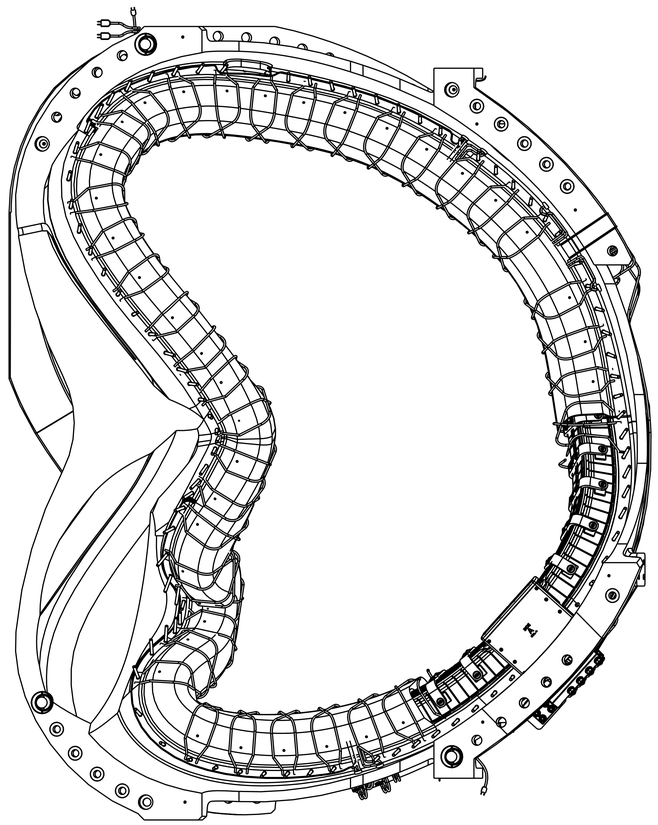

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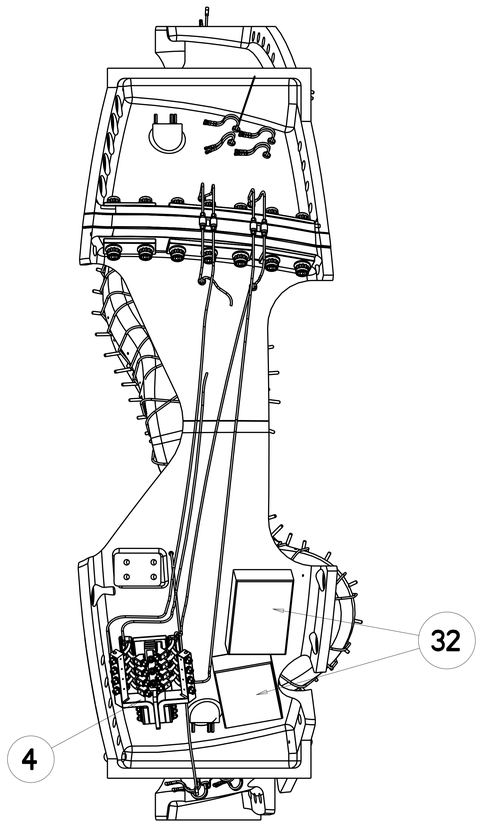

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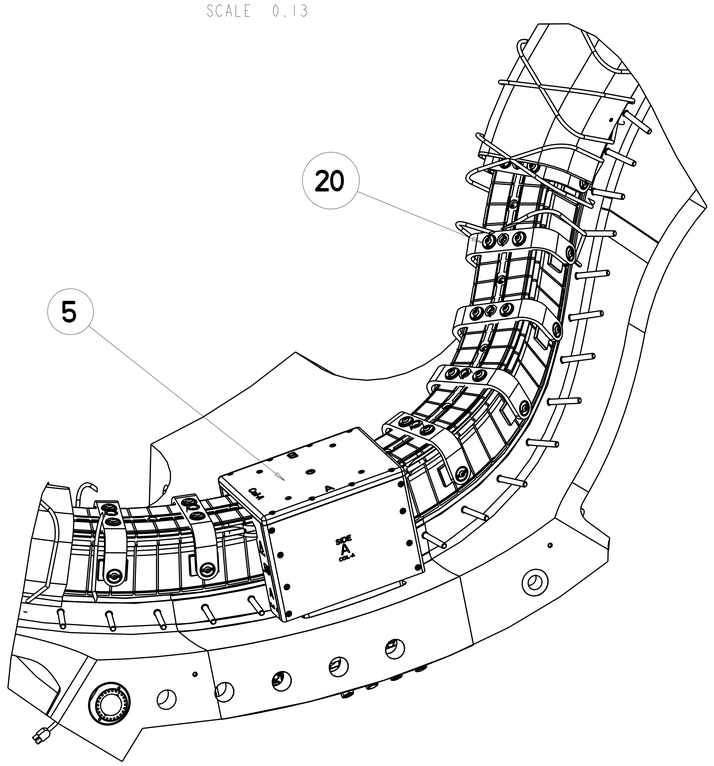

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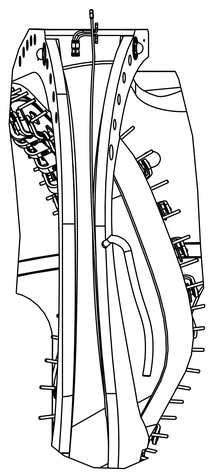


NOTES:
1. DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2000.
2. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M
3. DIMENSIONS ARE IN INCHES
4. DIMENSIONS APPLY AT ROOM TEMPERATURE. OPERATING TEMP 80 K.
5. LEADS AREA SHALL BE COVERED OR SPRAYED WITH AN INSULATING MATERIAL TO PREVENT DEBRIS FROM CAUSING AN ELECTRICAL SHORT DURING OPERATION.
6. OPTIONAL BLANKET INSULATION ASSEMBLY, F/N 18, NOT SHOWN. SEE DRAWING SE122-009 FOR INSTALLATION.
7. SEE LATEST REVISION OF PROCEDURE D-NCSX-MCF-001 FOR ADDITIONAL REQUIREMENTS.
8. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF PPPL PROCEDURE NO. ENG-037. VISUAL WELD INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE ACCEPTANCE CRITERIA OF AWS D1.6.
9. VENDOR INFORMATION: TRULY TUBULAR FITTING CORP
PO BOX 1160
MT VERNON, NY 10550
914-664-8686 OR WWW.TRULYTUBULAR.COM
10. VENDOR INFORMATION: FISO FIBER OPTICS
500 ST. JEAN BAPTISTE AVE SUITE 195
QUEBEC QC, G2E 5R CANADA
418-688-8065 OR WWW.FISO.COM
11. VENDOR INFORMATION: OMEGA ENGINEERING CORP
ONE OMEGA DRIVE
STAMFORD, CT 06907
800-848-4286 OR WWW.OMEGA.COM
12. SOME PARTS IN THIS ASSEMBLY ARE GRAPHIC REPRESENTATIONS OF ACTUAL PARTS/ASSEMBLIES. PART IDENTIFICATION NUMBERS REFER TO ACTUAL PARTS. FOR FULL MODELED ASSEMBLY SEE SE140-102-
13. TYPE "A" COIL: REMOVE NOTED STUDS AFTER CLAMP AND INSULATION BLANKETS ARE ASSEMBLED (POST VPI).

	2		-34	WASHER		SS 316L	
	4		-33	3/8 - 16UNC HEX NUT		SS 316L	
	12		SE142C-014	LINED INSULATING SLEEVE			33
	2		SE142C-015	3"X8"X12" FLUX LOOP BOX			32
10	AR		SE142C-013	FISO FIBER OPTIC STRAIN SENSOR			31
	2		SS-810-1-8	BLEED VALVE			30
11	2		TEMP-THERMOCOUPLER1	THERMO COUPLER			29
	6		SE185I-170	BALL ALIGNMENT ASSEMBLY			28
	13		SE141-204	FLANGE BUSHINGS			27
				TRULY TUBULAR FITTING		BRAZETYTE	26
	AR		SE142C-011	TUBE CLAMP			25
	2		SE142A-025	POL BR CONNECTOR ASSEMBLY			24
	2		90FF-4	TRULY TUBULAR 1/4 ELBOW		BRAZETYTE	23
9	2		10FF-4	TRULY TUBULAR 1/4 UNION		BRAZETYTE	22
6	AR		SE122-009	WINDING FORM INSULATION ASSY			21
	AR		SE142A-010	CLAMP ASSEMBLY			20
	AR		SE142A-248	SIDE B COOLING TUBES			19
	1		SE142A-246-4	SIDE "B" CHILL PLATES (SIDE)			18
	1		SE142A-246-3	SIDE "B" UPPER CHILL PLATES (TOP)			17
	AR		SE142A-243	SIDE "B" GROUNDWRAP			16
	1		SE142A-241	SIDE "B" WINDING ASSEMBLY			15
	1		SE142A-244-4	SIDE "B" LOWER CLADDING (BASE)			14
	1		SE142A-244-3	SIDE "B" UPPER CLADDING (SEPTUM)			13
	AR		SE142A-258	SIDE A COOLING TUBES			12
	1		SE142A-256-4	SIDE A LOWER CHILL PLATES (SIDE)			11
	1		SE142A-256-3	SIDE A UPPER CHILL PLATES (TOP)			10
	AR		SE142A-253	SIDE-A WP GROUNDWRAP			9
	1		SE142A-251	SIDE "A" WINDINGS ASSEMBLY			8
	1		SE142A-254-4	SIDE "A" LOWER CLADDING (BASE)			7
	1		SE142A-254-3	SIDE "A" UPPER CLADDING (SEPTUM)			6
	1		SE142A-080	TYPE "A" LEADS ASSEMBLY			5
	1		SE142C-050	TYPE "A" TERMINAL ASSEMBLY			4
			SE141-121	STUDS (SEE SHT 2)			3
	1		SE141-101	MOD COIL WINDING FORM ASSEMBLY TYPE-A			2
	1		-1	MCWF-TYPE A ASM			1
SE140-003	CAGE CODE		PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
	SE140-101		NEXT ASSEMBLY	PARTS LIST			

SE140-101

P THIS DRAWING PRODUCED ON PRO-ENGINEER

REV.	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
	REVISION OR ISSUE PURPOSE	REVISION APPROVAL										

SCALE NOTED
TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS
XX DECIMALS ±.01
XXX DECIMALS ±.005
ANGLES ±0°15'
BREAK SHARP EDGES .06 MAX
FINISH 125 UNLESS OTHERWISE SPECIFIED

DES	D WILLIAMSON	07-06
DRW	G LOVETT	07-06
CHK	M COLE	08-06
SECT	:	:
DEPT	:	:
PE	D WILLIAMSON	8-06
CR	:	:
PJ	:	:
REQ	:	:
PPPL DRFT	J SIEGLE	08-06
	:	:
	:	:
	DRAWING APPROVALS	DATE

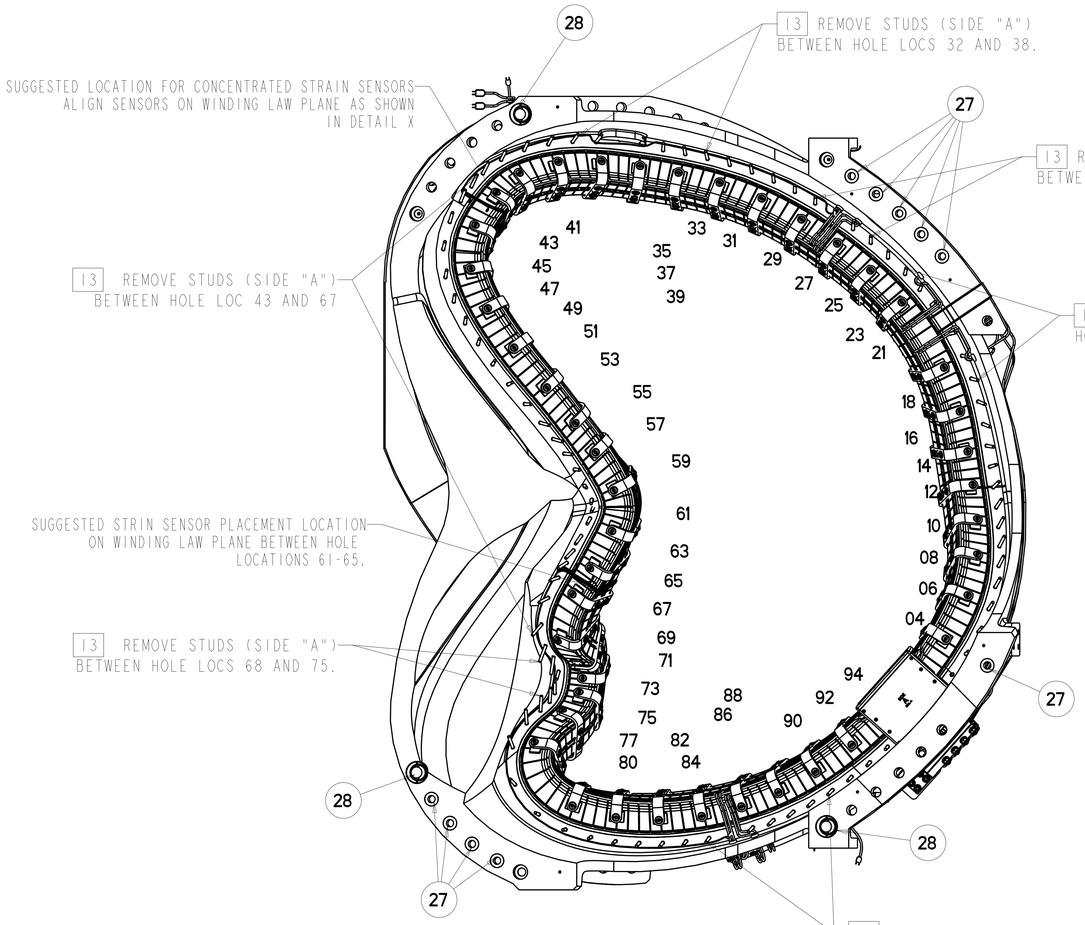
UT-BATTELLE
Oak Ridge National Laboratory
managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725
UT-BATTELLE, LLC. Oak Ridge, Tennessee
operated by

NATIONAL COMPACT STELLARATOR EXPERIMENT

MCWF TYPE "A"
FULL COIL ASSEMBLY

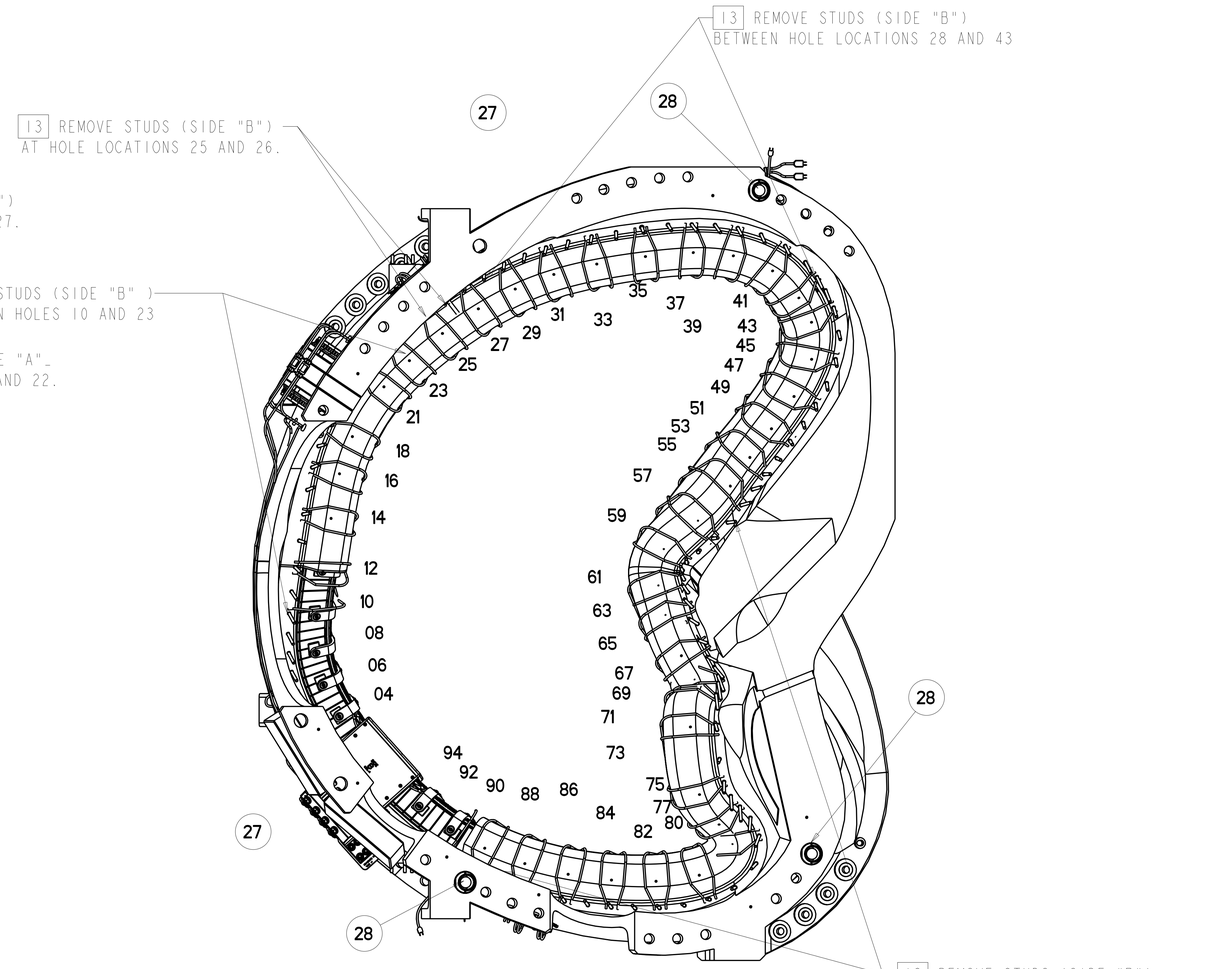
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
25	X-10	5700	3	1 2	S	U

RELEASE LEVEL: WIP
SE140-101
REV 0



SIDE "A" VIEW

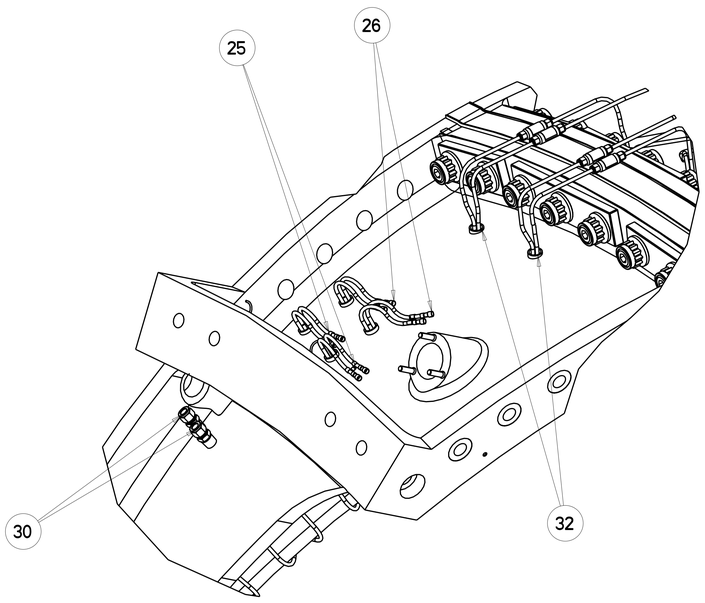
SCALE 0.125



SIDE "B" VIEW

SCALE 0.125

CLAMP / HOLE NUMBER LOCATIONS



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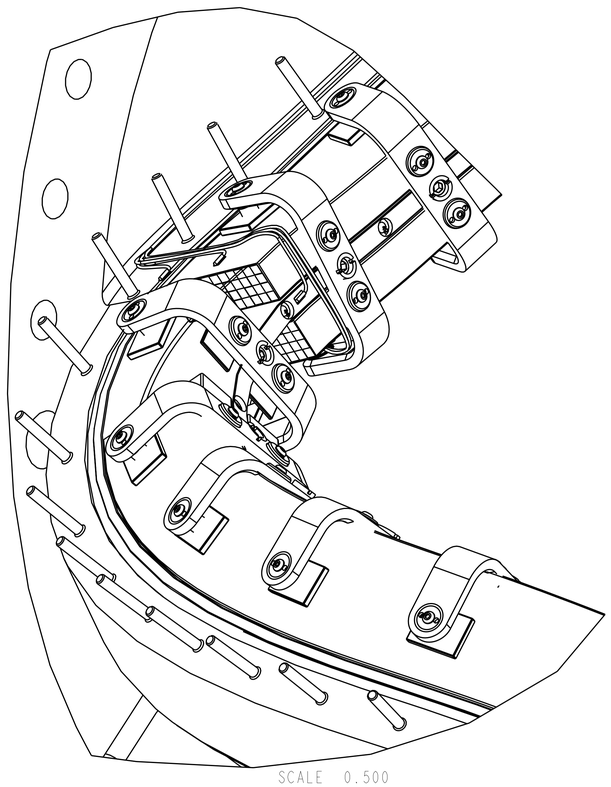

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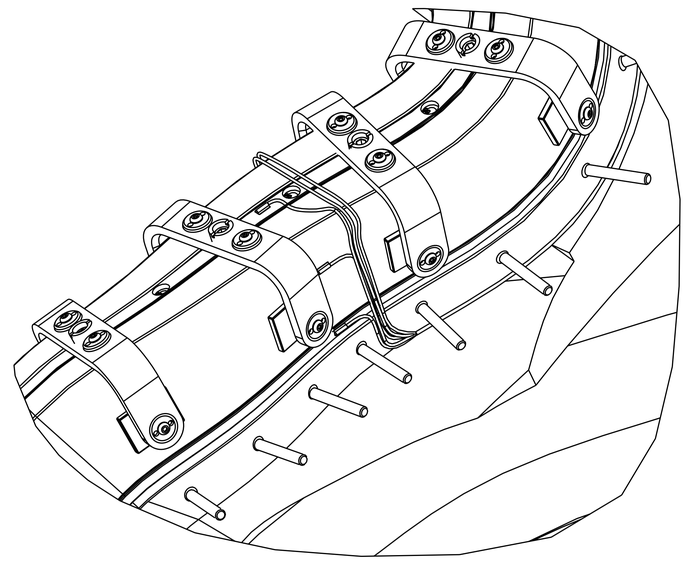
CLAMP / HOLE NUMBER LOCATIONS



SCALE 0.500

SE140-101

UT-BATTELLE	Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC. Oak Ridge, Tennessee						
PROJECT NAME: NATIONAL COMPACT STELLARATOR EXPERIMENT							
MCWF TYPE "A" FULL COIL ASSEMBLY							
VERSION NO: 48	PLANT X-10	BLDG 5700	FL 3	SHT OF 2 2		TYPE S	CLASS U
RELEASE LEVEL WIP	SE140-101						REV 0