

# West Wiltshire Society of Model Engineers Newsletter

Issue No. 16 September/October 2020









### Calendar

### September

5<sup>th</sup> - Saturday Steam Up. 10am-4pm 19<sup>th</sup> - Saturday Steam Up. 10am-4pm 19<sup>th</sup> - AGM – Golf Club 11am, followed by barbecue at club site.

#### **October**

**3<sup>rd</sup>** - Saturday Steam Up. 10am-4pm **17<sup>th</sup>** - Saturday Steam Up. 10am-4pm

#### November

**7<sup>th</sup>** - Saturday Steam Up. 10am-4pm **21<sup>st</sup>** - Saturday Steam Up. 10am-4pm

### **News**

### **Annual General Meeting 2020**

Following the cancellation of the WWSME AGM on 1st April 2020 due to the Covid-19 lockdown, the meeting will now be held at the golf club on 19th September assembling from 10:45 for a prompt start at 11:00. Only members who have renewed their membership will eligible to vote or stand for office.

After the AGM there will be a barbecue for members and their immediate family at the WWSME site. Social distancing rules will need to be followed to keep this event safe.

If you will attend either the AGM and/or the barbecue please let me know so that we can ensure that the golf club can be set up with appropriate safe distancing, and ensure we can purchase the correct supplies for the barbecue.

Colin Wade (Hon secretary)

### **Club Notice**

We want the club to be a place where members, particularly those who have been shielding, can feel safe to come and socialise. To enable this please follow the government guidelines on social distancing. The following behaviour should be observed to keep the site as safe as possible whilst not feeling too restrictive:

- 1) Sign in on entry to the site leaving contact details for track and trace purposes.
- 2) The clubhouse has a one way system in via the front door, out via the side door.
- 3) Only the person running the kitchen is allowed in it.
- 4) Each time you enter clubhouse please use the hand sanitiser which is on the left inside the entrance.
- 5) Masks should be worn whilst in the clubhouse we have many vulnerable members, please

- respect their safety. Masks may be removed whilst drinking coffee.
- 6) A stock of disposable masks will be in the clubhouse if you forget yours. Please make a donation to cover the cost of a replacement if you need to use one.
- 7) Social distancing of 1 metre plus (mask) needs to be observed whilst inside the building. Please keep separate in steaming bays and station area.
- 8) A maximum of twenty people can be accommodated inside—this number is subject to review once operational.
- 9) The workshop can be used, but social distancing is not easy to maintain, and the machinery may not have been disinfected by the previous user. For this reason it is recommended that members only enter if prepared to take this risk. No more than three people should be in the workshop at the same time.
- 10) Whilst outside do not congregate in groups of more than six people.
- 11) Please bring your own garden chair where possible.
- 12) Members and family living at same address only, no guests (except for prospective new members).
- 13) The toilet block will be open, please wash hands for 20 seconds and sanitise anything you have touched. There is a spray disinfectant supplied.
- 14) Please use gloves when operating the traverser and opening/closing the gate.
- 15) Limited running is available on both 5" gauge and garden rail lines. On the ride on tracks at least 4m separation must be maintained at all times.
- 16) Models to be run should be limited to those that can be handled from the members from the same family on site.
- 17) Every member using the 5inch track should inspect it prior to operation to ensure it is safe. If

there is any problem do not run and please notify a member of the committee as a matter of urgency.

This notice replaces the guidelines issues on 16<sup>th</sup> June and published in the last newsletter.

## Mamod Minor in a Morris Minor

### By David Adams

A friend of the family recently bought a Morris Minor car which was filled with spare parts and curiously also a small model stationary steam engine presumably from a garage being cleared.

Knowing we were into things steam related the engine was given to us to see if we could get it going.



Having had a Mamod SP2 stationary engine for my 12<sup>th</sup> birthday which I still have in its box over 30 years later I immediately recognised the engine as a Mamod and sure enough the word 'Mamod' was crudely stamped into the brass crank. This was like no Mamod I had ever come across before in my childhood as it was mounted on a flat Meccano type base rather than the raised base I was familiar with.

After a bit of research I found that the engine was a Mamod Minor 2 from 1948. The boiler was unusual in that it is drawn / spun and just has one push in end cap as opposed to the later Mamod Minor 2 boilers where the barrel was made from

brass tube with two soldered on end caps. Presumably this change was made to keep the production costs down to a minimum for what must have been a relatively expensive toy in post-WW2 Britain.

The two wick meths burner was missing but everything else was complete and original for the engine including the solid brass stamped flywheel as opposed to the later Mazak cast ones, one piece cylinder later changed to two piece soldered construction and stamped brass crank which was changed to the far less attractive steel crank on later engines all again presumably to reduce cost.



The engine was best described as a complete wreck and looked to have been used extensively, suffered a meths fire which had burnt away the paint and then had sat in a shelf in a garage getting absolutely covered in grime. The frames were twisted, funnel damaged, base bent, the engine had been taken apart and assembled incorrectly but crucially there was no damage to the boiler and the safety valve unscrewed easily to reveal a dry and corrosion free interior. Luckily, the grime was oily grime which had prevented corrosion of the exposed metal parts so I decided that as the engine was a 70 year old survivor it was well worth restoring as a small diversion from my usual building of  $3\frac{1}{2}$  gauge steam engines.

I wanted to try and preserve as much of the original engine as possible but after carefully removing the grime it became apparent that there was no original paint to preserve apart from a very small patch of red on the underside of the base

prevented from being scorched by the burner tank on the opposite side.



The engine was taken apart and cleaned, oiled, boiler tested, pipe between the boiler and the cylinder re-soldered, safety valve un-seized and serviced and the engine re-assembled and tested on compressed air at about 5 to 10 PSI, it ran beautifully. The engine was then put into steam and ran really well, the crank and cylinder trunnion screw were a bit sloppy in the frames from use but this did not seem to affect the performance of the 70 year old engine.



After the successful first steaming the engine was completely disassembled and cleaned, polished and re-painted. The paint used was the same as my 3 ½" Tich which I knew stuck well to the substrate metal and took the heat of a steam engine. Phoenix Precision two pack etch primer was used followed by synthetic enamel topcoat all applied by airbrush.

The base plate had the remains of some red rubber feet which had been riveted into place at each corner but these had perished and turned to dust with the passing of time. After some hunting I found some red silicone rubber O rings 4.34mm ID and 3.53mm C/S which slipped nicely over the original brass rivets still in place on the base plate and work well as replacement feet.



The original Mamod decal on the firebox was long gone and burnt away and replicas do not seem available but with a bit of hunting I found some artwork on the internet for the 1946 – 1953 style logo in blue which the engine would have had applied from new. I printed this loco onto some white water slide transfer paper using an ink-jet printer cut it out and applied clear lacquer to the transfer before fitting to the side of the now painted firebox with very pleasing results, not having used this process before. A further coat of clear varnish was then sprayed over the firebox side and transfer in an attempt to try and protect it from the heat, oil & boiling water droplet when in use as it is underneath the cylinder assembly.



An original replacement 2 wick meths burner proved difficult to source so a new one was bought from Tony Green Steam Models for not much more than it would have cost me to buy the materials to make one myself. The cotton wick supplied lasted no time but a 1 meter length of 6mm un-braded glass fibre wick with outer cotton braid was found on Ebay and sent to me from the manufacturer in Germany in a couple of days for less than £5 including postage which works really well and should last me a very long time!



Now completed, the engine has been run regularly and operates with ease my Mamod WS1 Workshop which I saved up my pocket money and bought when I was 14. You can get 20 to 30 minutes of continuous running with one boiler and burner filling when using the glass fibre wick which does not burn down in use.



The more times I run the engine, the better it looks with the brass boiler now taking on a darker more golden colour and the decal on the firebox has become brown along its top edge from the heat

whilst still remaining firmly attached, just like the original decals did on the early Mamod engines. It is now looking like a 70 year old engine again and I am very pleased with the end result.

Enough of playing with old Mamods now and back on with the business of getting my 3½" William engine finished.