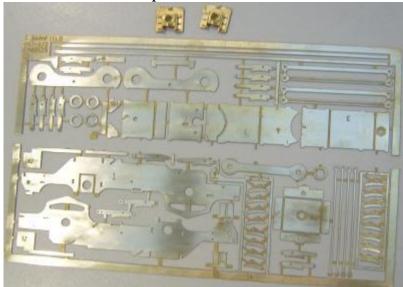
## **LNER Class D17 4-4-0**

Manufactured by: Four Track Models (1992) 22 Grange Road, HARROW, HA1 2PP. Tel: 020 8863 7338. E-mail: info@fourtrack.co.uk

http://fourtrack.co.uk/acatalog/



Though this kit is now under the Four Track label, the one my client gave me to build appears to be an original from Stephen Barnfield. It is therefore quite possible that there have been improvements to it in the meantime. There are many sheets of etch in brass and one in nickel silver, for the chassis. There were several duplicate sets of instructions that list all the parts and their numbers but no sheets identifying which parts are which on the etches. John at Four Track very kindly sent me a new set. It is important to be able to match up the parts numbers to the shapes since there are a good many parts that are not required at all and a number of parts for alternative versions.

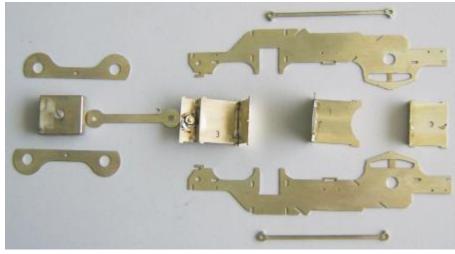


I started with the locomotive chassis as usual. Here are the parts cleaned up ready to be cut from the etch.

There is provision for compensation by installing a beam linking the front driver and bogie.

However, there are precious few instructions on how to go about it. Not to worry though, I make it up as I go along anyway!

The connecting rod laminations were soldered up first. The instructions suggest they could be used as a single laminate but they would be very flimsy I think. Having got both sets of rods cleaned up and exactly the same, the remaining parts had their cusps filed flat ready for assembly.



The instructions suggest tapping the holes in the bogie central support and the bogie sides, screwing them up, soldering, then cutting off the excess. The holes are far too big for this anyway, apparently being

blown up from 4mm originals so any bolts would have to be 6BA. I lined them up with some brass rod and soldered the parts together while the bogie frames were mounted in the chassis jig. Without a chassis jig one would have to use steel axle rod and graph paper to ensure they were lined up correctly.

Here is the chassis largely complete and awaiting the wheels before testing and



setting the beam to its final shape. The tabs and slots can only be used a guide since the slots are etched far too large. However, with the

chassis jig, fitting the parts accurately was not a problem. The rods were used to set the dummy axles and the parts assembled and soldered in situ. No further



work on the chassis could be done until the wheels arrived so I started on the footplate.

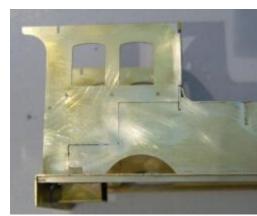
The kit provides two etched lengths of nickel silver to act as the valance.

They are, at best, 0.5mm thick but the slot for them to be fitted into is at least 1mm. I did try but gave it up and used some 1x2mm square brass rod. (The same applied to the Tender footplate too.) They gave much needed stiffening to the footplate. The dummy splasher sides are a fold up as is the rear drag beam

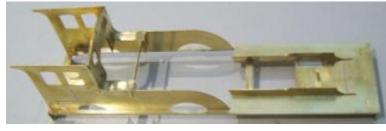


but the front beam is a laminate. I strengthened this too by adding some angle as you can see from this picture.

Later I had to take it apart again when my customer pointed out it should have the later wooden baulk between steel plates. I also measured up for the rivets/bolt heads that appear in pictures of the time and embossed them from the back of the front laminate. For the plank, I used some single sided circuit board. The front laminate was soldered to the copper and the rear laminate soldered to the footplate. Then the buffer beam was Araldited to the rear laminate.



The tab and slots for the body parts are a much better and fit reasonably well in most parts. The inner cab sides are particularly neat as is illustrated in this picture. They are half etched tabs that simply pass one over the other. Bending up the splasher tops that flow out from the cab front is not easy but manageable. Annealing is essential. The dummy frames soldered to the footplate are a little tricky and benefited from some more angle where the smoke box saddle will hide it from view.



The outer sides can then be fitted followed by the remainder of the splasher tops. These fit over tabs in the footplate and have half-etched overlaps to fit at the

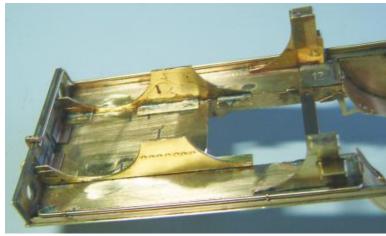
cab end. It is essential that these parts be cut to the correct length before attempting to fit them. They are fitted as a linked pair and the cross pieces cut



out afterwards. Provided the sides have been assembled correctly, the splasher tops come level with the tops of the splasher sides.

Pictures indicate there are a couple of pipe runs along the footplate.

One is for the vacuum brakes and the other is - I assume - for the Westinghouse brakes since this is a dual fitted engine. The pipe ends, from 1mm wire, were fixed into hidden holes drilled for the purpose. The brackets were made from unused boiler band but do also help hold the pipe in place by having their legs soldered to the inside of the valance.



Further progress has been made with chassis with the brakes and sand pipes being fitted. The next job is to fit the wheels and motor and then pack as much lead into it as possible to keep the centre of gravity low.

Brakes and sanding pipes were quite straightforward. Assembled and on the test

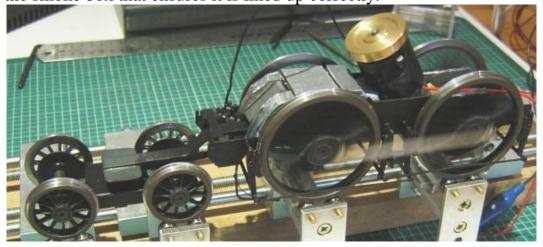
bed where, having been run-in, it is now running very slowly and smoothly. Lead was fitted in between the front drivers to the top of the horn-guides and inside the frames by the rear drivers. I also filled the bogie plate with liquid lead soaked in PVA to set it solid. The whole chassis weighs in at one pound.



Work on the boiler and smoke box is relatively straight forward and parts fitted reasonably well.

The basic parts are shown here part

assembled. The boiler was pre-rolled and has locating lugs to fit into the back of the smoke box that ensures it is lined up correctly.





The chimney is a lovely brass casting but the dome and safety valve were very poor and were replaced with better quality items.

It is shewn here partly completed but there are many

small parts still to be fitted. Washout plugs, lubricators and more pipes. This required obtaining more castings from the Shedmaster range, now under the

banner of Laurie Griffin, who is to be commended for his very fast response for parts. I posted my order off to get the post on a Sunday and got them the following Tuesday morning, excellent service.



The following three pictures shew some of the detail that was necessary to make this engine 'come alive'.







Some parts had to be made, others remade the guard irons for instance were far too flimsy. Where possible I used brass castings from Laurie Griffin but in a few cases had to



modify odd casting to hand because there were no commercial items available. The cab fittings are a compromise between an excellent picture of the preserved example and the set of parts from Laurie (Shedmaster).

The tender in comparison was a nightmare. All the slots were gigantic and the etched overlays for the sides and back were paper thin and therefore extremely



fragile.
Construction is traditional with an inner box over which are soldered the overlays.
Forming the curves was not easy and the mitre joints at the rear proved very difficult. In the



end, (I tried solder and plastic steel) one of them

was reconstructed using Araldite and sanded to shape.

These shots illustrate how poorly the parts fitted, a good deal more filling will be required than I have used so far.

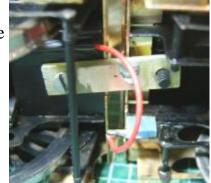
I have never used so much Squadron white putty before. There are two more parts still to fit, the brake and water scoop standards. They had not arrived when the pictures were taken.



The coal rail etches were used but half round wire (Eileen's Emporium) was carefully soldered over them first. On reflection, it may have been easier to make them from scratch. The chassis was modified to compensate it. Nothing difficult

or out of the ordinary.

Pick-up is by the "American" method and this picture illustrates how the coupling between engine and tender is arranged. A paxolin drawbar and an insulated wire-connecting tender and engine. The wire terminates in the blue plug, which fits onto a prong soldered to the tender.



Almost ready for the paint shop.



Despite the blood (yes really!) sweat and near tears, the finished engine looks quite good and I am happy with the end result.

This weekend (3-4 February), it will get a chance to be tested on Horton Regis during the Epsom club's open weekend before being sent off to Liverpool to be painted.

I suspect that this kit when supplied by Four Track will be far superior to the



example I built and so should be easier. Though it gave problems, it can be built



by anyone with experience of etched kit building and is very far from being the worst kit I have built.

Now back from Dennis Morley's paint shop it looks the part and will this





weekend (28-9 April) be performing on the owner's layout at the Epsom & Ewell show.

Finally ready for the road with crew (from "Heroes of the Footplate), coal and

glazing.



This engine was commissioned for Chris Robertson's layout "Staindrop". Here it is during its maiden outing at the Epsom & Ewell MRC's annual show on 29-30 April.





