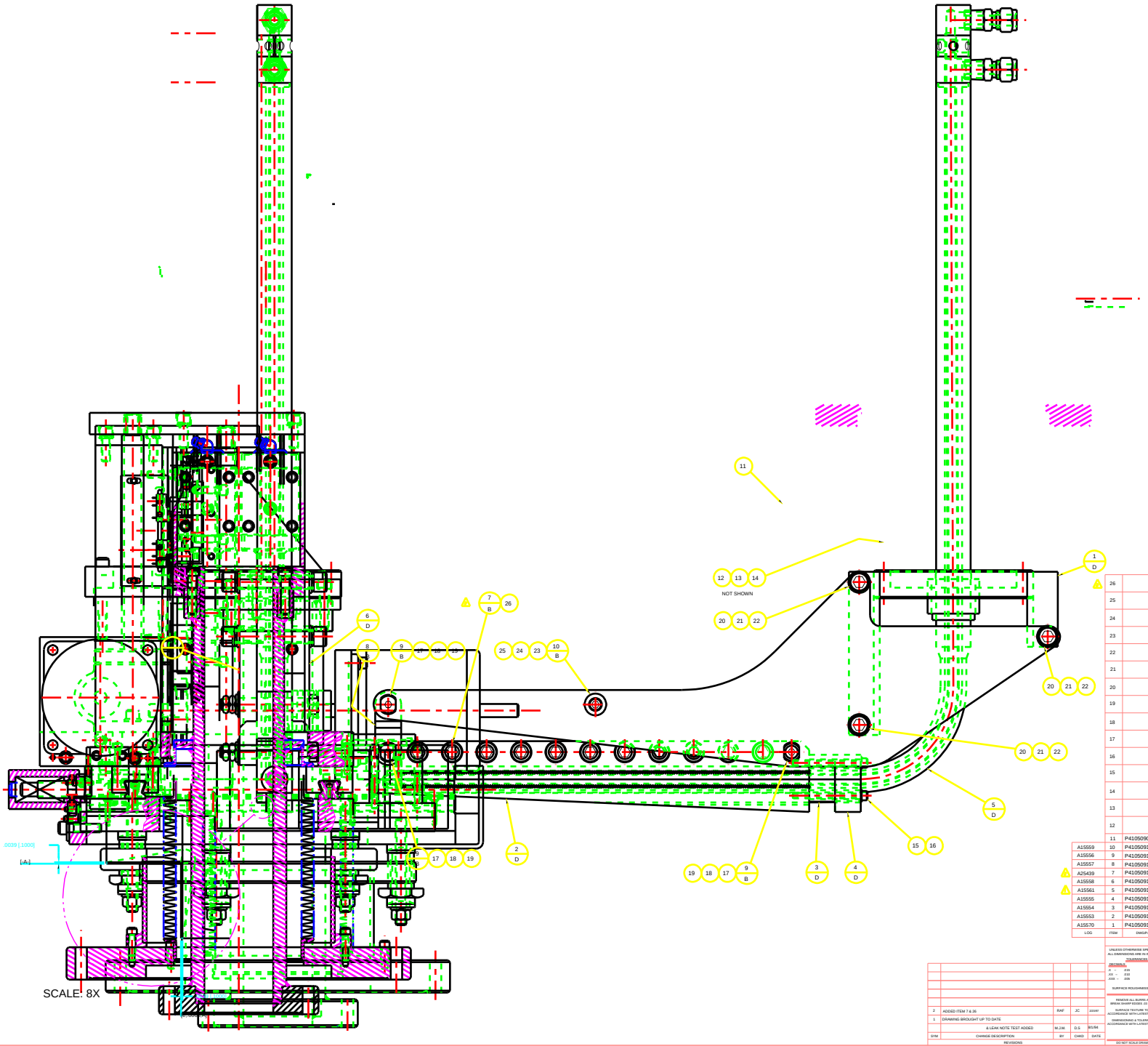
PLOT SCALE: 1=1	DWG. SCALE: 1	



NOTES:

1. THIS IS A ULTRA - HIGH - VACUUM ASSEMBLY (UHV)
   KEEP THE UHV PARTS CLEAN DURING ASSEMBLY, AND
   AND WRAP UP FOR PACKING WITH ALUMINUM FOIL

2. THE ASSEMBLY SHALL BE LEAK TESTED
   USING A MASS SPECTROMETER WITH
   MINIMUM SENSITIVITY FOR HELIUM
   OF 2X 10 -10 STANDARD CC/SEC PER
   LEAK METER DIVISION, SUCH AS:

   ALCATEL ASM-11OTCL
   VARIAN NCR 925 OR 936
   VEECO MS-9, MS-90 OR MS-18
   Du PONT CEC 24-120B

   CALIBRATION OF THE LEAK DETECTOR
   SENSITIVITY SHALL BE PERFORMED JUST
   PRIOR TO TESTING.

   FINAL TEST WILL CONSIST OF SURROUNDING
   THE CHAMBER (BAGGING) WITH HELIUM. THE
   CHAMBER WILL BE REJECTED IF A 2% DEFLECTION
   IN THE MOST SENSITIVE RANGE OF THE LEAK
   DETECTOR IS SENSED WITHIN 1 MIN.

3. DIMENSIONS IN [ ] ARE MILLIMETERS AND
   FOR REF. ONLY

LOG	ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
	26		HI-COLLAR SPRING LOCKWASHER .382 ID X .546 OD X .125 THICK	SST	11
	25		SOCKET HEAD CAP SCREW .250-20 UNC-3A x 2.50 LG.	SST	1
	24		FLATWASHER .28 I.D. x .63 O.D. x .08 THK	SST	2
	23		HEX NUT .250-20 UNC-2B	SST 316	1
	22		SPRING LOCKWASHER .39 I.D. x .68 O.D. x .09 THK	SST	6
	21		FLATWASHER .39 I.D. x 63 O.D. x .07 THK	SST	6
	20		SOCKET HEAD CAP SCREW, VENTED .375-16 UNC-3A x 1.00 LG.	U-C COMPONENTS C-1618-A SILVER PLATED	6
	19		HEX JAM NUT .312-18 UNC-2B	SST 316	6
	18		SPRING LOCKWASHER .32 I.D. x .58 O.D. x .07 THK	SST	3
	17		FLATWASHER .34 I.D. x .75 O.D. x .04 THK	SST	3
	16		SOCKET HEAD CAP SCREW #8-32 UNC-3A x 2.00 LG.	SST	4
	15		FLATWASHER .17 I.D. x .38 O.D. x .03 THK	SST	4
	14		FLATWASHER .34 I.D. x .75 O.D. x .04 THK	SST	20
	13		HEX NUT .312-24 UNF-2B	SST 316	10
	12		SOCKET HEAD CAP SCREW .312-24 UNF-3A x 2.00 LG.	SST	10
	11	P4105090101-850000	X-Z STEPPING LINEAR ACTUATOR		1
A15559	10	P4105091505-210007	L5 UPPER SUPPORT TUBE	SST 304	1
A15556	9	P4105091505-210004	L5 UPPER SHOULDER SCREW	SST 304	3
A15557	8	P4105091505-210005	L5 UPPER SWING BAR	SST 316	1
A25439	7	P4105091505-210009	L5 UPPER COOLING BLOCK SCREW	SST 18-8	11
A15558	6	P4105091505-210006	L5 UPPER SIDE SUPPORT PLATE	MACHINEABLE CERAMIC	2
A15561	5	P4105091505-210100	L5 UPPER COOLING ASSEMBLY		1
A15555	4	P4105091505-210003	L5 UPPER HORIZONTAL SLIT BLOCK	TZM MOLY. ALLOY 364	1
A15554	3	P4105091505-210002	L5 UPPER VERTICAL SLIT BLOCK	TZM MOLY. ALLOY 364	1
A15553	2	P4105091505-210001	L5 UPPER COOLING BLOCK	TZM MOLY. ALLOY 364	1
A15570	1	P4105091505-210200	L5 UPPER SUPPORT WELDMENT		1

PARTS LIST

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
2	ADDED ITEM 7 & 26	RAF	JC	3/3/97
1	DRAWING BROUGHT UP TO DATE			
	& LEAK NOTE TEST ADDED	M.J.M.	D.S.	8/01/94

REVISIONS

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
DECIMALS: X = ±.010, XX = ±.010, XXX = ±.005
ANGULAR: ±.25°

SURFACE ROUGHNESS: 250√

REMOVE ALL BURRS AND BREAK SHARP EDGES .015 MAX.

SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5

MATERIAL: SEE B.O.M.

LOG NUMBER: A1555202

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DRAWN BY: R. KRAKORA	DATE: 11/93	CHIEF DESIGN ENGINEER: D. SHU	DATE: 2/94
CHECKED BY: J. WOTHE	DATE: 11/93	OP LEADER: T.M. KUZAY	DATE: 3/94
REVIEWED BY: D. SHU, R. KRAKORA	DATE: 11/93	PROJECT MGR.	
RESPONSIBLE ENGINEER: D. SHU	DATE: 2/94	APPROVED/RELEASED	

TITLE: ADVANCED PHOTON SOURCE
L5 APS UNDULATOR WHITE BEAM
H & V SLITS
UPPER ASSEMBLY

SCALE: 1:1 SHEET 1 of 1 SIZE: E DRAWING NUMBER: P4105091505-210000-02