

NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET DRAWING IAW THE GLOBAL PROFESSIONAL PUBLICATIONS "DRAWING REQUIREMENTS MANUAL", EIGHTH EDITION.

2. INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M - 1982.

3. BREAK SHARP EDGES .002-015.

4. INTERPRET ABBREVIATIONS IAW MIL-STD-12.

5. GAS FITTING, SWAGelok (ITEM 5) IS AVAILABLE FROM: [HTTP://WWW.SWAGELOK.COM](http://www.swagelok.com)

6. WATER LINE CONNECTORS, (ITEM 4) ARE AVAILABLE FROM: [HTTP://WWW.JOHNGUEST.COM](http://www.johnguest.com)

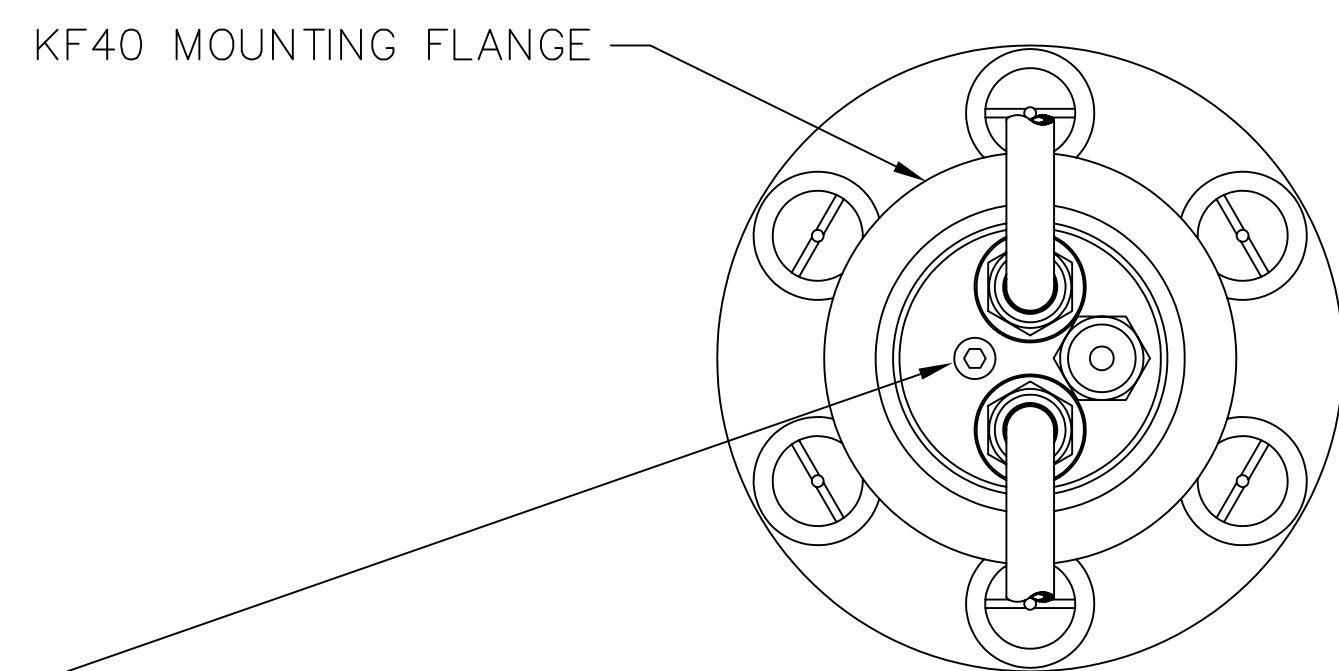
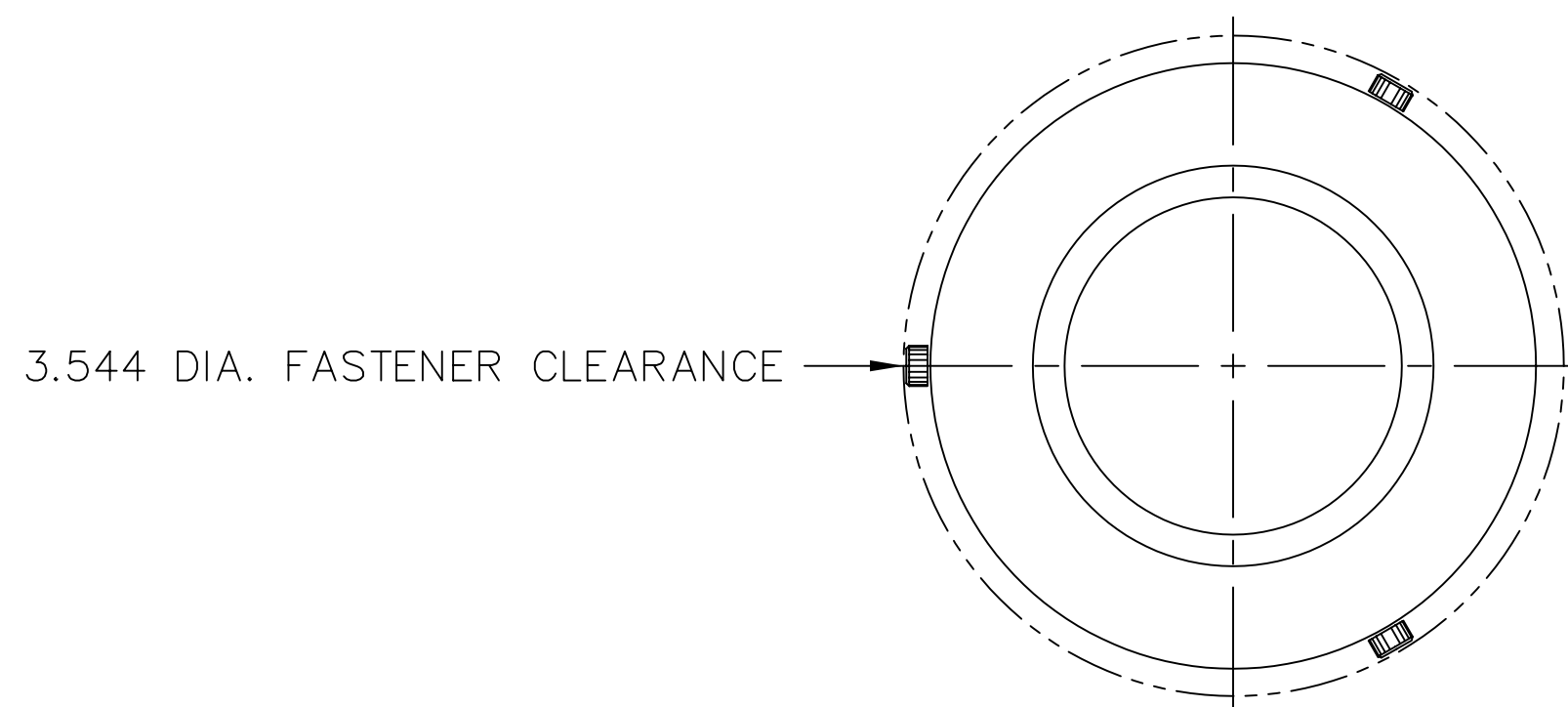
7. POWER CONNECTION. REFER TO DWG 00000056 FOR TYPICAL DC POWER AND DWG 00000049 FOR TYPICAL RF POWER CONNECTION. REFER TO NOTE 8.

8. SEE MATERIALS SCIENCE, INC. DOCUMENT NO. 251010 FOR PROPER USE, INSTALLATION, OPERATION AND USE OF POLARIS SPUTTERING SOURCES.

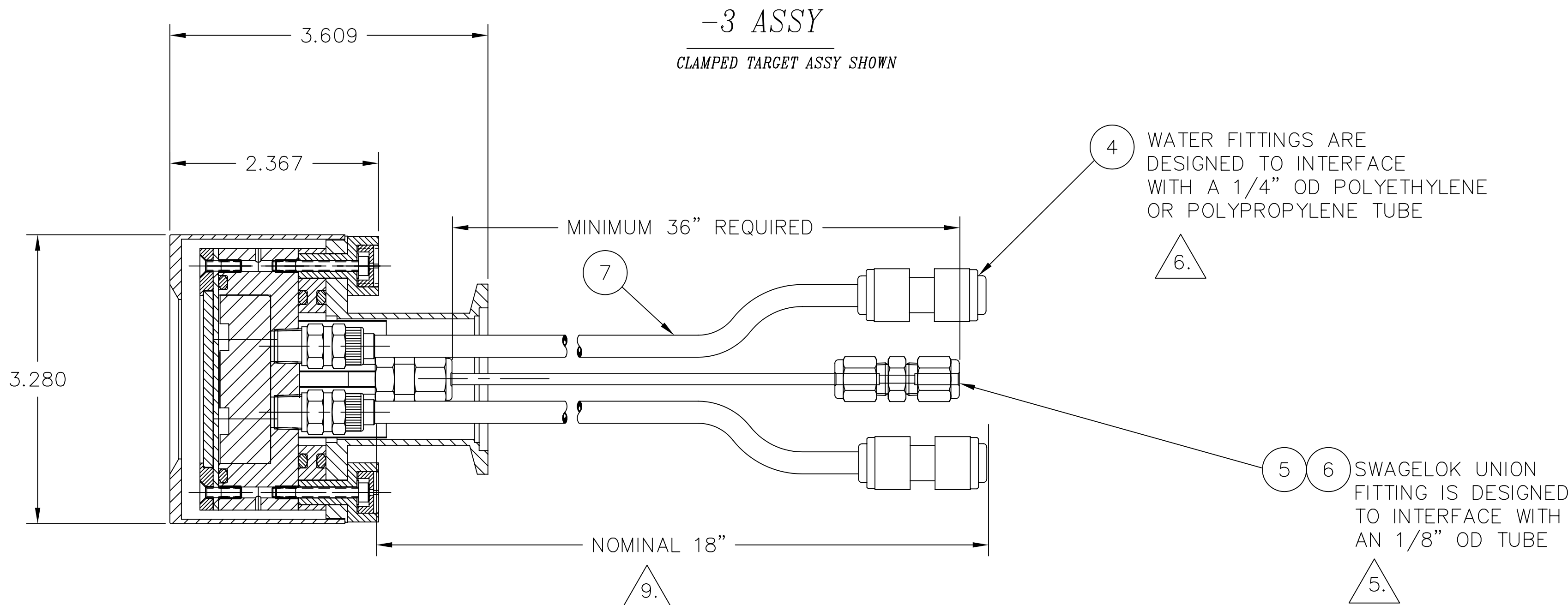
9. MINIMUM 60" LONG POLYETHYLENE WATER LINES REQUIRED FOR SAFE OPERATION. USER MUST SUPPLY ADDITIONAL 42" LONG WATER LINES TO MEET THIS REQUIREMENT. DO NOT SUBSTITUTE METAL WATER FITTINGS FOR ITEM 4.

10. MASS OF SPUTTERING SOURCE FULLY ASSEMBLED IS 3 LBS, 10 OZ., DRY.

REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	CHANGED GAS & WATER FITTINGS	05/04/03
			J. MILLER



8 9 M3 X 6 LONG FASTENER AND WASHER FOR POWER LUG.



QTY	QTY PER ASSEMBLY	QTY PER SUB-ASSEMBLY	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NO
1	1	1		00000070-22	SOCKET HEAD CAP SCREW, M3 X 6 LONG	18-8 CRES		9
1	1	1		00000095-10	WASHER, FLAT M3 7MM OD X 3.2MM ID	18-8 CRES		8
1	1	1	9.	00000074-1	TUBING, 1/4" OD X .170" ID X 18"	POLYETHYLENE		7
1	1	1		00000038-1	TUBING, 1/8" OD X 1/16" ID X 36" MINIMUM	TEFLON PFA		6
1	1	1		00000316	FITTING, SWAGelok, SS-200-6	316 CRES		5
2	2	2		00000281-1	1/4 INCH OD COUPLING, QUICK CONNECT	P/N C10408W		4
				00000197-3	2 INCH INTERNAL CATHODE (CLAMPED TARGET)			3
				00000197-2	2 INCH INT CATHODE (DIRECT WATER COOLED TGT)			2
				00000197-1	2 INCH INTERNAL CATHODE (BONDED TARGET)			1

INSTALLATION CONTROL DRAWING

NEXT ASSEMBLY		USED ON		APPLICATION		DO NOT SCALE DRAWING	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS .X ±.030 .XX ±.010 .XXX ±.005 ANGLES 2°/30' MACHINE SURFACES UNLESS OTHERWISE SPECIFIED 125				DRAWN C. CERVANTES 96/10/01 APPROVAL - - THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING WITHOUT WRITTEN PERMISSION FROM MATERIALS SCIENCE, INC. IS EXPRESSLY PROHIBITED.		MATERIALS SCIENCE, INC. Vacuum and Thin Film Technology HTTP://WWW.MS-PSE.COM	
SIZE D	CAGE CODE	DWG. NO. 00000197	REV A	SCALE: 1/1	WT:	DISP:	SHEET: 1 OF 1

CATHODE, 2 INCH INSTALLATION CONTROL