

# Scheme for removing cracked prism on PR2

Mark Barton 12/22/15

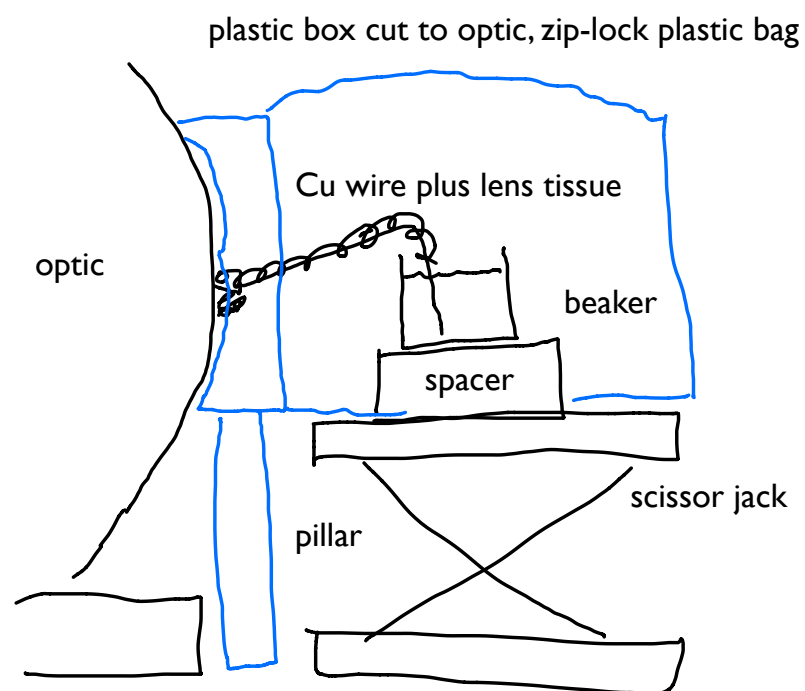
JGW-G1504702-v1

# Options

- Dichloromethane is recommended by manufacturer but completely ineffective (as well as poisonous, and hard to use because of low boiling point).
- Heating to 240°C is effective, but tricky to set up – see LIGO-T1400711.
- Danny Sellers of LLO has had to remove various misglued prisms in the course of HLTS and HSTS (HAM Large/Small Triple Suspension) preparation.
- Found soaking with acetone plus periodic working around the edge with a razor blade effective.
- Typical time 40 hours, maximum time 4 days.
- Dipping the optic in liquid is best where possible, but wicking is possible for larger optics.

# Possible scheme for acetone

- Beaker with acetone
- Wick with copper wire former and lens tissue or similar absorbent material
- Scissor jack to adjust height of beaker and thus flow rate
- Hood made of plastic frame cut to match optic and plastic bag with Ziploc® seal to reduce evaporation
- Use fume hood to remove acetone fumes



# Fume hood at ATC

- Currently being used for VIS suspension wire cleaning but will be freed up soon
- In a lab with many other projects – will need negotiation by Akutsu-san to avoid conflicts
- 62 cm deep by 103 cm wide by 67 cm tall

