

SEM

Focus - when tilted
can't be focussed

Stage movement - can't go full
scale

Reduced area image - not clear

Condenser has to go to one end
to get good image.

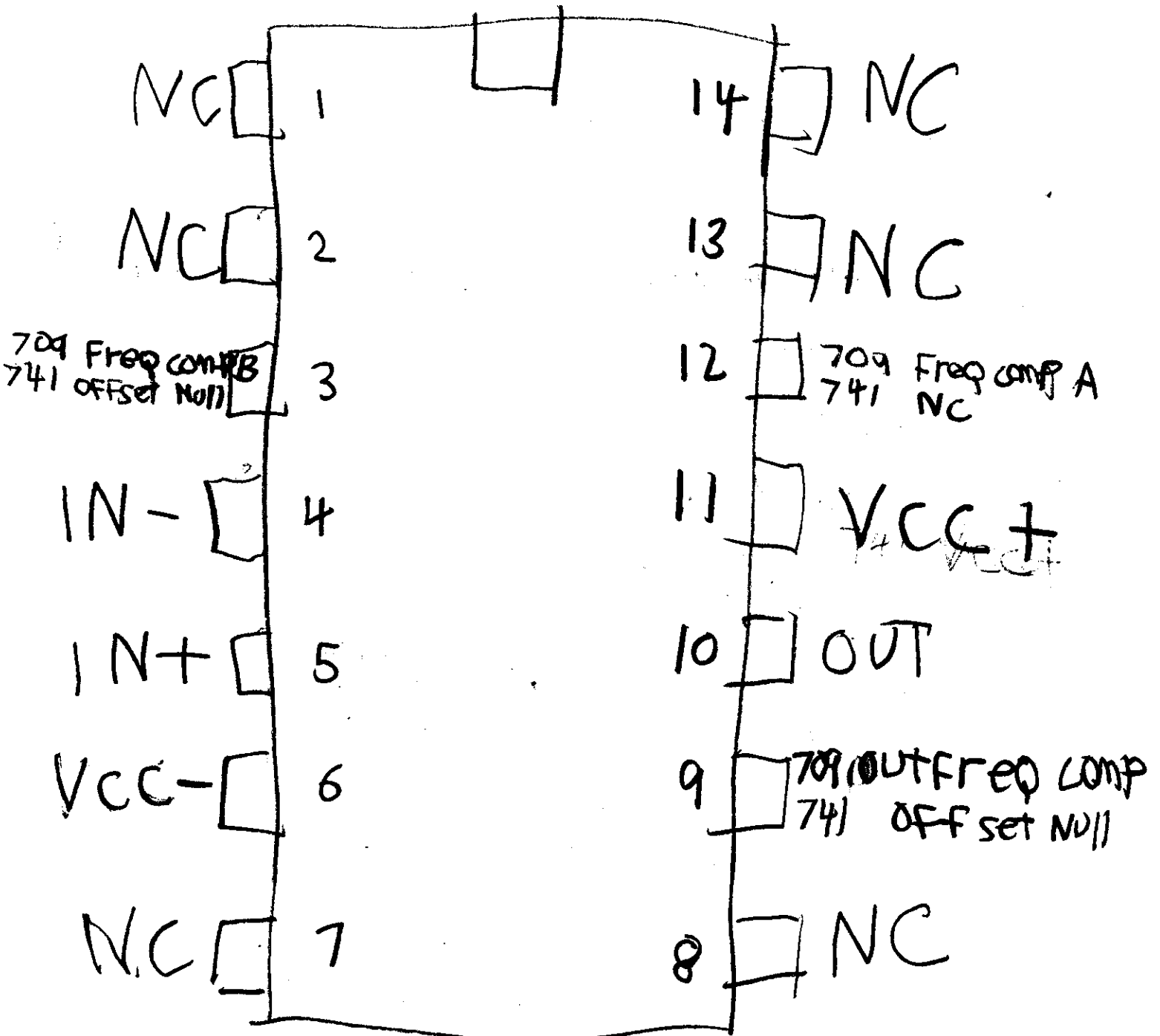
Intensity - has to go above red
marker.

OIL Suck back to Specimen Chamber caused electrical Spark/surge That blew Scanning output circuit. This is marked by slip of paper placed under IC 4 (No 7410) which drives T13-4 which drive column scan. There is signals going into this, but NO OUTPUT

The high voltage, and vacuum systems have been disabled to make Trouble shooting the scanning circuits easier. A magnet holds the Helium ready (green light) on for the scan operate.

Been working with Chris Murphy from Wednesday 1 PM till Thursday 6 AM and from 1 PM Thursday 11:45 PM ~~at~~. Bid of my wife. M.K.

709C / 741C OP AMP



used in sem

SCANATLANTA

SCIENTIFIC INSTRUMENTS

1645 TULLY CIRCLE, N.E., SUITE 101, ATLANTA, GEORGIA 30329

(404) 321-5454

Dear MINI-SEM User:

Your MINI-SEM TXY stage has been modified to include a 360° rotation motion of the standard 15 mm \varnothing specimen sub.

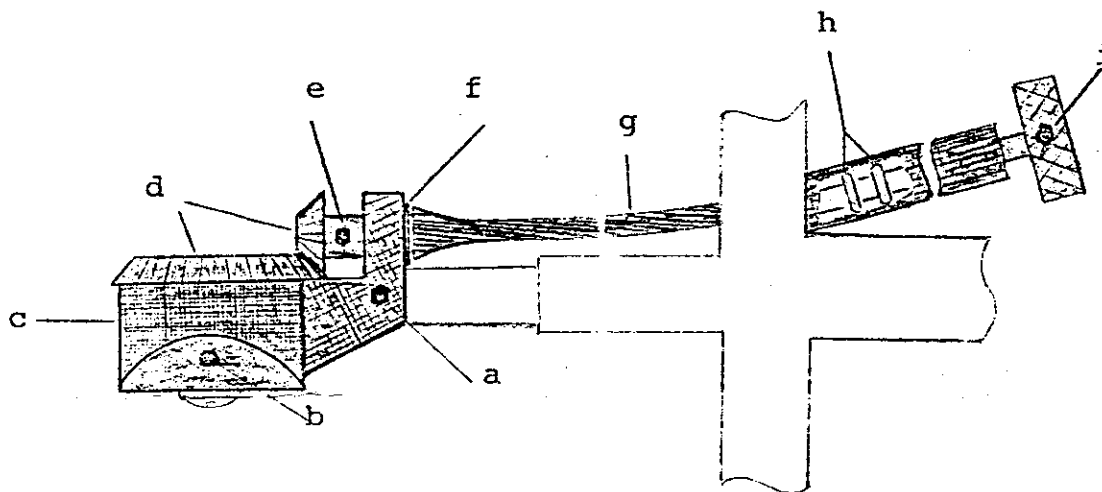


Figure 1: TXY Specimen Stage Modified for Rotation

(a) #4-40 set screw, (b) #1-74 set screw, (c) specimen holder, (d) small and large bevelled gears, (e) #1-74 set screw, (f) brass washer, (g) rotation drive, (h) 3/32 ID x 5/32 OD O-rings, (i) #4-40 set screw.

With your modified stage we have included a #1 hex key wrench for set screws (b) and (e), a #4 hex key wrench for set screws (a) and (i) and two spare 3/32 x 5/32 O-rings. We have also returned parts which are no longer needed.

To service the rotation (R) and X drives loosen set screws (a) and (e) and gently pull off specimen holder with small bevelled gear. The R drive can now be pulled out and serviced. Keep O-rings adequately lubricated with vacuum grease. The X drive can be removed in the usual manner by loosening the set screws at the micrometer drive. During removal and insertion of the R drive care must be taken not to scratch the shaft or tube housing. Scratches will inevitably lead to vacuum leaks. Also, observe proper position of brass washer and tighten set screw against flats of drive only.

9/74

Dear Zach :

Thank you for visiting the website of SPI Supplies and also, for taking the time to complete one of our on-line questionnaires. For your convenience, I have copied below the information we received from the internet and following that you will find my comments:

From: Mike Zach

Subject: ISI sputter coater specs

Hello,

I have been assigned a project of resurrecting a old International Scientific Instruments (ISI) sputter coater Model P-S1. I believe that this model of ISI coater was manufactured by Polaron.

My question is the following: Might your company have any technical information concerning (specs & scematics) the ISI instrument decribed or can you direct me to a source of this type of information?

Thanks Mike

PS What is the asking price for the Long Working Distance Microscope featured on your "factory outlet" page?

The sputter coater you have is VERY old. I am 99% certain that it was made by Polaron and this would have been from some time from about 1978 to mid- 1985. I have contacts with the successor companies to which the residue of the former Polaron has flowed. However the last time I asked for something that old, they did not have what I needed.

The good news is that for a time, from 1979 to about 1985, Polaron was making for us our own SPI sputter coaters. On the outside they looked entirely different but on the inside they were in fact very similar. We have maintain parts for our old units. We still service our old units.

If you want to get this unit up and running one possibility might be for you to let our service department take a look at it. There would be a minimum charge of \$400 however at that point we should be able to tell you what it needs.

One thing you want to be sure about is this: Check out the pump. If it has been sitting for ten years somewhere, then change the oil and let it pump for a few hours against a closed space.

I do hope you will find that my reply is responsive to your question and that also, the information will be useful to you. And when the time comes for you to make a purchase for your SEM lab, I hope you will think of SPI Supplies!

Chuck

PS: You asked about the price for the LWD Microscope in our Factory Outlet Store. The price for the basic unit is \$1200, it was originally \$3000. In the next few days, we will have the mess on that particular URL cleaned up and the missing information will be there.

Charles A. Garber, Ph. D.

Ph: 1-(610)-436-5400 President

1-(800)-2424-SPI SPI SUPPLIES

FAX: 1-(610)-436-5755 PO BOX 656

e-mail: cgarber@2spi.com West Chester, PA

19381-0656 USA Cust. Service: spi2spi@2spi.com

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