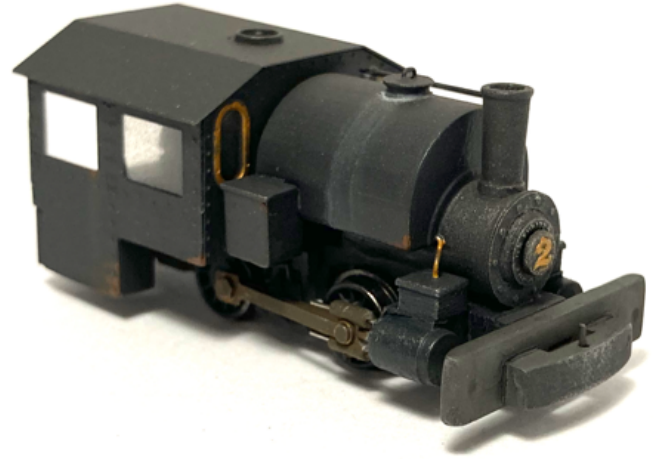


ENG-014
'Yellow Aster'
Porter 0-4-0st



Prototype Info

The Yellow Aster mine was a gold mine in Southern California. As production developed a series of tramways were built and in 1909 a 25hp locomotive was purchased from the H.K. Porter Inc., modified to work in the restricted Rand level tunnel. Two further locomotives to a similar design were sourced a year later, and worked at the site until the 1930s. One is preserved at the Rand Desert Museum, Randsburg.



About the kit

The kit is comprised of a fret of etched nickel silver detail parts and a 3D printed plastic body shell and detailing parts. Only simple folding of these parts is required and they can all be glued in place. We recommend sparing use of liquid superglue for assembly, ideally using a bottle with a thin applicator nozzle.

Due to the nature of the 3D printing process, some support wax material may still be present on the body shell. The plastic used is quite brittle so handle the raw print with care, yet it is easily cleaned up and smoothed with a sharp knife and fine wet and dry paper or emery boards - and then rinsed in white spirit.

The kit is designed to fit a Bachmann N gauge 'Thomas' Percy chassis. The mechanism is well known for it's good running qualities. Please read assembly notes for details of how to fit the chassis.

Please note this is a scale model for adult collectors and not intended for children under 14 years of age.

Parts required:

0.4mm brass rod.
2 short hand rail knobs.
Glazing material.
Superglue.

Tools required:

Sharp craft knife or scalpel.
Tweezers and small screwdrivers.
Emery paper or boards.



Assembly Notes

1 • Clean up the 3D printed body

Separate parts from the 3D printed sprue and use a fine wet and dry paper (640 then 1200 grade if possible) in water to achieve a smooth finish to the saddle tank and small details. It is important to remove any residue from the smooth inside surfaces of the print. If you superglue a small piece of wet and dry paper to the end of a matchstick you can get into some of the harder spots. Once you are happy with the finish, rinse the model in white spirit to remove any traces of printing residue or grease from handling.

2 • Check the donor chassis

Before removing the body from your donor locomotive it is suggested you run the model in following the manufacturer's instructions. The body is removed carefully using the small 'X' screws on the underside. Either loosen the keeper plate and pop out the couplings, or cut these off flush. Check the chassis fits the body opening, if necessary adjust the body carefully with a blade or file. Superglue the cylinders to the chassis and then carefully cut and smooth the top surface flat.

3 • Assembly

Carefully remove each part from the fret using a sharp knife on a cutting mat or similar hard surface to minimise the risk of damaging thin parts. Clean up the tags.



Assembly Notes (continued)

Saddle tank and smokebox

- i) Start by filling the saddle tank and smokebox with lead shot (or similar) secured with superglue. Leave to fully cure, before offering up to the Bachmann chassis to check the fit. This part only ever pushes into place.
- ii) Once happy fit the sandboxes (either side in front of the cab, these help disguise the motor and flywheel) with a touch of superglue. Sand pipes can be carefully bent up from 0.4mm brass wire.
- iii) Add the water filler and handle (0.4 or smaller brass wire).
- iv) The chimney can be fitted in place with superglue.
- v) To fit the handrail drill out the holes to around 0.9mm to accept a pair of short handrail knobs, and cut a length of 0.4mm brass wire to length.
- v) Carefully prepare the smokebox front etched parts. Start with the outer ring of rivets, secure with a few drops of superglue, then add the Porter herald and finally a number of your choice.

Chassis

- i) Add the brakes between the wheelsets, these will need slight modification and superglue to the square mounting brackets on the chassis.
- ii) Fill and smooth the top of the moulded cylinders and add the 3D printed cylinder valve chests and front buffer beam.
- iii) The coupling block can be added to match the height of your other rolling stock, I find flush with the bottom edge works well. A small piece of wire in the hole will provide a pin for coupling to 009 couplings.

Cab

- i) With the saddle tank in place, check the cab is a tight push fit on the chassis.
- ii) Apply the top of the fuel tank, then the fuel filler lid inside the cab, and then add the outer overlays. Start with the buffer beam, then the sides and finally the front and back.
- iii) The roof is gently formed with the fold lines on the inside, check often to ensure a good fit. The 3D printed 'safety valve' glues within the hole in the centre of the roof, this is the front edge. The roof can be left loose until after painting which will aid fitting glazing.
- iv) A handrail can be formed from 0.4mm brass wire, there are small pre-formed holes in the print that need gently opening out to 0.4mm to allow this to be formed and fitted in place.
- v) The rear 3D printed coupling is added to the buffer beam.

Going further

The small pipes from the valve chest to the front of the saddle tank can be bent and formed from 0.4mm brass wire. A seated driver could be included in the cab, his feet in the 'foot well' seated in the cab opening. Oil cans, jack, bucket etc could be added to the pilot or inside the cab.

Painting and finishing

Not quite black is a tricky colour to master, I add a touch of pale grey to my usual black. Pick out the window frames and any extra pipework in a suitable metal colour, the front etched number plates can be drybrushed to hi-light the lettering.

It would be worth adding some dirt, oil and grease build up to bring the model to life. Finally cut some glazing material. I only fitted this to the front and rear spectacles and front drivers side window.

About EuroNarrowGauge

EuroNarrowGauge was founded in 2014 with support from Narrow Planet. This kit is part of a growing range of European prototypes and was designed by James Hilton. If you have any queries about the model or instructions please get in touch.

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