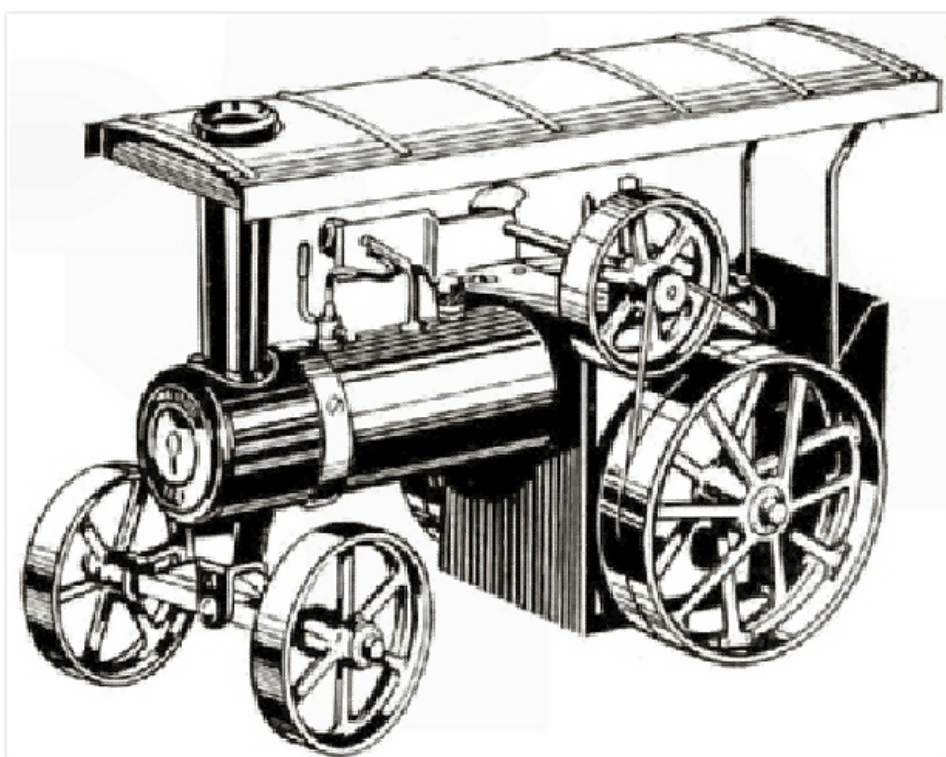


A complete guide to operating
And maintaining your
Mamod Traction engine.

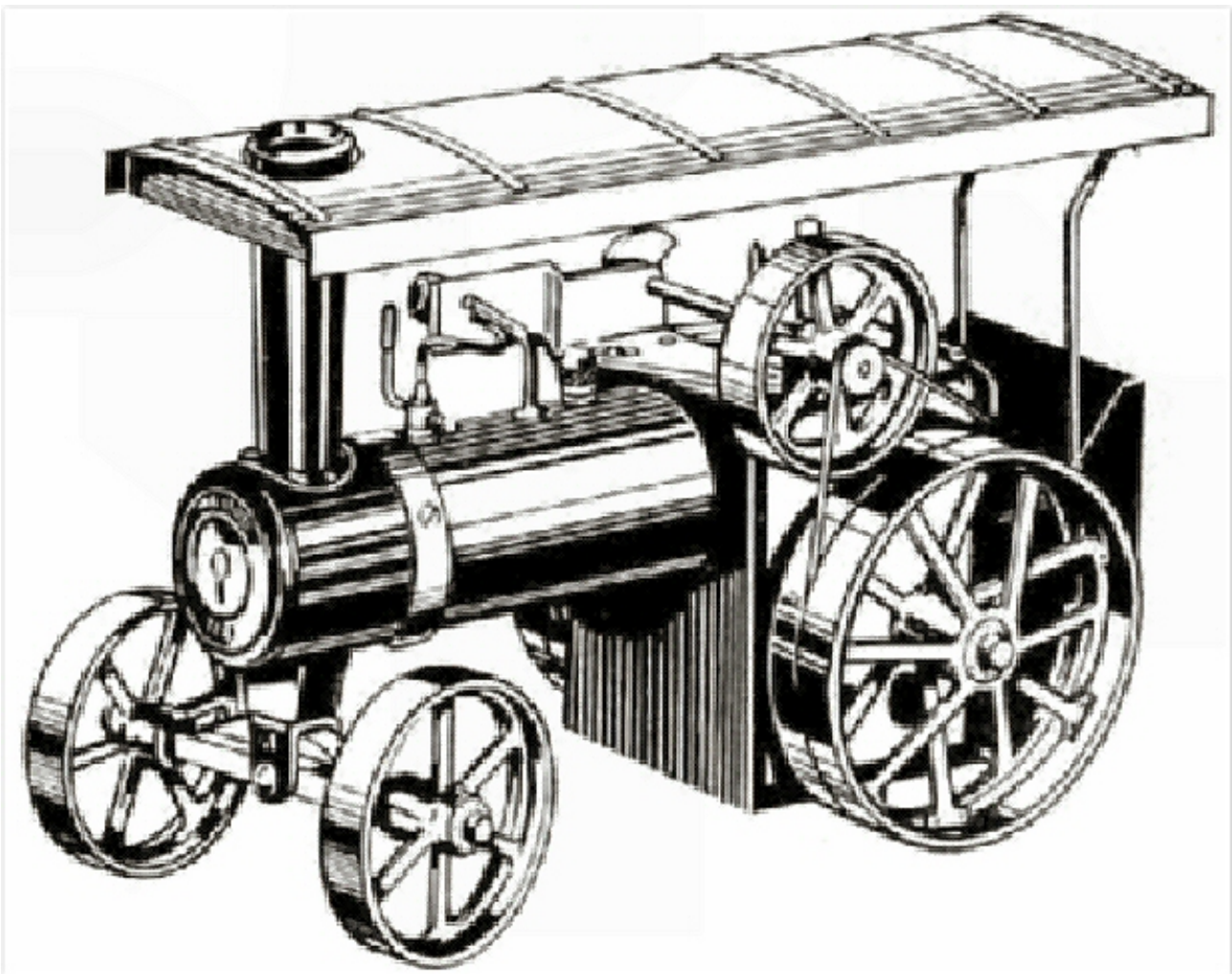


www.mikes-steam-engines.co.uk

Introduction

I hope you enjoy this free downloadable book which will hopefully help to explain everything you will ever need to know about operating your Mamod traction engine safely.

This booklet will also cover a few simple steps to help you maintain your traction engine so that it will last you a life time.



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A very brief history of the Mamod traction engine.

The Mamod traction engine was first manufactured in 1963 and was sold in Toy shops for 99s 6d.

Malins Engineers the manufacturers of the Mamod traction engine produced these models in huge numbers when records stopped at the end of 1995 they had produced an Incredible 468,890.

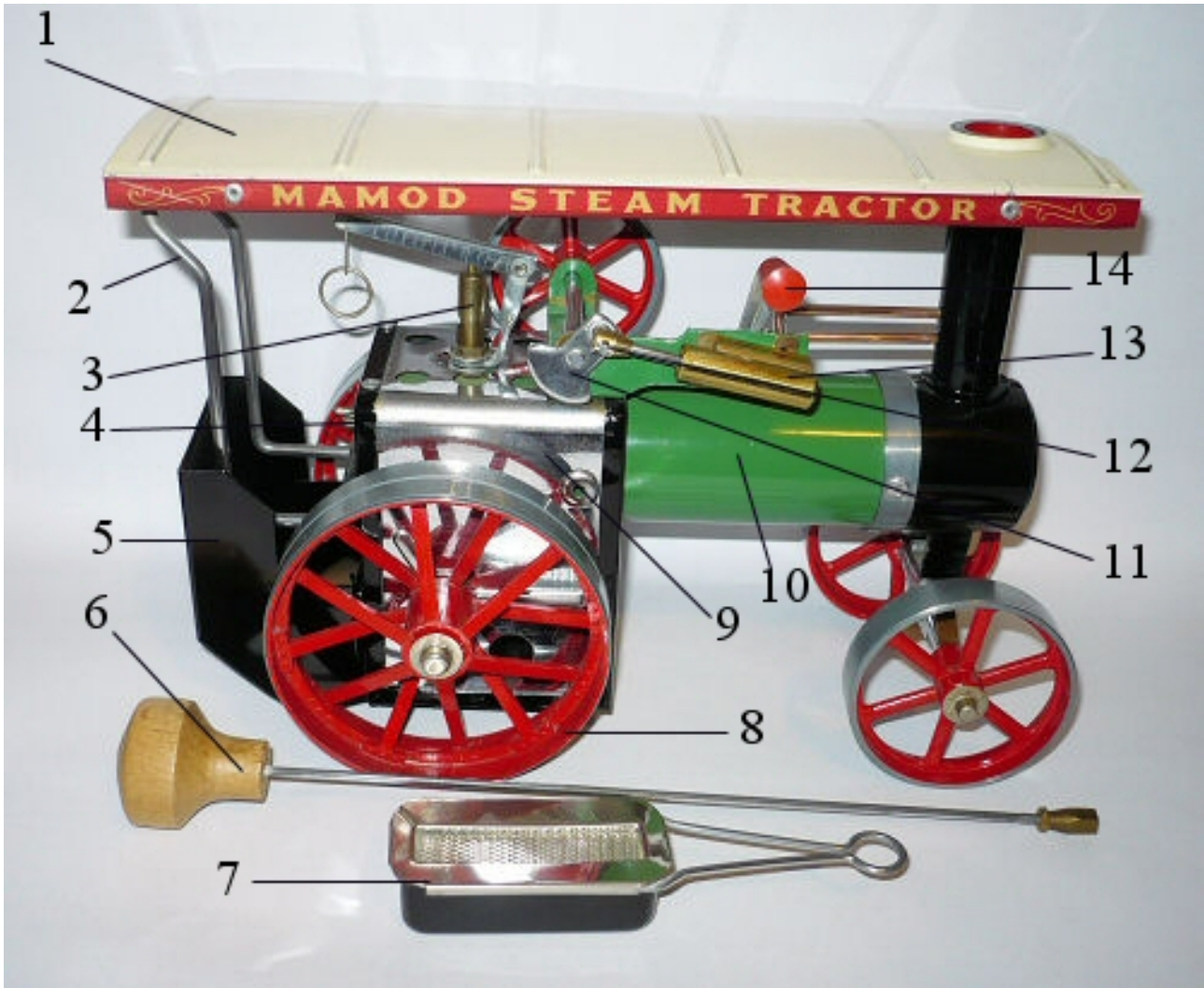
The Mamod traction engine has changed very little over the years, but it as both lost, and gained certain features, the most noticeably gain being the reverse lever which was added in 1967 and the greatest loss being the removal of the exhaust throttle around 1967.

Other noticeable changes to the Mamod traction engine was the change from a lovely turned brass whistle, to a pressed steel sprung type whistle in 1972.

And from the methylated spirit burner to a solid Fuel tablet burner in 1977, the final major loss and gain for the traction engine was the removal of the water level plug to make way for the boiler sight glass in 1978.

More traction engines have been produced by Mamod than any other steam toy in the Mamod range making it the most loved and played with steam toy that Mamod has ever produced.

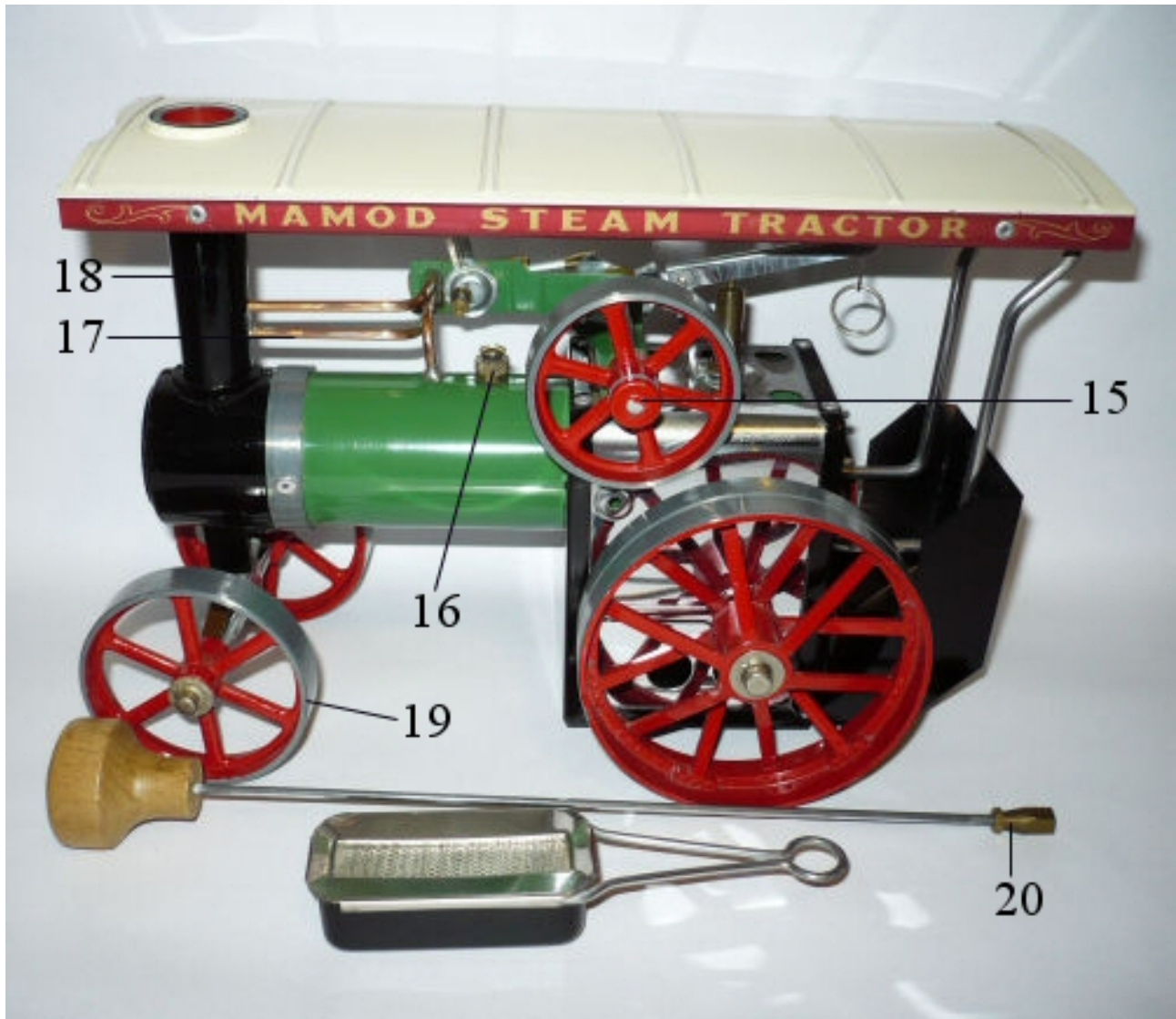
Parts List.



1: Canopy
2: Canopy Supports
3: Whistle
4: Water Level Plug
5: Scuttle
6: Steering Rod
7: Spirit Burner

8: Rear Wheels
9: Chrome Cowl
10: Boiler
11: Crank
12: Piston
13: Cylinder
14: Control Lever

Parts List.



15: Flywheel
16: Safety Valve
17: Steam Pipes
18: Chimney
19: Front Wheels
20: Coupling Nut

Did you know ?
In July 1979
A Mamod traction
engine cost £23.35

Which is the correct oil to use
On my Traction engine ?

With steam oil selling for around £270 per gallon it can be very expensive to buy, although steam oil is usually sold in much smaller quantities (100ml bottles) which cost around £6 per 100ml bottle.

Alternatively you can use a 3-in-one oil which costs a lot less at around £2 per 100ml

Personally I use whatever oil is at hand, whether it be a 3-in one oil, or car engine oil, both of which I usually have in plentiful supply in my garage.

But what do the steam engine manufactures recommend ?

Lets take a look.



In 1963 Mamod
Advised its customers to use a
“Thick car engine oil obtainable from any
garage”



In the late 1930's
Mersey Models advised its customers
to use
“M.M.C. Oil”



And finally in 1965 Meccano
told us to
“Use a medium Motor oil”

Safety Instructions

- 1: Enjoy your steam engine, but be careful and read these safety tips first
- 2: Always wear eye protection, and heat resistance gloves
- 3: Only use your steam engine in a well ventilated outdoor area
- 4: Never use your steam engine indoors
- 5: Make sure there are No flammable materials where you will be operating your steam engine
- 6: Only use Methylated spirit in your lamp, do Not use paraffin or petrol
- 7: Never tamper with the safety valve
- 8: Never leave a lit lamp, or steam engine unattended
- 9: Never store fuel, and matches in the same box, store them separately
- 10: Steam engines get very **Hot**..... Be careful and enjoy.

For extra help or advice please contact
www.mikes-steam-engines.co.uk

Operating Instructions

Children should be supervised by a responsible adult at all times.

- 1: Before the first run, flush out the boiler with boiling water to remove any soldering residue. (New steam engines only)
- 2: Thoroughly oil all moving parts, particular the piston and where the cylinder oscillates on the engine frame, also oil axles and any bearings, performance will improve as the engine is run in, keep well oiled at all times.
- 3: Remove the safety valve and make sure it operates correctly, clean any debris off the threads so that the safety valve is a tight fit when screwed in to the boiler replace the seal if needed so that the safety valve is steam tight.
(Seal is also known as a fibre washer or rubber O'ring)
- 4: Always wear eye protection, and heat resistant gloves, only use your steam engine in a outdoor well ventilated area, make sure there are **No** flammable materials were you will be operating your steam engine, and never use your steam engine indoors.
- 5: Remove the safety valve and the water overflow plug. (If fitted)
- 6: Insert a filler funnel in to the safety valve hole in the boiler and fill the boiler with clean water until it begins to run out of the overflow opening at the end of the boiler, replace the safety valve and overflow plug and screw up tight using the fingers only, if a sight glass as been fitted to the boiler, fill to the Max level only.
- 7: Fill the lamp with Methylated spirit by pouring onto the perforated strip, wipe off any spilt or excess spirit from around the lamp, light the lamp and fix in to position under the boiler by engaging with the scuttle, take care to keep the lamp level, and only use Methylated spirit, Do not use any other liquid fuel.
- 8: If your traction engine is fitted with a solid fuel tray, insert the solid fuel tablets in to the tray and light, Do not use fire lighters or any other fuel tablets, use only genuine Mamod solid fuel tablets.

Operating Instructions
Continued

Children should be supervised by a responsible adult at all times.

9: When the water boils and steam is up, start the engine by give the flywheel a few turns.

10: Do not stand over the boiler when steam is up.

11: Do not refill the lamp without also refilling the boiler, or you will damage the boiler, when refilling the lamp make sure it is completely extinguished before attempting to refill it.

12: Be careful, and enjoy your Mamod traction engine.

13: And finally after using your steam engine, drain all the water from the boiler (**When Cold**) and dry your steam engine thoroughly, and- oil all moving parts.