# **MWDC** Repairs

- Both chambers (1 and 3) were repaired in October
  - Repairs went pretty smoothly once we got rolling
  - roughly 1 week turnaround per chamber repair
     1 day moving chamber on each end
     2-3 days of repair/testing
- Chamber 1 had a broken wire (see picture)
  - There was some scoring of the glue near that wire (glue ball had been shaved down during initial construction).
- Chamber 3 had one broken wire and several sagging wires.
  - nothing unique about the broken wire in this chamber.
  - I wire was sagging enough to short the planes after we made the first fix.
  - 3 other suspect wires were preemptively replaced.



### **MWDC** Repairs

- The integrity of all wires on both chambers were tested by looking at cosmic signals on an oscilloscope prior to moving the chambers back to TestLab.
  - Chamber 1 checked out with no problems.
  - Chamber 3 has one dead wire (#11 on connector X13)
    - 2—3 cm from one edge of the X-plane
    - Selected to <u>not</u> re-open the chamber for this one wire

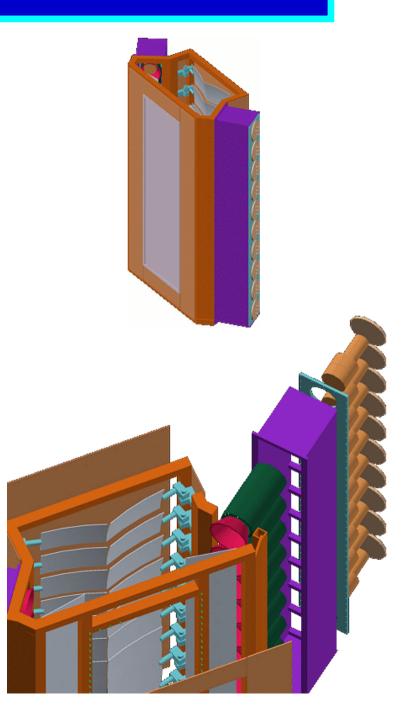
this will have a negligible effect on the chamber acceptance/efficiency

- Both chambers back in the Electron stack in Testlab
  - Both chambers now hooked up to the DAQ for testing chamber 1 looks good (I think?)
    - Chamber 3 still needs to be tested
  - ➡ More during Xin's talk...
- We (the 'Big Family' group of experiments will maintain the cleanroom space for the next year as an on-site repair station.

#### Cerenkov Status

- Tank parts arrived at JLab at the beginning of December.
  - ➡ Initial assembly has begun in EEL/124
  - Mirror mounts still in fabrication.
- Mirror update:
  - Flat mirrors coated and on-site
  - Spherical mirrors coated and on-site
    - Black 'paint' issue is resolved
    - no spares right now due to vendor damage, we're working on getting more fabricated
  - Conical mirrors at Cosmo Optics to be coated this month

There was an issue with the surface quality of the blanks as delivered by the initial vendor. This is now resolved.



## Cerenkov Tank



### Cerenkov Miscellanea

- Progress on "Still needed" list from Oct. meeting:
  - ~20 250ns cables to run from the F.E. rack —> weldment racks
    Done
  - 1—2 spare remotely adj. discriminator NIM modules (modified P706)
     Done. 4 additional units were modified, 2 spare, 2 for use with Transversity.
  - $\rightarrow C_4 F_{10}$  order should be submitted soon
    - $\checkmark$  not used until early 2008 since we will do all tests with  $CO_2$  and  $N_2$
  - Gas system parts still need to be ordered
     hopefully having the tank on-site will speed this process up
- A vendor for 0.008" 2024-T3 aluminum has (finally!) been located
  - Tech Metals & Materials, LLC Holbrook, NY (631-218-0013)
     have quote in hand, 5 week delivery
  - material will be used for for the Cerenkov tank windows
  - they will 'chem mill' 0.010 ± 0.0025" Al down to requested thickness