

NPC-012 Fletcher, Jennings TR N^o1 'slimline' detailing kit

Thank you for purchasing this Narrow Planet kit, we hope you enjoy building and operating it. Please read through the instructions thoroughly before beginning assembly.

Tools required:

25w (or above) soldering iron
145° solder & flux
Razor saw
Flatnose Pliers
Tapered reamer

Small Phillips type screwdriver
Twist drills & pin vice
Needle files/emery boards
Superglue/5-minute epoxy

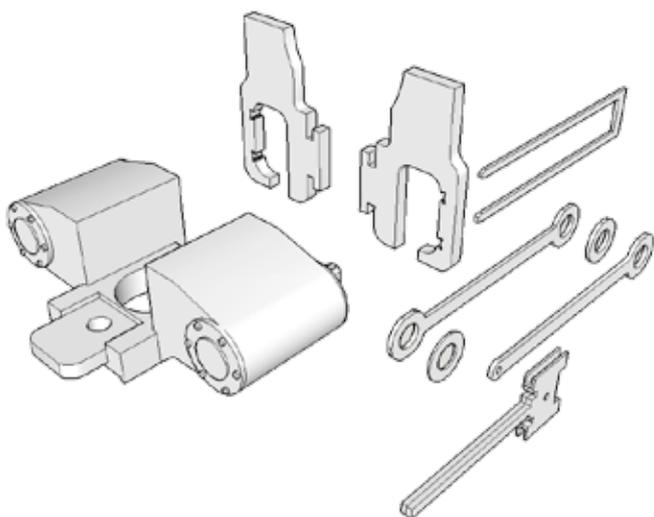
Required to complete:

Bachmann item no.58601
'Thomas & Friends' Narrow Gauge Skarloey

Product Info

This kit has been developed to enable owners of the Thomas & Friends "Skarloey" narrow gauge locomotive, to retrofit realistic profile cylinders more akin to the Talylyn Railway's N^o1 "Talylyn" which Skarloey is based upon.

About the kit



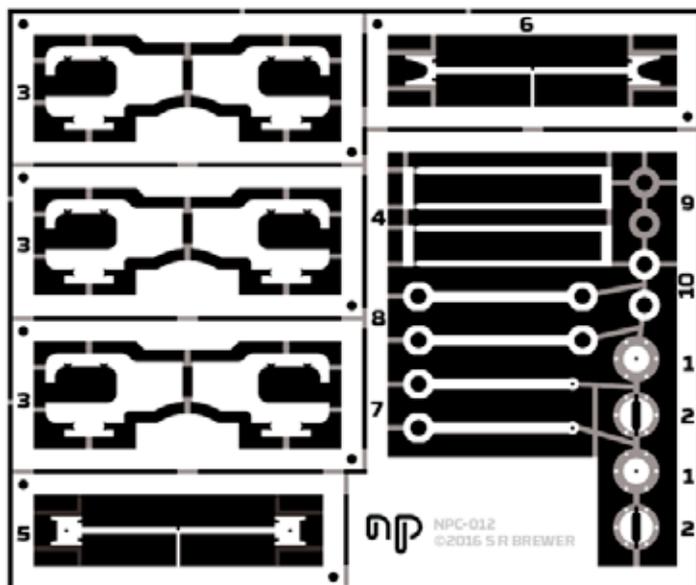
This kit is comprised of a 3D printed cylinder block and fret of etched nickel silver parts for the slidebars and brackets, crossheads, connecting & coupling rods and other details. Where applicable, we only recommend soldering the construction of the nickel silver parts to make them durable and long lasting. Carefully remove each part from the fret as required using a sharp knife on a board, dressing the tags with a file.

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

Construction notes

Chassis disassembly

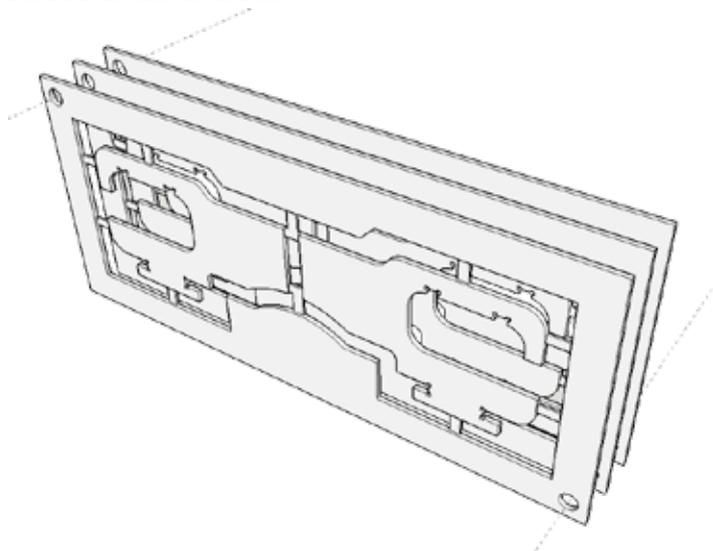
The Skarloey model needs partial disassembling. Before disassembly, check the model runs fine as you will void any warranty once modifications are made to the model. Referring to the exploded diagram supplied with the model, unscrew and remove the cylinder block, the coupling and connecting rods from the wheels, the keeper plate and in turn dropping the wheelsets, couplers and motion brackets out. Keep all the parts and fixings safe for the moment



Cylinders

The 3D printed cylinder block has been degreased for you, but will require burnishing prior to assembly. The holes for the piston rod will need opening out with a 0.7mm drill, ditto the holes for the slide bars which must be done with care. Take the fore (1) and aft (2) etched cylinder covers and fix them into place using a tiny amount of adhesive, be very careful not to flood any of the holes and block them in the process.

Slide bar assemblies



The motion brackets (3) are made up of three laminates which are to be soldered together. Using the alignment holes in the outer frame, drive a toothpick or cocktail stick through the holes to align the parts together accurately and then solder the outer frame. Using a minimal amount of solder (roughly the size of a large grain of sugar) apply it to the brackets themselves using plenty of flux. You don't want to flood the locating notches with excess amounts of solder. Once the part has cooled, snip the brackets from the frame and dress the outer edge. The motion brackets will need some material relieving where it fits around the boiler section, this easily done using a half round file.

Temporarily install the slide bar brackets into the chassis and retain with the keeper plate, ditto the cylinder block. The slide bars (4) need to be removed carefully from the fret to avoid distorting them, break off the bridging material denoted by the half etch line. The slide bars are to be inserted into the cylinders and then located into the corresponding notches in the motion brackets, these are to be soldered into place and the excess slide bar and bridge material to be removed and filed flush to back of the bracket.

Crossheads

The crossheads (**5**, **6**) are assembled in the same manner as the slide bar brackets using a minimal amount of solder. Again, you want to avoid flooding the channel guides with excess solder. Remove them from the frame and snap them in half at the nick break. It's advisable to round off the edges of the piston rods by dressing them with a file to ensure a good sliding fit within the cylinders.

The connecting rods (**7**) are attached to the crossheads by a dress makers pin. The best way of securing the pin to the connecting rod is to solder it in place using a piece of thin paper (newspaper or cigarette paper) saturated in penetrant oil (WD40 or similar) between the connecting rod and the back of the crosshead. Swiftly and carefully apply a tiny amount of solder to the tail end of the pin and file back the tail end of the pin slightly proud to the back of the connecting rod. Tear out the paper spacer and ensure that the rod pivots freely, check that the crossheads slide back and forth freely in the slide bars. If it's a bit tight, gently dress the cusp from the slide bars and/or gently (slowly) relieve material from the guides in the crossheads using a razor saw.

Assembly

Take replacement coupling rod (**8**) and relieve the cusp inside the crankpin holes with a tapered broach so they are a slightly loose fit on the crankpin bosses. Refit the wheels and couplers into their corresponding places – it will be easier to attach the coupling rods and half thickness washer (**9**) and retaining screws to the front axle beforehand, as it will be largely inaccessible with the slide bar in the way. Insert both slide bar assemblies complete with crossheads into the cylinder block, the backs of the motion bracket will need to be isolated from the pick-up plate with cellotape or 0.25mm styrene microstrip. Refit the keeper plate securing in place with relevant fixings. Working one side at a time, fit a full thickness washer (**10**) followed by the connecting rod onto the rear driving wheels and refit the crankpin screws.

Smokebox door

To fit the replacement smokebox door, gently drive a small, thin blade screwdriver under the face and prise it off. Fit the new door in place, noting how the lug underneath locates in the corresponding hole.

Etched plates

Etched plates should be fitted after repainting. Nameplates should be fitted on the saddle tank, works plates on the cab sides and (prototypically) a single number plate is fitted on the cab rear. Study prototype photos for precise placement.

To paint the etched plates, flood them with the chosen colour and then – when fully dry – lightly sand down with a fine sandpaper or emery board.

You may find it easier to fit the plates accurately by cutting out paper templates with a hole for the plate. Use the head of a pin to place a drop of superglue on the back of each plate and then carefully position over the template.

Acknowledgements

We would like to thank CW Railways (www.cwrailways.com) and Stuart Brewer of Small Run Batch for their co-operation in the production of this kit.

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. If you have any queries about the model or instructions please get in touch.

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