

# MIDGE MAGAZINE



Summer  
2019



Graham's Midge

MOBC. the Midge Owners and Builders' Club

## Hello All.

Well it's in at the deep end of Midge modifications this time, Keith has embarked, and succeeded on a fairly radical upgrade. Perfectly legitimate in a 1935 style car, gasoline direct injection was on the Hesselman engine invented by Swedish engineer Jonas Hesselman in 1925 (Thanks to Wikipedia for that) It has elements of the technology needed to fire a Machine-gun through a propellor. An extra that MOBC does not recommend for various reasons, and I don't think Keith is incorporating it. After that we have a glimpse of the MGJ2 frame for the edification of anybody who wants to get further into carpentry. Peter might be able to advise there.

Time has been in short supply this last quarter and consequently the mag is a bit thin, The material sent in by members turns into pages faster than stuff made up out of my head. Fortunately several members have been hard at work fabricating Midge stuff and their efforts are duly recorded.

There is quite a lot going on around the editorial desk, although mostly non Midge. I did manage to extract 'The Red One' from its garage just long enough for it to get thoroughly over excited and wee petrol on the floor. A sticky Stromberg float needle I think.

Being a bit short of material is a common editorial complaint, but I may just have to top up with adverts, or kittens, so get photographing and writing for next time.

JH.



Welcome to Ken Craighill, Jeremy Baldwin  
Eccles, Stuart Bilcock, Elsa Abrahall & Richard  
Roberts.

Stories and photographs to Secretary Jim Hewlett at  
[jim@jimhewlett.com](mailto:jim@jimhewlett.com) or The Old Manse, Tarbrax, West  
Calder, West Lothian, UK EH55 8XD

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There are those of us who feel we have achieved greater performance with a Spark Rite electronic ignition pack. Well, look to your laurels, Keith Warren has taken that a whole stage further.

### **JC Midge conversion from carburettors to electronic fuel injection**

It all started after buying a conversion kit for my TR6 about eight years ago, I first started building the Midge in 1990 finishing it 1997 but in recent years it has always run on the rich side and not well on the twin SU's, so the thought came to converting it to EFI (Electronic fuel injection.) The immediate problem was the lack of under bonnet space due to the shape of the bonnet.

During the winter of '17/18 I bought over the internet and fitted the 36-1 trigger wheel. The outside diameter chosen to suit the bottom pulley. Luckily the pulley fitted in the lathe so it was machined on the rear face, then the trigger wheel was bored out to suit fitting on the recess. Care was taken drilling and tapping the pulley so the missing tooth is set at 90 degrees after TDC, this can later be programmed into the ECU (Electronic Control Unit).

A strong bracket was made up to support the Ford crank sensor with the required adjustment required to give the correct running clearance. The engine fan was removed and an electric one fitted in front of the radiator this again would be controlled by the ECU, the Midge was put back together again so it could be used for the summer.

Pulley wheel with the rear face machined to take the trigger wheel



Trigger wheel with missing tooth at 5 o' Clock

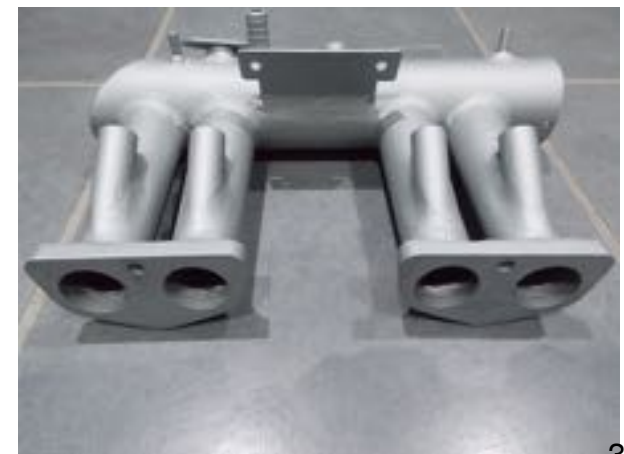


Crank sensor



During the summer I could progress with the manifold. I intended to make my own out of steel I would have liked to have done this from alloy but do not have the required TIG welding set, a friend had a bed head with 40mm tube going begging so this could make the inlets and I bought a length of 60mm tube for the plenum. The plate adaptors for the cylinder head had to be made by a local engineering firm as I could not scrounge any 10mm plate for these. The four inlets were cut to form a taper and shaped to suit the plenum before jiggging this all up on a borrowed cylinder head I made a boss up to suit a air inlet temp sensor and two 5mm vacuum takeoffs to suit the fuel regulator and the GM map sensor and one 12mm for the brake servo. I did make up flanges to suit the Rover combined map and air temp, and the throttle control valve later I found that I did not need these so were blanked off. Once happy it was all tack welded in place.

Later that summer I went to a local car dismantlers and bought the injection system from a Rover 25 1.4. From this I was able to use the throttle body, injectors, water temp sensor and part of the wiring loom with plugs all for £25 so back on the manifold I welded it all up and machined the tubes for the injectors out of 19mm bar with a 14mm hole to suit injector, then a jig was made up to align them all at the same level these had to be welded and brazed in position once the injectors were in place I bought a length of fuel rail this was drilled to suit the spacing and depth of the injectors the hole up the centre was 12.5mm so I made fittings out of brass for each end, flow and return, then a bracket on the manifold to support it. With having the spare head this could all be done on the bench the Rover manifold had the flange for the throttle body this was cut off and machined out to suit the plenum chamber sealed and screwed in position, again because of the lack of room I placed the inlet throttle body at the rear of the engine.



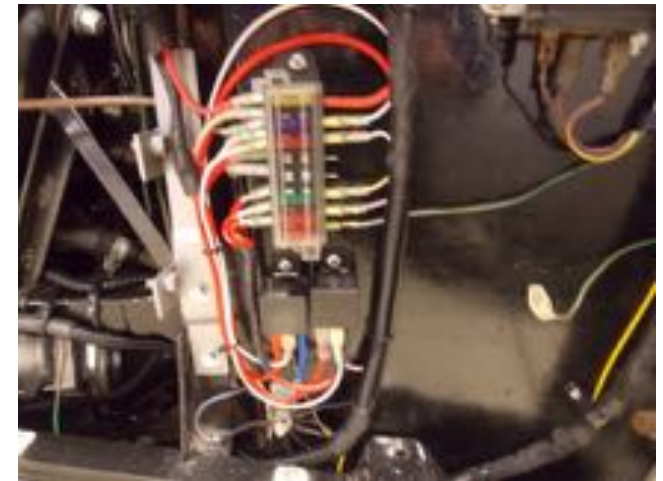


An eight spade fuse box was fitted with the relays to suit the new power in wiring for the ECU.

Once all the wiring was sealed and wrapped in tubing clipped in place I set up the laptop, programmed the timing for the trigger wheel, fuel pressure and the throttle position as the manual and on the second attempt the Midge came to life, after setting the tick-over on the throttle body I had a 'run around' a few times before attempting the run over to David's rolling road 25 miles away. The base map that David put into the ECU needed setting up but was not far out and after a couple of hours it was finished with 65 BHP at 5,000 RPM which I am very happy with. We had a road test and it runs really well, not only pulling like a little train but also on tick-over in all the gears which is ideal for traffic. Would I go through it all again? A big yes, but better for the knowing of what I know now.

*Keith Warren (157)*

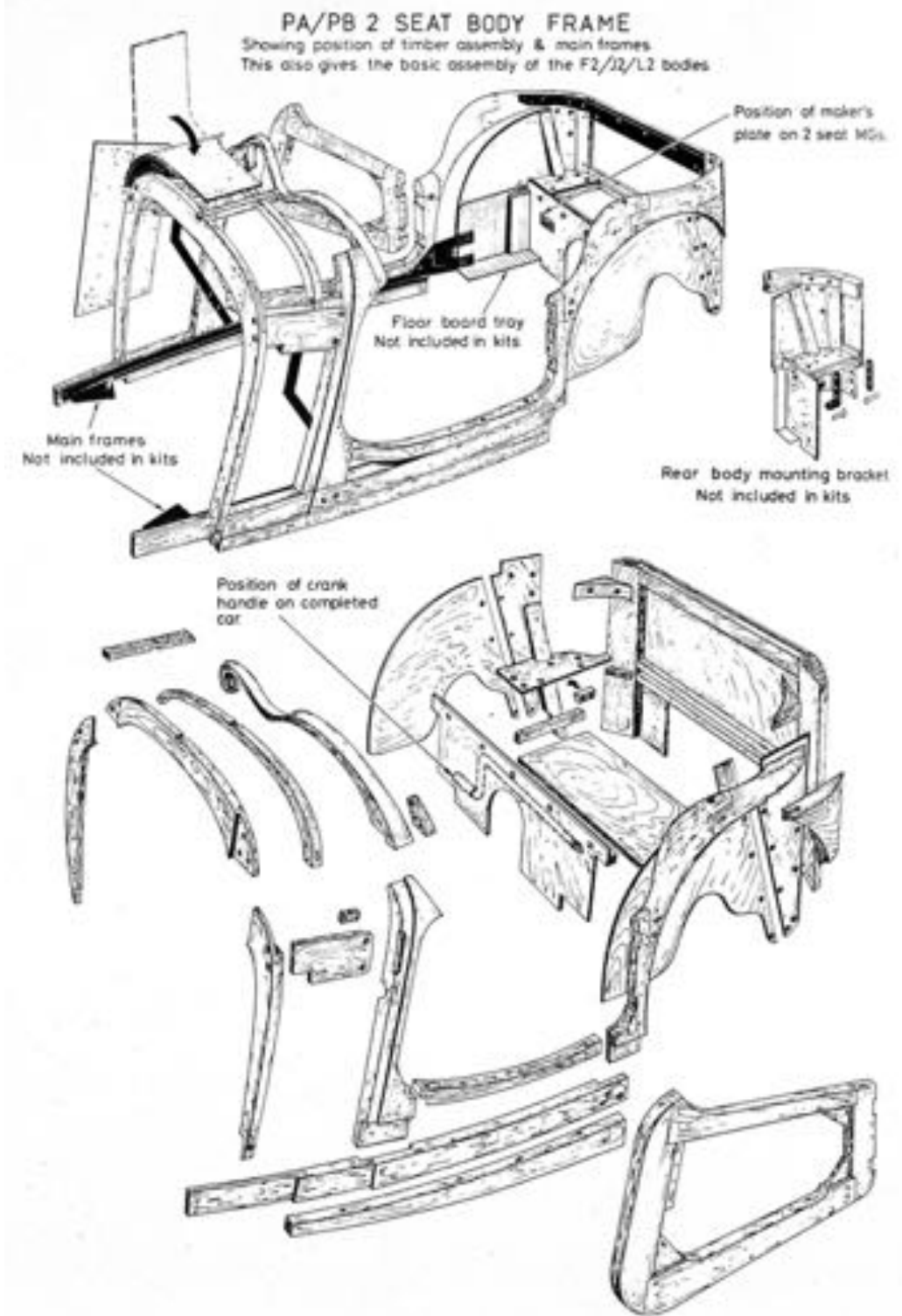
Keith says that if any members want more details they should contact him, I figure anyone thinking about it should be able to get the address from the members page. Remember the password will be changing as per the notification email. Anyone not using computers can ask me and I'll put them in touch. JH



## MGJ2 Ash frame.

Going back a bit in time now. I was asked the question:- What construction method was used for the MG J2 bodywork? Well I had a dig and found this at <https://mg-parts-spares.co.uk/parts-catalogue/mmm-bodies-kits-papb-2-seat-body-frame/> You can get alloy or steel panels. This would be useful for the rebuilding of the car unearthed and reported in the Winter 2019 magazine, but perhaps a rather expensive project by comparison with building a Midge. If anybody does set out on such a journey we wish them well but assume they are:-

- A. Very rich
- B. Quite daft
- C. Single. (This may be caused by the project, and in turn may impact on A.)





Fred Swansborough has been working on his Midge for quite a while over the years. It took 4 years to get it on the road in 1991 and has been visiting shows and generally driving about every year since then. He writes...

Photographs taken during a respray in 2000. I build the car '86 to '91 when it was registered. It has a 1300 '76 Mazda engine, gear-box and rear axle. I had the chassis built in an engineering work shop, the bonnet and side panels are galvanised steel. I had a friend cut the tub from ply, the louvres I cut from panels on a scrap generator and tacked them into the Midge side panels. The front suspension is Triumph Vitesse with an adjusted spring. (It sounds easier than it is.) The rear is Mazda three link suspension. I was a plant fitter and build the car to the best of my abilities with my son. I think It's my best work. At car shows I get a lot of questions, wondering who built it, as it has a Wolsey badge at the front and a Midge badge inside. I have also built and driven stock car racers in the 1960s and 70s. FS



Mark Powell continues with his rebuild. Here are a few snippets from his Facebook / workshop diary.

Ok, so I have about 130 kgs sitting over the rear (well, just in front of the rear axle), the engine and gearbox temporarily fitted and despite rolling backwards and forwards, the rear wheels are still 'tucked under'... I think a couple more leaves will have to come out of that spring. The other hiccup is the engine mounting mods, I haven't got the correct spacings for them, so they don't line up with rubber mounts.(too far apart). New ones will be made, the near side will be aluminium block, but the drivers side will have to be modified, as it is welded in place with a cut away to clear the steering column. For the moment it is resting on a piece of 3 x 3 across the chassis rails... Ho hum... Tomorrow is another day.

The engine is on the 3 x 3....

Some spare time this afternoon has found it sitting on its wheels... No weight over the rear end means that the wheels are seriously tucked under. I only took 2 leaves out of the rear spring and I feel that even with the 'built up' weight, they will still be tucked under. I can probably summon up about 120 kgs to weigh it down at the rear and with a temporary fit of the engine and gearbox I will see how it looks. I still suspect that I may have to remove a couple more spring leaves...





From page 8 ...When I was building my Midge in the early 90's I had a serious accident causing ankle damage. Not to be outdone and off work I managed to lift the engine into the car whilst on crutches. 'Er indoors was not impressed. I was! It meant progress whilst off work. Beats day time telly.

All a bit quiet on the rebuild at the moment... Very busy, workwise, and a week in Spain detracting from the Midge work...

The rear suspension is assembled, but I'm still not convinced about the position of the tie rod placement. I will get the wheels on and back on the ground so that I can check the toe-in etc.

Getting it on the ground should be interesting, I've assembled it all up on trestles.... a bit out of reach of any jack! It was a great working height, but I didn't think it through thoroughly...

Watch this space!

Progress, The driver's side engine mount mod is OK, just needed some shims. The n/s now has an aluminium item. (I found a guy selling ally billets on ebay) Cut to shape, drilled and fitted. I had previously made a wooden pattern, so I'm happy with the result. I now need to address the overdrive mounting...

and, just in...

As you can see from one of my photos, I have put 4 x 36 litre water barrels on the chassis plus some other odds and ends, which roughly equates to about 150 kgs. I have taken out one more leaf from the rear spring and although the wheels are still tucked in a bit, I am hopeful that after full construction and a bit of settlement over time, everything should be OK.

The front camber will need addressing as I don't think they are equal.

When the gearbox is mounted, I shall measure up for the prop-shaft. I am hoping to source a Vitesse item with the sliding joint as I really dislike the strap variant.

Then a new set of brake pipes and anything else that can be done easily without a body in the way! MP.





And a quick update from Billy Graham.

....just fitted a new carb supplied by FRC ( fast road cars ) so that solved my problem of it cutting out when warm. I have also fitted my new roof (bought from David) so it's happy motoring now. BG

*And (middle pic) , new wheels now too.*



Don't forget to tell me if your advertisement in the sales and wants page is no longer useful. Cobwebs can frustrate buyers and block the viewing of those still wanted. Here's a handy link to facilitate that.

[jim@jimhewlett.com](mailto:jim@jimhewlett.com)



### UK 2019/20 Events

The Car and Classic site does event prediction so much better than I can, there seems little point in copying their web page, especially as they can update as the months go by. If you go to

[http://www.carandclassic.co.uk/car\\_events.php](http://www.carandclassic.co.uk/car_events.php)

You can get the information direct, that's where I get it. If something you know about isn't on it, tell me and I'll add it to our pages.







# GEOFF CONTINUES...

Having purchased Ian's Midge, Geoff has started making it his own. Of the total known in the club or outside, a relatively small proportion of Midges were entirely started, built and finished by the original owner, but it is surprising how many, having stalled for one reason or another are still being completed, rendered roadworthy and



modified according to their new owner's taste. Fortunately most have been kept under cover, which considering the difficulty and cost of garaging says a lot about Midge builders even when forced by circumstance to stop. In the previous magazine Geoff had extended the gearbox linkage and re-finished the dashboard. Here the paintwork is being tackled. While it dried Geoff had introduced Tony, an unsuspecting friend, to the delights of the MOBC in the form of a 1200 Spitfire based Midge XTC127H. Geoff had also arranged a dash-top which was delivered by hand in April by your secretary. Gift wrapping a fragile fibre-glass dash-top and achieving a safe 200 mile delivery by courier struck us as a recipe for disaster. Your

secretary would like to point out that he was passing the area on his regular 400 mile southerly migration, and doesn't usually wander that far from his garret. However, since Geoff had made the special effort of simply creating a fellow enthusiast it was thought worth-while. Tony is, in the meantime, building up brownie points by finishing the family bathroom before continuing Midge work, and Geoff is, by the latest report, now on the road in his Midge in the sun. I imagine Tony will be spurred on. JH





### Father's Day classic Car Display @ Walled Garden Baumber

On Sunday I had a breezy run over the Lincolnshire Wolds to a new car show venue. At one point, I found the road flooded across and a group of motorcyclists gingerly chugging through towards me. The leader lifted his visor and offered that it was deeper than it looked. Thinking of the plight of nearby flooded Wainfleet, I slowly took my Midge, Tilly for her first paddle. We made the far side and soon arrived at our destination, down a track and through dappled woodland.

Sonia and David Elton bought the derelict 19<sup>th</sup> century double walled garden in 2006. It had originally belonged to the former Stourton Hall, one of the many lost houses of Lincolnshire that were mostly pulled down in the 1960s. After a lot of work, they opened to the public in 2016, adding a tea rooms a couple of years later. They have begun hosting various local events throughout the year, including this novel car show. It proved to be a breath of fresh air. There was free entrance, an excellent live trad jazz band and a beer tent.



Tilly was on show with about 40 other classic cars. The star of the show was a 1902 Oldsmobile, built in Detroit. The engine looked really solidly made, as though it had been created by a blacksmith. The deerstalker sporting owner said that it was 5 horsepower! I chatted to lots of people. It was a very friendly, local show. There was a lot of interest in Tilly. One young man of some 17 years observed to his dad that there was just enough room for one suitcase in my car's boot. Smiles all around, when Dad pointed out that it was the slab petrol tank!

This small, rural show is well worth a visit next year. The tea room is very pleasant and there was a well-stocked plant sale to boot. Baumber is a very pretty Wolds village, just 5 miles west of Horncastle, on the A158 Lincoln road.

Michael Taylor    Member. No. 233



*Thanks Michael, an ideal outing by the sound of it, good to hear you enjoyed yourself and hopefully kept your feet dry.*



So what has your secretary/editor been up to?

Well, as I mentioned in the editor's rant, it has been a busy few months here at the Old Manse. In case anyone thinks we live in an ancient rambling building with ecclesiastical windows and creaking doors, it is actually two miner's cottages, originally in five rows of eight, knocked into one. When the shale mine closed the other 38 cottages in the 'Top rows' were demolished leaving a large plot full of foundations and rubble. However, on the ecclesiastical side, the house does have a recycled pulpit in the porch and the summerhouse has church windows. Much of the porch is recycled church pews and roof. When the church, to which this was the Manse, was deconsecrated and turned into a house there were some bits left over and I have recycled them. The demolished houses provided enough bricks and rubble to make the floors of

several garages and sheds, now filled with Midges, Midge parts, and, inexplicably an MX5.

Being a natural DIY shed builder I now have two conservatories, a porch, five garages, one workshop, two greenhouses, a poly tunnel, four wood-sheds, a garden shed and a summer-house. There are another three indeterminate structures for random stuff. A large tractor shed has been pending for some time, but as I sold the tractor, less urgent. (It went to a farm so it's quite happy.)



Sadly these and various hobbies, charities and activities means I haven't recently had much time for working on the Midges, so the folding windscreen project is still unfinished and unwritten, All of the above restrict magazine building time, and buying a couple of new cars. (MX5 and e-NV200) hasn't helped, and, so as to make a bit more room I'm selling a couple of tatty trailers now surplus to requirements. I'm trying not to buy any more Midges. The main difficulty is maintaining the emptiness of sheds. It's as though homeless vehicles know where there's a dry space and just turn up looking hopeful.

Members who have the time and the inclination can get more details at [www.jimhewlett.com](http://www.jimhewlett.com), It's not by any means all Midges. There's a lot of recycling, eco stuff and general chat, but if the magazine's a bit short it'll occupy a minute or two. JH



Richard Staddon is needing a 13/60 clutch fork, he asks:-

I need all the parts to be replaced on my clutch fork, has anyone got a link as near all the parts on the fork need replacing. My clutch has been very stiff after changing the servos, the clutch plate has been changed but the fork has many hidden issues, has anyone got a link please?

He's looking for some rear mudguards too, if you have either and don't know how to contact him I'll forward any information. JH

[jim@jimhewlett.com](mailto:jim@jimhewlett.com)



David Webb is looking for a Midge building project. He's not a full member yet, but is on the MOBC facebook page. I'll pass on any messages (as above).

JH

Have a good summer everybody and take a few photos, otherwise it'll be kittens in autumn!



Baptiste has been showing his car in Paris. They certainly have the weather for it, but we're not jealous, are we?



Chris has been on the Dorset Classic Car Tour. The weather was a bit dull, but apart from getting a bit lost all went well.

*Getting lost in Dorset is normal, we all do that.* JH.

