

# Midge Owners and Builders Club Spring 2014

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Dear Members,

Spring is in the air at last - but winter may have returned by the time you read this! I hope that you are all well and that you and your families (and Midges) have survived the gales and the rain that we have suffered over the past few months. I admire those members who use their Midges over the winter season, but for most of us, our cars have been in hibernation until the sun shines again. If only we could do the same!



Anyone recognize this particular car?

It seems that the kit car movement is going through a difficult time as I heard recently that both the Newark Kit car show and the Kent Kit Car show at Detling have been cancelled, although the International Kit Car Show at Stoneleigh is due to be held on May 4/5<sup>th</sup> However, this doesn't yet appear in the annual programme for Stoneleigh so do check with the organisers before you travel.

Another change this year is that the MG and Triumph spares days at Stoneleigh were combined into one event, and this was extremely well supported with a huge selection of new spares, club stands and a massive autojumble. It was very noticeable that most of those attending were middle aged (or older) and this can't be good for the future of the classic car movement. Perhaps our

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young people have not got the spare cash available to indulge in our hobby, but you can't do it much cheaper than by building and maintaining your own Midge. Certainly the cost of motor insurance is frightening for young people so it is not surprising that they do not have funds for non-essential motoring. If you have any ideas for ways in which we can encourage new members of all ages to join our Club, then please let me have them and I'll publish them next time.

# John

# THE MIDGE MK2

Our founder and mentor John Cowperthwaite is now marketing the plans for the Midge Mk2, and I'm delighted to have received a copy on CD. Here is a review of the Mk2 which appeared on our group page on Facebook.



I have now looked in detail at the build documents for the Midge Mk2 for which the donor car can be any of the Suzuki SJ models (410, 413 and 413 Samurai). Although the parentage of the MK1 Midge is apparent, the new Build Manual is a step change from the original MK1 Manual which consisted of line diagrams and typed A4 photocopies. JC has put an incredible amount of effort to get it right and the result means that an inexperienced builder can produce a car without the hassle of the IVA.

The photographs on the CD show the different stage of the build, and the comprehensive price list means that all the fabricated parts are available for those whose skills are limited. The full size patterns are available ready printed. There are 19 sheets and the cost is £95 for the Patterns and Manual (which is sent out on CD). An option is to have the Patterns on CD so that those on a tight budget can have them printed locally as needed during the build. The Manual costs £10 or the Manual and Pattern CDs for £25 and these costs are redeemable for the full set of printed patterns. I'm sure the Mk2 Midge will have the same following as the original Midge and the 4WD could prove to be a major selling point for those hardy enough to keep their Midges on the road throughout the year or those who enjoy off-roading sports.

No more photocopied manuals, no more paper plans (although these can be supplied) This is an up to date approach to marketing an exciting car that doesn't require an SVA. What are you waiting for?

There is at least one MK2 under construction and it's being built by Aiden McHaffie who is enthusiastically writing a blog of his experience. It may be found at:

http://aideym.wordpress.com/2014/02/26/jcmidge-build-diary-issue-2/



Here's Aiden's donor vehicle. It makes a change from a Triumph Herald Jim Hewlett has produced the following guide to non-starting Midges. Keep a copy in your tool box; you never know when you might need it!

FUEL PROBLEMS IN A MIDGE. (Apart from the actual cost of petrol)

Properly set up, the Triumph 13/60 twin SU and Stromberg carbs produce few problems unless seriously worn, the 12/50 downdraft has a charming tendency to leak, mainly age related incontinence and over complication. Ford Cross-flows usually have a fairly reliable twin choke Webber, and a return pipe which can complicate matters somewhat.

There are a number of weak points in the fuel system of both engine types, but in the end the faults are the same.

- Fuel run back
- •Air ingress
- •Fuel leaks
- •Fuel blockages
- Weak fuel pump
- • Tank vacuum.

#### By the roadside.

For a quick fix you can take the spark plugs out, loosen the fuel cap, and spin the engine more easily while you air dry any flooded plugs. Check for sparks and bubbles. If that doesn't sort it then disconnect the fuel line at the carburettor and check the pump action (mind any loose petrol). Delicately clonk the float chamber to free off a stuck float valve.

What do you mean you haven't got a tool kit? What kind of Midge driver doesn't have a basic tool kit? Call the AA. No mobile phone? Achieve Darwin Award, write a letter, and die of exposure.

### Back in the work-shop.

Essentially the problem, irrespective of the cause, is usually a low fuel level in the float chamber, If the car has been standing for a while, some of the petrol will have evaporated or leaked and the delay is the refilling, usually compounded by flooding, swearing and flat batteries. The usual and simplest answer is to prime the chambers by manually operating the fuel pump, sadly these, with a manual override lever are extinct in the wild now. If you have one, then remember that the pump is on a cam, and if the cam happens to be at peak then your pumping it will not help because the spring cannot de-compress. Half a turn of the engine should clear that. If there's no manual lever on the pump then you can spin the engine with the spark plugs out, but in the longer term I recommend an additional electrical priming pump, which can be fitted in line, ideally near the tank and at fuel level. The sooner it is pumping fuel rather than air the better it will work. The best place for any fuel pump is next to the tank, but that cannot happen with a mechanical unless you put the tank in the engine compartment, which I advise against.

If, as on the Ford carburettor, there is a return pipe to the tank, then you may want to fit a switch to the electric pump so that it doesn't run the whole time, leave the mechanical pump in place, and just prime the carb with the electric at start-up.



Electric pumps, (can be skipped if that's not what you want). I liked the SU type mounted on the Morris 1000 and Mini bulkhead, but they were a bit prone to dirty contacts, and occasionally I had to get out and bang it to get it going. On the upside they were noisy, you could tell when they hadn't started up when you turned on the ignition, and, in those impoverished days, when the tank was getting dry you'd hear the rattle of drawn air and you could wiggle the back end of the car to throw the fuel around a bit, thereby getting to the garage. That kind is rare now, though you can get new, if expensive, ones. More modern styled ones don't have the dirty points problem (or the small spark they are prone to). Mine is relay operated which takes the loading off the switch, old style switches were heavy enough not to care.



**Diaphragm pumps** To the best of my knowledge, electric or mechanical pumps all use sprung

diaphragms to actually pump the fuel, and so the thump you hear is the diaphragm and spring being compressed, drawing fuel up. Pumping fuel to the carb is done by the spring, and it will not pump again until the spring has decompressed. That is why the diaphragm and a sound spring are the most important bits. Proper pumps have a  $2\frac{1}{2}$ " minimum diameter, 3" is better.

If the pump is working then the next area of interest is air being sucked into the pipe between the pump and the tank. Check your joints and clips, especially where the pipes change diameter. The internal diameter of the pipe is relevant in that a large pipe has greater capacity and will take longer to fill if it has 'run back'.

If there is a leak between pump and float chamber, being under positive pressure, it will leak fuel out (instead of sucking air in) and so be more obvious but more dangerous.

Additional non-return valves, vibration absorbing flexi-tube and filters can all help (unless they leak) but all add joints to the system, and resistance to fuel flow. A healthy pump should be able to push past them but remember that there are three valves and a filter to push past before you add anything.



**Fuel Filter** 

I was rather surprised to find that my Triumph Midge didn't have a tank vent, which explained why it wouldn't start if I did a long run and then parked for more than a few minutes. The vacuum in the tank sucked the fuel back, so that the pipe was full of air. I hadn't helped by tightening up the filler neck joint. The cure was to put a vented cap on the tank. A very small hole will do, but remember not to smoke when standing next to an upside down car, especially if it has crashed, as that loosens the joints.

A tank vacuum is not going to siphon the fuel out of the float chamber as there is an air vent in it, above the float level, but a leak will empty it. Look for dark stains around the base, a clean carburettor is easier to check. The 12/50 Solex is the worst for that as they are the oldest, most worn, and overly complicated.

The float valve can stick of course, blocking the input, or over-filling, and the manuals always suggest perforated floats as a likely cause. All are possible, but rare. Assuming you would have noticed the smell of a petrol leak, the problem is usually worn non return valves allowing back flow, weak pump action, or air being drawn in by the vacuum. (If your filter is transparent, check for bubbles).

Here are a few guidelines in summary:-

- **Diaphragm pump**. Bigger diameter = bigger volume = faster flow.
- Fuel pipe. Bigger diameter = bigger volume = slower fill rate.
- Non-return valves. Two in any pump, become inefficient when contaminated or worn.
- **Fuel cap**. Vented or non-vented. Does it hiss if you release it after a long run?
- Filter. Near the tank protects more components, especially if you swing the tail as described above, but is harder to check or change
- **Pump**. Nearest the tank is best, but more likely to leak petrol than draw air.
- Electric pump. Can be mounted near the tank
- Mechanical pump. Quieter and designed in. Non return valves may fail with age or dirt. Only works when the engine is turning.
- **Return pipe.** Reduces the effect of stale petrol and flushes bubbles out faster, but complicates electric fuel pumps.
- **Down-draft carbs**. Fit inside the bonnet easier, more complex.

**Syphoning**. If the fuel line is below the fuel level then it will draw fuel more easily, but it can drain your tank if it leaks, and will still siphon it if the leak is below the fuel level irrespective of what height the pipe reaches in between.

I prefer plastic, if it is tolerant of modern petrol, all the way from the tank to the filter just before the electric fuel pump, high on the bulkhead. But the pump does have to be quite powerful, and it is an old fashioned way of doing it. Don't start the engine until the pump has settled down unless you want to pre-load the oil pressure.

**Best route**. Tank to filter to electric pump to non return valve to long thin pipe then Mechanical pump if fitted and eventually Carburettor. Some prefer to put the filter after the electric pump.

Simplified version. Plastic pipe, about 4mm (3/16) internal, all the way from the tank to the new SU electric fuel pump, high on the bulkhead. Same pipe to the carburettor avoiding the exhaust and other hot bits. Metal braided rubberised pipe with stainless high quality jubilee clips for connections. The old fashioned and simple way of doing it, but vulnerable to dirty fuel.

Does mine look like that? No chance. This is how to do it properly.....One day.....

Many thanks for this, Jim. It should be standard reading for all Midge owners!

VINTAGE JAGUARS, PORSCHES PROLIFERATE AS CLASSIC CAR FRAUD RISES - BUT MIDGE OWNERS HAVE THE LAST LAUGH!



Oh dear - the Americans have been at it again. They're paranoid about an 'authentic' vintage car. Midge owners and builders don't have that worry. I've never yet seen a Midge that wasn't authentic! The phrase 'more money than sense' comes to mind.

In the 1930s, British sports-car maker MG made exactly 33 of the K3 open-top race car. If you want to buy one now, there are more than 100 to choose from.

No, the defunct carmaker didn't restart production. The tripling of the K3 fleet is part of the booming trade in fake antique autos as soaring prices for classic cars spur sophisticated counterfeits, "In the 1990s, I would find one faked car every five years," said Norbert Schroeder, who verifies classic cars at TÜV Rheinland, a Cologne, Germany-based technical testing company. "Now I find up to five fakes a year." Vintage cars have gained in appeal, especially since the financial crunch. Auction values have risen more than sevenfold over the past decade, according to data from market tracker Historica Selecta. British auction house Bonhams, which says global sales total more than \$1B a year, sold a 1954 Mercedes-Benz F1 car for £19.6M (\$32.1 million) in July, setting a world record at auction.

"People with a lot of money prefer to have a classic car in the garage than money in the bank," said Adolfo Orsi, president of Historica Selecta, a consulting company that specializes in vintage autos. Sophisticated forgers have been known to buy up old screws and washers, leave reproduction chassis in fields to weather and have parts copied to make fakes harder to detect. Christian Jenny the former chief information officer of Zurich Insurance Group AG, spent five years proving his rare 1952 Jaguar C-Type racer was authentic, after another model showed up on the market claiming to have the same identification number. The owner of 13 vintage Jaguars consulted numerous experts, including Norman Dewis, chief test engineer for the more than 30 years. With the car valued at about \$2.5 million, there was a lot at stake.



Genuine or replica? - you decide!

"The replica game isn't evil," said Martin Emmison, a lawyer at Goodman Derrick LLP in London, who advised Jenny and drives a Jaguar C-Type look-alike. "It gives people like me who can't afford a real C-Type a chance to drive the machine almost exactly how they were." The extent of classic-car fraud is difficult to track since few victims come forward, and it's still considered relatively rare. Still, to prevent the threat of counterfeits from discrediting the whole market, FIVA has created a passport for antique cars to improve transparency and help get-rich-quick newcomers and overeager fans from getting duped,

Keep your Midge and stay happy - It's always the genuine article!

Is your arm too short to reach the gear lever on your Midge? Then Keith Warren may have the answer

### TRIUMPH MIDGE GEAR LEVER EXTENSION

When I built my Midge based on a 1974 1300 Spitfire with the three rail gearbox I extended the chassis to the same length as the Herald this was so I could keep the original prop shaft just remaking the front engine mounts, when the body was fitted this left the gear lever position well under the dash. This needed to be repositioned six inches (150mm) back which was too much to bend the lever, so I cut the aluminium extension in the middle, I could have got another one and cut six inches out of it and then have it welded back together but decided to fabricate a section from 1/8" (3mm) plate..



The operating bar is  $\frac{1}{2}$ " diameter so this could be cut in a suitable place and extended to match, but before cutting scribe and centre pop a line along the bar so as to ensure its position when extended. I opted to make an extension up as you can see in the photo above to avoid any welding.



As you can see in the photos a box section was fabricated with extensions to allow it to be bolted to the aluminium, for this I used course threads 3/16" UNC making it secure in the softer material then used thread locking compound.



The operating rod extension, once cut to the correct length could be welded ensuring the marks are in the correct plane, or as I did it cut and file the ends to match and then use the original type of bolts and bush kit.

## Many thanks for this, Keith. I've often wondered why my left arm is slightly longer than my right!!

## GOVERNMENT BID TO END CAR TAX TRANSFER



Classic owners will no longer be able to sell their cars with remaining tax included if current government proposals get the green light.

Under draft legislation drawn jointly drawn up the Treasury and HM Revenue and Customs, car owners will no longer be able to transfer outstanding tax with their vehicles from this October, as part of ongoing reforms to the way Vehicle Excise Duty is administered.

"The reason for now preventing vehicle licences being transferred from registered keeper to registered keeper is to avoid a new registered keeper unknowingly keeping an unlicensed vehicle. For example, in the absence of a paper licence a vehicle may be purchased supposedly with the benefit of a vehicle licence."

If brought into force, the legislation would only affect classics made after 1 January, 1974, with older vehicles being exempt from paying VED.

Among the organisations opposed to the move is the AA. Paul Watters, the organisation's head of public affairs, said: "It is good that reliable, real-time

records now exist which have made the tax disc largely redundant. However, when it is abolished the sting in the tail will come with unexpired months of tax no longer being transferable to a car's new owner."

More bureaucracy - unless you have a 'historic' vehicle.

### NEW MEMBERS

I'm delighted to welcome five new members who have joined over the last three months

• Nick Jolly lives in Twyford, Melton Mowbray, Leics. and has purchased the Midge previously owned by Allan Raymond. Nick's picture is show on page 4 of this magazine in his new toy together with another suspicious looking character.

• Roger Williams of Biggleswade, Bedfordshire is retired but keeps active with five classic motor bikes, one of which is an Ariel Huntmaster 650cc 1956 being restored at the moment. His Midge is based on a Spitfire 1300 and took some time to identify! It was without a propshaft tunnel and hand brake and had a broken Brooklands screen. Roger says the wiring is beyond comprehension so he is looking for a wiring diagram. Do they exist?



Roger's Midge is currently being restored

• Aiden McHaffie from Walsall in the West Midlands has recently started construction of his MK2 Midge. Good Luck, Aiden! Details are given on page 2 of this issue.

Peter Donvaband lives in Preston, Lancs and has always had an interest in kit cars having previously owned a Pilgrim Family Tourer, three DRK three wheelers (not all at the same time) He has also built a Pembleton Brooklands three wheeler with a BMW boxer engine and had various motorcycles over the years.



The Midge with its new spoiler

Peter enjoys travelling to classic and kit car shows in his Midge which is a 1970 Herald 1300 based vehicle. He has fitted a set of 13" Weller steels and a set of uprated springs which give a significant improvement in handling. His Midge is used on the motorways and regularly exceeds 70mph. The existing radiator couldn't cope with this speed and the car continually boiled over which led to head gasket failure - so as well as replacing the head gasket he's fitted a new alloy radiator designed for a Honda Civic plus a 12" electric fan and silicone hoses.. This meant fabricating a new bonnet and bonnet sides, and a mounting bar for the new brass headlamps. Peter has fitted an oil cooler and made a front spoiler with front indicators



Peter's Midge ready for the 'off'

Tony Gould from Ipswich, Suffolk introduces himself to Club Members:-

I am secretary (and probably chairman, treasurer, event organiser etc.) of Suffolk Coastal Kit Car Club and have tried to carry out these roles since the late 80's early 90's. Also in the late 80's (probably about 1988) I informed my wife I was going to make a kit car, however she was a bit surprised when it arrived through the letterbox! I managed to obtain a Triumph Herald Estate from a Herald enthusiast which was beyond repair for him, but provided me with the basic parts I needed for the Midge. I set about building it over an 18 month period. I attended the Kit Car shows regularly and knew where I could get some of the extra parts needed to complete the Midge and after a cursory glance from the local DVLA man I was able to get the Midge on the road about 1989/90. I then attended guite a few shows in Sandown, Peterborough, Ashford, Stoneleigh and Newark over the next few years.



Tony's Midge almost completed

Unfortunately due to work commitments and having four children the Midge wasn't an alternative mode of transport for my wife when I had to go away with the main car. With regret I sold the Midge in about 1992 to a car enthusiast at a local historic vehicle event and he trailered it away to a town about 25 miles away. After the Midge, I went through a number of cars ranging from a Carlton Commando to a Quantum 2+2. In August, last year, I tried to attend another local car show in the Quantum but failed to make it due to a problem in the petrol delivery pipe and finished up going with my wife. One of our members with a DRK 3 wheeler got talking to a chap at the show with a Rolls Royce and he explained that he also had a kit car at home. Yes! It turned out that he was the owner of my Midge who I had sold it to 20 years or so ago. After a few phone calls I arranged to go and see it again and after a little bit of negotiation, managed to buy it back. All these years the car had only been about 6 miles from me but I had never seen it around. He explained that it hadn't been on the road for about 10 years, but that he had MOT'd it about 18 months ago. Now it's back home (and I have taken early retirement)



Tony's Midge comes home again

The petrol was "stale" and wouldn't start or run properly until I pushed a petrol hose into a clean can of petrol and connected it to the carburettor. The dashboard is beginning to peel and needs reveneering and I'd quite like to put some different seats in it (the previous owner has changed them and there is no longer much space between the seat and steering wheel). John tells me I was a member in the Midge magazine in 1993, and I still have a Moss owners club badge on the car (probably predated the MOBC). I also remember providing an article in one of the magazines on how I "skinned" my doors of the Midge. I have uploaded guite a few photographs of the Midge build on our club website www.suffolkcoastalkitcarclub.org.uk and then go to "Tony's Midge" and "Midges everywhere" on the right hand side. I hope to meet up or hear from some of you one day.

#### MOBC BADGES

A number of Club Members have asked about Badges for our cars that were last produced about three years ago. We have been fortunate in having a number of new members since then, and if there is sufficient demand I should be happy to arrange a further supply.

The badges are suitable for Badge Bars or for fitting on the dashboard and would cost about £15 for the two (assuming the price three years ago plus inflation)

#### MIDGE BADGES



The badges are cast in solid brass with the logos and surround polished, and the background can then be coloured to suit. If you would like a pair of badges then please let me know and I will obtain a quotation. There's no obligation to purchase at this stage so please don't send any money.

#### AND FINALLY ...

A picture of Neil Russell's latest project



Another JC creation which doesn't require an IVA (yet!)