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## “A1 Peppercorn Part 26, The final chapter”

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As the finishing line approaches, I got renewed energy to complete the final list of jobs. The first task was to get everything ready for the Hydraulic Test. With all the pipework refitted to the cab I decided to do a pre-test at home, just as well as I quickly found a couple of issues. Firstly, the regulator valve was leaking and secondly the regulator itself was letting by. The first issue was easy in that the gland was tightened; however, this would need a review after the test because it had become unusably stiff to operate. The regulator is a slide valve type and not designed to withstand a hydraulic test. To solve this issue, I drilled and taped a hole in the dome cover, where I was able to insert a screw that would press the regulator slide down and effectively close any gap. I assumed that this design would operate OK under steam conditions. It was the day of the test, and with a dry mouth and some nerves, I watched the club test pressure gauge slowly rise to 150psi, and with a great deal of relief it held, with only a small dribble from the regulator. Certificate number one done!



Home again to get ready for the steam test. So, I had to reverse the regulator mod and replace with a blanking screw, keeping the hold down screw for the next hydraulic test in 4 years. I changed the regulator gland packing from graphite yarn to PTFE. The first firing on my home rolling road went

reasonably well with the loco actually running smoothly. It did however throw up a problem with a cylinder cover gasket leaking which needed some urgent attention. The gaskets I made from sheet material and now fit them with light smear of Hermatite Red compound. Final checks were OK and ready for the Steam Test.

Back again at the club, with an even drier mouth and even more nerves. Luckily everything worked, the injectors both worked perfectly, the hand pump, and after a small tweak the pressure gauge was OK. With the fire roaring and the blower on full beans the pressure remained rock solid on 100psi, and the safety valves were doing their job. So green light from the Boiler Inspectors, do I push my luck and venture out on the track? Yes of course I did. After a bit of wheel spin caused by some over zealous use of the regulator we managed a full lap of the track. This first run revealed a few new issues, including the reverser becoming very stiff and this would need investigation before the next test run. After some investigation the reverser stiffness was luckily isolated to the cab control unit, this was much better than the alternative coming from the motion work, particularly the centre one! I wasn't able to pinpoint the exact cause, so I quickly remade the two threaded parts and the new ones worked OK.

Ready for a first proper test run, thanks to Dennis who captured this event for his Woowoomad You Tube channel and the other club members who came along to help and support. Surprisingly Dennis's video attracted over 6,000 views in the first week, plenty of people with time on their hands it seems! However, there were some nice comments. Anyway, this first run threw up some new issues, the main one being the lubricator didn't seem to be working properly, and this will need investigation and correction before any more runs. Also, as you can probably hear on the video the middle cylinder gland packing was leaking, giving a nice squeak. So back the workshop and prepare for the next run. Even with these issues I was pleased that it seemed to run pretty well and this is extremely encouraging. As I said many times "if it was easy....."

