



Prototype Info

The O&K well tank was available in a range of standard designs and primarily marketed as a 'contractors' type locomotive, supplied to small industrial firms for internal networks or construction projects. In the UK they were used for both and there are a number of examples preserved, including Penrhyn's Eigiau now based on the Bredgar and Wormshill in Kent. Our model depicts a typical example and is based upon prototype drawings. Larger tanks, as depicted, were available as an option on the prototype.



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 its 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.

Assembly Notes

Parts required:

0.4mm and 0.6mm brass rod.
Styrene section or scraps.
Glazing material.
Superglue.

Tools required:

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

1 • Clean up the 3D printed body

Use a fine wet and dry paper (640 then 1200 grade if possible) in water to achieve a smooth finish to the cab rear, sides and tanks. It is also 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. Remove the screw holding the circuit board, so this can be tucked to the side of the motor. 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 smooth the top surface, if required.

3 • Assembly

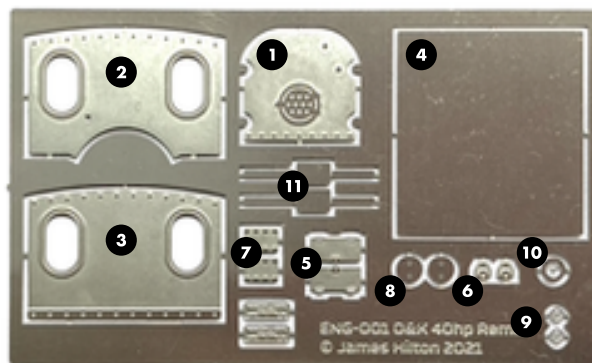
Carefully remove each part from the fret using a sharp knife on a cutting mat or similar hard surface to minimise the risk of damaging thin parts. Clean up the tags.

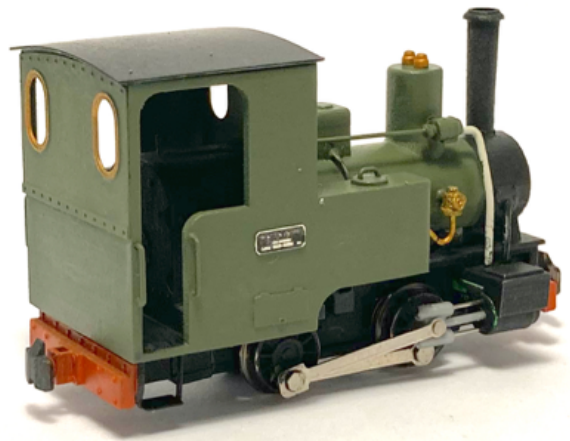
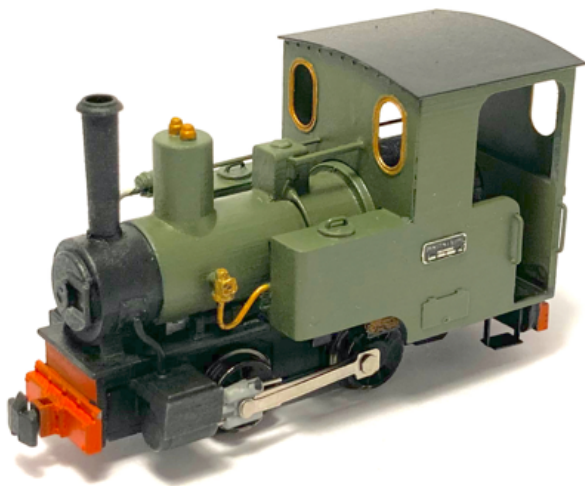
The back head (1) should be fitted first, before adding the cab front (2) and optional rear (3) etches. The roof (4) is gently rolled or bent to shape, keep checking to ensure a good fit. The tool box hatches (5) are on the driver's side of the cab, position can be estimated from photos. The sand dome has an etch (6) applied both sides, and the smokebox has the riveted panel (7) applied to the lower sides. This should be gently bent to a slight curve using your fingers. The water filler lids (8) are an optional part.

0.4mm wire is used for the cab handrails and the water filler handles. Bend these up from brass wire and superglue into position. The sandbox should have two straight pipes that are bent up from 0.4mm brass rod curved to match the boiler and attached both sides, the gentle curve can be formed around the handle of a craft knife, ensure these don't protrude too far into the body.

Locate the detail part sprue, remove the pair of clack valves and fit to each side of the boiler in the pre-formed holes. The hole should be on the bottom. Bend up the feed pipe using 0.4mm brass rod, studying prototype photos for the shape. The steam valve fits to the side of the dome. Add the regulator, through the hole in the cab front with 0.4mm brass wire. The steam feed pipes are bent from 0.6mm brass rod, one from the steam valve to the cylinder, and a pair of shorter ones, linking the cylinder with the etched plate fitted to the lower sides of the smokebox. The couplings can be fitted to the front and rear buffer beams. The short one goes on the front, long on the back, the lower edge should be flush with the bottom of the buffer beam to match your other rolling stock.

The pair of small etched handwheels (9) fit on the clack valves, and a short section of plastic sprue in the hole in the smokebox door will support the larger etched handwheel (10). Remove and fold up the cab steps (11) remembering all etched lines are on the inside of the bend. The flat piece goes against the rear buffer beam, the short tab glues under the cab floor.





Going further

Further details can be added, perhaps the manifold over the firebox, a weighted handbrake lever in the cab, a whistle, a crew, a different style of smokebox door handle, hinges on the smokebox door... the opportunity to personalise your model is endless. Study a prototype photo for inspiration.

Painting and finishing

Often supplied in colours specified at purchase, Humbrol 86 is a good approximation of the 'standard' colour. Often the chassis was painted red on European examples, we've chosen black on our prototype. Pick out the window frames, clack valves and safety valves in an appropriate metal colour and the steam pipe to the front cylinders was often lagged, so appears light grey in photos, this is Humbrol Matt 28 on our prototype. Paint the works plate black, once dry clean off the lettering with wet and dry. Secure using a spot of superglue on the cab side. A coat of lacquer will seal and protect the paintwork from handling.

To improve the performance of the model it is suggested that lead is added within the side tanks. This is available from Eileen's Emporium, plumbing suppliers or eBay. Our prototype uses a thin sheet that is easily cut and then folded to size. It is recommended that this is secured with superglue NOT PVA.

About Narrow Planet

Narrow Planet was founded in 2010 and offers a custom etching service for unique nameplates, works plates and number plates for your model railway locos and stock. In any size or shape from 2mm:ft to 16mm:ft scales. Many manufacturers' styles are available, our full range and ordering information can be found on our website.

This kit was designed by James Hilton, If you have any queries about the model or instructions please get in touch.

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