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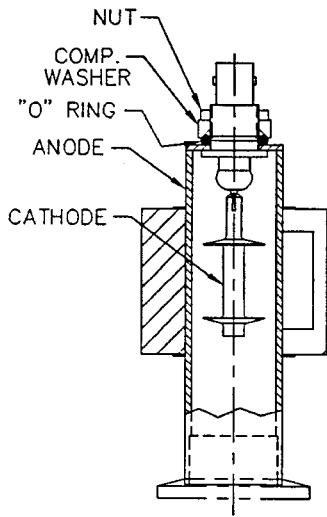


FIGURE A
OLDER STYLE 525
FOR REF ONLY

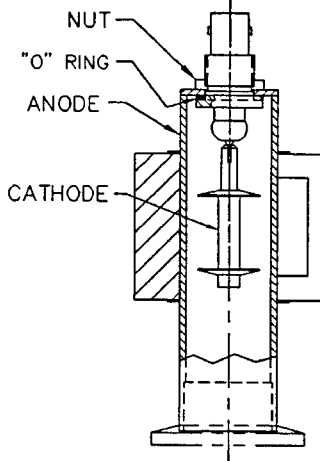


FIGURE B
OLDER STYLE 525
CLEANING OR REPLACING
CATHODE.

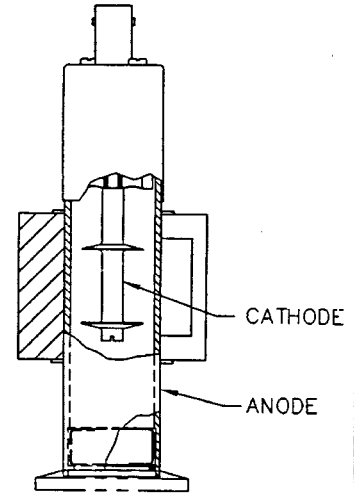


FIGURE C
NEWER STYLE 525
CLEANING OR REPLACING
CATHODE.

TUBE	KIT #
524	0591-F4381-301
OLDER STYLE 525	0581-K9440-301
NEWER STYLE 525	0591-F4381-301

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CAD FILE #

CAD GENERATED DOCUMENT MANUAL CHANGES NOT PERMITTED				varian VACUUM PRODUCTS							
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION IT MUST NOT BE REPRODUCED OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED IN WRITING BY VARIAN ASSOCIATES FABRICATE IN ACCORDANCE WITH VARIAN FABRICATION PROCEDURES QA 8000 AND/OR M-70000 FOR OTHER REVISIONS SEE ECO HISTORY FILE.				DRAWN CMS	DATE 11/18/91	CHECKED	DATE	APPR.	DATE	APPR.	DATE
				C.C.G. TUBE MAINTENANCE						A	L8771
9958	9552	8972	7430	ECO	NOT OTHERWISE SPECIFIED		A	L8771	D		
SSM	SSM	RF	CMS	DFT	FRAC±	ANG±					
JS	RL	JS		CHK	DEC.XX±	.XXX±	SIZE	DRAWING NO.	REV.		
	7/25/95	8/13/94	11/20/91	DATE	FIN. DWG.STD.(DOD-D-1000) (DOD-STD-100)		SCALE	PROD. 05	SHEET 1 OF 2		
D	C	B	A	REV			NONE				

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COLD CATHODE TUBE MAINTENANCE

All Cold Cathode Gauges require periodic maintenance over time due to contamination of the cathode by pump oils, dirt, oxidation, and sputtering of the cathode. Maintenance is indicated whenever performance becomes erratic, or the tube either takes excessive time to or fails to strike. This may be accomplished by either cleaning or replacing the cathode. (Note that while cleaning may be successful initially, eventually the cathode will have to be replaced). The length of time a given gauge tube will operate before requiring maintenance is strongly dependant upon the application.

Refer to chart on sheet 1 for the correct maintenance kit.

A. To disassemble the Cathode:

- 1) Remove the tube from the vacuum system.
- 2) If your tube has a baffle, remove it.
- 3) Loosen and remove the nut at the hi voltage connector.

- (FIGURE A ONLY) {
- 4) a. Remove & discard the compression washer and "o"-ring.
 - b. Push the connector/cathode assembly out of the gauge tube thru the vacuum side of the tube.

- (FIGURE B ONLY) {
- 5) a. Push the connector/cathode assembly out of the gauge tube thru the vacuum side of the tube.
 - b. Remove & discard "o"-ring.

- 6) For 524 or new style 525 simply unscrew cathode with a flat blade screwdriver. (SEE FIGURE C)

B. To Clean the Cathode:

- (ALL STYLES) {
- 1) Clean off surface contamination and debris using an abrasive cleaner (ie: steel wool, abrasive pad, etc., sandblasting is not recommended though)
 - 2) Wash with soap and water, rinse with clean water.
 - 3) Let dry thoroughly (a final rinse in reagent grade alcohol will shorten the drying time).
 - 4) Carefully inspect the glass seal and the knife edges. If the glass shows any evidence of cracking, if the knife edges are significantly rounded, or if there is excessive pitting on any of the cathode surfaces it should be discarded and replaced by a new one. (FIGURE B ONLY)


C. To Reassemble or Install new Cathode Assembly:

For older style 525: (SEE FIGURE B)

- 1) Push the supplied "o"-ring over the connector as far down as possible. (It may not stay all the way down). If you are installing a cleaned cathode use the extra ring supplied with your gauge and grease it with a little Apiezon or similar vacuum grease. The o-ring dimensions are .489 ID x .070, Buna, 70 durometer if you buy one.
- 2) Push the cathode assy up thru the "D" hole from the vacuum side of the tube. Align the flat with the flat of the hole and push in place. Do not apply excessive force.
- 3) Install the nut & tighten on anode surface.
- 4) If you can, it is recommended to leak check the gauge tube before installation onto your vacuum system. The leak spec is less than 2x10⁻⁹ atm cc/sec on a helium leak detector.
- 5) Install baffle, as removed using retaining ring to hold in place.

For 524 or new style 525: (SEE FIGURE C)

- 1) Screw cathode into feedthru.
- 2) Install baffle, as removed using retaining ring to hold in place.

 VACUUM PRODUCTS	A	L8771	D
	SIZE	DRAWING NO.	
	SCALE NONE	PROD. 05	SHEET 2 OF 2