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MODEL BOILER HYDROSTATIC TEST

No boiler should be operated without first doing a hydraulic or hydrostatic test. In full size boilers, a hydrostatic test of 1 $\frac{1}{2}$ times its designed maximum allowable working pressure is used. In our model boilers a test of 2 times the working pressure is generally used. Do not exceed these values as it puts unnecessary stress on the boiler.

To perform the test, the boiler should be fitted with a hand pump (such as our model BFP-1) and a reliable pressure gauge. Plug all the threaded boiler bushings with pipe plugs, except the highest one, through which you will fill the boiler and vent any air. Completely fill the boiler with room temperature water, make sure there is no air space left in the boiler. Air can be let out through the highest fitting on the boiler, usually where the safety valve mounts. When you are sure all the air is out, plug this last bushing. Using the hand pump, slowly raise the pressure in the boiler to the required hydrostatic test value. In our model boilers this would be twice the working pressure. Hold this pressure, but do not exceed it, for thirty minutes. Slowly release the pressure from the boiler so it can gradually come back to an unstressed condition.

If leaks occur, repair the leaks and repeat the test.

After this test, be sure to replace the safety valve.