THE TOWER BLACK 5

Manufactured by DJH for Tower Models.

The Tower/DJH Black 5 comes in an enormous box with all the parts packed in foam with some quite good instructions. These include a list of recommended additional parts and their suppliers; some historical notes; hints for the inexperienced; comprehensive parts lists and pages of invaluable exploded diagrams. The basic instructions are just that, basic, of the type "fix part x to part y. However, careful study of the all this paperwork will pay dividends. The one thing missing is a visual representation of the etched sheets that relates to the part numbers. I estimate that a tenth of the time I spent building this kit was wasted in searching for parts. That aside, they are far better than many competitors’.

DJH’s support is excellent and helpful and their response to cries for help when a part needs replacing is efficient and effective. Ten out of ten there.

As usual I started with the tender and later are some shots of the finished vehicle. All it requires now is couplings and painting, happily the latter is not my job, it goes off to a professional next.

Construction was not difficult; the water pickup linkage is a bit fiddly but there is nothing here that the average modeller cannot easily accomplish.

There is a fair amount of white metal in this kit but it has proven to be of very high quality, well cast and not suffering from shrinkage or poor moulds.

These front a rear views shew off well the excellent way the kit goes together. Parts are usually so a close a fit that it is necessary to file off the etching cusps. Always a good sign of a well designed etching. However, those among you who have sharp eyes will see that the
hole for the draw bar is still solid! Why it was not etched out is a mystery. It was a pig to do after construction.

THE ENGINE.
The locomotive chassis goes together very well with nice thick - "non-bendy" - frames.

This shot shews the plunger pickups and associated wiring. The motion plate is a separate item that bolts on so the valve gear can be (to some extent) disassembled for maintenance.

The chassis on its wheels with the motor temporarily fitted but awaiting installation of the cylinders. Later would be added sandboxes and sundry other pipe work and fittings.

There is one very large diameter bore pipe that goes from the injector under the cab along the centre of the chassis underside. It is supplied as a cast white metal piece but was the wrong shape (I broke it trying to alter the bend in it) and too short. I made another from 1.6mm rod bent to shape to fit into the injector that hangs behind the rear wheel. It had the advantage that it could be soldered to the base of the ash pan to make it secure.
The next job is the motion, shewn here with some of the laminates partly soldered up and awaiting cleaning and polishing. So this is the "before" picture. Notice how short the slide bars are, of which, more anon.

As the bottom part of the picture shews, there are still more nickel silver laminated etches to do. The completed motion can be seen later in full motion at about 60+ mph.

And this is the "after" picture with the motion soldered up, polished and partially assembled. One of the piston rods turned out to be too short when assembled and so had to be cut off, a 2mm hole carefully drilled in the slipper and a new piece of rod soldered in.

Personally I would rather that casting such as these came with holes (possibly even ready tapped, say, 8BA) for the rod to be fitted. Cast rods a frequently not as round as they might be and are often bent out of shape too. Good nickel silver rod would be both straight and round.

The back head and reversing gear mocked up in the cab. They will be fitted after the painter had completed his work. This represents a satisfying couple of afternoon's work identifying where all the pipe runs go from the diagrams and various pictures, none of which matched! So much for standardisation of the original.

Here are all the component parts waiting to be assembled. I thought the slide bars rather a poor design in that there is but 2mm or less of material to fit into oversize slots in the cylinder.
Not easy to solder to a huge lump of white metal either (I destroyed one and had to get replacements) so I used old fashioned Araldite baked in a coolish oven overnight. I think the bars should have gone the full length of the cylinders for strength. So that they would not have to bear any appreciable load, I lined the cylinders with brass tube to take the piston rods. A useful tip from Bob Alderman.

At last, a fully working chassis but it took a while to get the valve gear assembled. The instructions say to bolt it all together with tiny (14BA) nuts and bolts but they look awful when compared with the excellent lost wax castings of the prototypical bosses for the coupling rods. It is far better I think to solder as many parts as possible and captive solder the bolts in place where nuts are used. It does make up into a nice set of gear though and all the bits move.

Ready for the paint shop (not, thankfully, my job!). The engine weighs 3lb without any extra ballast so, lots of adhesion but, the tender weighs 1lb; a lot a dead weight to haul before adding a payload. We shall see what it can do eventually when it is painted and has couplings fitted. I do like the cast lamps (three of them) that fit the equally well cast lamp irons. I changed to handrail wire from 0.7mm brass for 0.8mm nickel silver. They look more substantial, like the real thing, and, if the paint gets chipped they will still look like steel.

Not an easy build but a, mostly, well designed kit that was ultimately satisfying. The devil is in the detail; there are a myriad small parts and, unlike many kits, most all of them got used. This particular engine, No: 45428, had no speedometer but it did have a conduit down the left side of the footplate not provided for in the kit. It pays to check carefully what differences
appear if building a particular locomotive. The smoke box door has a marked spot for the lamp bracket top centre. On this engine it is on the right hand side half way down. I did not notice this until after I had drilled out the hole, which then needed filing and new one measured up and drilled. All part of the fun though.

Would I recommend it? Yes certainly for a relatively experienced builder it should present no problems other than those I have highlighted. All the castings were of very high quality and the etches cleanly and accurately done.

My thanks to Mike Marritt for the loan of a number of books on Black 5’s and Bob Alderman for some useful tips.

Even though not a God’s Wonderful engine, there is enough Swindon in it to make it a fine locomotive, only spoiled by all that reciprocating iron hanging off the wheels!

DJH’s response.
I read the review of Towers Black Five, designed and manufactured by us, and I thought it both fair and constructive, and well built by the way.

You will be pleased to know that some of your improvement suggestions have been incorporated in more recent kit releases, in particular identifying etchings by number and overall instruction presentation.

Keep up the good work.
Stephen Widdows.