

GT Proto chambers status report

7.Dec
RPC TC meeting
By DongHyun.Kim

Introduction

1. Request
2. Progress status
3. Mechanical advice
4. Summary

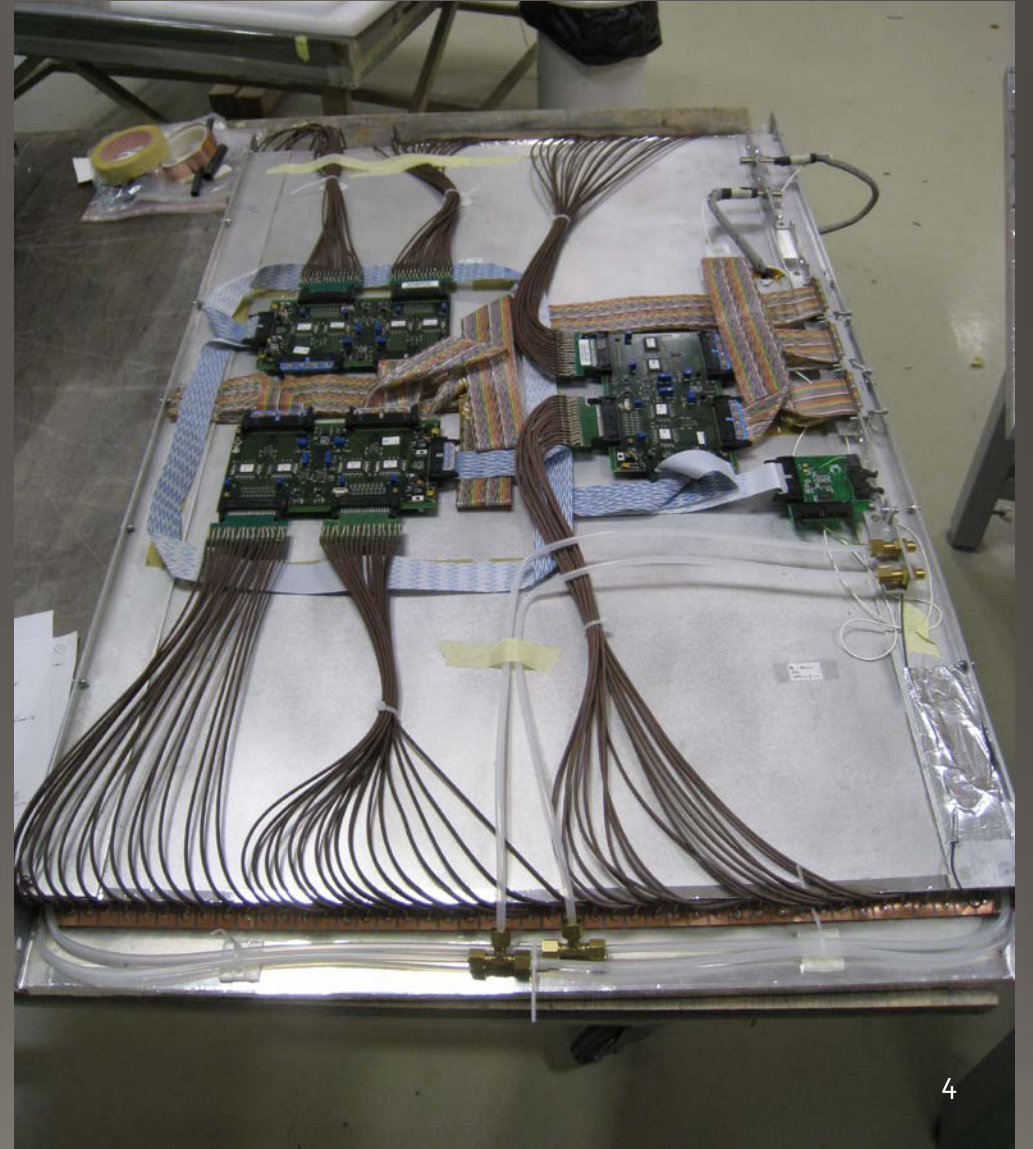
Request(from Ian)

- a) Drill 8 holes for mounting purposes -> **Mechanic**
- b) Clean and insulate the bottom and top gap HV connections (done) -> **Insulator**
- c) Check oV connection on gap -> **Insulator**
- d) ground the oV ref plane (Cu) done at Cu end -> **Ground**
- e) Insulate (Kapton tape & Mylar) the oV ref plane (Cu) from the Frame -> **Insulator**
- f) Gas connexions (I will look for 8 "T"s so that a parallel schema can be implimented(improved flow for high flux) -> **Gas connections**
- g) Ground the patch panel. -> **Ground**
- h) Shield and insulate the Hv leads -> **HV**
- i) establish all 4 grounds -> **Ground**
 - oV of Hv
 - shield of HV
 - LV (done)
 - oV ref Cu sheet

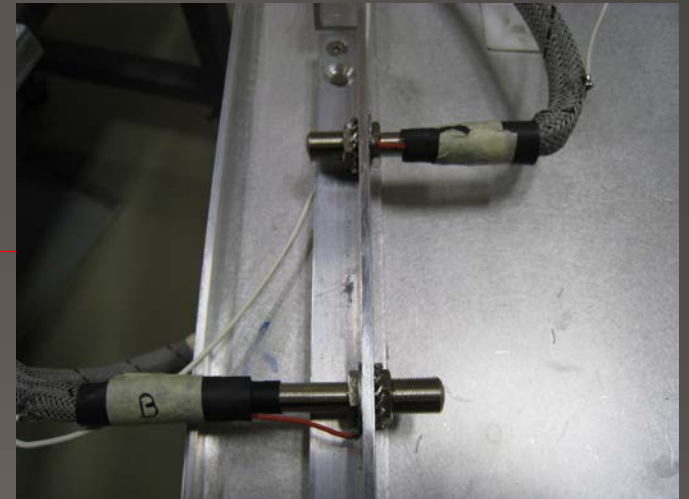
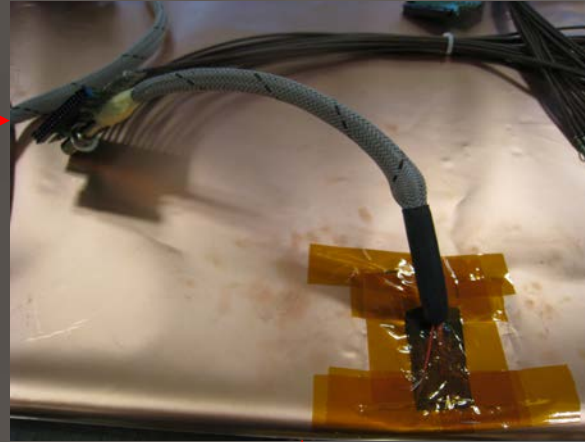
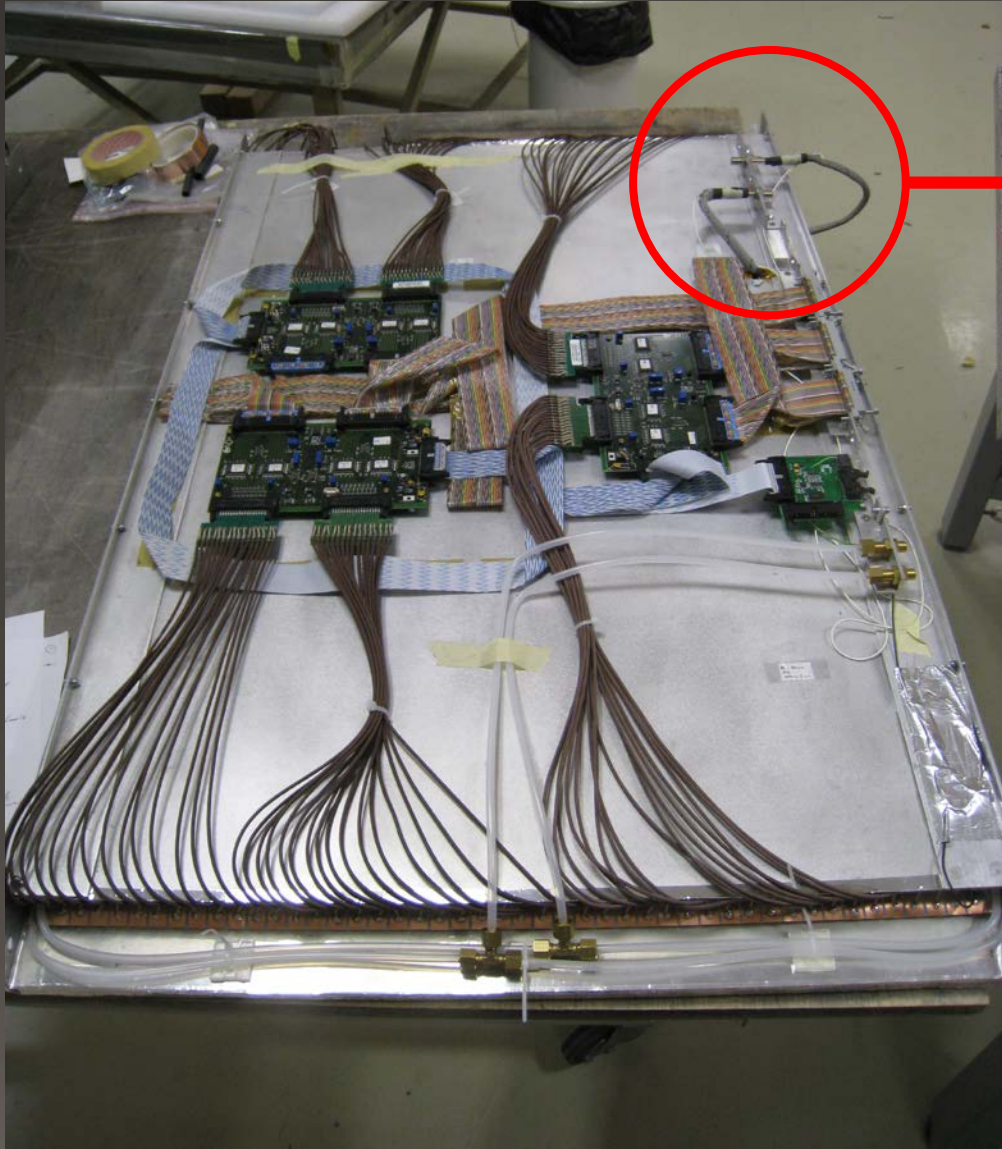
**Total
5 kind
9 jobs**

Progress status

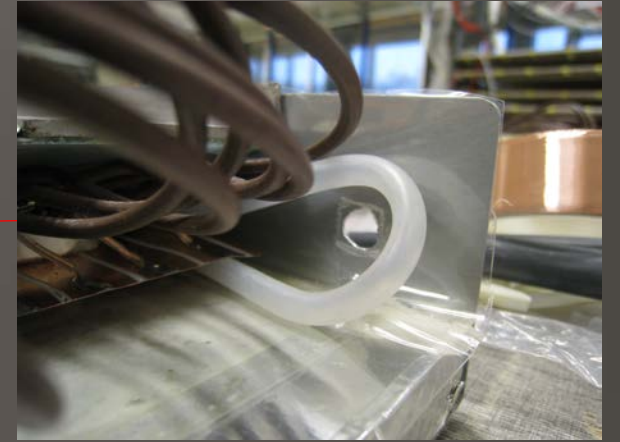
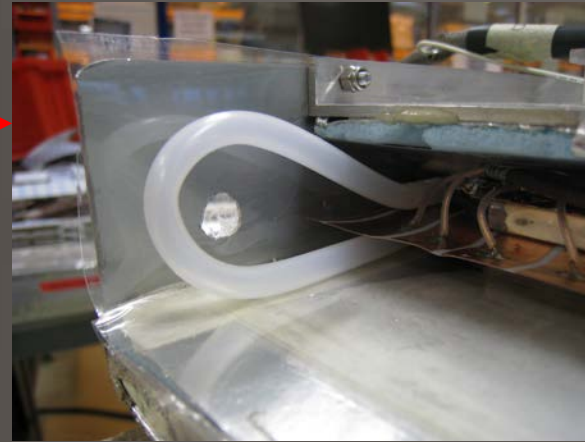
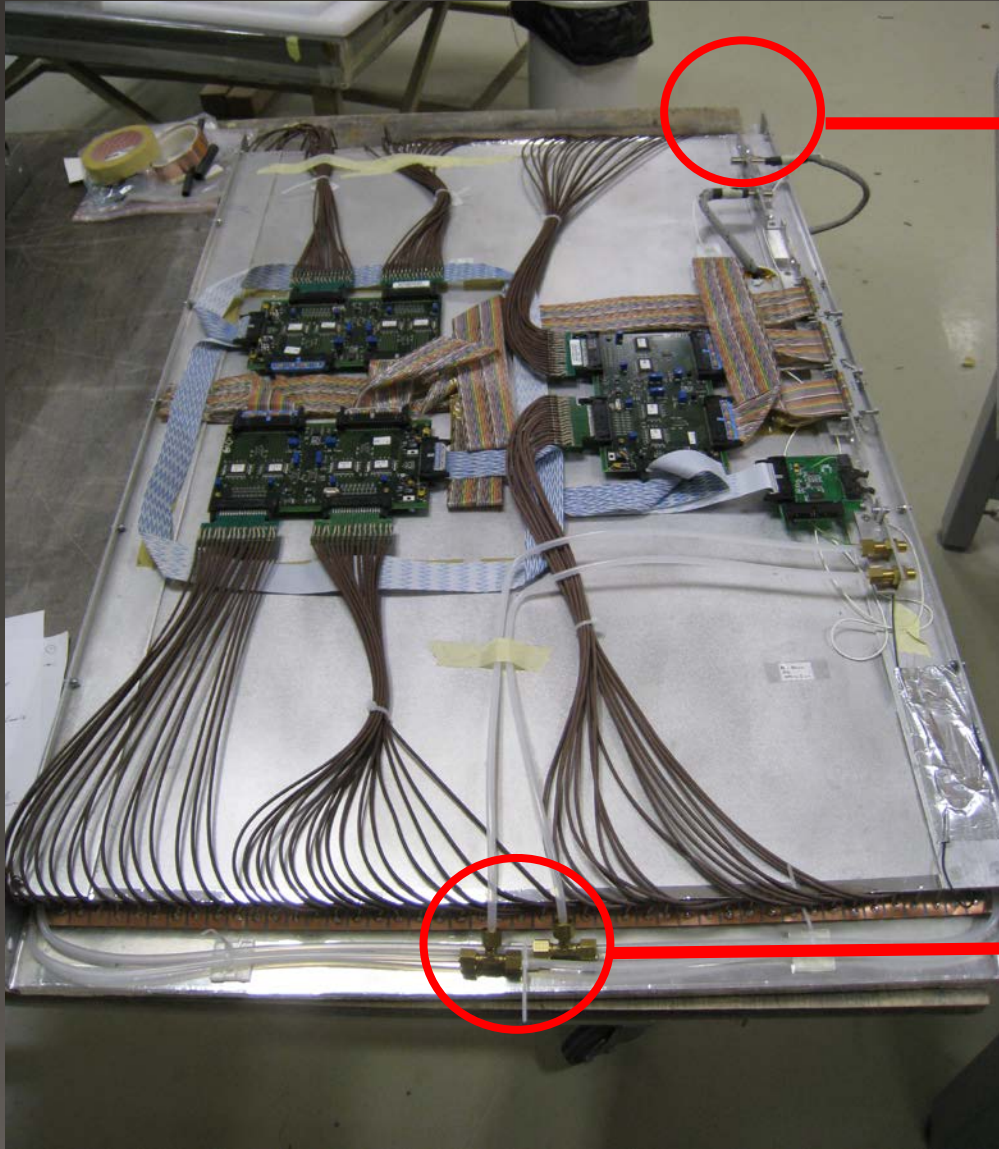
- GT chambers
 - ✓ 9 of 9 jobs done (100%)
 - ✓ Need to Leak test and HV test



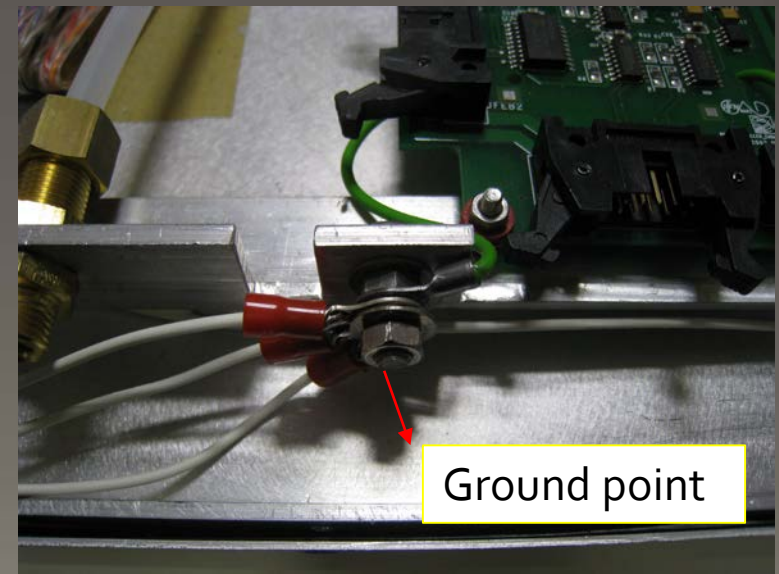
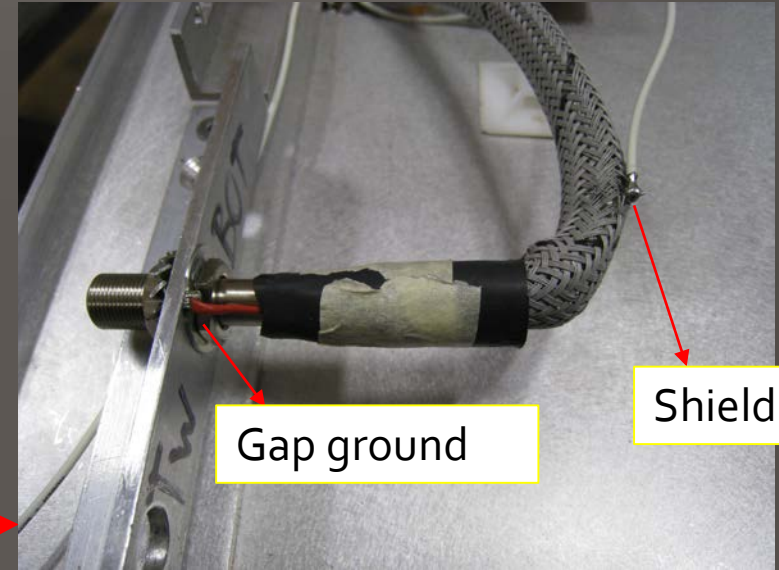
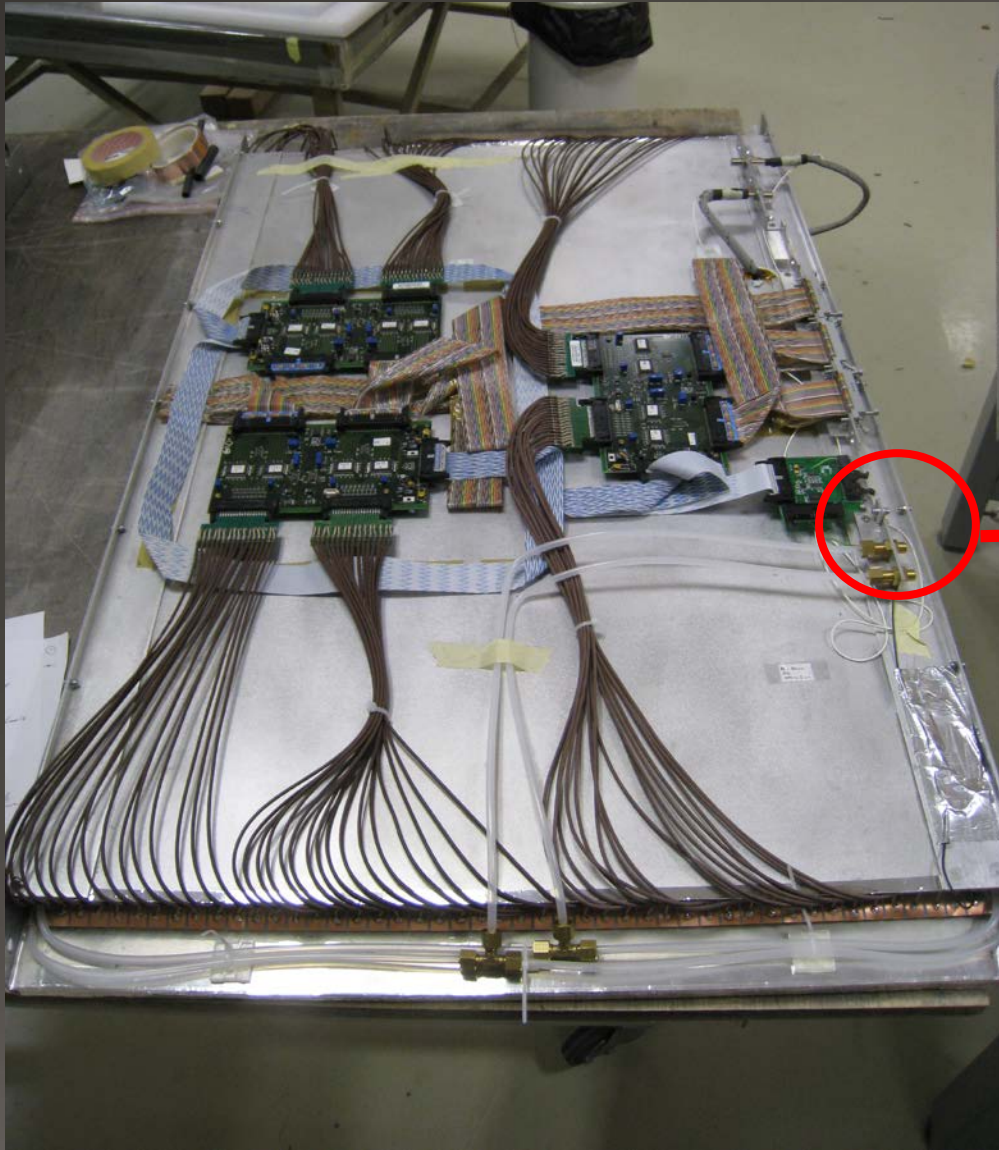
Progress status - HV



Progress status – Gas pipe

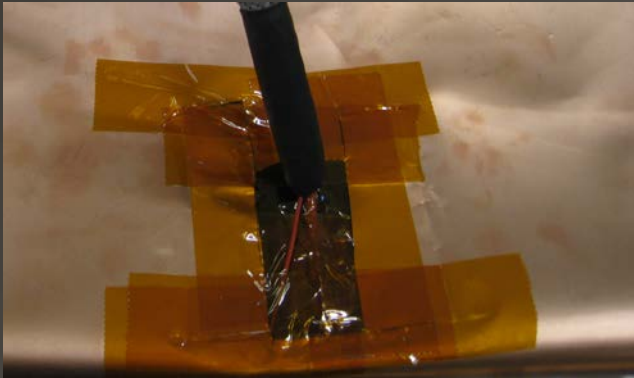


Progress status - Ground

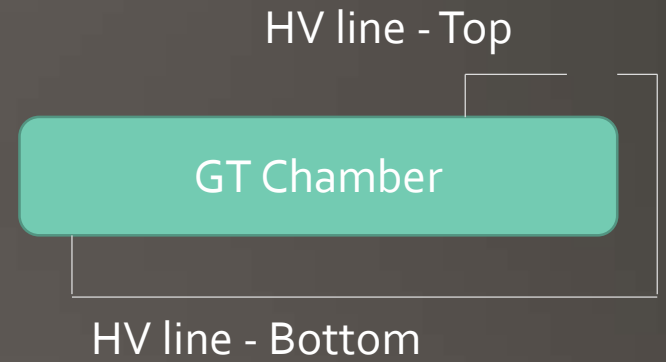
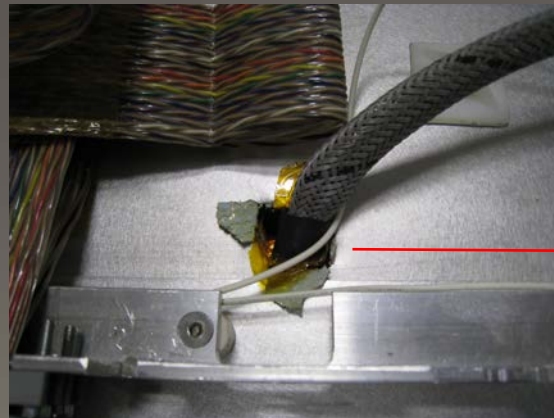
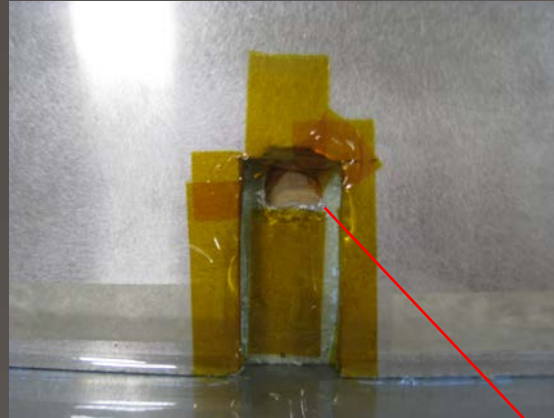


Mechanical advice

- HV



No HV shield block
Protected by insulation tapes



Expansion HV hole

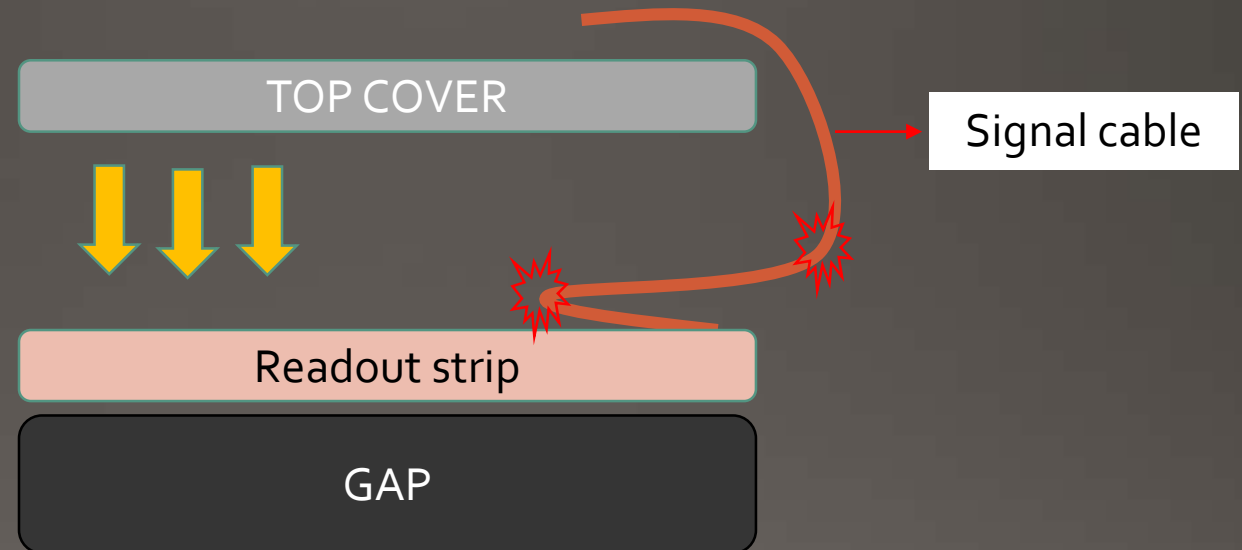
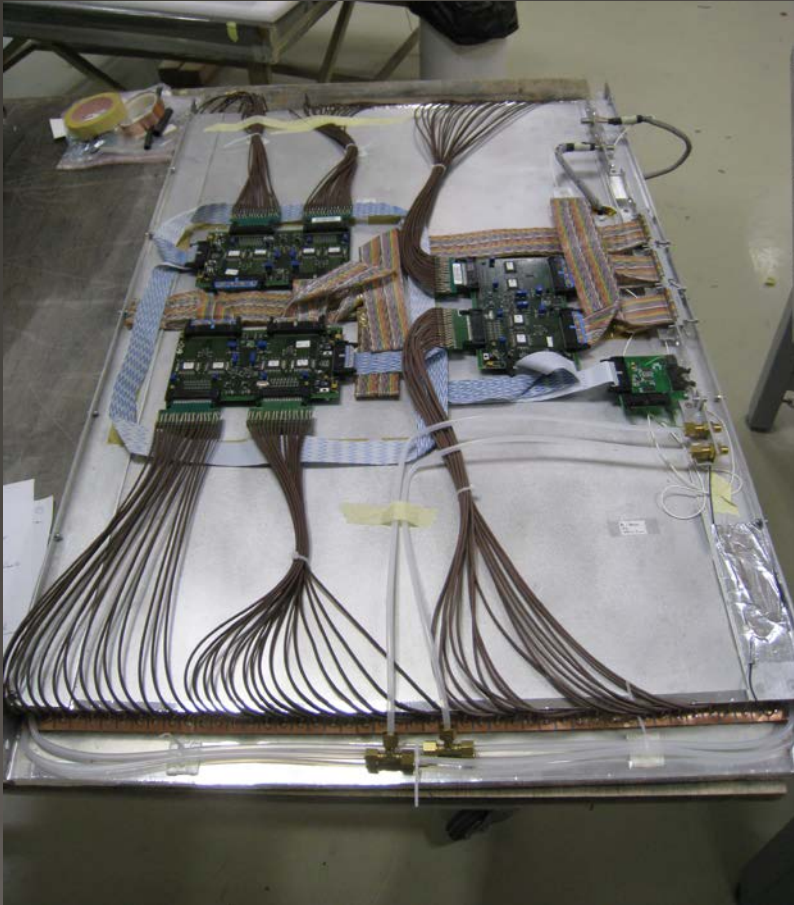
Mechanical advice

- Interfere between Gas pipe and Mounting hole



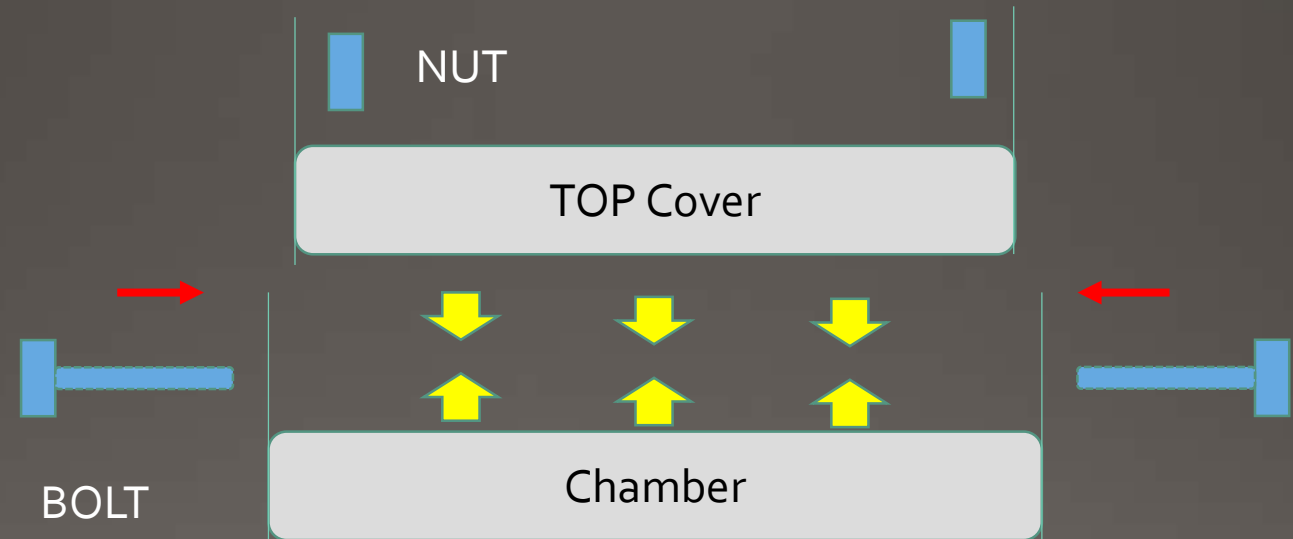
Mechanical advice

- Signal cable twist and pressure



Mechanical advice

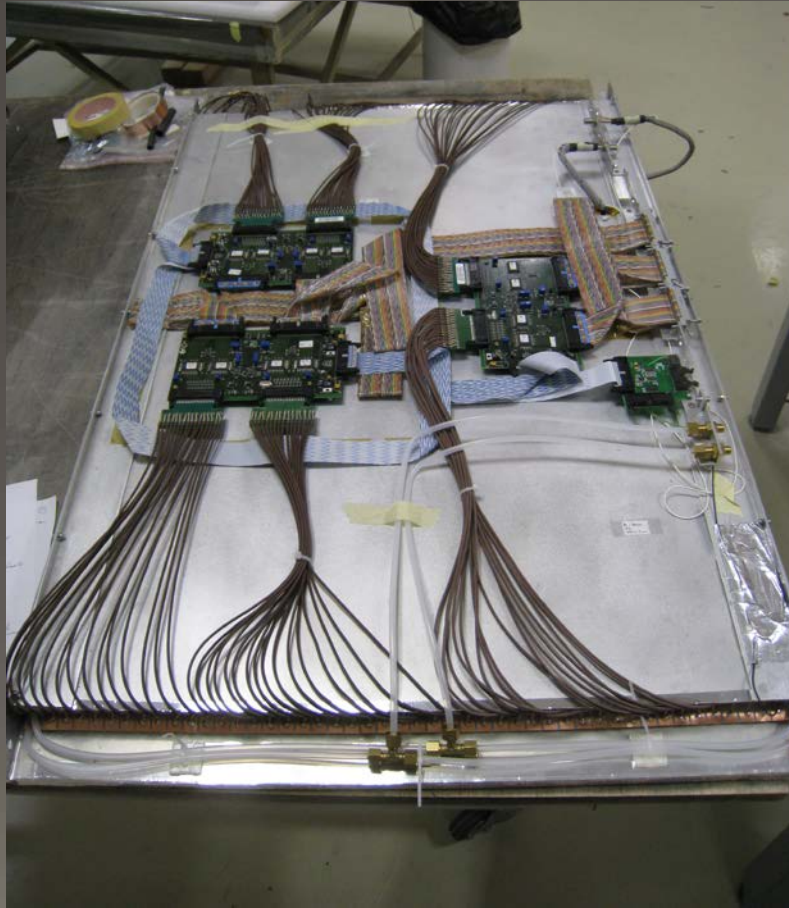
- TOO DIFFICULT to Combine cover with chamber



Mechanical advice

- Gap position holder

Not holding Gap position



Easy to moving

Summary

- 2 GT proto chambers 100% done
- Need Leak and HV test