



REV	DATE	DESCRIPTION	BY	APPROVED	DATE
01		SEE DCN NO. 950307-03	FM		3/8/98
02		SEE DCN NO. 960103-01	CRP		3/10/98
03		SEE DCN NO. 970521-01	CRP		5/7/98

- NOTES**
- USE ROOM CURE EPOXY FORMULATED AS FOLLOWS:  
EPOXY RESIN E.P.O.N. 828 IN RATIO OF 100 PARTS  
EPOXY RESIN EM 308 IN A RATIO OF 70 PARTS  
CAB-O-SIL TO THICKEN EPOXY MIXTURE
  - VACUUM SPECIFICATIONS REQUIREMENTS  
ALL WELD JOINTS TO BE LEAK TIGHT  
LEAK TEST, USING A LEAK DETECTOR  
HAVING A SENSITIVITY OF  
1 X 10<sup>-10</sup> ATM CC/SEC. HELIUM.
  - ELECTRICAL RESISTANCE VALUES FOR  
L<sub>6</sub> = 8.42 μH  
R = 199.25Ω  
Q = 9.8
  - HI POT AT 2 KVDC @ 5μA
  - WATER FLOW .32 GAL/MIN. AT 100 P.S.I.G.
  - ESTIMATED WT. 1100 LBS.

SECTION B - B

STORAGE RING  
AC THICK INJECTION SEPTUM  
GENERAL ASSEMBLY  
31010502-700000-03 A1785403  
SHEET 1 OF 3

- |   |  |   |   |
|---|--|---|---|
| <p>▶ <b>SOURCE:</b><br/>EMERSON &amp; CLIMING INC.<br/>77 DRAGON CT.<br/>WOBURN, MA 01888<br/>(800) 832-4929</p>                                    | <p>▶ <b>SOURCE:</b><br/>OMN ELECTRONICS<br/>746 VERMONT ST.<br/>PALATKA, IL 60467<br/>(708) 359-5500<br/>SIST. OF "CIRCUIT PRODUCTS"</p> | <p>▶ <b>SOURCE:</b><br/>EVENWOOD ELECTRIC<br/>1801 MOEN AVE.<br/>JOLIET, IL 60434<br/>(815) 725-3900<br/>SOURCE FOR "PANDUIT"</p> | <p>▶ <b>SOURCE:</b><br/>MORTON THIKOL CHEMICAL DIV.<br/>333 W. WACKER DR.<br/>CHICAGO, IL 60606-1292<br/>(312) 807-2000</p> |
| <p>▶ <b>SOURCE:</b><br/>PIONEER CHICAGO DIV.<br/>2171 EXECUTIVE DR. SUITE 200<br/>ADDISON, IL 60101</p>   | <p>▶ <b>SOURCE:</b><br/>ARGONNE NAT'L LAB<br/>5700 CASS AVE.<br/>ARGONNE, IL<br/>630-252-2000<br/>APS/ASD DIVISION</p>                   | <p>▶ <b>SOURCE:</b><br/>SHELL CHEMICAL CO.<br/>ONE SHELL PLAZA<br/>P.O. BOX 2463<br/>HOUSTON, TX 77001<br/>(713) 241-6161</p>     | <p>▶ <b>SOURCE:</b><br/>CABOT CORP.<br/>75 STATE ST.<br/>BOSTON, MA 02109-1809<br/>(617) 345-0100</p>                       |
| <p>▶ <b>SOURCE:</b><br/>PORTAGE ELECTRIC PRODUCTS INC.<br/>7700 FREEDOM AVE. NW<br/>P.O. BOX 2170<br/>NORTH CANTON, OH 44720<br/>(414) 499-2727</p> | <p>▶ <b>SOURCE:</b><br/>J. &amp; GLEN CO.<br/>390 WAGNER DR.<br/>WEST CHICAGO, IL 60885</p>  |   |   |

QTY	DESCRIPTION	MATERIAL	UNIT
09	77	SECO MET ADHESIVE "HENKEL"	CYANOACRYLATE
08	CAB-O-SIL	EPOXY THICKER	A/R
07	EM-308	EPOXY HARDENER	A/R
06	EPON 828	EPOXY RESIN	A/R
05	34	G10 .06 THK X 1.00 WIDE X 20.00 LG	NEMA GRADE G10
04	32	G10 .06 THK X 1.00 WIDE X 48.00 LG	NEMA GRADE G10
03	33	CATALYSTS 9	EPOXY
02	32	285	EPOXY
01	P5301-00033	TARGET LOCATING CUP-WELD ON	SEE DETAIL 2
01	PL11M-C76	CABLE TIE - TEFZEL	XXXX
01	29	FILM STICKY BACK .004 THK X 1.00 WIDE	KAPTON
01	28	FILM STICKY BACK .005 THK X 1.25 WIDE	KAPTON
01	27	A0592AN	P.N. JUNCTION
01	26	C-101109-071H	THERMO SWITCH 71°C (160°F)
01	25	25	TERMINAL STRIP
01	24	74	FLT. WASHER NO. 10 I.D.
01	23	32	SHCS NO. 10-32 UNC-3A X 1.50 LG.
01	22	22	BRMS NO. 8-32 UNC-2A X .50 LG.
01	21	21	HMCS 250-20 UNC-2A X .75 LG.
01	20	20	SST
01	19	19	SST
01	18	18	SST
01	17	17	SST
01	16	16	SST
01	15	15	SST
01	14	14	SST
01	13	13	SST
01	12	12	SST
01	11	11	SST
01	10	10	SST
01	09	09	SST
01	08	08	SST
01	07	07	SST
01	06	06	SST
01	05	05	SST
01	04	04	SST
01	03	03	SST
01	02	02	SST
01	01	01	SST

QTY	DESCRIPTION	MATERIAL	UNIT
20	WASHER, LOCK #.250 NOM.	SST	24
19	WASHER, PLAIN #.250 NOM.	SST	24
18	SHCS .375-16 UNC-3A X 1.00 LG.	SST	4
17	WASHER, LOCK #.375 NOM.	SST	4
16	220107-710004	BRACKET	SEE DETAIL 1
15	220107-710001	SEPTUM PLATE	SEE DETAIL 1
14	220107-720004	CLAMP BLOCK	SEE DETAIL 2
13	220107-700003	SUPPORT BLOCK	SEE DETAIL 2
12	220107-700002	CONDUCTOR FLAG	SEE DETAIL 2
11	220107-700008	HOSE ASSEMBLY 35.00 LG.	SEE DETAIL 1
10	220107-700007	HOSE ASSEMBLY 28.00 LG.	SEE DETAIL 1
09	220107-700006	HOSE ASSEMBLY 22.00 LG.	SEE DETAIL 1
08	220107-700005	HOSE ASSEMBLY 16.00 LG.	SEE DETAIL 1
07	31010502-700001	MODIFIED FLANGE #3.375	SEE DETAIL 1
06	31010502-700100	VACUUM CHAMBER SUB-ASSEMBLY	SEE DETAIL 1
05	220107-750000	MAGNET COIL ASSEMBLY	SEE DETAIL 1
04	220107-740000	FLAG ASSEMBLY	SEE DETAIL 2
03	220107-730000	TERMINAL ASSEMBLY	SEE DETAIL 2
02	220107-720000	MAGNET TERMINAL SUB-ASSEMBLY	SEE DETAIL 1
01	31010502-710100	MAGNET CORE SUB-ASSEMBLY	SEE DETAIL 1

**REVISIONS**

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**PARTS LIST / BILL OF MATERIALS**

QTY	DESCRIPTION	MATERIAL	UNIT
1	31010502-700000	AC THICK INJECTION SEPTUM GENERAL ASSEMBLY	ASSEMBLY
1	31010502-700000	AC THICK INJECTION SEPTUM GENERAL ASSEMBLY	ASSEMBLY

ARGONNE NATIONAL LABORATORY  
ADVANCED PHOTON SOURCE

STORAGE RING  
AC THICK INJECTION SEPTUM  
GENERAL ASSEMBLY

31010502-700000 0.3

SCALE: 1:2

DO NOT SCALE DIMENSIONS