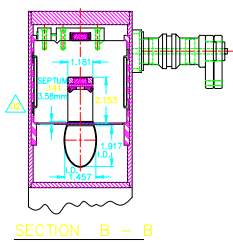


SECTION A - A  
SCALE 2:1



SECTION B - B

- NOTES:**
1. START THE ASSEMBLY BY APPLYING ITEM 1 TO ITEM 2, MAKE SURE ITEMS 6 & 7 ARE UNDER ITEM 1, THEN GRAZE THE SEPTUM CONDUCTOR TO THE ENDRPLATE - BOTH ENDS OF SEPTUM AROUND AND BACKUP SEAM AT OPPOSITE END, THEN COMPLETE WELD.
  2. THEN WELD ITEM 10 TO FLANGE OF ITEM 2 HOUSING ASSY.
  3. START TACK WELD AT TOP OF SEAM BETWEEN ITEMS 2 & 3 CONTINUE DOWN, AROUND AND BACKUP SEAM AT OPPOSITE END, THEN COMPLETE WELD.
  4. PERFORM COPPER TO COPPER WELD ALL AROUND, TYPICAL 2 PLACES, AND ONLY AFTER ITEM 10 HAS BEEN WELDED INTO PLACE.
  5. THEN CUT COPPER LEADS TO DIMENSION SHOWN.
  6. VACUUM LEAK CHECK AFTER WELDING ITEMS 2 & 4.
  7. WELD ITEMS 5, 8 & 9 (MOD. FLANGES) ON AFTER ALL OTHER ASSEMBLY WORK HAS BEEN COMPLETELY WELDED.
  8. VACUUM LEAK CHECK FINISHED MAGNET PER SPEC.
  9. FOR ADDITIONAL ASSEMBLY PROCEDURE SEE SPECIFICATION NO. 220104-XXXXXX

**VACUUM SPECIFICATIONS REQUIREMENTS**  
 ALL WELD JOINTS TO BE LEAK TIGHT.  
 LEAK TEST USING A LEAK DETECTOR HAVING A SENSITIVITY OF  $1 \times 10^{-10}$  ATM CC/SEC. HELIUM.

**ELECTRICAL RESISTANCE VALUES FOR**  
 $L_s = 2.49 \mu H$   
 $R = .36 m\Omega$   
 $Q = 8.4$   
 $C_p = 10.2 \mu F$   
 HI POT AT 2 KVDC  $\pm 5 \mu A$

ESTIMATED WT. 275 LBS.  
**SOURCE:**  
 MIDWEST VACUUM  
 201 EAST GREEN AVE. SUITE 15  
 HINSDALE, IL 60521  
 (708) 323-5399

INJECTOR SYNCHROTRON  
 INJECTION SEPTUM MAGNET  
 GENERAL ASSEMBLY  
 220104-700000-02 A1295702

ITEM	QUANTITY	DESCRIPTION	MANUFACTURE OR IDENTIFICATION	REVISION	SHEET	TOTAL
14	220104-730200	EXTENSION TUBE PLATE ASSEMBLY		SEE DRAWING	1	
13	220104-730100	L.S.R. & L.E.T. TUBE PLATE ASSEMBLY		SEE DRAWING	1	
12	220104-730004	SEAM TUBE		SEE DRAWING	1	
11	220104-730001	SIDE PLATE		SEE DRAWING	1	
10	220104-730000	FEEDTHROUGH ASSY.		SEE DRAWING	1	
9	450-2008	Ø4.50 OF ROTATABLE FLANGE NOR-CAL		PURCHASE	1	
8	220302-100042	Ø6.00 MODIFIED FLANGE		SEE DETAIL	1	
7	220104-700004	INSULATION PLATE		SEE DETAIL	2	
6	220104-700003	INSULATION PLATE		SEE DETAIL	2	
5	220104-700002	Ø6.00 MODIFIED FLANGE		SEE DETAIL	1	
4	220104-700101	TOP PLATE SUB-ASSY.		SEE DRAWING	1	
3						
2	220104-720000	HOUSING ASSY.		SEE DRAWING	1	
1	220104-710000	CORE SUB-ASSY.		SEE DRAWING	1	

DESIGN: G. CHERRY DRAWN: J. JAGGER CHECKED: S. REEVES APPROVED: S. REEVES DATE: 11/1/88	A1295702 PROJECT NO. DATE: 11/1/88	ARGONNE NATIONAL LABORATORY ADVANCED PHOTON SOURCE INJECTOR SEPTUM MAGNET FINAL ASSEMBLY	SHEET 1 OF 1 220104-700000-02
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