Taking Down TOFII

Note:
The original Time-Of-Flight II will be collected by the Canadian Science & Technology Museum. This note shows the disassembling process.

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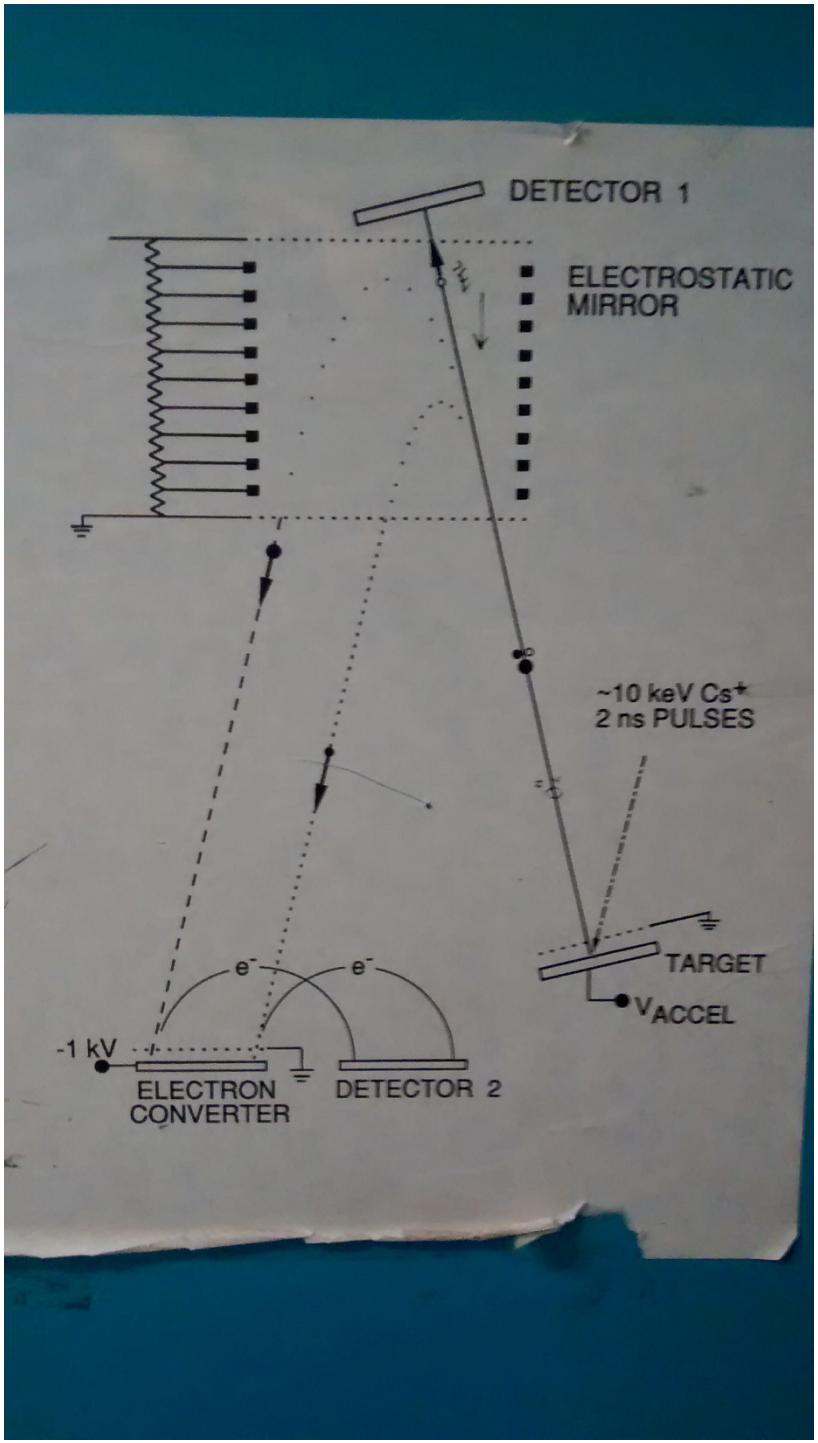
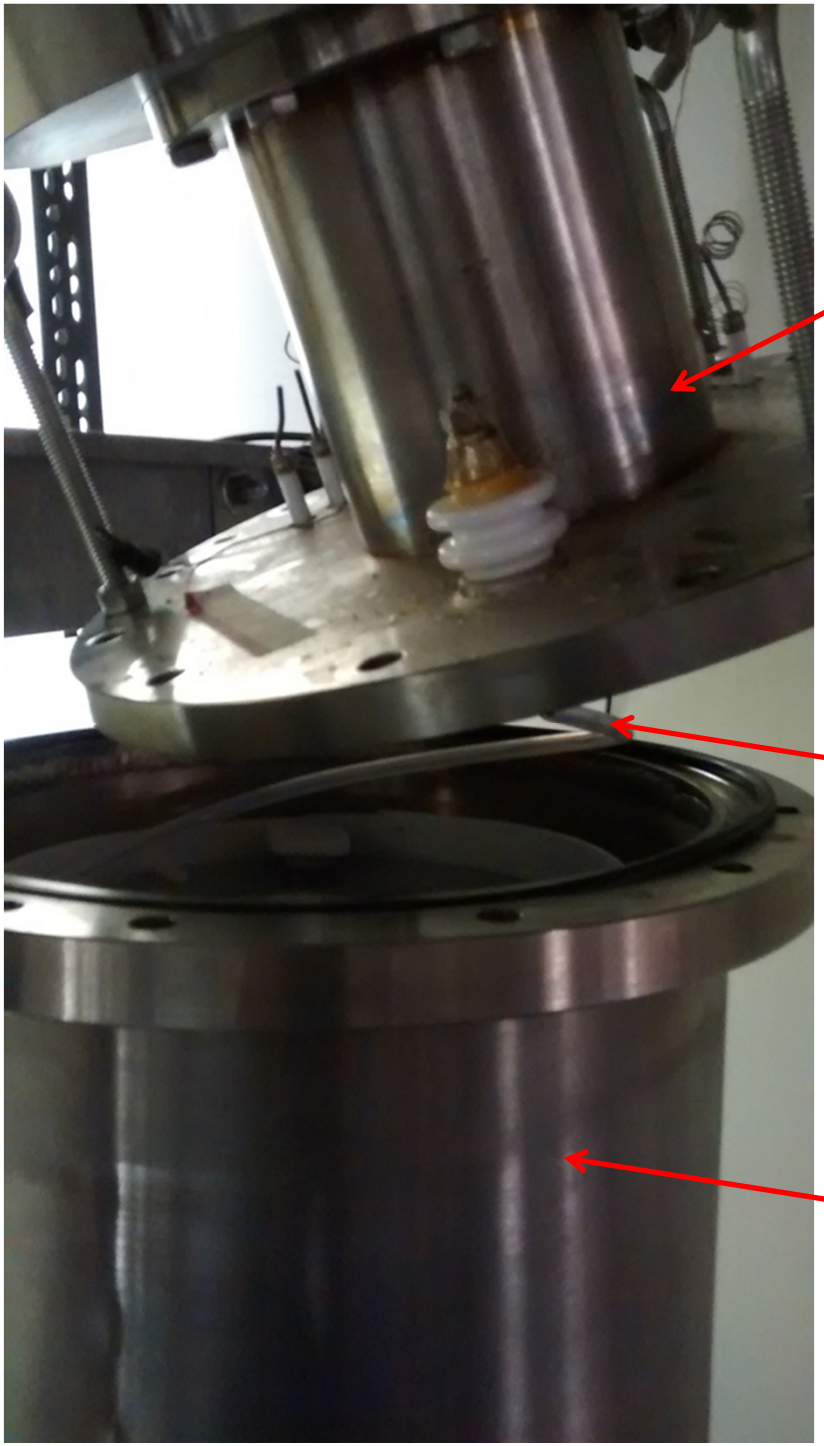
20/12/2016

TOF II in its original location
(505 Allen Bldg, Time-of-Flight Spectroscopy Lab) before being taken down



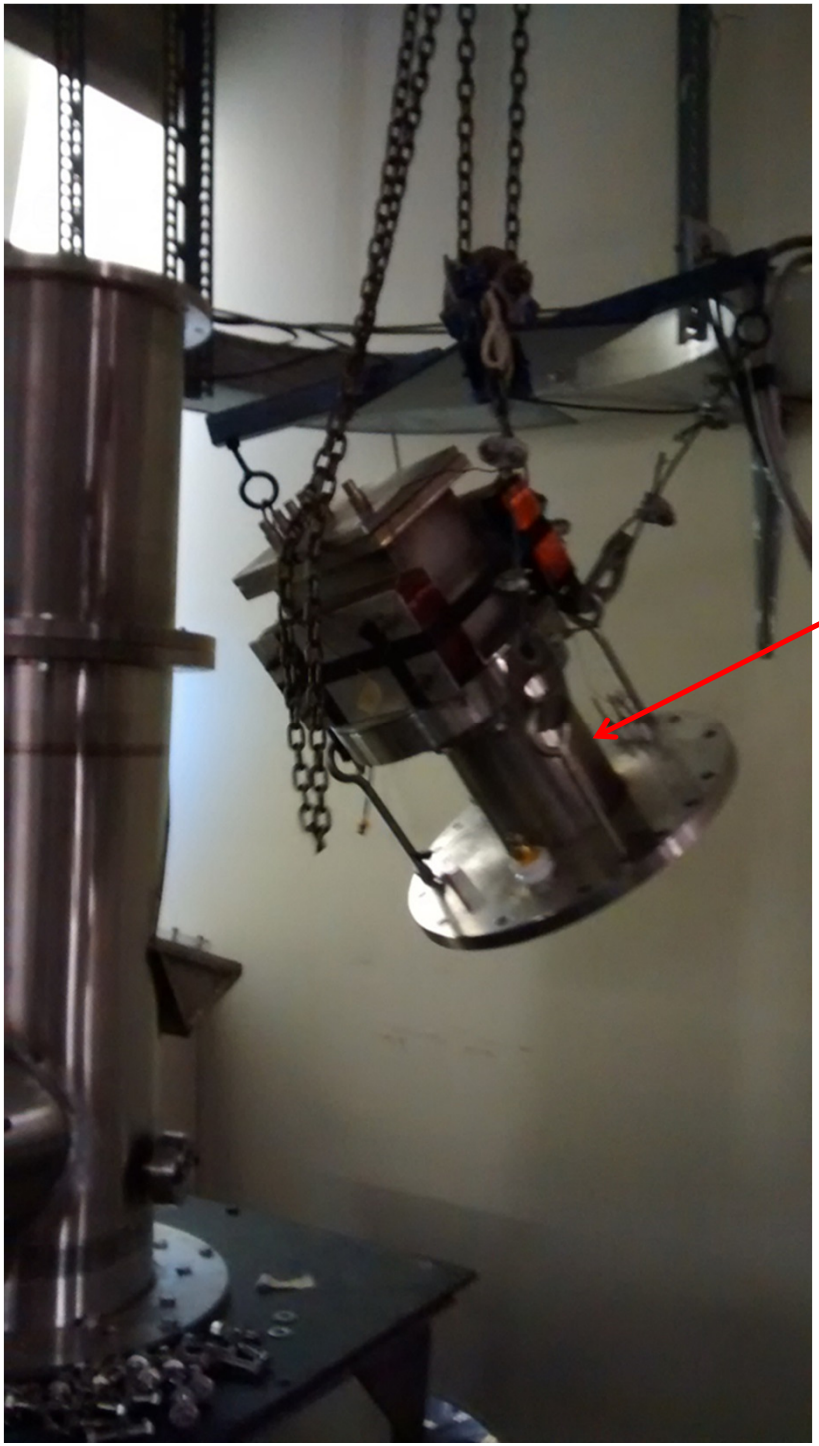
Schematic diagram



Top section was unbolted & lifted

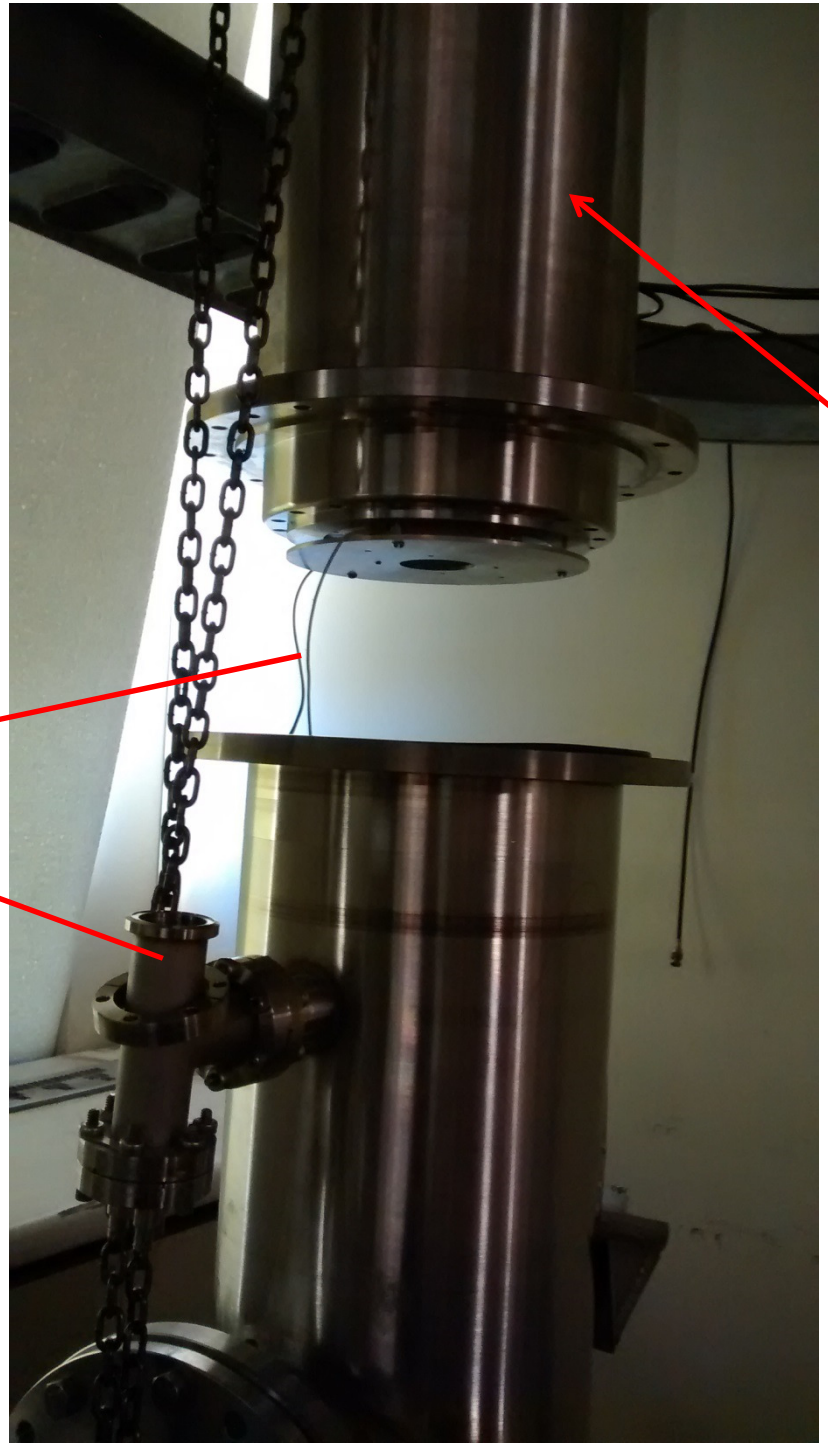
HV cable connected to HV vacuum feedthrough and electrostatic mirror

Electrostatic mirror section



Taking down the top section

Cable connection can be observed by looking down



Taking down the mirror section

Bottom section moved
into workshop

Bottom section here refers to
Section A, E, F (stainless steel parts
in the picture)
and the steel support structure

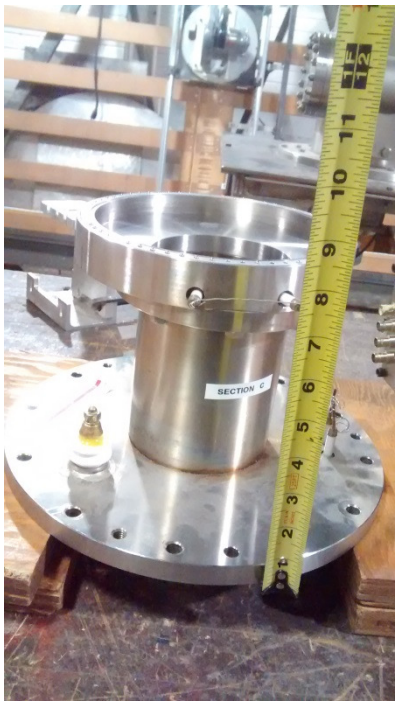
Footprint: 36” x 30”

Height: 66”

Weight: ~250-300 lb

Electrostatic mirror section (labeled as sect. B) in workshop

Diameter: 12” Height: 18” Weight: 85 lb

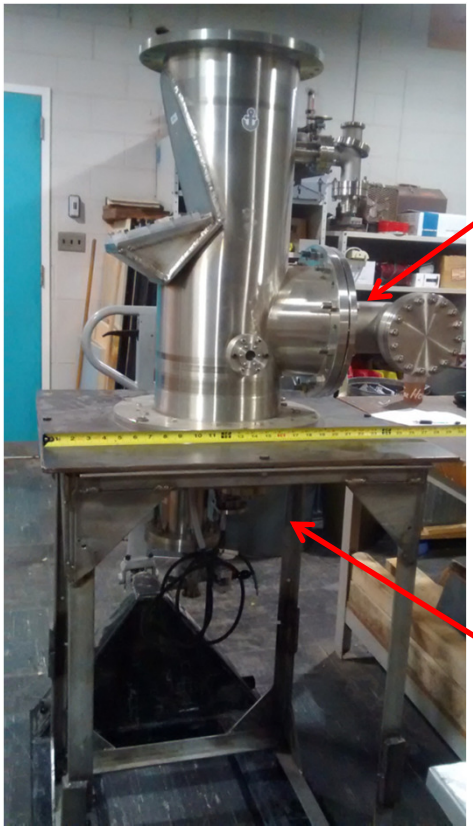


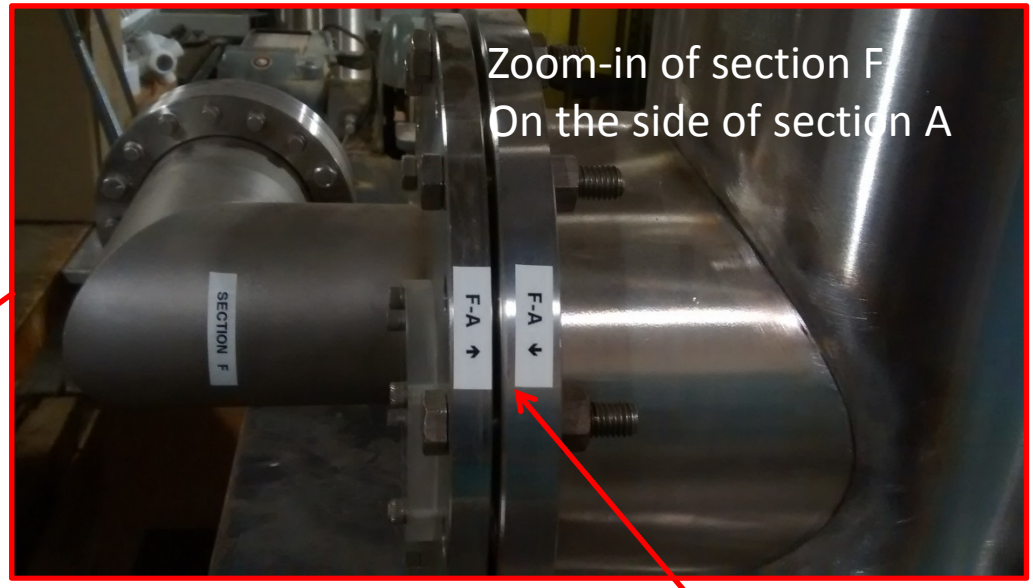
Head section
in workshop
(labeled as section C
and section D)

Diameter: 12”

Height: 8.5” (sect. C)
7.5” (sect. D)

Total weight: 55 lb





Zoom-in of section F
On the side of section A

Zoom-in of section E
under the steel plate

All joints of sections
were labeled

Arrows on the labels
indicate alignment

This picture shows where the ion gauge was installed.

It is detached now for shipping.

Suggestions for Packing

- The bottom section could be bolted on a rigid pallet wood
- The mirror section then can be bolted inside the steel support structure on the pallet wood (saving space and lowing the center of mass)
- Build a wood enclosure on the pallet wood as a shipping crate
- Wood cross bars could be used inside the crate to enforce the support
- The head section (and the ion gauge) can be put in a separate, smaller wood box for shipping.