

FCalchik Packing List

- 1 – FCalchik – calorimeter module
- 2 – Excluders – to displace liquid argon
- 1 – FCalchik Table – to hold FCalchik and excluders
- 1 – Argon gas purifier
- 1 – Flow Meter Assembly – to regulate getter
- 4 – Hanger Rods – to hold table
- 2 – 3/4” End Wrench – for purifier connections
- 1 – Hand Drill – for FCalchik repair
- 1 – Roll Plastic Wrap – to cover FCalchik and assembly when not sealed in cryostat
- 24 – Rubber gloves – for handling FCalchik and assembly
- 12 – Wipes – to clean pieces/FCalchik repair

1 – Red Toolbox (Following in Toolbox)

- 1 – 9/16” End Wrench – for purifier connections
- 1 – 1/2” End Wrench – for purifier connections
- 2 – Pinning tools (Double and single) – to repair broken pins on FCalchik module
- 2 – 1/4” x 10mm copper tube coupling – to adapt to IHEP plumbing
- 4 – Swagelok VCR Copper gaskets – for purifier connections
- 6 – 20cm long x 250micron PEEK fiber – to repair FCalchik module
- 6 – 20cm long x 100micron PEEK fiber – to repair FCalchik module
- 3 – FCalchik Base Kapton sheet – electrically insulate FCalchik from table
- Est. 1000 – Pins – to repair Fcalchik module
- Est. 200 – Brass Washers – to repair FCalchik module
- Est. 200 – Kapton Washers – to repair Fcalchik module
- 2 – boxes (100 per box) Pinhole Swabs – to clean pin holes during repair
- 1 – bag (est. 50 count) Tube Swabs – To clean tubes during repair
- 2 – 100micron gap copper rods – for FCalchik repair/replacement

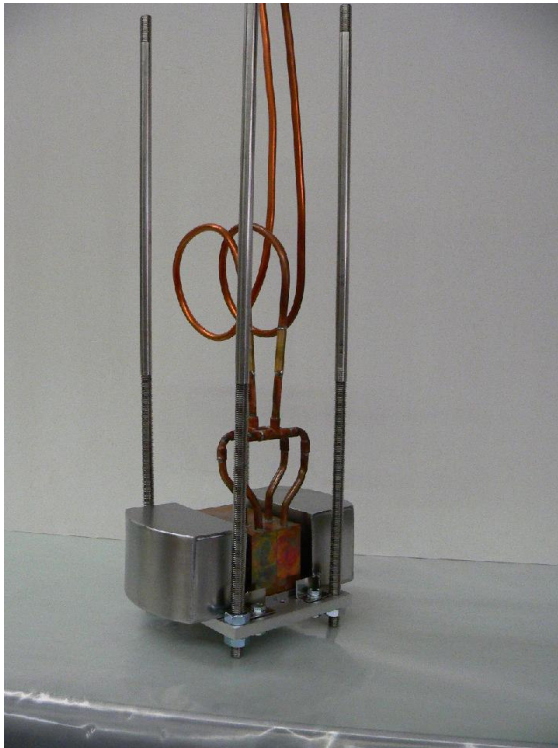
Box of Electronics

- 1 – HV distribution box – electronics for FCalchik
- 1 – 3m copper braid – For grounding electronics
- 1 – wiring harness – to readout signals from the FCalchik
- 1 – bag jumper wires/pins

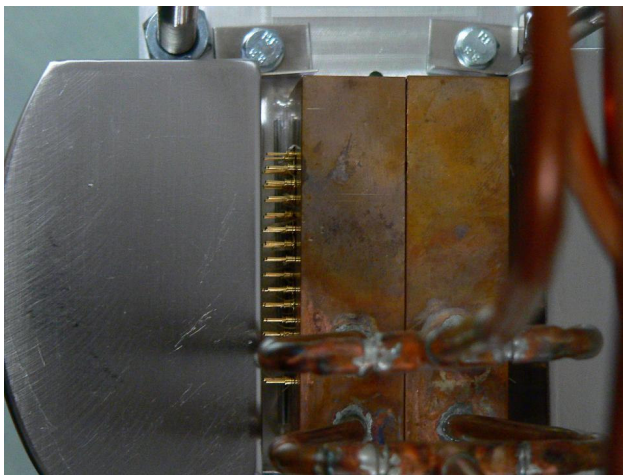
Possible Removal from box

- 4 – M6-1.00 Bolt – For Excluder Assembly
- 4 – M6-1.00 Nut – For Excluder Assembly
- 8 – M6 Washer – For Excluder Assembly
- 8 – M10-1.5 Nut – For Table/Hanger assembly
- 1 – Adjustable Wrench – FCalchik cryostat assembly
- 1 – Tube Cutter
- 1 – Small Vice Grip – for FCalchik repair
- Est. 50 – Cable ties – Hold FCalchik to table

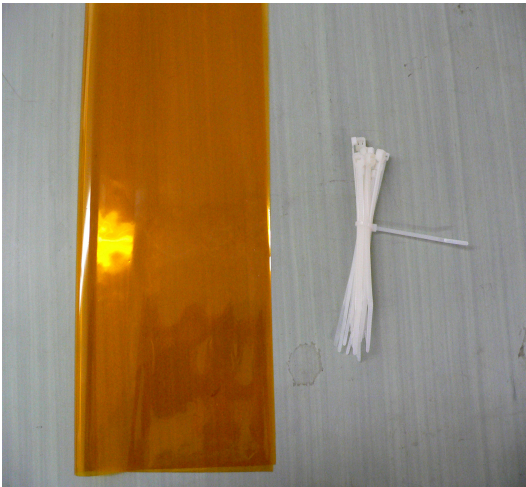
1 – Wire cutter – for FCalchik repair



FCalchik
Excluders (2)
Table
Hanger Rods (4)
Hanger Rod Nuts (8)
Excluder Nuts/bolts/washers



Shows Excluder bolts
Shows Hanger rod nuts
Top View of FCalchik



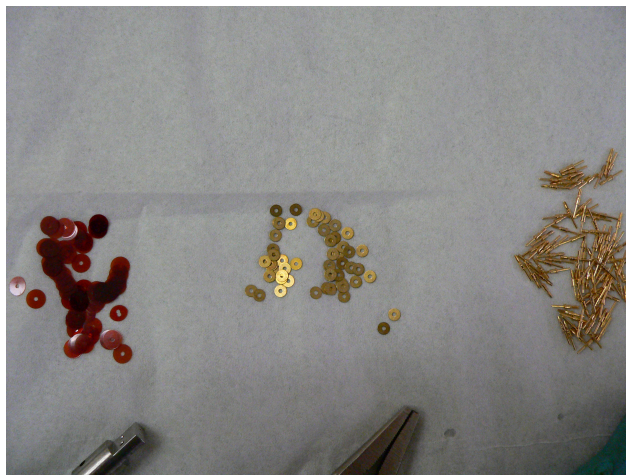
FCalchik Base Kapton (similar to that shipped)
Cable Ties (similar to those shipped)



End Wrenches
Adjustable Wrench – Similar to that shipped



Double Pinning Tool
Small Vice Grip
Wire Cutter



Kapton Washers
Brass Washers
Pins



Wipes
Rubber Gloves



Box of Pinhole Swabs
Bag of Tube Swabs