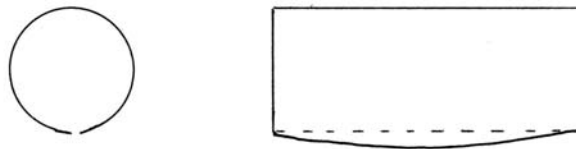


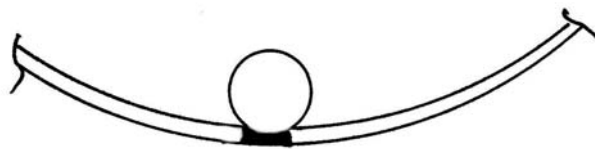
Boiler seams.

Bob Alderman © October 2007

For my own part I have just had a problem with a boiler. It is parallel and quite long relative to its diameter. It is formed around two discs, one at each end. Ideally it could do with one in the middle. (There's a soldering challenge!). The etch for the boiler was not quite the full circumference of the boiler either so there was gap. It also bellied out along the gap at the bottom. The sketch shows this somewhat exaggerated.



To overcome this the gap had to be closed. I was able to pull the tube back to circular by using soft iron wire wrapped around the boiler and wound up to squeeze the tube. I did this in two places. The gap still remained, but was parallel along the edges. Lacking large holes in the end discs I could not easily get a strip of brass in to cover the gap. However the holes easily took a length of $\frac{3}{32}$ " diameter brass tube, rod would have done and any suitable diameter that would block the slot. It was a fraction shorter than the boiler. Once inside it dropped into the gap and located itself.



To solder it I initially had to work overhead to tack it in position. Once fixed then a more conventional approach could be made. I flooded the gap progressively with solder. This tied the tube to the boiler edges. All that remained was to clean up the excess solder and round off the boiler. All that now shows is a millimetre wide line of solder.