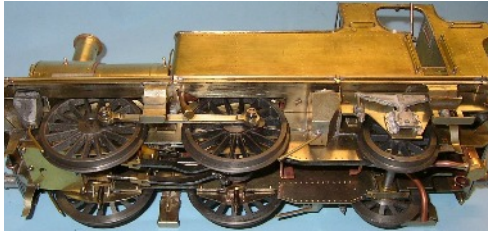


BARRETT STEAM MODELS Ltd.

John Barrett started Barrett Engineering in 1980 having spent many years in engineering quality management. Since 1980 we have been in continuous, full time manufacture. In 2000, Barrett Engineering Services, with son Steven as a partner, produced model makers kits. In 2013 John retired and the business changed its name to Barrett Steam Models Ltd.



We embrace traditional skills of the craftsman together with modern technology. Computers are at the heart of design, accurate production of etching masks and laser cut steel. We use CNC for some production machining and pattern making. We cast our own whitemetal and inject our waxes for investment casting.

We produce ready to run locos from our kits, 10% deposit will be required on order, a completion date will then be provided.



PAYMENTS & DELIVERY

Component production of this kit will start in Jan 2023 and will proceed over the following 12 months :-

Delivery 1 : Laser Chassis, Etched body, Wheels, motors, buffers
Delivery 2 : Coupling rods, detail castings, smokebox & boiler wrapper
Delivery 3 : Cylinders, crank axle, inside rods, burner, sump,
Delivery 4 : Meth tank, boiler, controls safety valve.

	DEPOSIT	INSTALMENTS	TOTAL
Electric Kit.	£ 75	12 x £75	£975
Steam Kit with enots	£120	12 x £115	£1,500
Steam kit with handpump	£124	12 x £123	£1,600

1 complete kit at the end of production will cost £30 to post.

BARRETT STEAM MODELS LTD

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March 2024

GAUGE ONE STARTER KIT



**G.W.R. 0-4-2 TANK
LOCOMOTIVE
KIT**

**Classes
48xx / 58xx & 14xx**

There are several well known examples of Colletts' '14xx' class tanks to be seen on our smaller preservation lines due to their light weight making them very useful. Their visual proportions also make them instantly recognisable as a lovely little branch line loco. Designed in 1932 they were numbered as 4800-4874 and were all built with auto train control for use with autotrailers on push-pull services. A later batch in 1933 were numbered 5800-5819 but were not ATC fitted. During 1946 the 48xx batch was renumbered to 1400-1478 leaving the 48xx numbers free for oil burning locos of the 28xx 2-8-0's. The 58xx series were unchanged.

During BR ownership, a large top feed casing appeared on some in front of the splendid dome. Footsteps and handrail over the rear cab roof on the fireman side only were also added and of course the smokebox number plate instead of the painted number on the bufferbeam.

THE MODEL

From experience gained with our previous beginners models, we have simplified the construction even further. The electric kit contains all that you need to build a nicely detailed model and will include a motor/ gearbox unit and wheels. Space and suggestions are provided for battery powered control systems, but the wheels will need insulating for two rail operation.

The steam powered kit contains everything required to produce a simple, working, live steam model able to run for about 15 minutes on a boiler of water. You will have a choice of Enots valve directly into boiler, or handpump, which will allow the model to be kept in steam for as long as you like. The axlepump will be produced as an optional extra enabling the loco to pump it's own water to maintain boiler water level on longer uninterrupted runs. It is commonly fitted to larger locos but is still being proved for this model.

A DESCRIPTION OF OUR STARTER KITS

These are ideal for those whose machining facilities or skills are limited or whose modelling time is at a premium. They are a good stepping stone from the 4mm and 7mm kits into the world of gauge one. This model is particularly suited for those who are new to live steam. It can run on small radius curves (1175mm 3'10"), making it possible to use live steam on layouts of limited size.

The construction guide comprises photographs and text together with identification diagrams and drawings. It takes you through each stage, including settings and adjustments, finishing with operation and use.

You will require a bench and vice, some hand tools, a drilling facility (which could be an electric drill on a stand) The work includes simple bending of sheet metal, drilling piloted holes out to size and 'tapping' threads if you can. The major components and assemblies are held together with screws. Epoxy resin adhesives such as Araldite can be used to seal bodywork joints and hold details but a small gas torch for soldering can be used for soft soldering but is not essential.

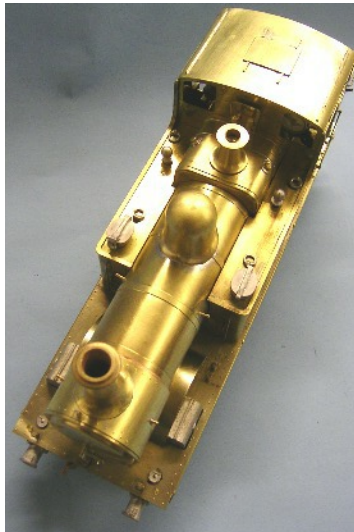
The electric kit includes, laser frames and rods; requiring very little cleaning up with some piloted holes opened out to size with a drill, etched brass sheet parts; with complex forming done, a number of investment and whitemetal detail castings, with all machining including wheels and axles done. Includes motor and gearbox but not control system.

The steam kit adds a built, tested and certified boiler. The single cylinder unit comes as a loose assembly with piston and valve in place, ready for final assembly. Pressure gauge, screws, nuts, rivets, 'O'ring seals, springs etc. are included to complete the assembly. We roll the boiler wrapper and silver solder the meths tank, sump, burner.

The proposed axlepump pack will contain the motion driven pump and its drive linkage, water delivery control and pipework fittings.

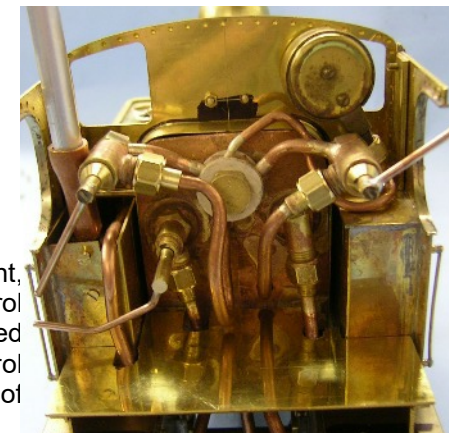
The model making hobby is littered with part built projects which have been abandoned because the modeller has hit a problem. We offer a 'Get out of trouble' service. It could be advice on the phone, a practical soldering training session in our works, correcting a mishap or setting valve timing. We include two hours free consultation or training session in our works and will try to advise over the phone during normal working hours. Over and above the two free hours there will be a nominal charge.

We will also supply replacements for individual components providing they are returned for us to identify. For etched items or investment castings there will be a charge depending on the size. Whitemetal castings returned with a stamped self addressed packing are free.



LOCO SPECIFICATION

Scale	10mm : 1ft	Rail gauge 45mm
Length	Length 295mm, Width 85mm, Height 120mm	
Weight	2.7 Kg (6 Lb)	
Min. Radius	1175mm (3'10")	
Fuel	Methylated spirits, industrial alcohol, bio ethanol. supplied by constant level feed system.	
Cylinders	single : bore 12.7 mm x stroke 20mm	
Boiler	Internally fired, multi flue, with safety valve. Built from copper and bronze, silver soldered throughout. Tested to 200psi (13bar) Max. safe working pressure 100psi (6.5bar)	
Controls	Regulator, blower, pressure gauge. Fuel valve	
Valvegear	Slip eccentric drive to slide valve(s)	
Lubrication	Displacement (Rosco) type.	
Water feeds	Enots valve connected to boiler or Water carried in both side tanks, Hand pump in left hand tank An axledriven pump with its pipework and bypass control valve As an optional extra	
General	Sprung buffers and coupling hooks	



View inside cab showing from left to right, Handpump lever extension, regulator control Water level test valve (lower Left), boiler feed connection (lower right), Blower control (upper right), Pressure gauge (looking out of right hand window).