Steam testing, Personal notes. G S Povey

You all probably recall, as required by our insurers, any steam model run at the club must have a current steam test safety certificate. The club made arrangements with the Knightcote Club for these test to be carried out for our members at a very reasonable cost. I visited with my 10 year old steam launch which had only been run a couple of times but had no certificates in place.

Knightcote were extremely helpful in getting my model certificated.

After a visual inspection to look for any obvious problems the first step was to remove the pressure gauge and calibrate it. Fortunately mine was spot on. Apparently some are way out.

Note 1. If you do go remember to take all the tools you need for servicing your model. Their members kindly lent me all I needed.

I then tried to fill the boiler but the sight gauge did not show anything due to 'furring up' of the connections.

Note 2. Fill and steam before you go especially if its an old model like mine.

Note 3. Preferably use deionised water, not tap water.

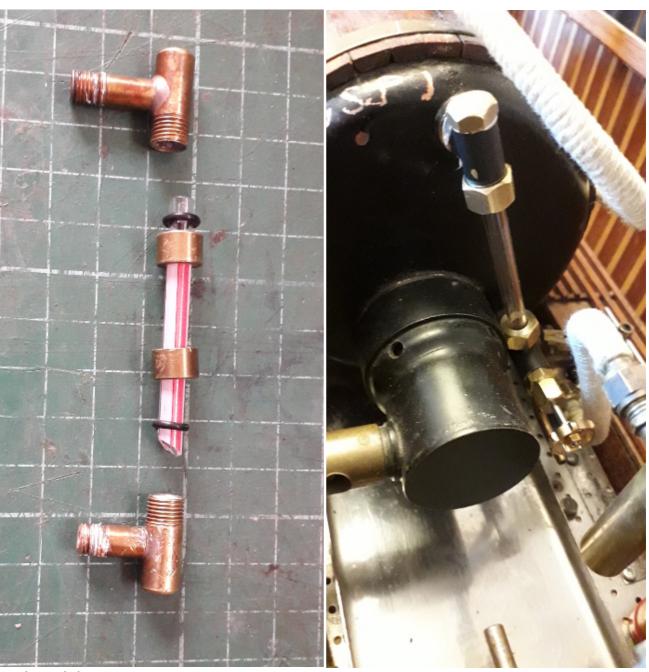
At this point the test could have been halted but the members helped me remove the sight gauge for cleaning. Unfortunately I broke the glass in the process and again the test could have been halted. However, again with the help of the members it was still possible to prepare the boiler for the hydraulic test. This involved connecting the water filled boiler to a hand pump and pumping it up to at least twice its working pressure whist looking for weaknesses and leaks. This was repeated. The cladding remained in place. The boiler passed and the appropriate certificate issued.

Note 4. Every boiler must have its own identification mark evident to the testers.

At this point the tests were halted as it was not possible to steam it with out a sight gauge.

I returned two weeks later with a new sight gauge fitted. Having filled the boiler with rain water, steaming it and also checking that the gas line was leak free I was confident it would pass. It did but only after a minor adjustment to the pressure relief valve.

Note 5. The relief valve has to be seen to be blowing fully at the set pressure not just cracking open.



Broken sight gauge

New sight gauge in situ