

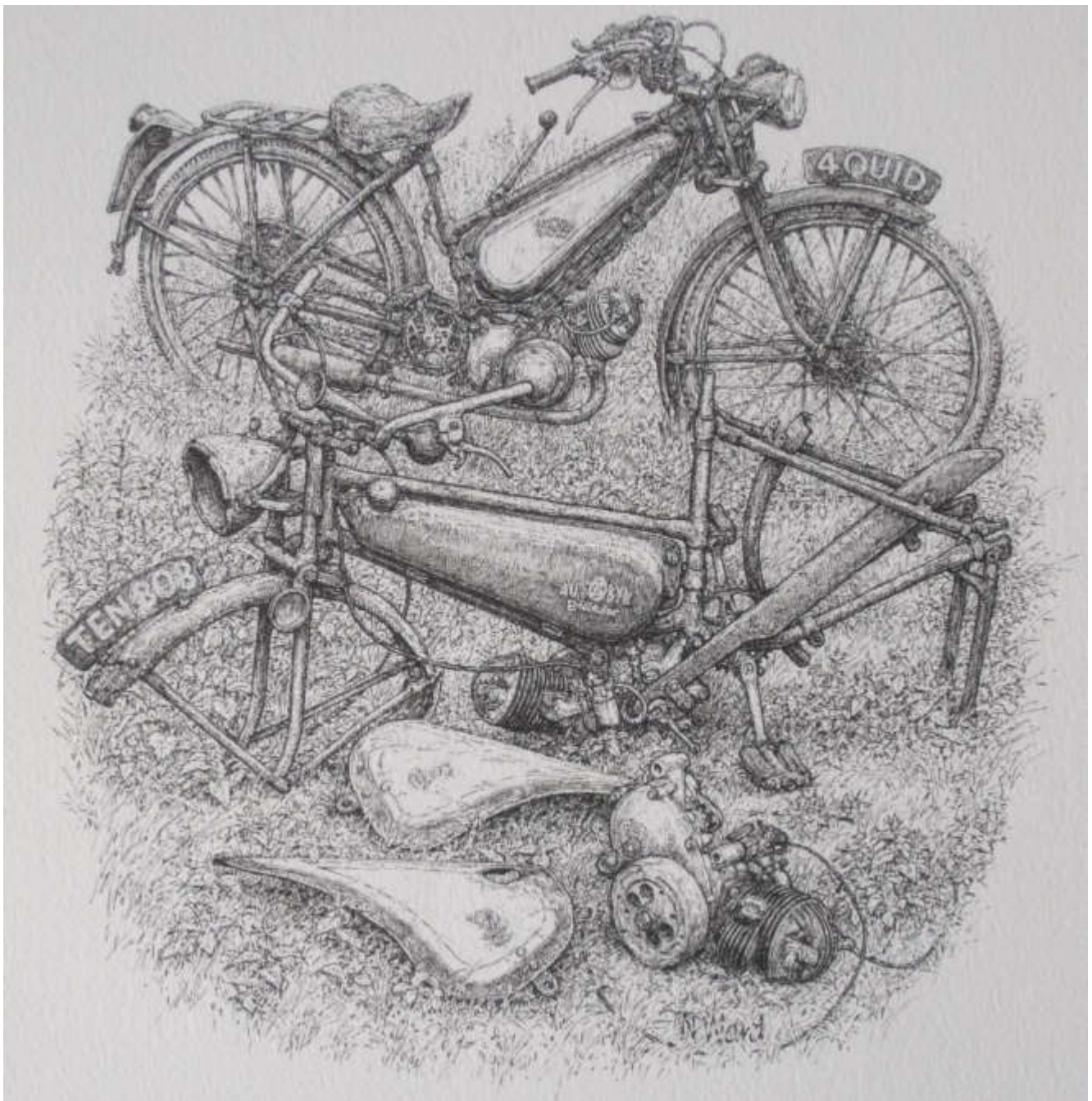
The M·A·C

The Newsletter of the EACC



Number Sixty Three

April 2021



...sensible offers only...



Not the "4 QUID" bike used by Nick in the front cover drawing but same model, Excelsior's own 2 speed "Goblin" powered.

Not the "TEN BOB" bike used by Nick in the front cover drawing but same model, Excelsior's own single speed "Sprite" powered.





Club Information



The EACC is the club for all Cyclemotor, Autocycle and Moped enthusiasts everywhere. Membership is just £8.00 a year for UK residents (and its £12.00 for the rest of Europe, & £18.00 for the rest of the world). The membership forms are available from our website... or just ask and we'll send you one.

Secretary & Web Master.

Andrew Pattle, 7 Unity Road, Stowmarket, Suffolk, IP14 1AS.

Phone: 01449 673943 E-mail: membership@autocycle.org.uk

Website: <http://www.autocycle.org.uk/> Forum: <http://eacc.freeforums.net/>

EACC Committee Members.

Andrew Pattle (Secretary), Sharon Wikner (Treasurer), Mark Daniels, Alan Course, Paul Efreme, Martin Gates, Neil Morley, David Watson (Publicity).

Club Officers.

Editor of the MAC David Watson mac.editor.eacc@gmail.com

The club's newsletter is called The MAC and it is issued six times a year: February, April, June, August, October and December.

Deadline for items to be sent in is the 15th of the preceding month.

Club Regalia

Clive & Ann Fletcher 11 Buckland Lane, Maidstone, Kent ME16 0BJ

Tel: 01622 678011 or clann67@tiscali.co.uk

Contact details for all club officers are on the club information sheet that you get when you join or renew your membership. Spare copies are available from the website or from the secretary.

Website: www.autocycle.org.uk

Forum: <https://eacc.freeforums.net/>

Facebook: <https://www.facebook.com/groups/254351421715768/>

Icenicam: <http://www.icenicam.org.uk/>

The Moped Archive: <http://www.users.globalnet.co.uk/~pattle/nacc/arcindex.htm>

FBHVC: <https://www.fbhvc.co.uk/>

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A N Other Section: Anybody interested in starting a new section in their area? Please contact Mr Secretary

I have just read the new issue of the MAC, particularly interested in the article by Neil about soldering fuel tanks and using "real" solder - as an electronics engineer my industry has been using "unleaded" for a while, but it does not flow as well as leaded. I live in **Worthing, West Sussex**, I now own a Cyclemaster (26cc), Raleigh RM5 and a Velosolex 660. I ride them when I can, but do not venture too far and do not have a trailer or van to take them further afield.

I would be interested to know if there are any other members / fellow enthusiasts in my area, who might be interested in meeting up at some point in the future when we are allowed to.

Please feel free to put this as a letter to the editor and publish my phone number.

Regards **Colin Pennifold** Mob 07794 447830

Joe Walker would like to start a section in the **South Somerset** area - could anyone interested call him in 01458 251127

He hopes to get some meetings going in the area though, of course, that will have to wait until we're all allowed out.



Events

COVID-19 The plan for easing restrictions isn't as rapid as our optimistic hopes but, nevertheless, it's starting to look as if the end is in sight. As always, our events are listed in the website [calendar](#). We'll try and keep it up-to-date but things can change at the last minute—always check with the organiser before you set out to an event.

AGM **The 2020 AGM has been postponed.** There is no new date for it yet but considering the 'roadmap' for lifting the COVID-19 restrictions, we're thinking it might be possible to hold it in July 2021.

Sunday 11th April 2021

The 17th Radar Run, Mopedjumble, and EACC AGM

This event has been cancelled

Friday 28th to Sunday 30th May 2021

EACC Lancashire Slow Riders Weekend Rally, at The Brighton Ferry near Selby, North Yorkshire.

Cost £5 per person a night. Electric extra if needed, limited but we can share and use splitters, only pay for what you use. Full facilities: Pub on site for food, etc. Showers/toilets. Free fishing. Ride outs planned every day. Obviously everything depends on the situation at the time and any restrictions, etc, but if allowed we WILL be going, please let us know if you want to join us. It's a Bank Holiday weekend so may get booked up if restrictions are fully lifted, so if you're on the 'maybe' list there is no guarantee there will be room; we'll add you to the camping list as soon as you confirm.

Day riders also welcome—just turn up on the day, any moped or bike. Anyone wanting to attend, please contact Paul lancashireslowriders@gmail.com.

Friday 4th to Sunday 6th June 2021

The fifth EACC **Northern Camping Weekend** at Hooton Lodge Farm camping and fishing site, Kilnhurst Road, Rotherham, South Yorkshire, S65 4TE. Showers and toilets available. Electrical hook ups should anyone require them, but these are limited. Also open to non-members, spouses, partners, pets...

More details later; please feel free to contact John Bann: 07798 731951 or mobymagic@gmail.com.

Sunday 18th July 2021

The Reservoir Dogs Run will head out from the Marks Tey Diner at 11:00.

Sunday 5th September 2021

Club stand at the 29th Copdock Bike Show, Trinity Park (Suffolk Show Ground), Ipswich.

News from the FBHVC



Introduction of E10 petrol for historic vehicle owners.

After an extensive consultation process, the Department for Transport has announced that they will legislate to introduce E10 petrol as the standard 95-octane petrol grade by 1 September 2021. They will also require the higher-octane 97+ 'Super' grades to remain E5 to provide protection for owners of older vehicles. This product will be designated as the 'Protection' grade.

The introduction of the 95-octane E10 grade and the maintenance of the Super E5 protection grade will be reviewed by the Government after 5 years to ensure they remain appropriate to the needs of the market. In relation to the E5 protection grade, such a review will examine market developments over the period. HM Government have sought to reassure FBHVC members and historic vehicle owners that, without a suitable alternative becoming available, it is highly likely the Super E5 protection grade would continue to be available. Filling stations that stock 2 grades of petrol and supply at least one million litres of fuel in total each year, will need to ensure one product is the Super E5 protection grade. While not all filling stations meet these criteria, almost all towns across the UK will have a filling station that supplies the 'Super' grade and currently one major retailer, a national supermarket group, has committed to offer the product. The main exception to this is in certain parts of the Highlands, north and west coast of Scotland, which will be covered by an exemption process and allowed to continue to market the 95-octane E5 grade.

The Federation therefore recommends that all vehicles produced before 2000 and some vehicles from the early 2000s that are considered non-compatible with E10 should use the Super E5 Protection grade where the Ethanol content is limited to a maximum of 5%. To check compatibility of vehicles produced since 2000, we recommend using the new online E10 compatibility checker: www.gov.uk/check-vehicle-e10-petrol

It should be noted that some Super E5 Protection grade products do not contain Ethanol as the E5 designation is for fuels containing up to 5% Ethanol. Product availability varies by manufacturer and geographical location and enthusiasts should check the situation in their location.

Bev Crook 1944 - 2021



It was my sad duty to report in the last MAC our old mate and long-time EACC member Bev Crook was losing his battle with cancer, I'm afraid Bev passed away on 14th Jan 2021. I'm sure we shall all miss him. He was a great lover of old two strokes of all types, always friendly, always cheerful, and always helpful.

I first met Bev at a Stowmarket meeting of the old East Anglian Cyclemotor club in 1986. I had just finished restoration of a Berini Cyclemotor and as I was wrestling it from the back of my estate car, Bev came up and said "Want a hand with that mate?"

There started an enduring friendship, in those early days there were not so many runs for cyclemotors, and we would travel to the wilds of Suffolk and to Colin Packmans events down in Kent for runs. Bev also introduced me to the British Two Stroke Club, and the Chiltern groups monthly meetings at the Three Horseshoes,

Eggington. Over the years we attended many runs with the EACC, NACC, VMCC Magic Wheelers and British Two Stroke Club including jollies to Comines in France and to Ostend for the Vintage rally there, and of course many a Chiltern 100. Bev was also an avid Royal Enfield enthusiast, MZ owner and supporter of classic racing.

Bev served an apprenticeship as a tool maker, and became a very skilled engineer. With his knowledge of tuning all his machines went a lot better than they should have done, He could never resist "just cleaning the ports up a bit", although I think it often went a bit further than that! In his youth he acquired a Trojan Mini Motor, and this was the first Cyclemotor he restored.

Over the years I knew him there were many more, although he would never put an exact number on how many machines he actually owned. If he ran out of storage space he would just build another shed! We would chide him about the number of projects he had on the go, saying he would need to live to 150 to finish them all! We often met at the Kempton Park autojumbles, where he would purchase spares to replace the spares he knew he had but couldn't find. Quite recently he found a Cyclemaster engine he had forgotten about in a drawer in his spare bedroom! He will be remembered more recently riding his Honda Express, which Ralph Richardson christened the Honda Expire!

Bev was a great raconteur and would regale us with tales of past escapades, such as the racing Bantam, tuned with advice from Mole Benn and Peter Hogan, that he put together when he was first married. This was assembled in his spare bedroom. When he was trying to get it down the stairs he err – lost control - the Bantam hooked on the stair carpet and descended on its own, peeling the carpet back as it went! We understand his wife Linda was not pleased.

On a personal level Bev was a great friend to me; giving my family much needed support when I was in hospital with heart trouble a few years ago. For the last 10 years or so a group of us including Bev would meet on a Thursday for a breakfast at various greasy spoons. Our meetings won't be the same without him.

Bev leaves partner Marilyn, three sons, Colin, Alan and Neil, and ex-wife Linda.

Andy Day



The East Anglian Cyclemotor Club, 1981–86

The East Anglian Cyclemotor Club—the **EACC**—was founded in 1981 and lasted for slightly less than five years before becoming the National Autocycle and Cyclemotor Club—the NACC. Now (2007) that the NACC itself has been wound up as an unincorporated club, it seems a good time to look back at those early years and to remember what the EACC was all about.

The EACC was not the first organisation set up to cater for cyclemotors as 'classic' or 'historic' vehicles. That honor goes to the Cyclemotor Section of the VMCC. However, the Cyclemotor Section found itself hampered by restrictions placed upon it by its parent organisation, the VMCC, and this left the way clear for the birth of the EACC.

The EACC started out as a club for young people: three of the four founders were teenagers at the time. Riding cyclemotors was the ideal form of classic motoring for young 'impoverished students'. Lack of money was one of the reasons they had for setting up their own club: the VMCC was relatively expensive to join, in fact the VMCC membership fee was more than the going rate for a Cyclemaster at that time. These three: Andrew Roddham, Simon Whitehead and Kevin Mallone, joined forces with Andrew Pattle (at age 28, they thought he'd give the project an air of 'mature respectability'!) to create a club of their own. All four came from within fifteen miles of Ipswich but, rather than call it the Ipswich Cyclemotor Club, they decided to think big and go for the 'East Anglian' title. As it turned out, they hadn't thought big enough: the club had members in Gloucestershire and Warwickshire before the total membership had reached double figures.

Although the EACC and the VMCC Cyclemotor Section could have become rivals, the opposite was true: there were always friendly relations between the two organisations. The Cyclemotor Section—and Stan Greenway in particular—were most helpful and encouraging in getting the EACC up and running. EACC members rode their machines all the way to Warwickshire each year to support the Cyclemotor Section's Annual Road Run.

As membership of the EACC quickly spread across the country it soon became clear that a monthly meeting in Ipswich was no good for keeping all the members informed. So, early in 1982, the [first edition of the club's magazine, *Buzzing*](#), appeared. Another early aim of the club was to provide a spares service. This was also up-and-running by the start of 1982 and a look at the [first edition of *Buzzing*](#) shows that a range of bearings, seals, piston rings and drive chains were already available.

Keeping things affordable, while also doing them as well as possible, was another of the EACC's guiding principles. The first three editions of *Buzzing* were a rather unusual size—because the very cheap source of photocopying that had been found was only available on foolscap paper. Membership numbers soon became so big that another photocopying source was needed and from the [fourth magazine](#) onwards, a more conventional A5 size was adopted.



My Raleigh RM8.

A story that spans nearly 1/2 century!!!!

You know how it is, beer creates loose talk, one thing leads to another and before you know it another project is born. One such 'Loose talk project' came to being when I mentioned to a chum over a jug of ale that wouldn't it be fun to have travelled on the same vehicle to work in the first year of your working life as well as the last. (Retirement approaching) Could I possibly resurrect my Raleigh moped and accomplish such a feat? (Well just for one day maybe, not a whole year's commute, that would be a feat beyond feasibility) A time machine!! Travelling back and forth through 5 decades. Oh yes was my chums reply, I'll raise my jug to that! So, the quest was on.....I shall keep you posted on progress to make the Raleigh a runner. In the meantime here's a few tales from years past during custodianship of the afore mentioned flying machine.

It was February 1973. I was 15 & 1/2 and counting the days to my 16th birthday. Applying for a provisional licence and riding the open road was where my priorities lay. 'O' levels? Not on the agenda. By chance the scoutmaster had an old moped for sale, just what I needed. (As you know the law changed in December 1971 restricting 16 year olds to mopeds.) Being a Patrol Leader I considered I had first dibbs on the purchase, paid the princely sum of £5 from my Saturday job savings as a butchers delivery boy and hey presto before you know it I was the proud owner of what turned out to be a Raleigh RM8. **My very first motor vehicle.**



It wasn't in the best of condition but Dad helped me make it a runner before we stripped it down, sprayed the metal work with Polyurethane 1pk Blue and shone the chrome. Spares were purchased from Watson & Cains in Leeds and an M.O.T. obtained from Bill Bancrofts in Horsforth. Alas both dealers now long gone although quite well known and respected in their day

So, for a year I commuted the 8 miles to work on the RM8. Rain, shine, sleet and snow. Mechanical skills learnt every day. Plenty of plug whiskers, probably due to using any old oil available in the pre-mix. Misfires aplenty due to wet weather and road spray on the coil and low tension connection. Silicone and WD40 were not available to me in 1973.

Just an old roll of Self-Amalgamating Tape and a blob of plasticine to cover wire exit at the magneto end.

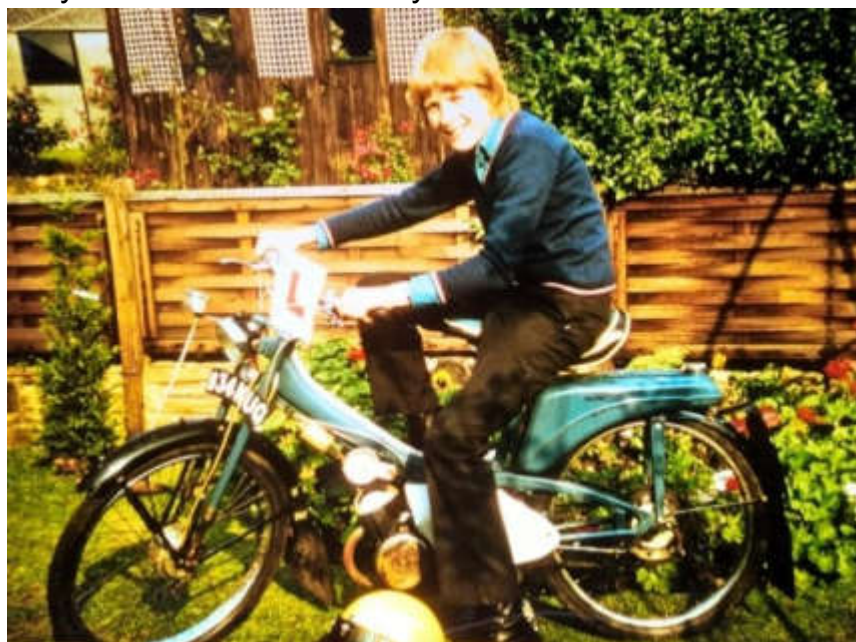
Don't ever remember pushing home though so, all in all some reliability must have been present. A lust for speed.....Obviously knocking the cover on the underneath of the silencer back increased horsepower immensely. The racing seat allowed me to ride with a tuck down body posture and one day I was absolutely flying on a slight downhill main road approaching the estate where I lived. The little engine revving to the max. My eyes starting to water with the wind speed so I knew I was hitting high velocity!!!!!! It was only when turning on to the estate and in sight of my abode that I realised there was a police car behind.

Now then Sonny Jim.....usual police talk....Oh dear, big trouble. I'd been 'officially' clocked at 38mph in a 30 limit!!! Dad saw the happening from the lounge window....came flying out to help his boy!!! Thank goodness he was a good talker and not an angry man.Production of documents required at nearest police station and a verbal telling off.....Phewww weee. 1st endorsement averted. Sometime during this first year of ownership the front forks were swapped for early Honda C50 ones. The original RM8 wheel was grafted into them, a top fork/handlebar mounting plate was made from an old JAP speedway engine plate and a set of bars that I always believed to be ex-speedway were fitted too.

The year passed and my 17th birthday brought a licence upgrade. Any motorcycle up to 250cc. The RM8 was parked at the back of the garage.....Not so much unwanted, more not really needed. Time passed and my motorcycle collection grew. Dad thought it would be a good idea to give the RM8 to my uncle for my cousin to use as he was approaching his 16th year. . Off went the RM8 to live near Chester. Alas, my cousin didn't use the Raleigh, it sat unloved in an open fronted outhouse for quite a few years. Now, there's patina and there's corrosion. Unfortunately the latter was now applying to our once faithful friend. On one visit Dad had seen enough and asked for it back.

So, back up north came the RM8, but rather worse for wear. The old green logbook (still in my name) and handbook thankfully came too. I'm guessing that was about 1996. My two young sons thought the Raleigh was great. Whizzing around the garden, what fun!!!!

They named it 'Eric' after my uncle. It's been called 'Eric' ever since.



So, I'm on a mission, you have the background story and have seen the old photos when I was nay but a lad.

Let's get Eric flying again.....

To be continued.

Albert Crackleport. (Age 63 ¾)

Premium, Super and Stale - Petrol of course!

It is a liquid fuel that we use regularly with little or no thought to what it is, how it is produced and its hazardous properties.

Petrol is obtained from crude oil, by fractional distillation, where the oil is heated until it boils and vaporises, and then the fractions at different boiling point ranges are distilled off. This process happens in fractionation columns at oil refineries, where we see the typical tall slender vertical metal towers. Petrol is produced from these complex distilled liquid components and then additives are blended into the complex fuel mix.

The manufacturing and control processes are detailed in BS EN 228.

Typical additives to name a few are;

Bio ethanol < 5%

Detergents quantities not given

Typical inherent hazardous components that are limited to near zero are;

Lead <0.001 mg/l

Benzene < 1%

Here in the UK, the most common petrol types are:

Premium Unleaded (95 RON)

Super Unleaded (97 / 98 RON)

Premium Fuels (99 RON e.g. Shell V-Power)



‘RON’: Octane rating explained.

OK, we’re about to get technical; ‘95/97/98/99 RON’ refers to the Research Octane Number rating. This is a measure of how easily the fuel will ignite within the combustion area engine of a vehicle. The higher the octane rating is, the harder it is for the fuel to ignite because the fuel requires greater compression to do so. All this happens in an engine cylinder.

Because high octane fuel burns much hotter, it can burn more efficiently, and performs better for higher performance vehicle engines with high compression ratios.

Many years ago, whilst I was working at a new refinery, I was responsible for the build of a fuel blending area. In this area was an actual ‘knock engine’, and it was explained to me what happened in fuel blending and octane ratings. In those days lead was added reduce the combustions knock. We have moved to unleaded fuel.

Premium Unleaded (95 RON)

Despite the ‘Premium’ label, Premium Unleaded is the most used petrol across the UK and Europe and is suitable for almost all petrol engines. This includes two stroke cycle machines.

Super Unleaded (97 / 98 RON)

Super Unleaded has the higher-octane rating (97/98 RON) that is widely available here in the UK. It is mostly used for high-performance cars that require it, and that will benefit from using it. Additionally, the fuel consumption figures of modern new cars provided under test conditions is nearly always using this fuel unless stated.

Premium Fuels (e.g., Shell V-Power)

Premium fuels, such as Shell V-Power, have a higher octane rating (99 RON in this case). Manufacturers of these premium fuels claim that as well as the higher octane rating, the fuel offers benefits such as “improved lubrication, cleaning action and a higher performance.”

Stale petrol There is a belief that when you use your lawnmower for the first time in spring, it does not start. We then suspect the petrol has gone stale and we need to drain it and refill the petrol tank with fresh petrol. Magically, it starts first time. So, we say the fuel has gone stale mainly due to evaporation losses over time.

The lighter components evaporate first; these are the chemicals that provide valuable octane benefits on starting from cold. These are very volatile and compose most of the fuel/air mix during initial start-up, but when they are depleted by evaporation, the mixture becomes lean, causing higher temperatures, detonation, pre-ignition, and piston damage, especially in small high revving two strokes.

In the fuel cap there is a vent, in older fuel tanks, the size of the vent or hole can be 1mm or so. As fuel is used air replaces the fuel volume used. If your shed is like mine, in summer roasting hot and hence evaporation losses.

The fuel that remains when the volatile parts have evaporated has a higher density, but it is not as volatile, cold starting is impaired. Because carburetors meter fuel by volume, the mixture now becomes rich because of the extra amount of fuel in the denser liquid.

This richness will cause plug fouling and blocked exhaust ports due to carbon deposits, but the lack of volatile octane will suppress full revs. So, in short, marginal fuel will result in hard starting and lack of top end revs and power, but the machine will run once started.

Formation of Gums and Peroxides.

After several months' storage at summer temperature the petrol will start to form peroxides and gums. The degradation will continue as the fuel ages and the peroxides which form will slowly attack the soft materials in the fuel system. The first to suffer will be the rubber and plastic fuel hoses, which will fall apart, followed by primer bulbs and carburetor diaphragms. Eventually even the harder plastic of the fuel tank will be eroded as will the aluminum of the carburetor.

The 'gums' or 'varnish' are solid material which forms and lines the inside of the carburetor, blocking the microscopic bores and jets, thereby affecting the functioning of the carburetor. Ethanol is well known for attacking and degrading synthetic fuel line materials.

Stale fuel is the number one cause of stiff metering diaphragms and the primary cause of carburetor replacement. Gums and varnish will quickly stick the piston rings of a running engine causing expensive failure.

Modern fuel tanks and containers have specifically designed vents that reduce evaporation losses to a minimum.

Considerations

If you are in doubt about which petrol you should put in your vehicle, please check your manual. It'll give you a recommendation, unless your vehicle is a high performance model, basic 95 RON unleaded will do the job. It must be mentioned that there are Health and Safety issues with petrol. Because of the volatility of petrol and ease at which it will ignite as a liquid and the explosive properties as a vapor make it a chemical that we must take the appropriate Safety precautions. The Health part concerns toxic effects and wearing appropriate PPE to prevent ingestion, inhalation, skin contact and spills and the environmental impact. The environment is polluted by the products of car engine combustions,

Finally Fuel duty tax/VAT is now 58 pence per litre, so more than half of the fuel cost we pay at the pump goes to the government. Do not forget Vehicle Excise Duty which is based on the level of air pollution that the vehicle produces, is intrinsically linked to fuel consumption.

Petrol has many benefits but is a hazardous pollutant. (refs; RAC and Shell) *Barrie Holland*

More distributed Mince Pie pictures.



Garelli Tiger Cross on the shores of Lake Lothing, Oulton Broad, Nigel Page



James Superlux by the former
Stowmarket & Ipswich
Navigation,
Andrew Pattle

**More Distributed
Mince Pie pictures.**

Paul Newton's Honda 90 by the
Leeds & Liverpool Canal at Gathurst



Ian Munroe's New Hudson by Potter Heigham Bridge





Chris Gornall's Sun in the sun.



Douglas Felton's Raleigh RM4 Automatic.

More distributed Mince Pie pictures.



Mark Gibb's Honda at Orford Quay

David Watson's Honda PC50 by sunny Potter Heigham Bridge



Tips, Tricks and Techniques

Tanks A Lot

Before we embark on another chapter in this series I have to thank Bilt Hamber Ltd for their assistance in the production of this piece. This is far from a blatant advert because I've been a huge fan of their corrosion control products for some time, so I'm delighted that they've been able to supply some of the products I've used here, to help spread the word through our enthusiastic little community.

With that out of the way what are we looking at this time? Well, the opening words will have already given you a clue- the dreaded rust, corrosion, tin worm, ferrous oxide and many other pseudonyms, not all of which are suitable for publication here. Specifically rust inside fuel tanks, which is a subject often talked about on the EACC Facebook group.

There are many, many opinions of what works, what doesn't work and what could work, so the following is just one series of steps that I take to remove rust and prevent its recurrence primarily in fuel tanks, developed and honed over a number of years. If you're sceptical about my methods that's fine, do what you think most appropriate but know that at the time of writing I have seven tanks in for cleaning, five of which are from returning customers, so I feel confident in sharing and recommending my methods.

In initial inspection of the tank interior with a good torch will dictate the first step, so let's assume the worst-case scenario which is a tank that's been languishing in the back of a damp shed, and was stored full of "Pool Petrol", which sets the era quite nicely. The petrol will have evaporated leaving a residue on the bottom of the tank that resembles an unappetising mixture of Old English Toffee and earwax. The remainder of the tank is coated with loose, flaking rust. Nice.

Step one is to shake out as much loose rust as possible, but it's not essential to get it all out. To soften and remove the residue a good soak in acetone or cellulose thinners (cheap "gun wash") is the order of the day. Both are available from motor factors, automotive paint suppliers or the dreaded eBay. After use both can be filtered and re-used for other heavy duty cleaning purposes, to help offset the initial cost. It's not essential to completely fill the tank, because the vapours are also very effective. **WORK OUTSIDE!!** The fumes from these chemicals are highly volatile and dangerous to breathe.

Every time you walk past the tank give it a good shake for a few seconds- it helps if you leave the tank in a place you pass frequently. Empty the tank periodically and check progress- it could take several days to completely soften and dissolve the residue, so be patient. Filter whatever you've decided to use and put it back in the tank- even when it appears dirty it will still work. A happy side effect of this process is that it can also remove older types of chemical liner, but that's a whole different article!

When you're happy that all of the old residue has been softened and dissolved empty the tank and dispose of the solution responsibly. Acetone in particular can be re-used several times if filtered and left to settle. Wash out the tank with washing up liquid and hot water.

If you're working on a tank that's been used with pre-mix you'll need to remove the oily coating on the inside, either by using an abbreviated version of the above, or by using a proprietary degreaser (Gunk etc), a strong mixture of Traffic Film Remover or if you're lucky and patient washing up liquid and hot water.

Now the alchemy can begin in earnest- if your tank didn't have the nasty residue this is your starting point, after relieving the tank of its stale, foul smelling contents of course.



Here is my starting point for this example; A Triumph fuel tank probably dating back to the mid '50's and judging by the mounting holes for a "nut cruncher" rack on the top, probably a T110. It's showing a consistent covering of moderate rust throughout, with thick crusty rust on the bottom surfaces.

The only product I've found to work reliably and consistently well is Bilt Hamber De-Ox C. This is purchased as a powder which you dissolve in water to the appropriate quantity and strength required. Because it's

water based it has no detergent properties, which is why it's so important to clean the oil and residues from the tank to start with.

Fill the tank and leave overnight. The following day empty the tank by about three quarters and vigorously shake it with the remaining quarter in it. **KEEP THE SOLUTION!** Empty completely and inspect with a good torch. Depending on the severity of the rust it may be necessary to filter the solution and return it for a further period. It will help speed up the process if a. you can keep it warm, and b. you agitate it periodically. Check progress every few hours, until you're happy that all the corrosion has been completely eradicated, and if you've followed all of the above steps it will have been.

Wash out with washing up liquid and warm water, then rinse thoroughly. This is important because it's possible that the solution will have loosened large flakes of rust, that could still be lurking in hidden corners- you're going to want these flakes in the flowerbed rather than in your main jet!



After an overnight soak and regular agitations during the next few hours of the following day this is the result- clean, shiny metal totally devoid of any signs of corrosion.

The metal is now so clean that can give rise to another potential issue- flash rust. I've treated Jap tanks using this method and watched the now clean, shiny metal turn orange before my eyes as it dries in the sun!

This is clearly far from ideal, so as I see it you have four possible options;

Leave it to go rusty again. Counter intuitive at best.

Partially fill the tank with a pre-mix solution, empty and allow to dry. Smelly, wasteful and not a long term solution.

Use a solution of Bilt Hamber Atom Mac. This is a highly concentrated migratory corrosion inhibitor, that well, just works! I've used it in tanks that were cleaned and stored in a shed about six years ago, and they're still completely rust free.

Use Bilt Hamber GAS MAC, which is supplied in an aerosol and has been specifically developed for use in all vehicles, to prevent corrosion during storage above and below the fuel level and is harmlessly burnt off during the combustion process. As an added bonus it will help stabilise fuel during storage. Highly recommended.

The initial outlay for all of these recommended products may seem quite high, but remember that they will last a very long time (the De-Ox C rust remover and Atom Mac rust inhibitor can be re-used many times) and once you've seen how effective they are you'll inevitably find other uses for them- just imagine having a shed full of clean, shiny tools instead of an anonymous pile of orange spanners you need to wash your hands after using!

As I said at the beginning these are the methods and products I use, and others are of course out there on 'tinterweb and in folk lore. A modified cement mixer and a handful of road chippings / nuts and bolts is a favourite. This may work to a degree but won't galvanise a relationship with any of your neighbours who aren't hard of hearing, and have you got a cement mixer to modify? Additionally it won't help to remove rust from tight corners, typically where seams meet on the sides and bottom of the tank, and if your tank's integral / non-removeable how are you going to strap a moped to a cement mixer?

White / distilled vinegar is also one that rears its head from time to time. Yes, it possibly will work simply because it's acidic, but it'll work out very expensive for the quantity you'll need, and won't attack anything other than light surface rust.

Again I'd like to unapologetically thank Bilt Hamber for their generous assistance in the production of this article, and I would strongly encourage you to explore their extensive product range (www.bilthamber.com).

Over the months I've been happy to share with you some of the techniques, tools and processes I use in my activities including wheel building, vinyl decal application, making and applying waterslide transfers, paint run removal, lead loading rust holes, plastic welding, applying and shaping body filler, and preparing & painting plastic panels. So far so good, and by now I hope you've been able to paint a picture of the sort of thing I get up to, and while I'm very happy to carry on with this series of what I hope has been informative and interesting to you, dear reader, I'm starting to run out of ideas for new content.

So, have a think and let me know what you'd like to see in future publications, either via Dave Watson (mac.editor.eacc@gmail.com) remembering of course to thank him at the same time for his continued and much undervalued dedication as Editor or me at waltonworks@outlook.com.

As always dear reader, if you enjoy this sort of content tell the Editor. If you don't like this sort of content tell the Editor. If there's something specific you'd like to see tell the Editor. It can be a lonely and thankless job for our poor old Ed, so show him some love and give him stories, pictures, articles but above all give him something to put in our humble publication!

Neil

Walton Works Bowen

With thanks to

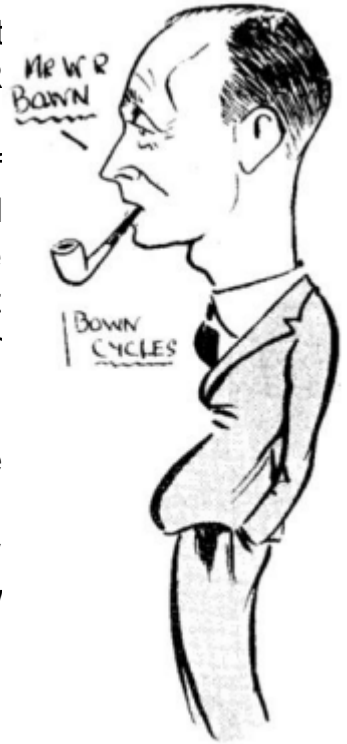


Autocycle ABC

Part 3: Bown

Bown was a cycle and motor cycle manufacturer that became part of the Aberdale Cycle Company in the early 1930s. William A R Bown had a seat on Aberdale's board and was commissioned to produce a replacement for the Aberdale autocycle (the subject of part 1 in this series of articles). The replacement was needed because of the introduction of the Villiers 2F engine which would be followed by the withdrawal of the Junior de Luxe. This meant that all makers of Villiers-powered autocycles were redesigning their Junior de Luxe engined machines to use the 2F engine.

Aberdale was provided with a factory at Llwynypia in 1949 under the Labour Government's Advanced Factories Scheme. This factory produced both autocycles and motor cycles, which were originally launched under the Aberdale name at the 1948 Earls Court Show with production scheduled to begin in March 1949. February 1950 saw the autocycle's appearance on the market as a Bown product.



The new frame was unusually well-engineered for an autocycle, being a cradle type with duplex down tubes. Otherwise, the Bown had all the usual features of the 2F 'family' of autocycles: 4-inch [102mm] hub brakes front & rear, Villiers lighting set, lever operated throttle, strong rear carrier, rear stand and pressed-steel girder forks. Some more individual features were inverted brake levers, a box silencer mounted between the frame rails under the bottom

bracket and a spring loaded jockey wheel to tension the pedalling chain. The colour was maroon with gold lining and its price (in March 1950) was £58 15s 8d [£58.78], which included £12 10s [£12.50] Purchase Tax. Tube Investments bought the Aberdale company in 1954, mainly to acquire the rights to Aberdale's 'Gresham Flyer' children's tricycle. The takeover led to the closure of the Bown factory in the same year. Production of the autocycle ceased when the factory closed, with about 3,000 having been produced.

Autocycle ABC

Part 4: BSA

BSA Motor Cycles Ltd did not have any production autocycles in its range—although, as we'll see in part 15, there was a production autocycle produced within the BSA group of companies. In 1940, BSA Motor Cycles Ltd did, however, get as far as producing a few prototypes. One of these machines is depicted in the two photographs.



As can be seen, BSA's autocycle did not follow the standard practice of most other manufacturers. It does, however, bear a striking resemblance to the Levis-engined HEC Power Cycle: maybe too much of a resemblance to be accidental. But the BSA is not simply a re-badged HEC. There are enough differences to show that BSA built this machine itself, but following the major design points of the HEC. The Levis and HEC engines are very similar: the layout is the same, the primary drive cases are the same shape and in the same position, the same style of flywheel magneto is used and both engines have the distinctive curved exhaust expansion chamber sweeping around the flywheel. Again, comparison of these expansion chambers shows that, although they look the same, they are different castings. The frame is proportioned much more like a pedal cycle than the conventional Villiers-powered autocycle. The wheel-base is shorter and the bottom bracket is in the correct position for pedalling. The curved down-tube can be seen in the pictures. The curvature creates extra space to accommodate the engine but it is also a feature found on some BSA pedal cycles and may have allowed the use of some common components. The petrol tank is like a motor cycle one and is obviously designed to conform to the BSA 'house-style'.

What became of these machines? The mask on the headlamp and white patches on the mudguards show that these are war-time photographs. In fact, they were taken outside the BSA works in Armoury Road in 1940. Essential war work took up all of BSA's efforts in the following years and the autocycle project was shelved. The prototypes did not survive intact although parts of one of them may have. They were probably used by workers at BSA's works until something went wrong when, being prototypes, the lack of spares would mean they were consigned to the scrap heap.

* * * * *

Firstly can I say how much I look forward to each issue of The **MAC**. Especially in these strange times!

I have hesitated for ages to submit this as it could so easily sound like an endless winge? I have been a "resident in overalls" in my garage all my life, and interested in all forms of mechanical and electrical devices. I was mostly interested in cars young and old, until my interest in smaller engines came with my 16-year old son's entry into the world of stationary engines. However, he proved to be a whizz at getting engines to run, using a mixture of logic and great patience!

Whilst being by nature rather an impatient man, unusually I seem to have infinite patience for the work involved with mending and restoring things. My entry to your world of two wheels started a few years ago when I found working on my 1953 Morgan Plus 4 too onerous. I had been given a basket case 1956 Garelli Mosquito cyclemotor, which I restored and just exhibited with the stationary engines. After many years in the garage, I decided I should put it on a bike, and eventually got it registered at DVLA fitted to a 1954 Tildesly bike.

I got this running sufficiently to brave the first CARD run at Stowmarket in 2018 (?). This was the year of a summer with wall to wall sunshine, but on the day of the run it **POURED!** The Mosquito did run some, but did not stay the course, due to a lead coming off the coil that I was too fed up and saturated to even see, let alone repair!! Also, I could not believe how uncomfortable a motorised, but un-sprung, bicycle could be! It has not been ridden since, not only for comfort, but also for no confidence in its reliability!

However, a meeting with some club members at the East Anglian Railway Museum after a local run made me wish for a moped's fatter tyres and springing! So when I found a **Kerry Capitano** on a nearby farm, I decided to restore it. Finding out from John Burgess that it was only one of 3 Automatics known to the Club spurred me on even more.

I had many, (largely enjoyable). ups and downs restoring it, some of which I have written about before, but now I have become thoroughly fed up with trying to get it running properly! This is where my patience seems to desert me!

As regards this automatic, because the centrifugal clutch only engages above certain revs when the engine is *running*, the makers provide 2 aids to starting. Firstly a handlebar-mounted lever to temporarily engage the clutch, and with it a lever to operate an engine de-compressor.

The Manual says to operate the de-compression lever, engage the temporary clutch and rotate the engine until releasing the de-compression valve causes it to fire, whereupon you are to release the clutch lever. This cannot be done with the bike on its stand, so you can only try to pedal it or run along beside it.

The simple problem I could never overcome is that as soon as you release the clutch, there is no drive to make the engine go round, so it won't start!! Eventually, in desperation I have disconnected the de-compression lever, and now start it by a "kick-start", turning the engine with the pedals 180 degrees at a time. This so tires my legs that I give up very easily! Much of the time, the engine fires tantalisingly, but then dies before I can get it warmed up and idling! The rest of the time it just doesn't even cough!

I think the problems may relate to petrol mixture in some way? The connection to the carb from the tank is a short transparent plastic tube, and I observe there is always a bubble about an inch long sat up by the tank tap. I can get rid of this by slackening the carb connection and draining some out, but it re-appears almost immediately? I wonder where this bubble comes from and if that stops flow? Could it be the petrol vaporising?

Also, the carb has a plunger to prime it, but I am not sure exactly what this does? I have taken the carb off and cleaned it what I think is meticulously, including blowing it out with a compressor, but to no avail!

I did get it going once, enough to get on it and ride it a few hundred yards, but then it died, not to re-start! I tell a lie! On just **one** other occasion it actually went all round the circuit of our estate, about 2 miles, with no problem at all! But that is the very last time I got it going! The only thing I can think of is "stale" petrol? For a while I had the strange problem of petrol dripping out of the carb inlet, even though the tank tap seemed not to let by at all? Because of this, when I came to start it for the above "successful" run, I found the tank dry! So of necessity it was filled with "fresh" petrol from my container after adding oil. This whole issue of ethanol in petrol etc. I find difficult to understand, particularly how it affects engines? By now I expect you are shouting at these pages telling me I am in the wrong hobby? My real problem is overcoming an irrational fear that I will never get the engine running properly, so I just lose all confidence in it. With that goes my determination to persevere! I often hark back to my Father's advice. He was a proper Chartered Mechanical Engineer, and he often said: *"If you have compression, the right mixture & a spark at the right time, no-one can stop that engine from running"!!!*

I don't expect I am alone, and my heart goes out to all those on runs whose machines have to be rescued. On the other hand, I just marvel at the sheer numbers of you who do incredible miles, seemingly time after time, with little or no trouble. Or am I just glossing over the real situation? Logic tells me that having run well for a couple of miles once, it surely can do so again. I just have to persevere, which may mean draining the tanks each time and putting in "fresh". I realise this is not a great hardship – I just have to convince myself there is an answer to this problem. If anyone is interested in replying, I would especially welcome any comments on the starting procedure, although I am not sure how many automatics there are? (Years ago, I had a Raleigh Mobyette automatic, and this was a simple start as you had a throttle-type twist for the decompressor, and could pedal the engine round whilst sitting on the stand. This was enough to get engagement of the centrifugal clutch, whereupon you let go the de-compressor and the engine fired, but you could keep it going for a short while by keeping pedalling until it was firing well.)

I think perhaps I am missing something and should go back to the "recommended" method in the Manual and persevere with that? The current method of getting half a revolution "kick start" is not really very satisfactory and very tiring. Having said that, it is only **half** of the problem because it will often fire but just die again after a few revs!

I am sure the spark is not the problem; it always seems OK when checked. The magneto was given to Danny to sort out and he seemed quite happy with his tests.

I hope maybe to get in reply some renewed confidence to have another go at getting this nice machine going properly. *Richard Rowsell*, Essex.

Bridlington,
East Yorkshire.

Following my letter published in the December 2020 issue of the club mag, I would still love to hear from anyone who can help me in the full restoration of my **Mobylette AV42** which I am hoping to start on once the weather starts to warm up in my garage. The machine is French import and the metalwork is in excellent rust free condition having been liberally smothered in old oil during its days of usage. The engine is pretty much complete but will need an amount of work to get it to 'fire up'. Hints and tips on restoration would be very much appreciated. I have a copy of the workshop parts list but haven't a clue where to start! It would also help if there are any recommendations of spares stockists or indeed if any members have parts to sell. I am quite keen to make a start on the machine with a view to it being on the road sometime this year and maybe showing at local events but need help to bring that about. My email address is petervdg@talktalk.net and is OK to be published. This is an urgent call to all you enthusiasts please.

Peter Vande Gravel.

The article in the last issue of the MAC, from DVLA about **Changes to Black and Silver Number Plates** was interesting especially as I seriously considered changing the yellow and black plate on my 1974 'N' reg. moped last year for a silver and black one. However, I'm glad to say, I abandoned the idea as I wanted to keep the little bike as original as possible. What I would like though, is clarification on the following. Re. The exemption qualifying dates, the DVLA refers to registration dates of vehicles in one paragraph but construction dates in another. As we all know, for Historic Vehicles non-payment of VED and exemption from MOT is based on age dependant on the date of 1st registration of vehicle. Is it an oversight or misprint or does DVLA really mean construction date? As we all know there can be a large difference between construction and registration dates; months and even years, as in the case of British bikes bought in the mid to late 1960's when they sat in dealers' showrooms for ages, unsold until probably heavily discounted, because of the competition from Japanese iron .

Garth Jeffery

Some aircraft are permitted to use Motor Fuel; others are only allowed to use **Avgas**, at a price of about £2.50/Litre the last time that I was allowed out of my house. Like many road vehicles, aircraft fuel systems can be damaged by Ethanol, but a simple test can establish if Ethanol is present or not, you can even work out the percentage of ethanol in the fuel, by using a graduated, "stop-able" parallel sided glass container, if it is non-graduated, then a felt tip or china graph pencil and a ruler will work. Put 2cm of water into the container, and then put an equal 2cm of fuel on top. You should be clearly able to "see the join" through the glass and mark its position. Agitate the glass for a few minutes, hence the need for a stopper (a thumb may work). Check the level of the water after the liquid has settled. Because Ethanol is hygroscopic, it will leave the fuel and mix with the water. The amount, by which the water level rises, will reveal the percentage ethanol in the fuel. I suppose that with a large container and a syphon tube, the ethanol could all be removed. I do not have either the patience or courage to try it.

The **flywheel puller** shown in the last magazine reminded me of a simple puller which I made out of a scrap piece of 2" round bar many years ago. I have access to a Unimat "baby" lathe, so turned it, but any suitable size and shape and a large drill bit would serve. It has five holes, so can be used as a four screw puller or as a three screw puller as appropriate. The tool is about 20mm thick, and is bored out about half way to allow it to sit flat on the flywheel. I cannot now remember the dimensions for the small hole centres, but anybody with suitable skills can measure hole spacing.



I seem to remember the four screws should be 2BA, but that this size is compatible with a metric size screw M5(???). I may be mis-remembering the sizes and facts here. The nuts are purely retainers to prevent loss of the screws when not in use, and should be removed to use the puller.



Even numbered BA screws are fairly readily available, but odd numbers resemble hens teeth. I tried to obtain 1BA screws for one of my cyclemaster casings, and was quoted £55 per item for screws of the wrong length, which was all that was available. Fortunately, I own BA and BSF taps and dies.

R.P. Davies

At the risk of further boring Newsletter readers here is another photograph of a **Cyclmaster** fix.

One of the main annoyances with the Cyclmaster is the fact that once it has started from cold you have to stop and get off it to open the choke. I understand that Cyclmaster did make an optional remote choke control but I haven't been able to find out what it looked like - so here is my version.



All you need is a length of control cable which is long enough to reach from the air cleaner to a point that you can reach when you are sitting on the bike - mine ends on the crossbar. Solder a length of copper wire to the end of the cable and wrap the wire round the choke knob, then zip tie the cable up the rear fork support and along the crossbar. If you're a perfectionist (and if you are, why are you riding a Cyclmaster?), you can connect the nipple end of the cable to a lever, but it's not necessary.

To operate the choke, close it in the normal way using the knob, ride off and when the engine fires open the choke by pulling on the nipple. You don't need return springs or anything fancy because you are just using the cable to pull open the choke, though I have refined mine slightly by moulding an epoxy putty knob onto the nipple.

The fix works well and has the added advantage of retaining the air cleaner if/when it falls off the carb stub.

Regards *David Romaine*

Wanted

Wanted for a Motobecane D45B, 1949, rigid/girders - chaincase, stand, rear engine shroud, throttle twist grip.

Wanted for a Solex 330 - 4 long dress springs (stop clothing getting caught in the back wheel).

Tom - 01733 577301, 07748977342, tom123dolby@aol.com.

For Sale

Suzuki service manual for AS50 and A50. Dated 1 July 1968. 48 pages.

Used but complete and intact.

£15 posted to UK mainland. Tom - 01733 577301, 07748977342, tom123dolby@aol.com



***How dangerous is that?
Sandals on a bike?...***

RIP Bev Crook.

This photo is from The East Anglian Run in 1987 (when Bev had been a member for 2 years or more)



And this picture shows Bev at the Periwinkle Run in 2019.