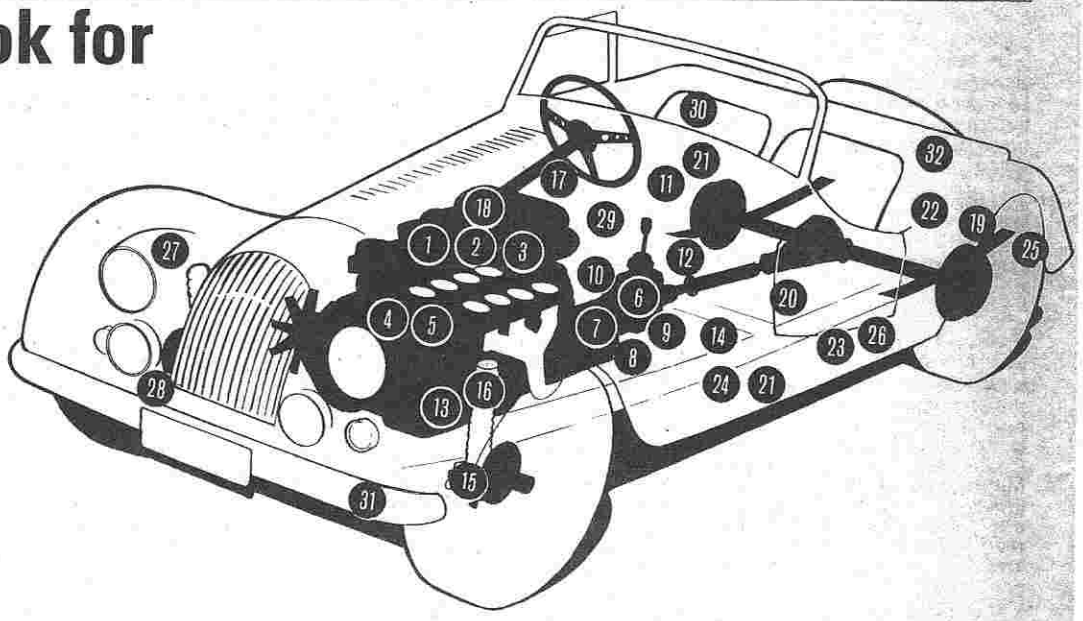
When the cars were introduced, all had steel skinned bodies as standard. From the autumn of 1975, however, a Sports Lightweight version of the Plus 8 became available, in which most skin panels were in aluminium instead of pressed-steel. From the beginning of 1977, however, the Sports Lightweight was dropped as a separate model, and henceforth all Morgans could be provided with aluminimum panels as an option.

The choice of secondhand Morgans is strictly limited, for something like half of the 500 new cars built every year are exported.

In general, by the way, service is best gained by visiting a Morgan dealer, or a specialist restorer. Parts supply is mainly good (the cars are still in production, of course) but some items from older versions are both difficult to find and expensive. The Morgan Motor Co build new spares if they see a continued demand for parts. Engine, gearbox, alternator and starter motor replacements are not available from Morgan themselves.

What to look for

Almost every new Morgan is bought by a private motorist, but it is a sad fact that many are neglected during their early, and middle, years. Although the Morgan's design is simple in many ways, so is the method of manufacture, and many details may require attention after the first few years.



Mechanical

In general, engines fitted to these Morgans have quite an easy time, for the cars are light and, to be frank, do not have superlative traction. All types should last up to 100,000 miles before needing a major overhaul, but look out for noisy valve gear on the Fords (1) and Rovers (2), and for any signs of premature corrosion around the Rover V8 (3).

The Plus 8s tended to be undercooled at first, so look for any signs of overheating on earlier cars (4). At the same time, be sure that the engine oil is not getting too hot (5), which is often a sign of previous hard usage, or a drop in pressure.

We do not recommend Plus 8s with Moss boxes (6), for they have very light synchromesh and a slow change, even when new, and are a real chore when old. The lack of synchromesh will make itself clear in a test run (7). Note that spares for this box are very difficult to find these days. The Rover four-speed box always feels nicer than the SD1-type five-speed, which may be quite notchy (8), but the synchromesh should still be effective in either case (9). You should have little cause to complain about Ford boxes – if there are synchromesh problems, the box is certainly in its old age (10).

The brakes, in general, are well up to the job, but if there is no servo assistance, we recommend that this should be added at a later date (11). There is quite a history of handbrake failure, due to the cable nipple stripping out at the lever end of the assembly (12).

The story on chassis and suspension items is that rust should not be a serious problem, but cracking may occur around the engine mounting holes in the side-members (13), and where the cross-members are welded to side-members (14), with another trouble spot being identified at the bottom of the suspension pillar mount (15).

Look for front suspension wear if the daily dab of engine oil lubrication has not been carried out (16). This manifests itself in steering wobble at about 50 mph (17), which is not helped if the steering box has developed wear (18). Front and rear dampers should still be very hard, but have a look at rear leaf springs, which may sag, and break a leaf (19).

Body and trim

The body frame is mainly of unprotected wood – ash or ply – and may rot, especially around door hinge posts (20), sill boards (21), rocker panels (21) and elbow rails near the rear wheel arches (22). Rocking the doors, when half open, can tell you a lot about the condition of the frames, and the hinge posts.

Aluminium panels last longer than steel equivalents. With steel panels, look for rusting around the side panels under the doors (23), the base of the wrap-over scuttle panel (24), the rear body panel in splash areas (25), and the bottom of the door skins themselves (26). Another obvious rust spot is the joint between headlamp pods, and the front wing pressing (27), while the wings themselves eventually rot at their joints with the rest of the bodyshell (28).

Restored cars (many already have been, when less than 10 years old) are usually a good buy, for they have often received more pre-assembly attention to the body framing, and to the panel skins themselves (29).

Interiors suffer if they have been left open to the rain often, but most cars were built with vinyl seats and panels which seem to last better. Leather, in this respect, is a mixed blessing (30).

You may find that some chrome fittings have rusted quite badly (31), but at least replacements are easily available, and you may also need a new hood and/or a tonneau (32), which can also be found. Hoods, incidentally, are best if individually made and fitted.

As a final point, do not buy a modern Morgan unless you are something of a masochist who doesn't mind discomforts, howling draughts around ill-fitting side curtains, and other ailments like "Morgan elbow" caused by adopting the approved driving position and getting your clothes wet. Expect to have to do more maintenance, and restoration, than with more modern cars – and for that reason, we hope that you will get to know the location of your nearest Morgan specialist. □

This article first appeared in MOSS MOTORING magazine. Reprinted here with permission of Moss Motoring Editor David Stuursma and the author.

WHITWHAT?

Michael Grant, Moss Motors

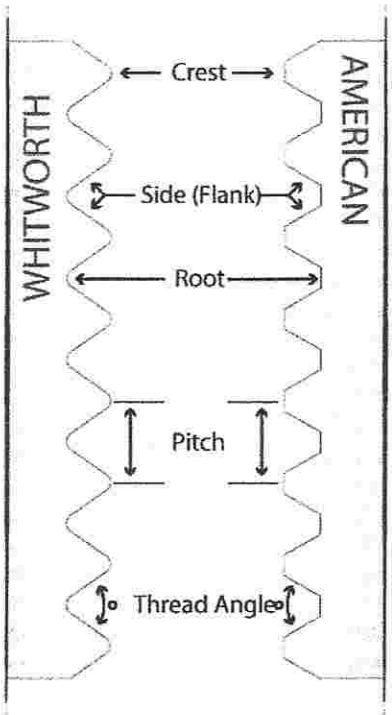
A good many of the cars we deal with don't use nuts and bolts that can be purchased from the corner hardware store. Much maligned and misunderstood, Whitworth hardware used on older British cars has quite an interesting history.

Threaded fasteners go back a long way. In 1568, the first practical screw cutting machine was invented by a French mathematician named Jacques Besson. After that, things took off... after a fashion. By 1611 the idea had caught on in England well enough for it to be mentioned in a book, the significant point being that the companion piece to any screw—the nut—was mentioned as well. While the concept was basically sound, in practice there were a few bugs to be worked out. In the 1600s putting something together was a real chore. Once you found a bolt you liked, you had to find a nut, and that was a matter of chance since nobody was making consistent threads. Once you found a nut that fit (well, sort of) the nut and bolt were tied together with string.

This happy chaos continued until well into the industrial revolution, when Henry Maudslay perfected a lathe that could cut a consistent thread pitch into the shaft of a screw. This made it possible to make large numbers of identical screws. Making threaded fasteners on a lathe is time consuming, and therefore expensive. In 1850 a man from New York named William Ward perfected a system for forming the threads on a bolt by heating it to 1600 degrees Fahrenheit, and then rolling it between two grooved dies. The grooves on the flat dies were forced into the bolt, and the threads were formed as the bolt rolled between the fixed and the moving die. This same basic system is used today, the only difference being that the bolts are not heated before being rolled. "Cold" forming produces much more uniform threads, allowing closer tolerances, and because the bolts are not heated, they are stronger.

The man responsible for the development of the first standards for the production of threaded fasteners is none other than Joseph Whitworth. In 1841, his paper "A Uniform System of Screw Threads" set forth a concept that was to revolutionize manufacturing:

2) The angle between the side of one thread and the adjacent thread should be 55 degrees.



3) Both the crest and root of each thread should be rounded with equal radius (r).

4) The relationship of the pitch to the radius of the rounded portion of the thread is defined by a ratio of 1/6th; in other words, the radius r = (1/6) x (pitch).

Finally there was a system that would allow the fasteners used on one type of machine to be replaced with another "standard" fastener. The logic was hard to beat, and England adopted the system to the extent that by 1881 it was the effectively the "British Standard."

The Whitworth System was used as proposed for bolts and screws from 1/8" to 4 1/4" in shank diameter up to 1908, when an additional thread form was proposed—British Standard Fine (BSF). Presented by the British Engineering Standards Association, BSF was identical to the original Whitworth form except that the pitch was finer—meaning more threads per inch. Now, a bolt with a diameter ¼ inch could have either 20 threads per inch (BSW) or 26 threads per inch (BSF). The advantage of the finer thread pitch is twofold. A fine thread bolt is about 10% stronger than a coarse thread bolt of the same size and material. Fine threaded fasteners also have greater resistance to vibration. Those of you who have worked on cars with Whitworth hardware will have noticed that almost all the hardware is BSF for these reasons. Why use any coarse threaded bolts at all? Coarse thread fasteners are well suited for use in tapped holes in material softer than the bolt (such as studs in aluminum cylinder heads), and they are

easier to assemble. It's almost impossible to cross thread a coarse threaded fastener by hand.

For sizes smaller than 1/8", the British adopted a Swiss Standard thread form for small screws and renamed it British Association (BA) thread. This thread form was adopted in 1903. Like the Whitworth form, it has rounded crests and roots, but the angle between adjacent faces of the screw's threads is 47 ½ degrees. Instead of being sized by fractions of an inch, they are numbered 0BA, 1BA, 2BA and so on up to 22BA. In the BA system the larger the number, the smaller the screw. Other than that the system is analogous to our machine screw system, where numbers are used (#6, #8, #10 and so on).

A question often asked is why didn't the US adopt the Whitworth System? As it turns out, we did. By 1860, most of Europe and the US were using the system. In 1864, however, William Sellers was instrumental in persuading the Franklin Institute in Philadelphia to set up a committee whose prime goal would be to set up national (meaning American) standards. Sellers, who made machine tools, was dissatisfied with the Whitworth System on several points; the 55-degree angle was hard to gauge and the rounded threads caused an uncertain fit between the nut and bolt. He also argued that the Whitworth threads were weaker than a system he proposed where the angle between the opposing faces was 60 degrees (not Whitworth's 55), and the crests and roots were flattened. The Franklin Institute adopted Seller's system, and by 1900 it was in use throughout the US and much of Europe. The American system had both fine and coarse threads called, logically enough, American National Fine (ANF) and American National Coarse (ANC).

The Whitworth system is further complicated by its tool size designations. American tools (and European) are sized by the head of the bolt or the size of the nut. An American 1/2" wrench fits a nut or bolt with a head 0.500" across the flats. A Whitworth wrench is sized according to the diameter of the shank of the bolt, not the head. A ¼ W (Whitworth) wrench fits a bolt with a shank ¼" in diameter. The jaws of this ¼ W wrench will fit a bolt head or nut 0.525", which is a bit larger than a 1/2" American wrench. As if that wasn't enough, in 1924 the British decided that the heads of the Whitworth bolts were too large, so they were downsized without changing the diameter of the shank.

The "new specification" bolts had heads that were one standard size smaller so that the old tools could still be used—otherwise the literally millions of tools in use would be rendered obsolete. The jaws of a ¼ W wrench are 0.525" wide, and will fit pre-1924 bolts with a ¼" diameter shank. The same wrench will also fit the head of a post-1924 BS standard bolt with a 5/16" diameter shank. To enable the tools to be selected easily, they are marked with both sizes. The ¼" W wrench described above will be stamped "¼ W"and "5/16 BS", the BS in this case standing for "bolt size."

The Whitworth, BS and BA wrenches are unique—there are no American counterparts. Use of the closest American wrench will often result in the rounding off of the corners of British nuts or bolts, with intense frustration leading to the use of pliers or the ever-popular Vice Grips.

The Whitworth System, with its associated BS thread system, was in use by British automobile manufactures until 1948, when Canada, the US, and the United Kingdom adopted a Unified Thread System which incorporated features of Seller's and Whitworth's systems. Actually, the push to standardize an international thread system was initiated during the First World War. Both America and England shared much of the same machinery and equipment, making interchangeable parts essential. The issue was the subject of various international conferences from 1918 to 1948, with the Second World War playing the role of catalyst for the adoption of the Unified System. The Unified System was adopted by the British automobile industry on a large scale in 1956, when most of the common fasteners on the cars built that year were of the Unified Thread System. The fact that the major market for these cars was in the US was no doubt a major factor in the decision. The Unified System is basically the same as the American system in use—the two thread systems were American National Coarse (ANC) and American National Fine (ANF). They became the Unified coarse and fine. The change was not mandatory and some British manufacturers (notably SU and Lucas) did not make the switch to the Unified System, and used Whitworth based hardware, mostly small British Association (BA) fasteners until they ceased production.

The Unified System was not destined to last. Having seen that everyone could change over from one system to another, the International Standards Organization launched a campaign to replace the Unified system with a version of the metric system which originated in Europe. It has been slow going. Since 1966 there has only been a partial changeover to the ISO metric system in the American and British automotive industries.

The Whitworth system should not be viewed as a stumbling block invented by the English to keep us from putting their cars back together again once we've managed to take them apart. I don't believe it has anything to do with our minor disagreement back in 1776 either. The Whitworth system made it possible to manufacture complex machinery on a large scale, and it made it possible to work on that machinery without having a team employed full-time keeping track of the different nuts and bolts. Each system takes some special wrenches and sockets, and you might have to think for a minute or two about which wrench to use, but heck, if it were easy, anybody could work on these cars.

DRIVING YOU NUTS!

In the space available it would be impossible to list all the thread forms you may run into working on British cars– but a partial list may give you an idea as to how many are out there.

British Acme Threads
British Association (B.A.)
British Standard Brass (B.S.B.)
British Standard Cycle (B.S.C.)
British Standard Fine (B.S.F.)
British Standard Metric
British Standard Pipe (BSP) parallel threads
British Standard Pipe, Tapered (BSPT) tapered threads (like American National Pipe)
British Standard Whitworth (B.S.W.)
French Automobile (metric)
ISO Metric
Metric Spark Plug
American National Coarse (A.N.C.)
American National Fine (A.N.F.)
Unified National Coarse (U.N.C.)
Unified National Fine (U.N.F.)
Unified National Extra Fine (U.N.E.F.)
and the list goes on…

The British Standard Whitworth, British Standard Fine, British Association Fine, British Standard Pipe (parallel and tapered) and related thread forms are based on mathematical relationships, which are beyond the scope of this article. Because we still make threaded fasteners to the original British specifications, some of our reference material is quite old. One of my favorites is the "British Standard Specification for Screw Threads of Whitworth Form", published 10 May 1940. That date is very significant. World War II began in September of 1939 with the German invasion of Poland. On May 10th, the Germans invaded Belgium, Luxembourg, the Netherlands and France. Neville Chamberlain resigned as Prime Minister of the UK and Winston Churchill became the man of the hour.

MMCC BUSINESS MEETING / NOGGIN

Unless otherwise noted, on the First Thursday of every month at 7:00 PM we meet at

BACK COUNTRY BAR-B-Q

Back Country Bar B Q
6940 Greenville Avenue
Dallas, TX 75231
214-696-6940

~~Jan 2~~
~~Feb 6~~
~~Mar 5~~
~~Apr 2~~
~~May 7~~
~~Jun 4~~
~~Jul 9**~~
~~Aug 6~~
~~Sep 3~~
~~Oct 1~~
~~Nov 5~~
~~Dec 3~~

2021 Jan 7

Back Country is located on the east side of Greeneville Avenue at Park Lane, one block east of Northpark Shopping Center and Central Expressway

** **This denotes meeting on 2nd Thursday – an exception**

Membership Application Form

SEND THIS FORM AND DUES, IF PAYABLE TO:

MORGAN MOTOR CAR CLUB
P.O. BOX 50392
DALLAS, TX. 75250-0392

NOTE: Changes and additions in bold have been made to this application/registration form. PLEASE complete this additional information.

ANNUAL DUES $20.00

DATE: _____

PLEASE COMPLETE ALL THE PERSONAL DATA SECTION AND ANY OTHER PORTIONS, WHICH HAVE NOT PREVIOUSLY BEEN FURNISHED OR WHCIH MAY HAVE CHANGED.

PERSONAL DATA

NAME: _____ SPOUSE: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

OCCUPATION: _____ PHONE: H_____W_____

CELL: _____ EMAIL: _____

CAR DATA

MODEL: (+8, +4, 4/4, +4+, 3 wheeler, etc.) _____ LHD _____

BODY STYLE: (DHC, RDSTR, 4 STR, SS, etc.) _____ RHD _____

YEAR: _____ COLOR: _____ CHASSIS NO. _____

ENGINE TYPE: (TR4, FORD, FIAT, ROVER, JAP, etc.) _____ ENGINE NO. _____

GENERAL DATA

HOW LONG HAVE YOU OWNED YOUR MORGAN? _____

OTHER MMCC MEMBERS THAT YOU KNOW, IF ANY? _____

HOW DID YOU LEARN OF MMCC? _____

_____

LIST ANY OTHER MORGAN CAR CLUB MEMBERSHIPS _____

LIST ANY OTHER NON-MORGAN CAR CLUB MEMBERSHIPS _____

FROM WHOM DID YOU ACQUIRE YOUR MORGAN? _____

(PLEASE ADVISE IF YOU WANT ANY OF THIS INFORMATION DELETED FROM ANY DIRECTORY)

The present MMCC club newsletter, the MOG LOG, is distributed electronically in color. Printed option in black and white sent by U.S. Mail may become available sometime later.