



Article taken from 'Steam in the Garden'

*Loco Review*

## ***The New Mamod Mark II***

by Rob Kuhlman

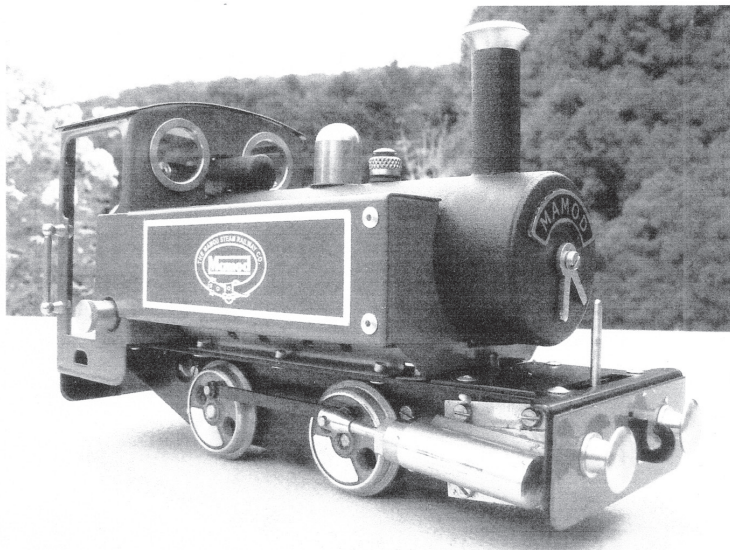
**Back to our roots...  
but much better!**

**The New Mamod Locomotive,  
Mark II from Mamod, Ltd.  
[www.mamod.co.uk/mamod.asp](http://www.mamod.co.uk/mamod.asp)**

### **Introduction**

Many of us graybeards got our start in the hobby with Mamod locomotives, either the kit or the r-t-r

version. Both of these versions of the Mamod left a lot to be desired with respect to their feisty behavior and mediocre quality control. Aftermarket or home-made modifications and improvements (drivers, cylinders, lubricator, safety valve, regulator, even a new boiler) were typically required to make the Mamod a reliable runner. At this point there was little remaining of the original except, perhaps, the bodywork.

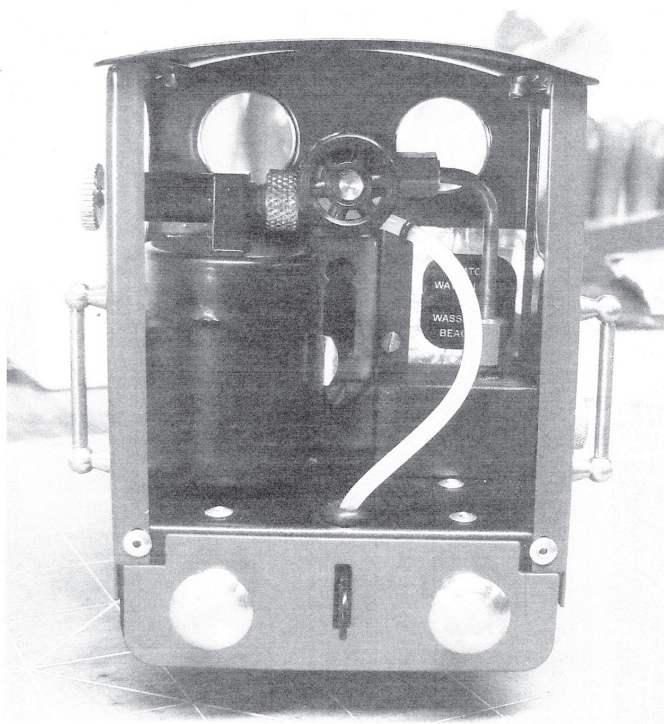


*The new and much improved Mamod Mark II.*

THE OFFICIAL MANUFACTURER & DISTRIBUTOR OF MAMOD PRODUCTS



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*A peek into the backhead and control area.*

But with all its warts, the original Mamod was great fun, and it represented the most inexpensive avenue to live steam.

Now, roughly 25 years after the introduction of the original locomotive, a reconstituted Mamod company has introduced what they are calling the Mark II. The family resemblance is unmistakable, but this new locomotive has little in common with the original. Do you remember as a child studying those visual puzzles in which two seemingly identical pictures were placed side-by-side and you were asked to find all the differences? Several of us at Ron and Marie

Brown's steamup in August played that game with the Mark II and an original Mamod, and the more we looked, the more differences we noted. The most obvious difference is the boiler -- it's fatter, it's silver soldered, and it's painted with a matte black crackle finish. The boiler is 1-3/4" in diameter (vs. 1-1/2" on the original) and has a 170 ml capacity (vs. 105 ml). The cosmetic dome appears undersized, the chimney is soldered to the boiler, and the position of what on the original was the whistle is now occupied by a cylindrical manifold which leads into the cab and serves as a steam turret.



Article taken from 'Steam in the Garden'



*The new Mamod Mark II generated a lot of interest when it was unveiled at Ron & Marie Brown's steamup. Here Peter Foley gives it a thorough examination before putting it to the test.*

#### **More Differences:**

-- The cylinders are a major improvement. They're still double-acting oscillators, but they're each milled as an integrated cylinder and bearing surface, and they're outfitted with steam glands where the piston rod exits the cylinder. They hold their vacuum/compression very efficiently.

-- No more fuel tablets. The boiler is a pot boiler heated by a gas burner whose reservoir occupies the port position in the cab. The reservoir is retained by a spring clip and can be filled through the cab roof utilizing the supplied extended filler nozzle or popped free from the cab and filled externally. Being retained by a spring clip enables the reservoir to be positioned such that the supply regulator can be accessed either at the port cab doorway or from the cab rear.

-- New bodywork is utilized which conveys the look of the original, but there are slight differences in dimensions. In essence, the new cab is a tad shorter, shallower, and it sits higher. It lacks a back, so your engine driver will have to hold on tight! The spectacles on the cab front are a bit coarse and the bodywork pieces are attached to one-another with conspicuous aluminum pop rivets.

-- There's a dead leg displacement lubricator located on the starboard cab footplate.

-- There's a throttle regulator in the cab which provides a nice effective range of throttle settings. It's got a black plastic spoked wheel which is rather attractive and stays cool to the touch. Reversing is accommodated by a redesigned reversing disk located under the smokebox; its action is as smooth as butter.



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-- Wheels appear to be securely mounted upon their axles. This was a major flaw on the original Mamod and has been addressed by utilizing ribbed axle stubs.

-- The chassis is sturdy. The Mark II, like the original, is constructed at the factory as either gauge 0 or gauge 1. The steel side frame members are actually folded as angles whose 1/2" wide horizontal flanges provide stiffness and serve as the mounting surface for the bodywork. Axle bushes are retained in the sideframes with steel retainer strips held in place by the frame stretchers. By removing the stretchers and retainers, then the axles and drivers, access to the burner is obtained.

### How Does It Run?

Surprisingly well! I have steamed it five times now and am getting a feel for how it works. Let me take you through the steaming from beginning to end because there are a few quirks which were new to me. I first oiled the running gear with light oil and then pulled the cylinders free from their port blocks and lubricated the mating surface with steam oil. Resting the locomotive on its port side allows the lubricator to be filled. I next popped the gas reservoir free to fill it. The only access to the boiler is through the safety valve, so I unscrewed the safety and added 170 ml of distilled water to fill it and then withdrew 35 ml. Lighting off the gas burner is a little unusual. The burner is almost dead silent, so auto traffic or conversation will overwhelm its sound and consequently gas supply regulator adjustments are difficult to discern. A piezo electric ignitor didn't work; I utilized a flame barbecue lighter held underneath the loco or below the side tanks to light off, and 3 or 4 strikes were required before I succeeded. Once lit, the burner performed capably.

In 6 minutes the boiler came alive and the safety valve began to weep (more about this later). At this point, with the loco on blocks, I cracked open the throttle and flipped the reverser back and forth to introduce steam to the cylinders. After 8 minutes, the cylinders were hot, condensate had been cleared, and the drivers were spinning smoothly.

Control of the loco is remarkably smooth and reliable in both directions -- much better than the original -- and it's quite powerful. It pulled my 10 axles of wood and cardboard coaching stock with no fuss whatsoever, and throttle adjustments, when necessary, were effective and easy to make through the cab

back.

Twenty minutes after placing the loco on the track the gas ran out. The boiler still contained 60 ml of water, so there's little danger of damaging the loco by running the boiler dry. After the loco cooled down a bit I drained the lubricator of the very small amount of condensate and refilled it with steam oil.

### So What's the Catch?

Well, this loco is, depending upon your point of view, aesthetically ugly or charming. The original Mamod was undersized for 1:19/1:20, and with the new fatter boiler and smaller cab, the Mark II is even more awkward looking. The boiler front and the pop rivets certainly don't help in the realism department. But let's not forget the spirit of the endeavor; this loco is a toy, not a scale model.

Of greater concern to me is the safety valve. The boiler bushing into which the safety screws doesn't present an effective surface for the supplied flexible flat gasket to seal. The gasket instead presses against the curved surface of the boiler and consequently steam weeps. Perhaps a true O-ring would work better.

The lubricator has a gluttonous appetite for oil. After each ~20 minute run no oil remained in the reservoir, and very little condensate dribbled out. But better too much oil consumption rather than too little, I suppose.

Also in the nuisance department is the boiler's sight glass. The original Mamod's boiler had a folded piece of light sheet metal behind the sight glass window to serve as a backdrop for observing the water level. The Mark II lacks this backdrop, and with the black gas reservoir and black lubricator on either side of the sight glass, it's nearly impossible to peer into the darkness of the boiler to discern water level. For all intents and purposes I ignored the sight glass altogether.

### Why Buy One?

The Mark II Mamod ran splendidly right out of the box. I couldn't have been more surprised and pleased. Mamod Ltd. has reconfigured the original Mamod quite successfully. Let's now consider some economic rationale. I dug out some old advertisements from the early days of the Mamod loco in our hobby, and the SRP of the original Mamod in 1984, with today's inflation-adjusted price in parentheses, was \$150 (\$315). In 1989 the price was \$180 (\$316).



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In all likelihood you would have had to replace the burner, safety, wheels, cylinders, etc., so you were probably \$200 further in the hole before you ended up with a reliable runner. Let's now consider several current entry-level alternative steamer locomotives. The MSS Mamod can be purchased for as little as \$299. The PPS Janet (formerly IP Jane) lists for GBP400 (\$616). The Accucraft Ruby can be purchased for as little as \$460. The Mamod Mk II purchased directly from Mamod Ltd. sells for GBP299 (\$462). In my view the Mark II operates as well as all and better than most of these other engines.

Why would you wish to buy one? I can see several purchasing scenarios. One scenario is as a gift to a protege such as a grandchild to whom you might wish to introduce the joys of steam. The loco is safe enough, controllable enough, and reliable enough that an older child would have success. A second scenario would be as the first steam locomotive for a neophyte with limited financial resources. This is where I was twenty years ago, and I sure wish this loco had been available then. And a third scenario is pure whimsey. With an inexpensive bright, ugly, charming toy loco which runs reliably right out of the box, I don't think you'd be disappointed.

