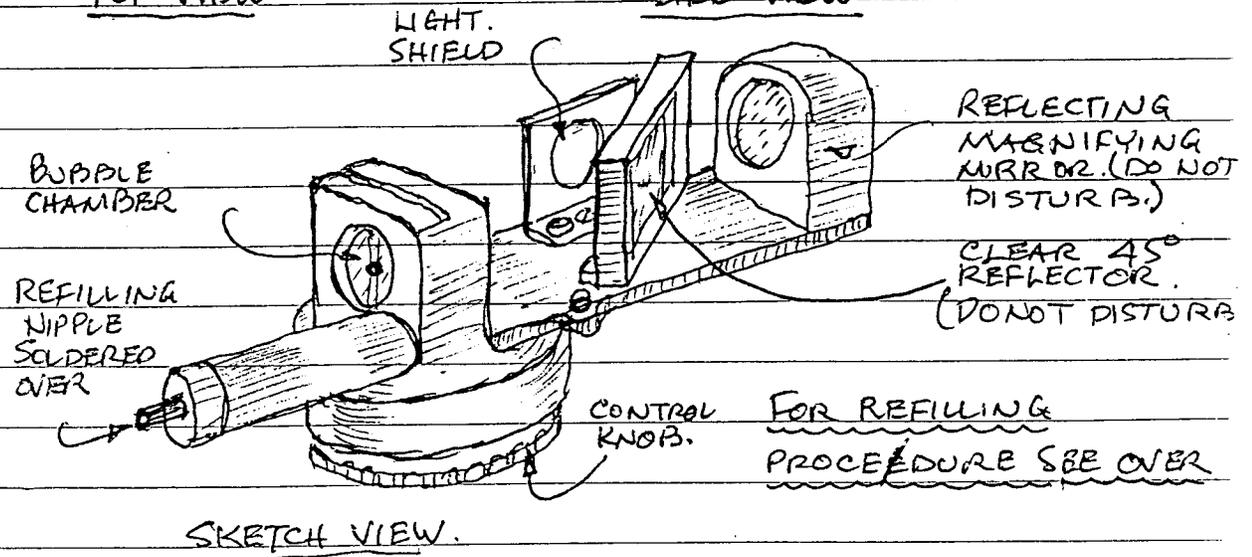
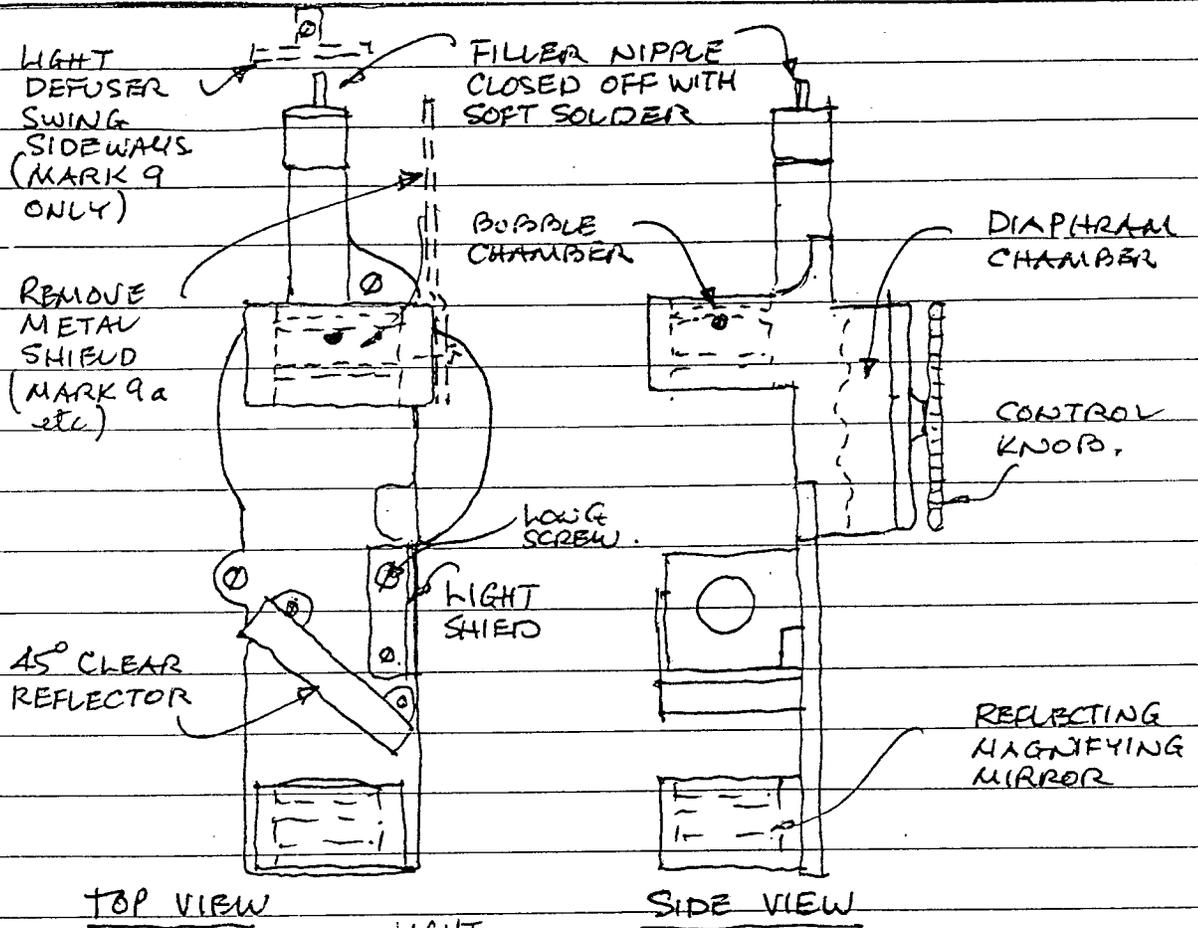


REFILLING BUBBLE UNITS

1.



REFILLING BUBBLE UNITS.

2.

1. UNSCREW 4 SCREWS SECURING TWO HALVES OF SEXTANT. PULL APART BY PRISING WITH FINGERS FROM THE EYEPIECE SIDE OF THE SEXTANT.
2. UNSCREW 3 SCREWS SECURING LAMP HOLDER AND PULL TO ONE SIDE TO ALLOW REMOVAL OF BUBBLE UNIT UNSCREW 3 SCREWS & SPRINGS SECURING BUBBLE UNIT IN CASE ~~HALVE~~ ^{HALF}. NOTE THAT SCREW, ALSO HOLDING THE LIGHT SHIELD, IS LONGER THAN THE OTHER TWO & MUST BE REPLACED IN THE SAME POSITION.
3. UNSCREW AND PULL LIGHT DIFFUSER TO ONE SIDE.
4. CLEAN PAINT OFF REFILLING NIPPLE LOCATED AT TOP END OF UNIT. CAREFULLY DRILL WITH SMALL WATCHMAKERS SCREWDRIVER CENTRALLY INTO THE TOP OF THE NIPPLE A HOLE OF SUFFICIENT SIZE TO RECEIVE HYPERDERMIC SYRINGE. MAKE SURE NO SWarf OR DRILLINGS ENTER THE NIPPLE TUBE.
5. FILL SMALL SYRINGE (I.E. TYPE USED BY DOCTORS FOR INNOCTIONS ETC) WITH HEXTANE WHICH MAY BE OBTAINED FROM CHEMISTS ON ORDER.
6. PUMP FILLED SYRINGE INTO NIPPLE BY VERY SMALL

REFILLING BUBBLE UNITS:

3

CONTINUED.

QUANTITIES AT A TIME, TO AVOID OVERFILLING. WITH THE BUBBLE UNIT IN AN UPRIGHT POSITION CAREFULLY SCREW THE BUBBLE CONTROL KNOB IN AND OUT (NEVER EXCEED 2 TURNS WHEN TIGHTENING UP OTHERWISE DIAPHRAM WILL BE SUBJECT TO UNDUE STRAIN & LEAK.) UNTIL BUBBLE IN CHAMBER DISAPPEARS COMPLETELY. TURN CONTROL KNOB UNTIL BUBBLE APPEARS (TWO TURNS) IF THE BUBBLE DOES NOT APPEAR TURN THE UNIT UPSIDEDOWN, PUMP A SMALL QUANTITY OF HEXANE OUT, THEN TRY AGAIN IN THE UPRIGHT POSITION. IF NO BUBBLE STILL APPEARS REPEAT THIS PROCEDURE UNTIL A BUBBLE APPEARS (AFTER TWO TURNS).

7. ON COMPLETION OF THE ABOVE PROCESS SEAL OFF NIPPLE WITH SOFT SOLDER. CHECK FOR LEAKS. TOUCH UP PAINTWORK AND REFIT UNIT INTO SEXTANT HALF.

8. LIQUID FOR REFILLING MUST BE EITHER HEXANE OR PENTANE OTHER LIQUIDS WILL DISOLVE THE SHELLAC SEAL AROUND THE LENS. HEXANE & PENTANE DO NOT FREEZE.