

Wrench used to prop up the male side of the line. Using the thru hole on weld body to maneuver the female side into alignment







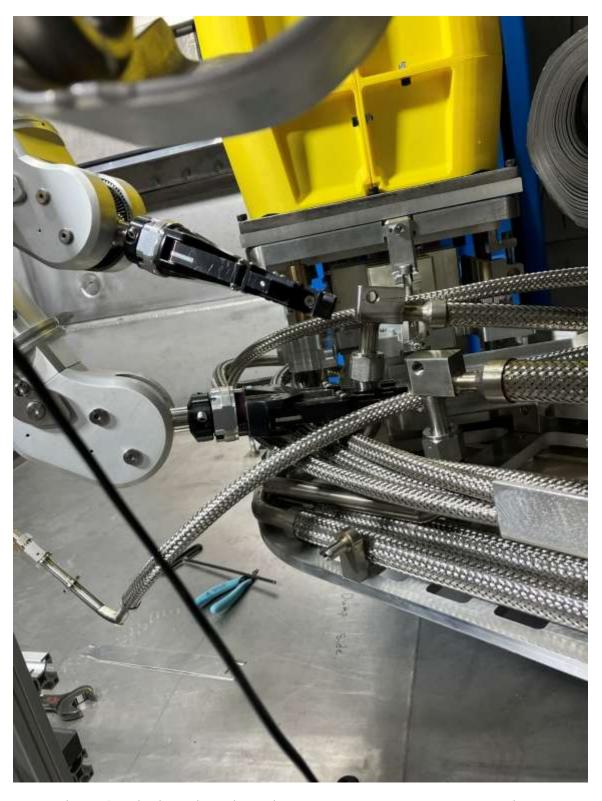


Illustration of 'resting' relative orientation between the male and female sides.

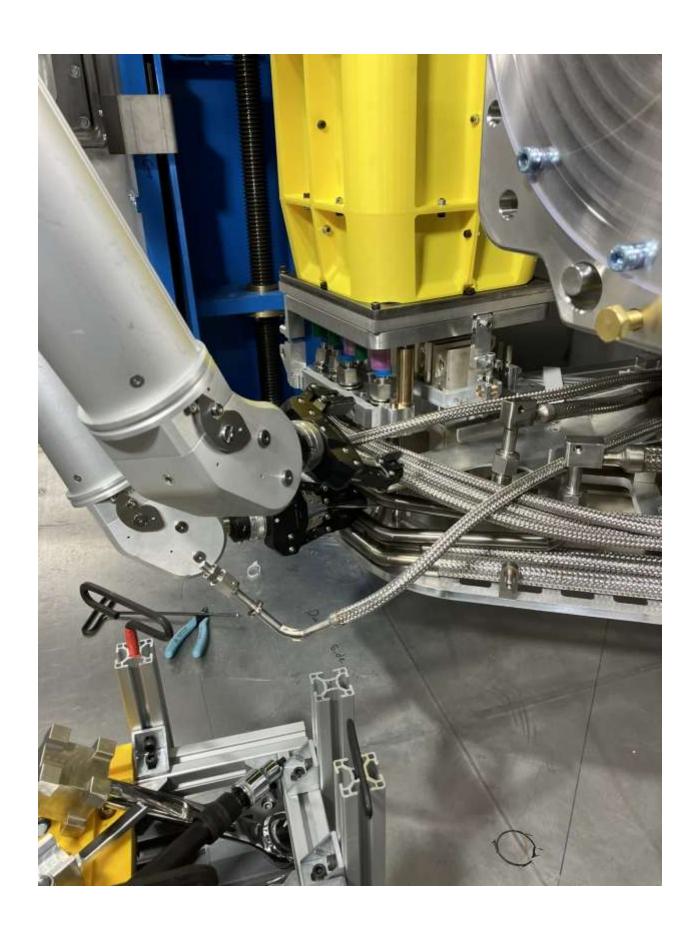


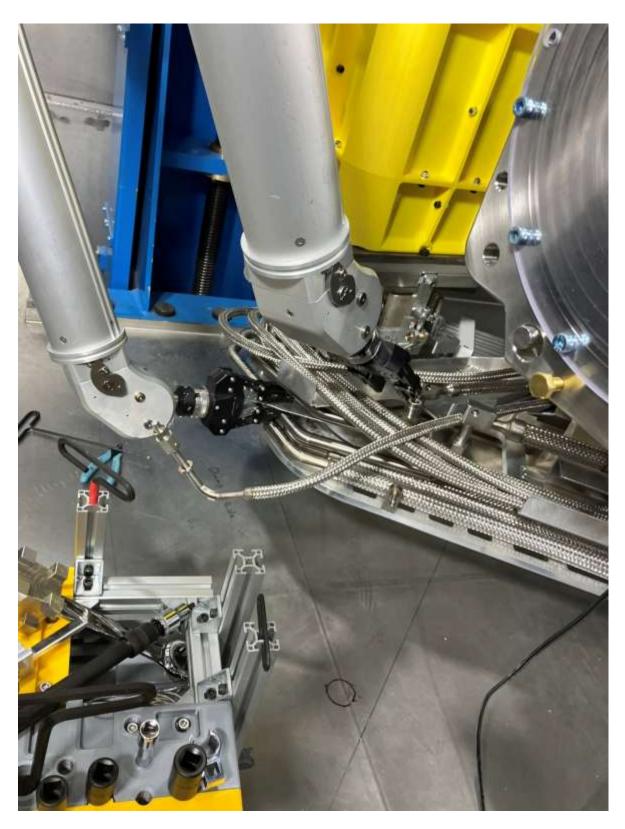












Initial attempt at propping up using flexible sheet tool.

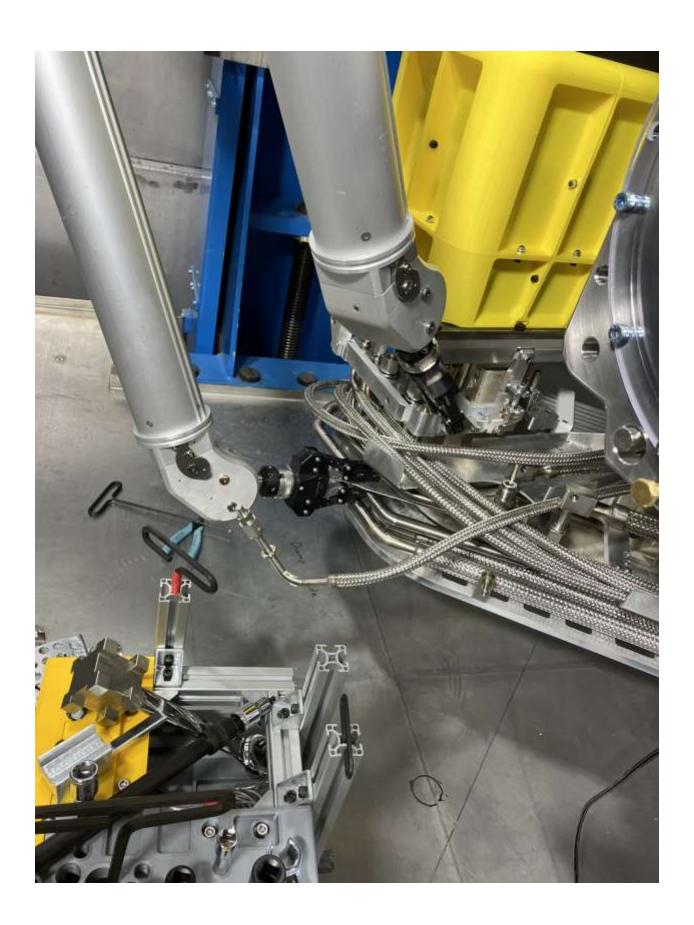
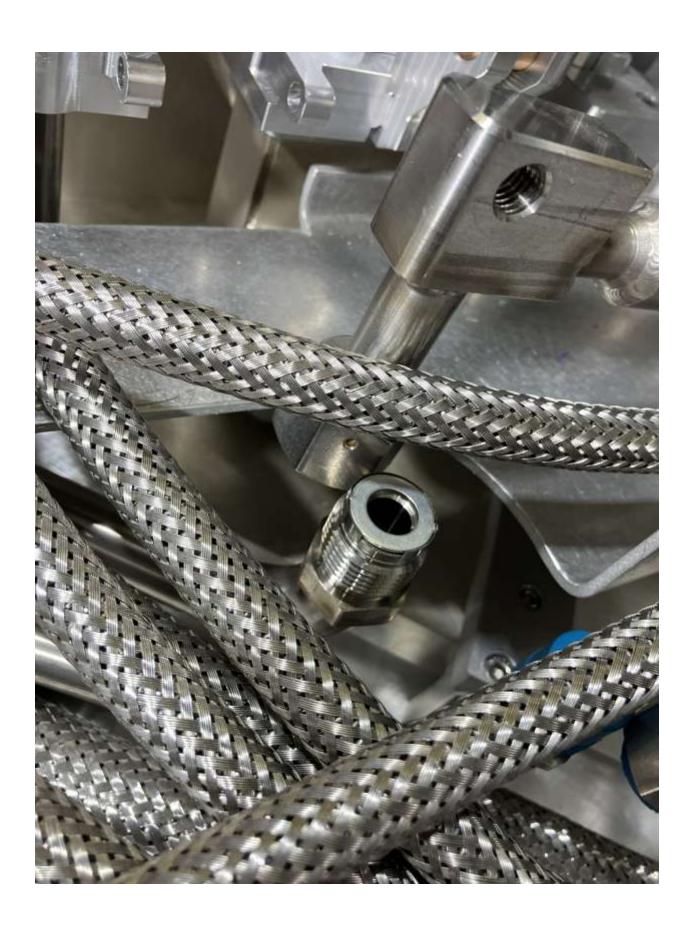






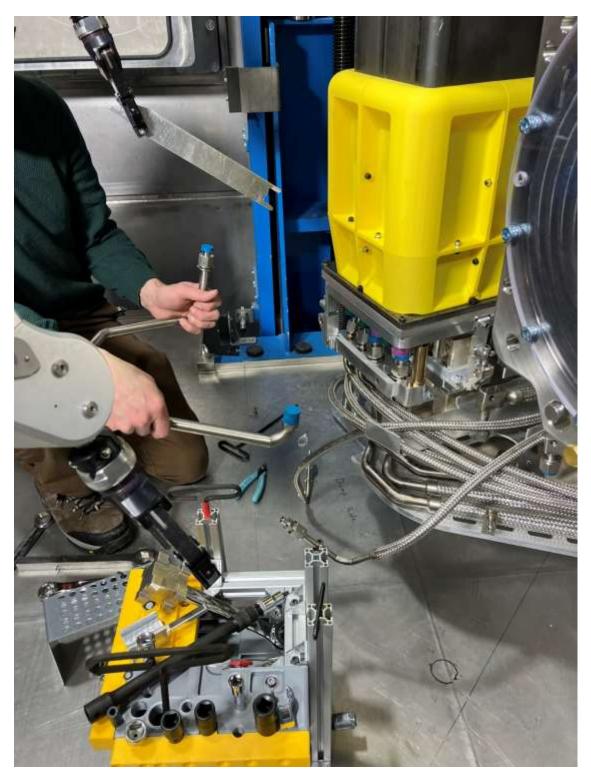


Illustration of VCR gasket on male side

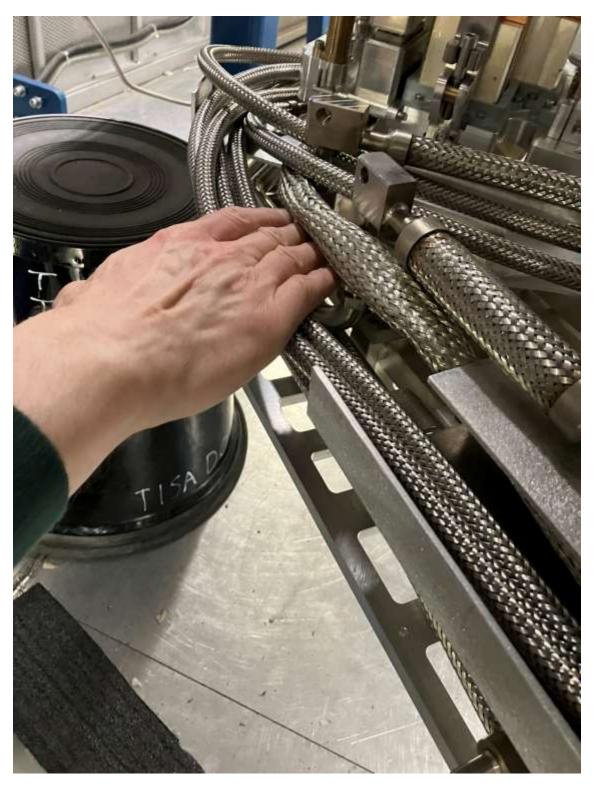




If dropped behind the lines, VCR gasket will be difficult to retrieve.



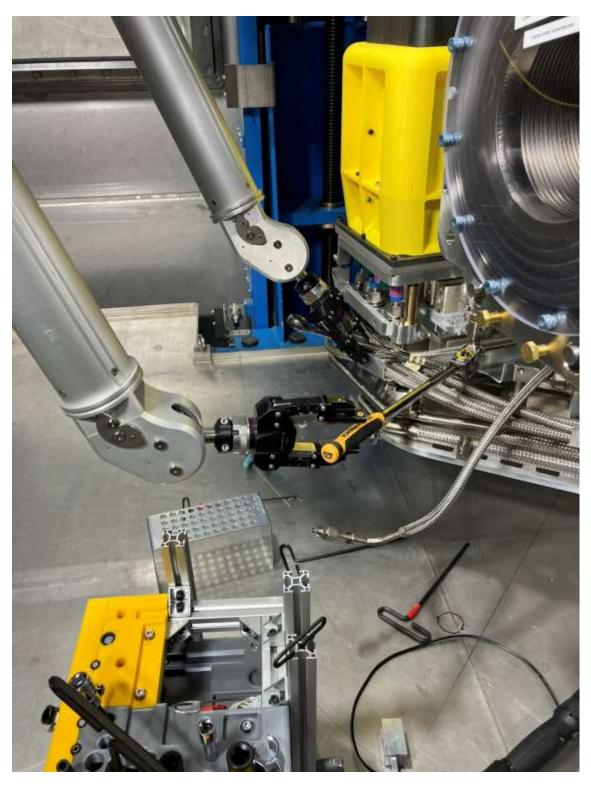
Hard line tube section looks like it can be removed without issue, tested by hand.



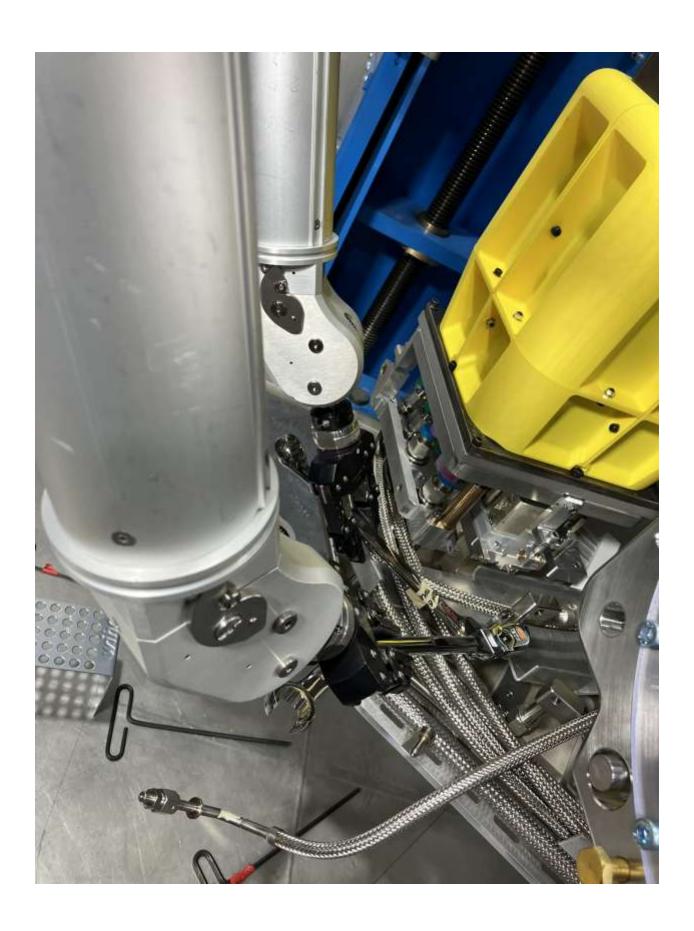
Multi-pin bundle line on AETE in TISA room interferes with access to intermediate VCR joints.

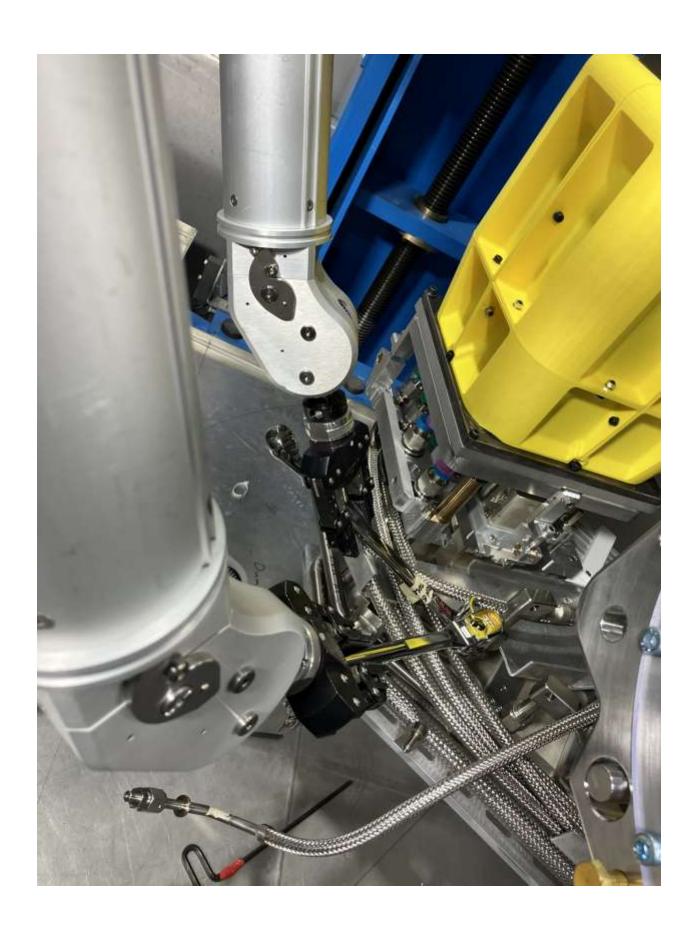


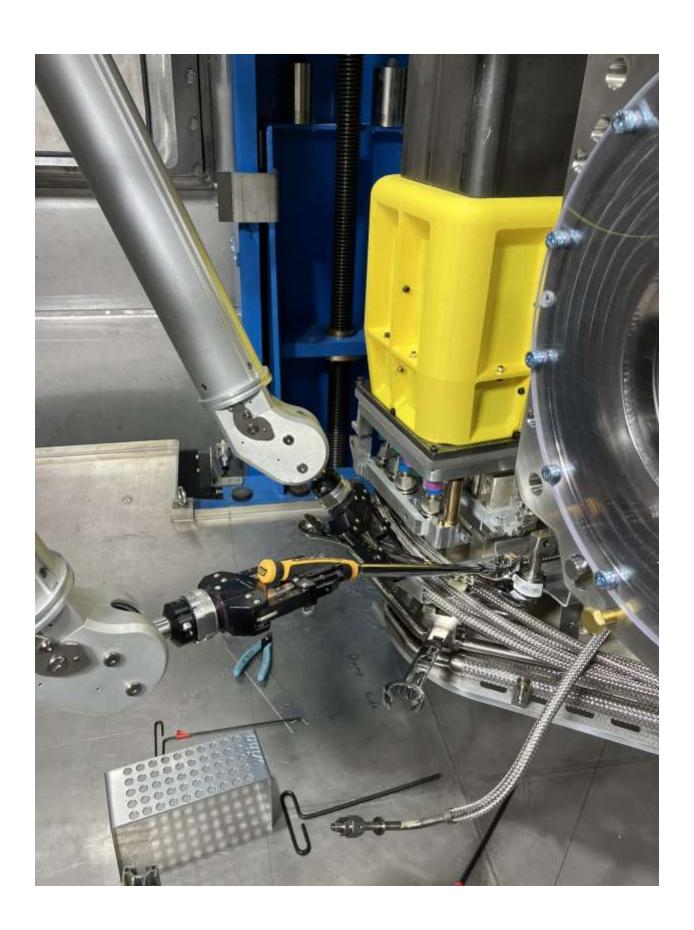
Using big handle wrench worked well to prop up the welded tube section for access to redo the joints.



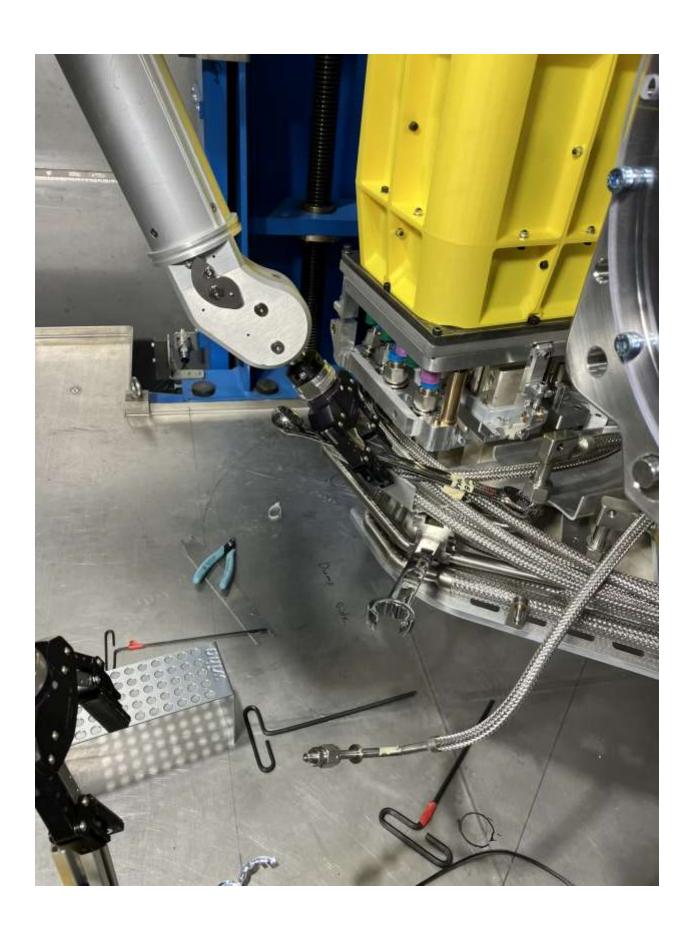
Setup for successful re-establishment of joint. Crows' feet and extra length ratchet used.











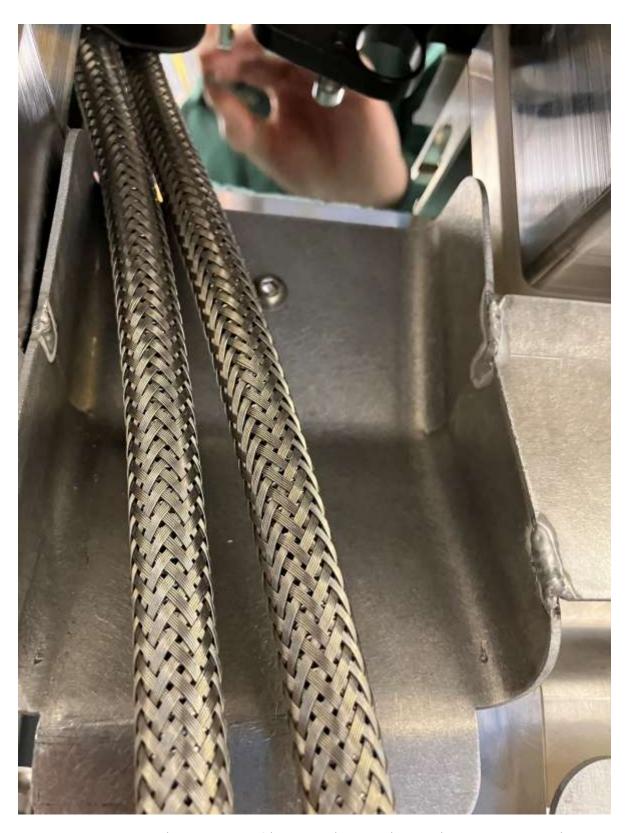




Misalignment not perceived from hot cell window, illustration of possible useful cross-view camera placement.

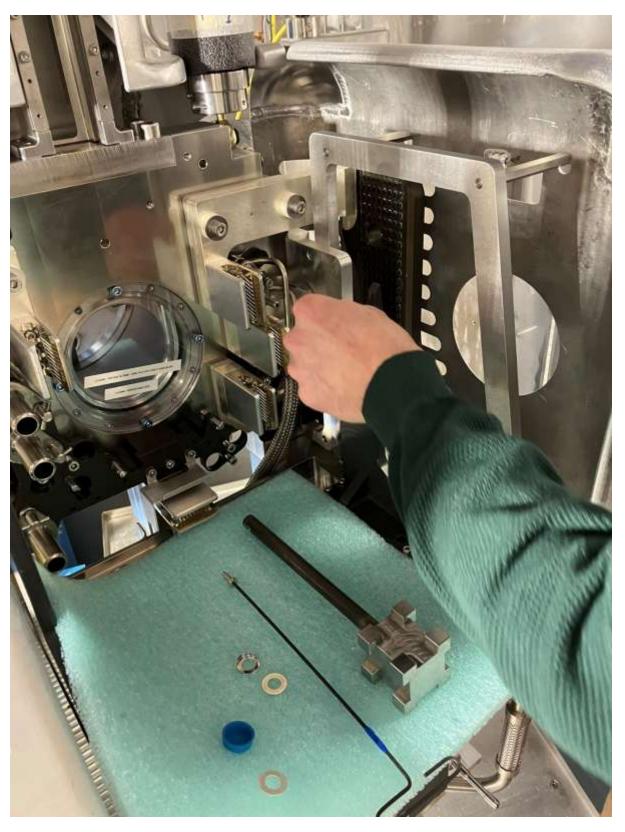






The full length of gas lines could be 'fished out' from this opening on the FE services plate.





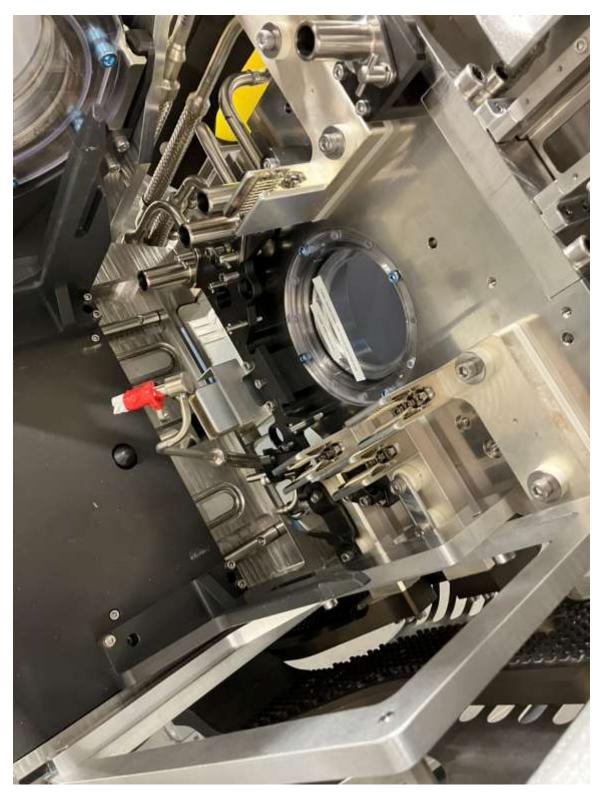
Gas line bracket and screws tested by hand, confident can do if tool is made to grab onto the sealing tube ends without damaging.





When undoing the small shoulder screws on the gas line it is strongly recommended to have a catch tray to prevent it from dropping into the FE carriage mechanisms.





Taped sealing face on gas line tube, checked that it can be fished out from opening, electrical connectors not present at the time but confident it won't affect the outcome.

