

## Atlantic 5 ins. gauge Locomotive No. 3279 Update – Tender Brake Gear and Springs

With the locomotive chassis and running gear substantially complete, the boiler lagged and clad and the cab in primer, the boiler is ready for painting so that it can be mounted onto the locomotive frames. However, I decided to turn my attention to the tender with the intention of getting it ready for next Spring so that the boiler, cab and tender can all be painted at the same time with the same mix of paint. So on with the tender!

In order to build the tender I am working from an LNER works drawing and scaling it to 5 ins. gauge. No. 3279 exited Doncaster works in 1938 with a 'dipped front' tender so this will also be incorporated. LNER works drawings have a mass of information on them, often overlaid, so a good deal of time is needed to sort out what is what and decide on the level of detail is to be incorporated. I've fitted the axle boxes, wheels and axles and designed the brake gear. The brake gear I have made is similar to the real thing but minus some of the detail such as the adjusting turn buckles. There are no bolts in the brake gear, the rods, clevises and cross beams are assembled with turned pins fitted with split pins, the nuts are castellated also with split pins and the levers on the main operating shaft are secured by fitted taper pins. I'm still debating the working water scoop. A line has to be drawn somewhere!

The tender springing is something of an experiment. In the box of bits which came with the locomotive was bag full of cast bronze 'imitation' leaf springs, the intention being the use them in conjunction with hidden coil springs. Some of these castings were the wrong size and I haven't got round to determining which locomotive there are for, whilst a further batch were the correct Clarkson castings but they looked pretty awful..... I'd call them reight numb things! I wasn't happy so I have made my own leaf springs using twelve different lengths of Tufnol strips and one spring steel strip for each spring. The leaves are held by a central screw in a square box. Drilling the central hole in the spring steel leaves was interesting! Round bobbins were brazed on the ends of the spring steel strips so that the leaves are held captive at each end. The spring steel came from a 'recycled' old clock spring reduced in width and a heat sink was applied when brazing the ends so as not to destroy the heat treatment in the spring. Having assembled all the springs I'll have to wait until the tender is complete before deciding if the 'spring packs' need making more or less strong by the addition or removal of a leaf.....Tufnol or steel that will be the question!





