

## The Bogie Project by Pete King

At the committee meeting in October 2019 it was suggested that the GL passenger truck wheelsets were in need of replacement, not immediately but possibly within the next year or so. When the new bogie frames were made in 2012/3 we used the wheelsets from the original bogies which had been in service since the GL railway was built c.2005.

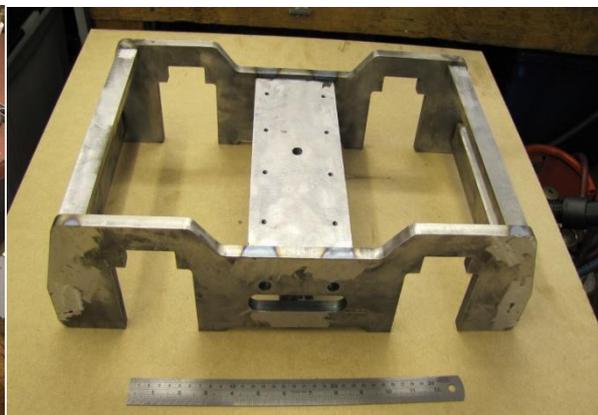
The new frames were designed by Paul Reed and proved to be very good and easy to assemble. The various frame parts were laser cut and then fitted together like a 3D jigsaw. Once assembled, they could be easily welded to make a very strong bogie into which the original wheelsets were fitted using new self aligning bearing units.

Four extra frame unit kits were also ordered for one of our members who has never completed his project and they were kindly offered back to the club at the original cost price. No wheelsets were available for these bogies and the suggestion was made that we should build the bogies and purchase new wheels and axles from 17D Miniatures. Two of the bogies were to be the basis for a flatbed truck to make for easy transportation of two full wheelbarrows of ballast (or anything else) up into the field when required and the other two, one of which would be braked, would allow for easy changeover of bogies into the passenger trucks as and when required until all the 24 wheelsets had been replaced.

The committee agreed a budget and I offered to do the work in my home workshop over the winter period.



Frames assembled ready for welding



Frame ready for powder coating

Frame components which had been lying in unloved in the platelayers hut were cleaned up, fitted together and welded ready for powder coating. Self aligning bearings were purchased and modified ready to accept the die springs. Spring aligning pins had been mislaid and Roger Montgomery kindly offered to make the 16 new ones.

The wheels and axles were ordered from 17D Miniatures and collected just before Christmas. 17D also pressed the wheels onto the axles and then I painted them red in my lathe so they looked pretty and could easily be distinguished from the originals.



Self aligning bearing as purchased



Two bogies trial assembled



Wheels awaiting assembly



First completed bogie



3 completed and ready to roll out of workshop

The last bogie is to have brakes fitted and will take some time as I will try to improve the design to make the linkages more robust and, more importantly, make the brakes adjustable from above rather than having to turn the truck over each time an adjustment needs to be made. Hopefully the project will be complete before the running season begins at Easter.