GRS Kit Built Austerity J94 0-6-0ST (Electric Version)

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This was a first for me, I have never built a loco from a kit before and I thought that a small electric powered tank engine would be a useful addition to my stock. The price seemed a bit high to me (£600) for a small G3 loco, so my expectations were high also. After a visit to GRS and a demonstration with a finished model, I decided to have a go.

The kit was delivered by a carrier company within four days of ordering, and everything was well packed and secure in a strong box. The contents were carefully checked against the parts list in the enclosed assembly instructions booklet. There were only two shortages, the draw hook springs and the handbrake standard casting, both items were sent by return post after a phone call.

A couple of grumbles - the main frames were bound with some annoying sticky tape, as were the frame spacers, which took a lot of time to remove and clean off. Also, all the nuts, bolts, rivets and washers were together in the same pack, small plastic envelopes for each item would have made them much easier to check and to keep until required for assembly. A start was made with a trial assembly of the chassis, referring to the instruction booklet, although I soon realised that a few more photos and some drawings of the assembly details would have been very helpful!

I did not use the etched brass buffer beam overlays as supplied, but drilled the buffer beams and fitted $^{3}/_{64}$" snap-head rivets, using an overlay as a drill template. The rivets were held in place with a dab of superglue. The holes in the horn keeps were not drilled to the same centres as the tapped holes in the frames, I had to open out the keep holes to 0.125" (3.2mm) to fit the 8BA screws. The axle boxes had to be reamed out to ¼" diameter (from 6mm) to enable the axle journals to run freely. This required a very careful set-up to hold and ream the boxes.

Instead of using the compensating beams supplied with the kit, I made up some flat leaf springs bolted to suitable brackets, and fixed them to the main frames, so that each wheel was individually sprung. I do like to have Gauge '3' stock fully sprung, it helps a lot on outdoor tracks. The buffer stock flanges had no bolt head detail and I decided that they should have bolts fitted to complement the rivet detail on the beams and they were drilled and fitted with 10 BA small-head hexagon bolts. Wheels, axles and motor all went together well and were fitted into the frames, remembering to mount the axle boxes and motor on the axles first! The coupling rods required a bit of cleaning up with a smooth file and after fitting to the loco a trial run with the motor and gears left loose proved satisfactory.

Not enough $^{1}/_{16}$" diameter brass wire was supplied to make all the handrails, sand pipes etc. but fortunately I had some in the workshop. The cast white metal sandboxes I drilled and tapped 10BA for the pipes, using a dab of paraffin and doing the tapping carefully by hand. Brake hanger cross-shafts were made from 1/8" diameter brass rod instead of the $^{1}/_{16}$" wire supplied. This enabled me to fit 10 BA hex screws into each end, but the tapping had to be done carefully. I think this item should have been ready made in the kit.

I made the cab floor from 4mm grey plastic sheet, and the roof removable so that the floor and boiler backhead assembly could be made in one piece and easily fitted (and removed if required). The safety valve recess in the saddle tank was made deeper so that a brass safety valve and whistle assembly could be fitted with small angle section beading fitted around the top edge. The brass castings, chimney, tank filler and injectors are very good, but I would have preferred all the other cast items to be brass instead of white metal. When you are building in Gauge '3', strength and rigidity are required for all parts, especially when drilling and tapping has to be done.

To summarise, I found this an interesting and absorbing kit, which builds into a very neat and presentable model. I would advise reading through the assembly instructions two or three times and decide which (if any) modifications or changes you wish to make. Study the brass etched parts carefully, there is plenty of soldering and riveting to do, but with care and patience the end result can be a very satisfactory and useful locomotive.

The loco was spray painted with two coats each of grey primer and satin black auto paint, and then BR 1950's lion and wheel emblems and numbering transfers applied.

It is battery powered, using radio control equipment supplied by Cliff Barker, and runs very well - quite often with my Grandson Ben at the controls!