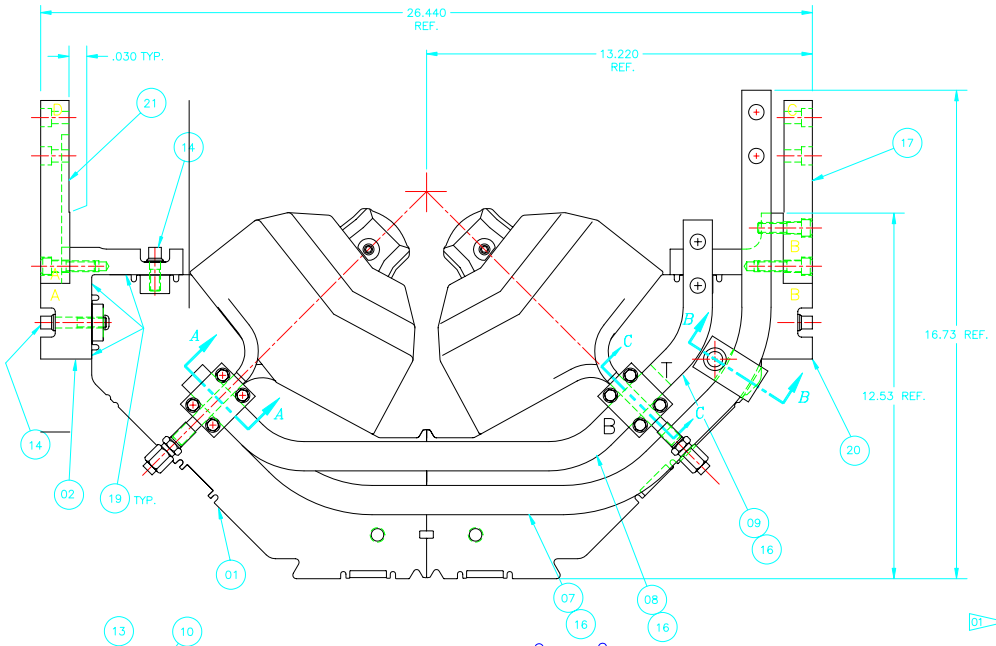
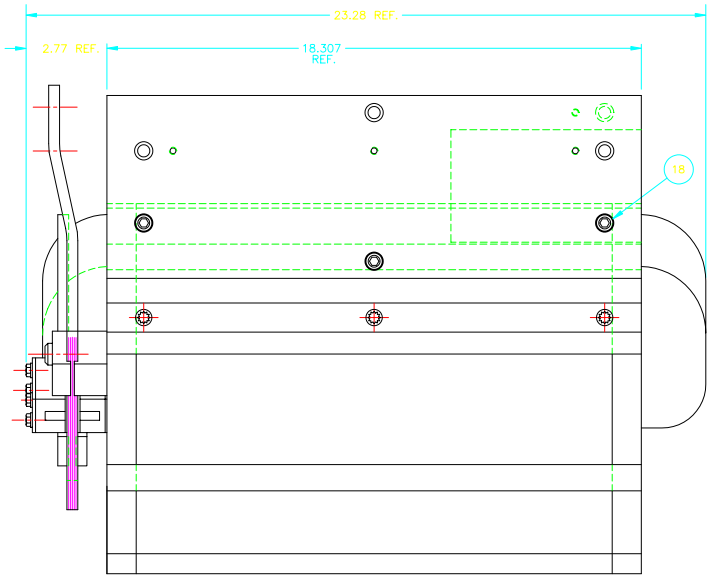
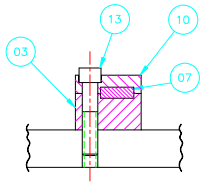
(D)	PLOT SCALE: 1=2	DWG. SCALE: 2	A13707

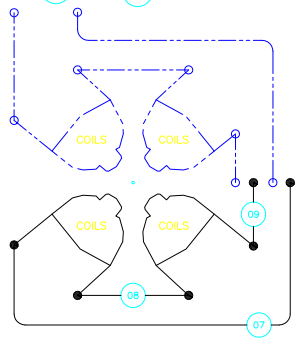




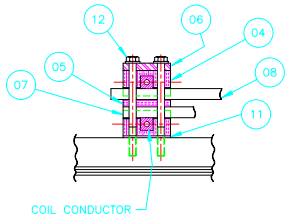


SECTION B–B

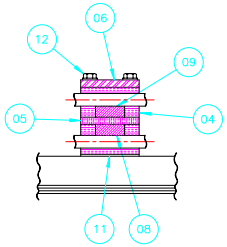
STORAGE RING
TECHNICAL COMPONENTS
.5M QUADRUPOLE MAGNETS
AQ4 BOTTOM HALF ASSEMBLY
A13707
31010203–100000–00



COIL SCHEMATIC



SECTION A–A



SECTION C–C

01 SOURCE:
A.N.L.

02 SOURCE: OR EQUAL
MARKEL CORP.
PO BOX 752
NORRISTOWN, PA. 19404
1–800–462–4479
NO. CS59WA1000

03 SOURCE: OR EQUAL
EPOXY: 828
SHELL/HACROS CHEMICAL
2501 S. DAMEN
CHICAGO ILL 60608
312/890–4000

EPOXY: 308
MORTON INTERNATIONAL
100 N. RIVERSIDE DRV.
CHICAGO ILL 60606
1–800/257–9596

CAB–O–SIL:
CABOT CORP.
CAB–O–SIL DIV.
CHICAGO ILL 60608

EPOXY MIXTURE:
EPON 828 @ 100 PARTS
EM 308 @ 70 PARTS
CAB–O–SIL THICKEN ABOVE
FORMULA AS REQUIRED
SEE STATEMENT OF WORK
310102–00211

ESTIMATED WEIGHT 1125 LBS

NOTES:
1. SPREAD EPOXY ITEM 19 THROUGHOUT LENGTH OF MATING SURFACE OF ITEMS 1, 2, & 20.
2. TORQUE BOLTS ITEMS 14 & 15 TO 270 IN. LBS.

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
21	31010203–200020	SPECIAL CENTER ADJUSTING EXTRUSION	SEE DETAIL	1
20	31010203–200016	R.H. BOTTOM ADJUSTING EXTRUSION	SEE DETAIL	1
19		EPOXY	SEE NOTE NO. 1	A/R
18		S.H.C.S. 3/8–16 UNC–3A x 1.50 LG.		6
17	31010203–00013	CENTER SPACING EXTRUSION		2
16	CS598BA1000	INSULATION		A/R
15		12 PT. C.S. 3/8–16 UNC–3A x 1.00 LG.	STN. STEEL	6
14		12 PT. C.S. 3/8–16 UNC–3A x 1.75 LG.	STN. STEEL	6
13		S.H.C.S. 1/2–13 UNC–3A x 2.50 LG.	STN. STEEL	1
12		H.H.C.S. 1/4–20 UNC–3A X3.25 LG.	STN. STEEL	8
11	310102–00180	INSULATOR SHIM	SEE DETAIL	2
10	310102–00186	BUSS BAR CLIP SUPPORT	SEE DETAIL	1
09	310102–00167	BUSS BAR NO. 4	SEE DETAIL	1
08	310102–00166	BUSS BAR TOP & BOTTOM NO. 3 & 6	SEE DETAIL	1
07	310102–00165	BUSS BAR NO. 2	SEE DETAIL	1
06	310102–00182	INSULATOR COVER PLATE	SEE DETAIL	2
05	310102–00181	INSULATOR SPACER	SEE DETAIL	2
04	310102–00183	INSULATOR	SEE DETAIL	2
03	310102–00184	BUSS BAR SUPPORT	SEE DETAIL	1
02	310102–200004	L.H. BOTTOM ADJUSTING EXTRUSION	SEE DETAIL	1
01	31010203–00026	HALF MAGNET WELDMENT ASSEMBLY	SEE DETAIL	1

PARTS LIST

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
00	SEE DCN NO. 930930–05	CRP		9/30/93

REVISIONS

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .X ±.1; .XX ±.05; .XXX ±.005
ANGULAR ±.25°
SURFACE ROUGHNESS 125
REMOVE ALL BURRS AND BREAK SHARP EDGES .01 MAX.
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1
DIMENSIONS & TOLERANCES IN ACCORDANCE WITH LATEST ANSI Y14.5
DO NOT SCALE DRAWING

LOG NUMBER: A13707

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY

DRAWN BY: CLIFF PITTS 9/30/93
DATE
GP LEADER
DATE
CHECKED BY
PROJECT MGR
DESIGNER
APPROVED/RELEASED
RESPONSIBLE ENGINEER

TITLE: ADVANCED PHOTON SOURCE
STORAGE RING
TECHNICAL COMPONENTS
.5M QUADRUPOLE MAGNET
AQ4 BOTTOM HALF ASSEMBLY

MATERIAL: SEE PARTS LIST

SCALE 1=2
SHEET 1 of 1
SIZE D
DRAWING NUMBER 31010203–100000–00