Federation of Model Engineering Societies

BR Standard Class 2 2-6-0 5 inch gauge

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My introduction to engineering began when I became an apprentice at the National Gas Turbine Establishment, Pyestock, near Farnborough in Hampshire, in September 1966. Following my apprenticeship, I became involved as a fitter with the gas turbine noise reduction section and then moved onto the Naval Gas turbine test section.

In the late 70s I started my model engineering career. My first engine was LBSCs Doris (LMS Black 5) and I joined Bracknell Railway Society in the early 80s where I ran the engine for a few years and visited other clubs. I then built and finished a Don Young 4F. Whilst building the 4F I saw the drawing for the BR 2, another Don Young design. This I could not resist even though it said it was for ‘the more experienced builder’ and the drawings were poor on dimensions. Not having the finance to fund the BR 2, I had to sell Doris to buy the castings. Doris went to an ex-pat in Australia 1985. I have recently been contacted by its second Australian owner for some history of this engine as he had seen my name in the modelling press. Pleased with his purchase, he says the engine runs like new and the boiler has passed its test, more than thirty years after being built.

Together with Conway for my wife, I have built nine locomotives, all involving different aspects of the hobby including inside cylinders, Joy valve gear, leaf springs, and detailing. I have also been involved with some rebuilds of other locos and have also built my own boilers plus some for other club members, 16 in total, all copper. I bought the castings for the BR Std 2 in 1985 and collected these from Don Young when he was visiting the Ascot club before it moved to the racecourse. A long-term project, it required a lot of research and photographs. Thankfully, in this period of preservation, access was a lot easier than it is today. Where today would we be allowed to climb all over a nearly completed locomotive to take photos? Unfortunately, Don mixed up the details between the LMS Class 2 2-6-0 and the BR Class 2 2-6-0. You really do need to do your research to sort this one out before deciding which version you are building!

As I built the loco, the front lubricator system became a challenge to get the detail correct and to give it an accurate look. The smaller copper pipes were 3/8 inch in full size, and the larger ones 3/4 inch. At approximately 0.088 to the inch in this scale, it was a challenge to find the correct size looking copper. The smaller one is from multi-strand copper wire and the larger one is cable core from a TV aerial.

Bolts were another issue. They are everywhere on these locomotives and finding the right size hex was a nightmare. I eventually decided to buy standard sized 10BA and 12BA bolts and machine the heads down to 3/32 for the 10ba and 0.080 in. for the 12BA. I also made some stainless 12BA for the manifold bolts - plus spares for my next loco!

When building the boiler, I had to decided what extras were needed before commencing construction, i.e. extra bushes for a second gauge glass, where to mount a pressure gauge / whistle take off, regulator mounting pad, etc, and none of these extras affected the design of the boiler. Axle pumps - love them or hate them - I decided to fit twin pumps so had to fit eccentrics to the axle very early on, with a drop ash pan instead of fixed, and a cover over the rear axle to prevent ash ingress. All these details and modifications created problems in construction later on but to a model engineer, that is what the challenge is all about.