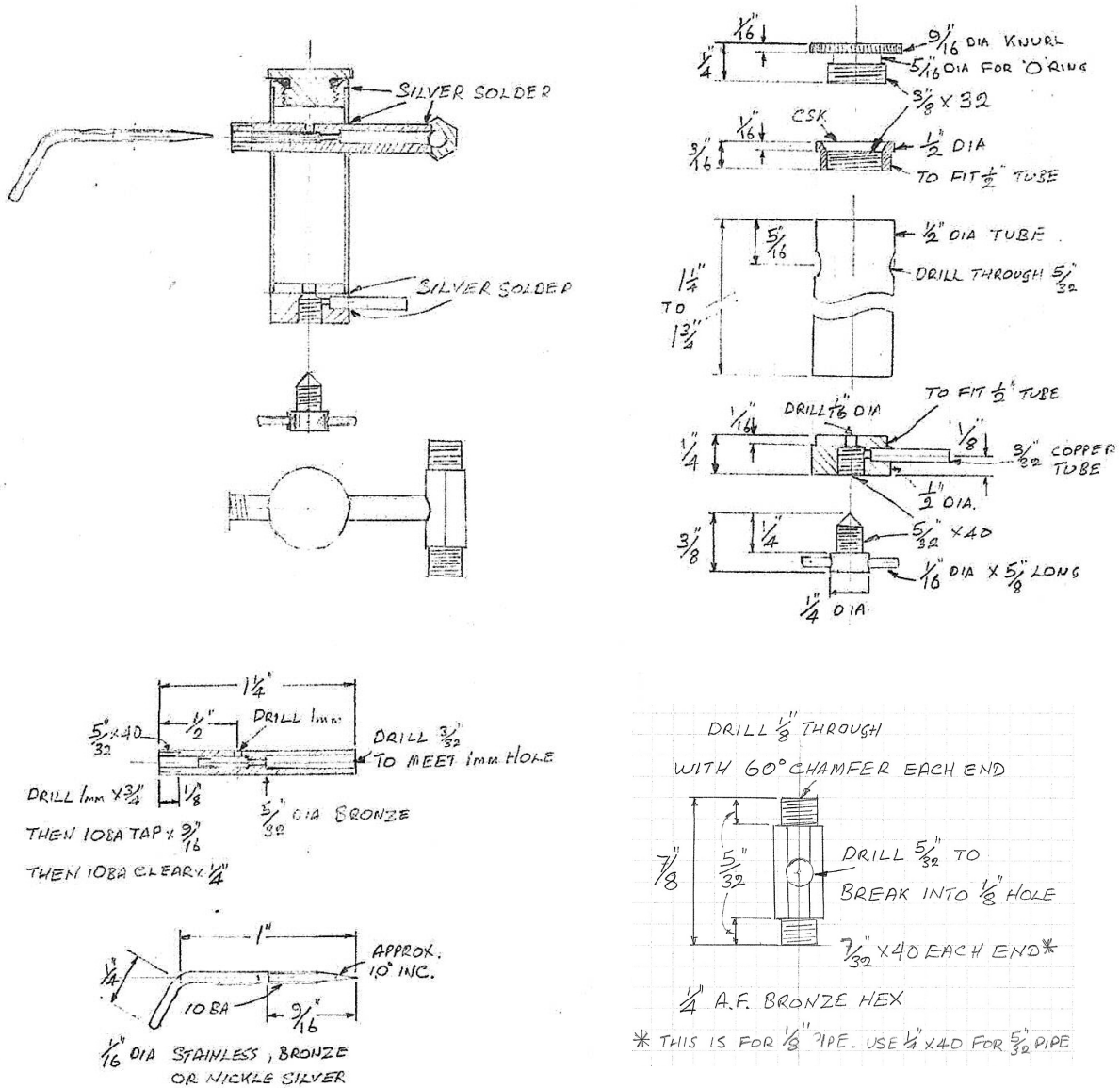


Displacement Lubricator



The lubricator should be filled with steam oil to just above the cross tube. Note that the cross tube should be fitted with the 1mm hole at the top. The operation of the lubricator relies on steam condensing in the reservoir, falling through to the bottom so raising the oil level that some flows out through the 1mm hole and into the stream of steam going to the engine. Steam comes out through the hole at the same time that oil goes in through the hole – sounds a bit odd, but this is what actually happens.

A few comments on the construction:-

- The screw top:** You might like to add a slot for a screwdriver as it can get rather hot to use fingers if you have steam up.
- The needle valve:** I just use a smooth file to produce the taper – the exact taper doesn't matter, and there is no need to produce a sharp point, as long as the end is less than 1mm diameter.
- The drain tube:** You will need to decide which way you want the drain pipe to face before the bottom fitting is silver soldered in position.
- The "O: rings** For the screw cap Ref.015 for the needle Ref.001- this one will need to be stretched over the needle.
- You should find** that the needle valve only needs to be open up to about one turn. The amount of internal lubricant needed is very small.