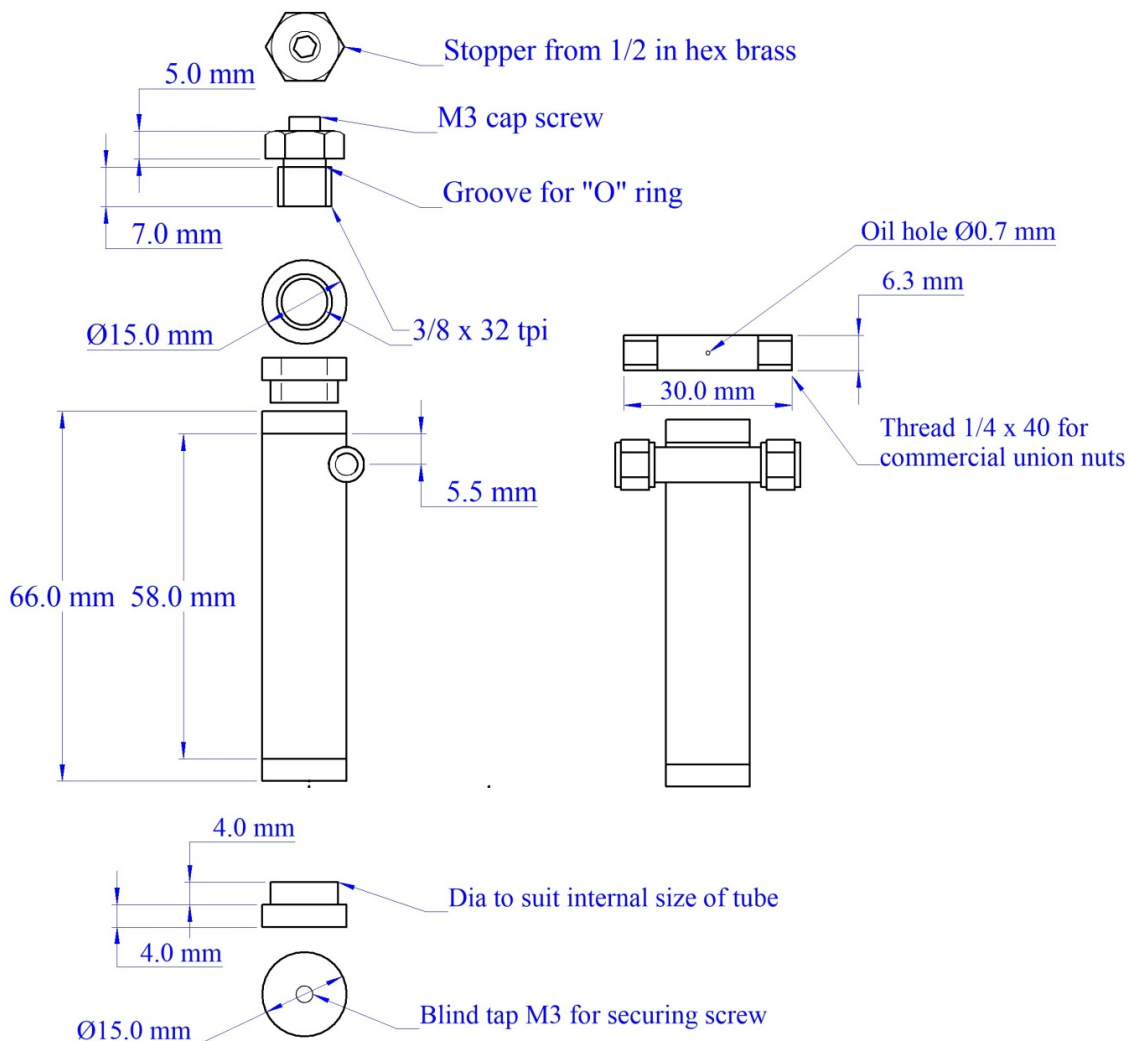


## Ephraim Additional notes

1. **Bevel gears on the bogie axles:** The original model used Mod 0.5 3:1 reduction gears supplied by Reely.
2. **Bevel gears on the valve shaft:** The original model used two Meccano gears, Part No. 30 with 26 teeth. A second model used a pair of bevel gears made from Hostaform that are Mod 1 and have 16 teeth.
3. **Drawing D6:** The Backplate is made from 1/8<sup>th</sup> in brass strip 3/4 in (19mm) wide and the Stretcher is made from 3/16<sup>th</sup> brass strip 1 in (25.4mm) wide.
4. **Drawing D21:** The longitudinal spacing between the holes in the boiler supports is 84mm.
5. **Drawing D28:** The small grooves in the smokebox support fixture were cut with a hacksaw 4.5mm in from each end to accept side plates made from 24 swg brass 30mm x 28mm. These plates are cosmetic and their exact measurements may be best taken from the model itself. If necessary they can be profiled after assembly to match the curvature of the smokebox barrel.
6. **Displacement Lubricator:** The model was fitted with a displacement lubricator as shown on page 95. Other than the 0.7mm oil hole, the exact dimensions are not critical providing that the lubricator fits with the other parts. The following drawing is a guide.

## D27a - Displacement Lubricator

Body from 15mm copper tube, fittings from brass all silver soldered.



Make two end caps.

Top cap tapped to receive filler stopper

Bottom cap tapped to receive fixing screw