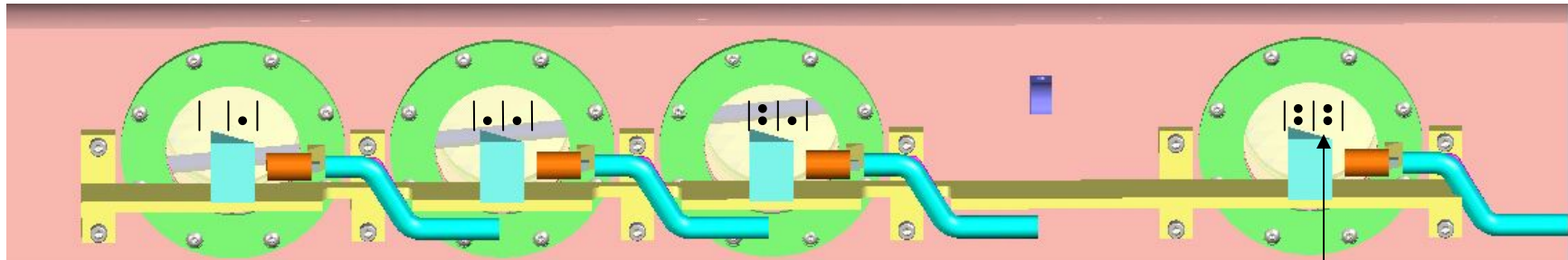


# Optical Diagnostics on Mock-up/SS Primary



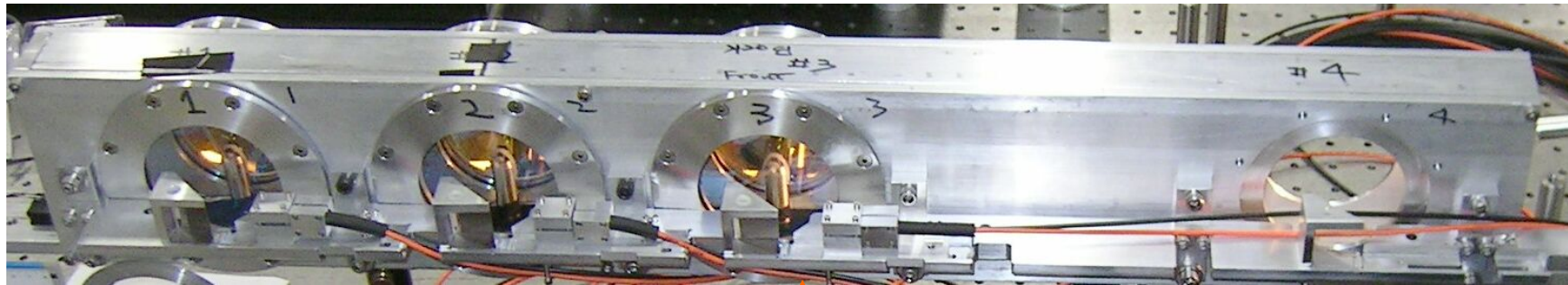
identification on window exterior

Viewport #1

Viewport #2

Viewport #3

Viewport #4

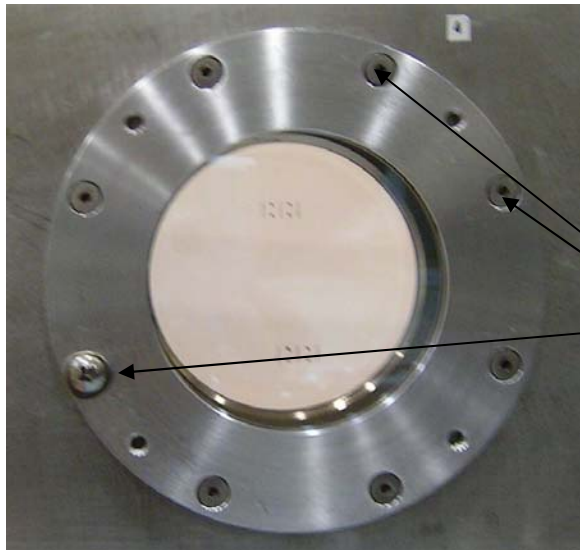
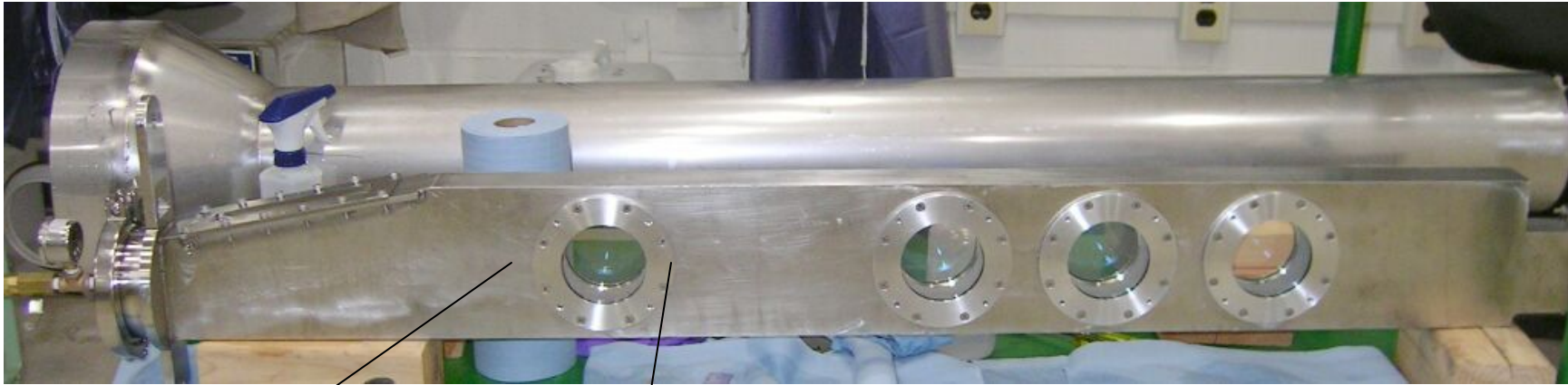


Laser light



home-made mini-choppers

## Small leak on SS primary



10/06/06 - large leak detected, all gaskets are not good

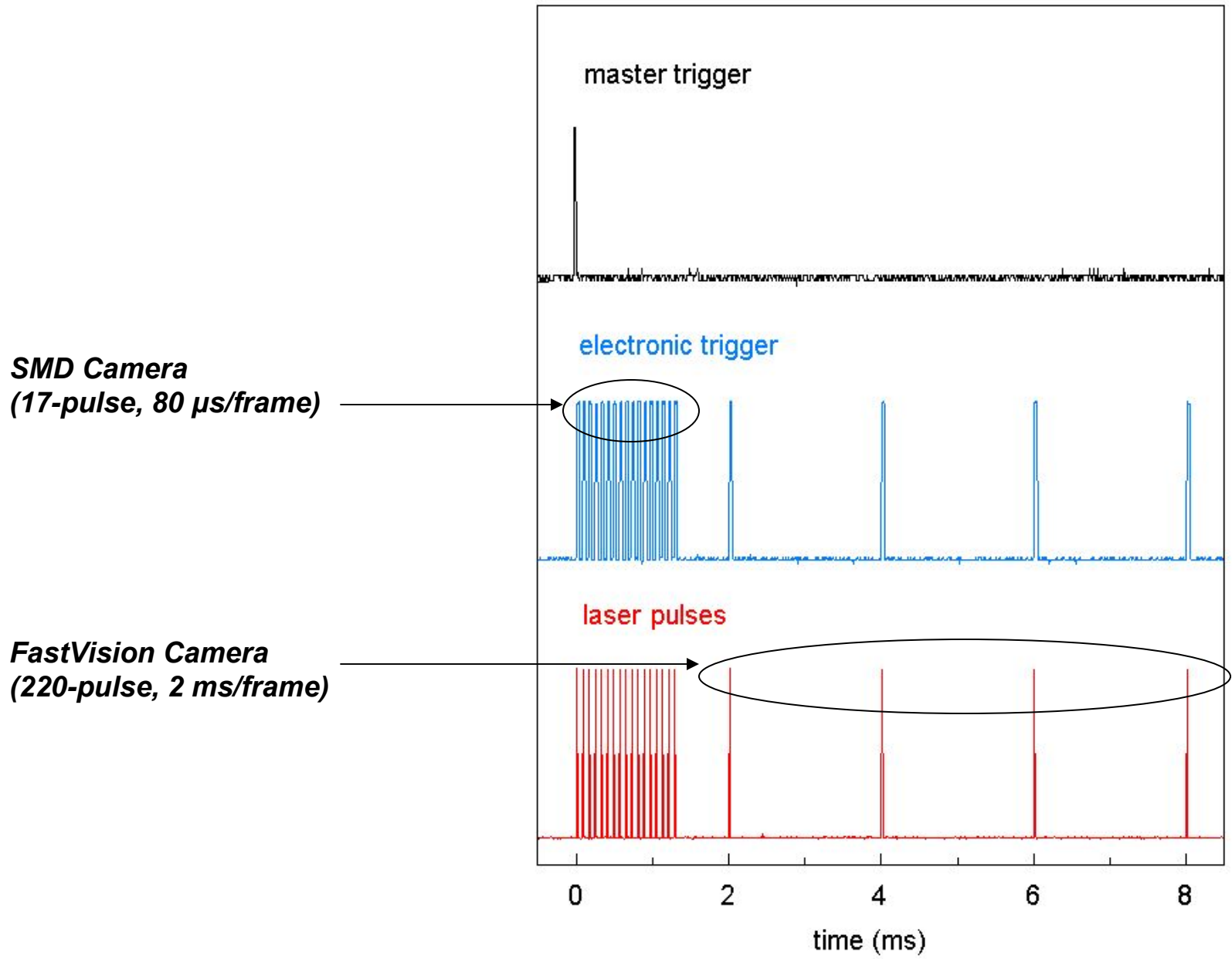
10/10/06 - new gaskets installed, small leak detected, in 17 hrs pressure drop from 21 to 8 psi, fixed viewport #4 gasket.

10/11/06 – small leak in 21 hrs pressure drops from 21 to 19 psi leak rate of  $\sim 1.4$  mTorr/sec

10/12/06 - Leak check using Metheson 8850 flammable gas sniffer, 5 ppm sensitivity, 15 psi of Ar/Methane (90%/10%) several tap holes aren't deep enough on viewport #4, shorten a few screws and tighten the viewport.

10/13/06: No leak detected, 21 psi holds for over 17 hrs

# Multi-Pulse Train for SMD and FastVision Cameras





# Optical Diagnostics on SS primary



30 frame/sec, 1sec. movie  
cw NIR light, video camera

80 us/frame, 16 frames pulsed NIR light, SMD camera

2 ms/frame, 16 frames  
pulsed NIR light, FastVision camera

