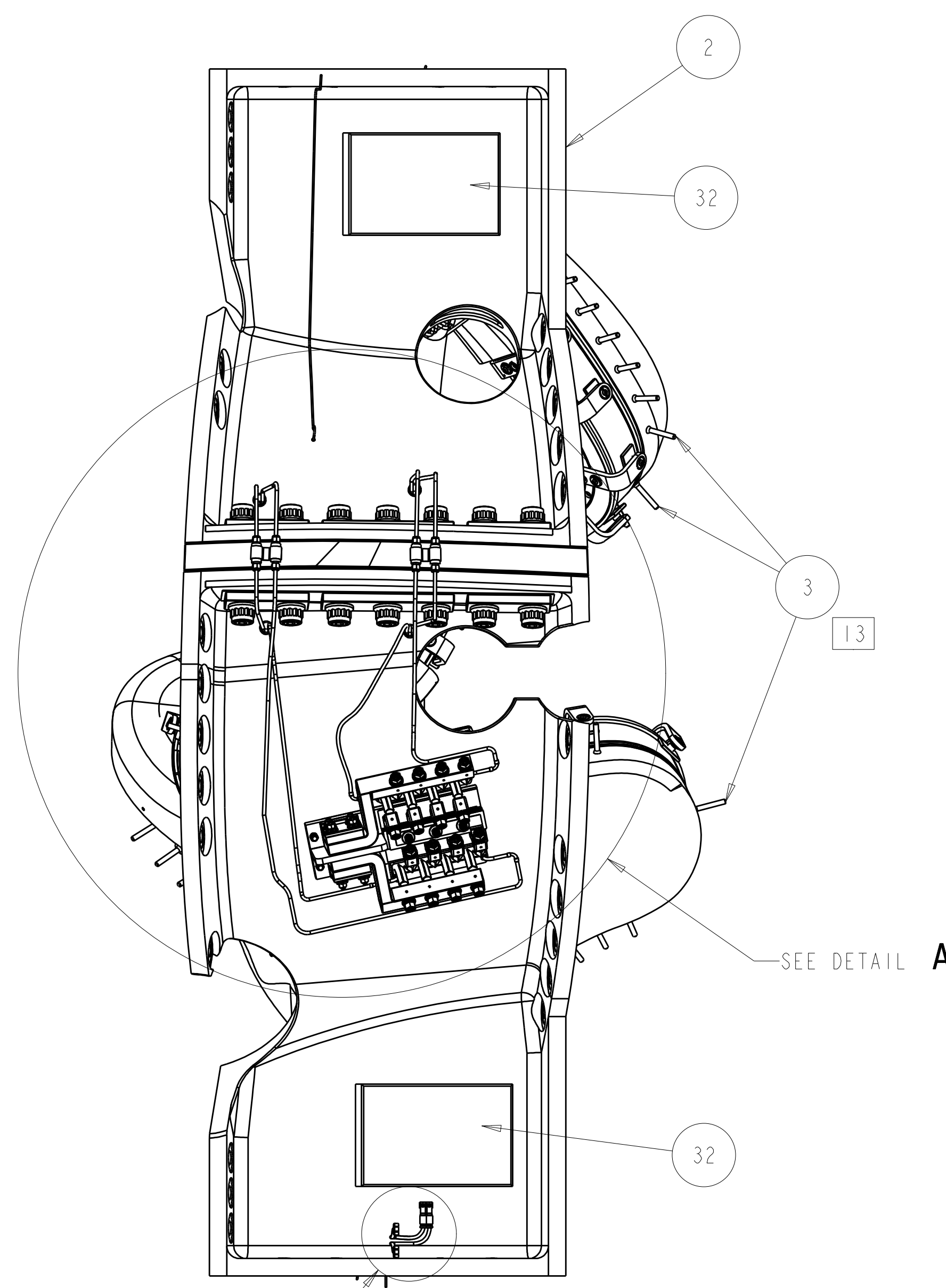


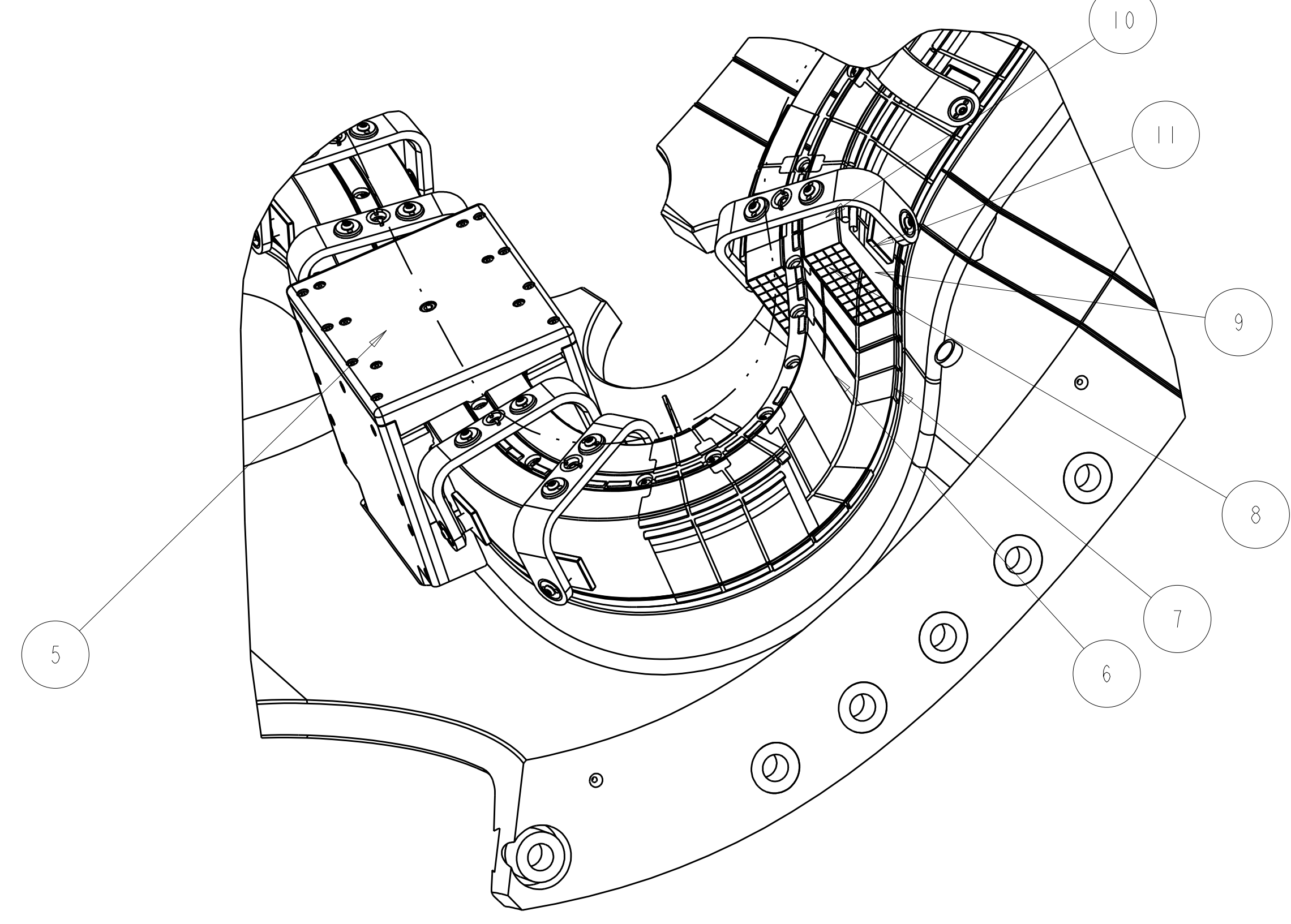
1 TYPE-C MODULAR COIL ASSEMBLY
 SCALE .125



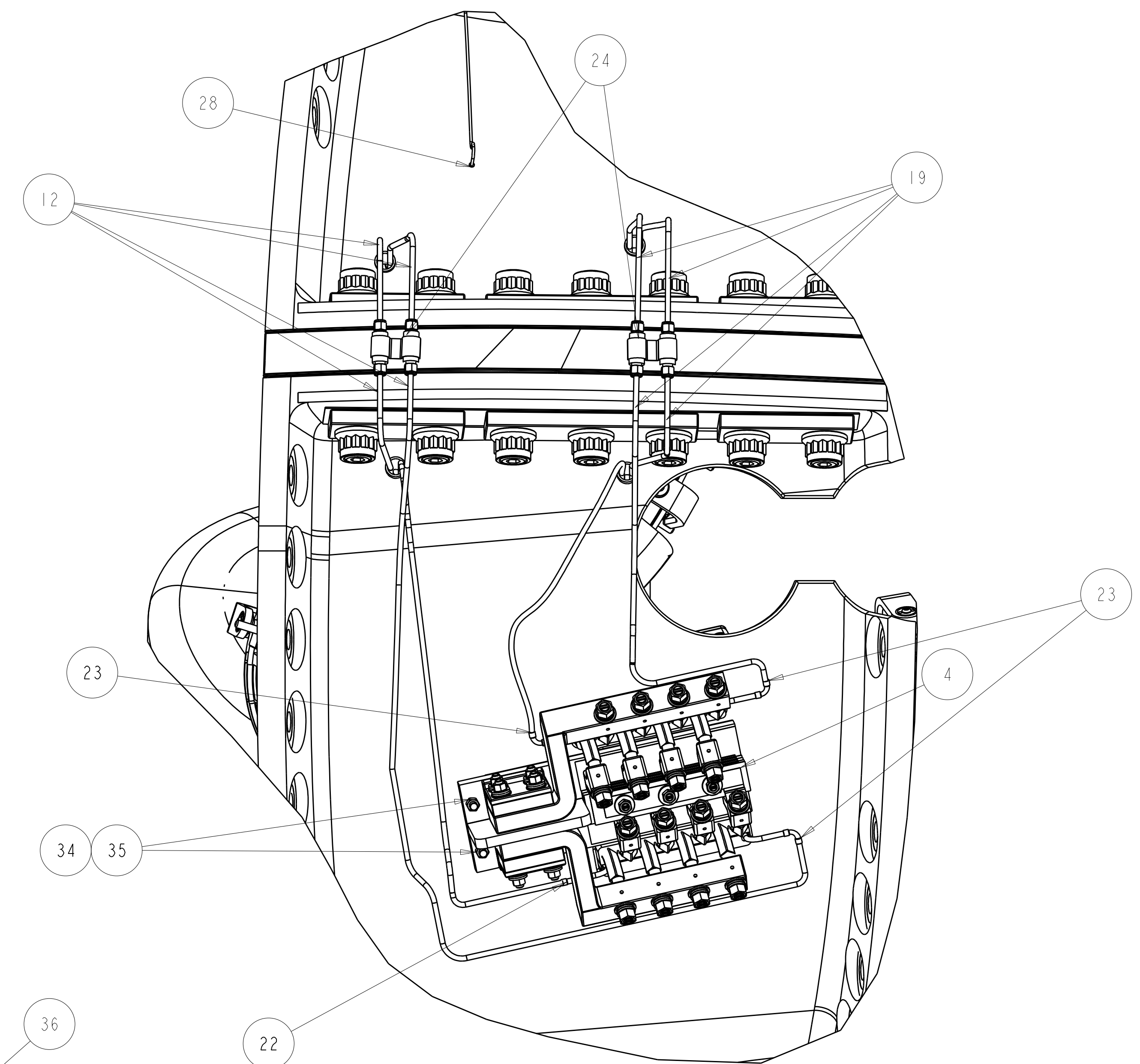
VIEW OF WINDING FORM AT HOLE 46
 SCALE .50

LOCATE STRAIN SENSORS AND LABEL AS SHOWN
 1 EACH ON TOP OF TEE (ie 46-T-TOP)
 2 EACH ON SIDE CHILL PLATE
 ie (SIDE A) 46-C-A AND (SIDE B) 46-C-B
 2 EACH ALONG FORM BELOW VPI GROOVE
 ie (SIDE A) 46-V-A AND (SIDE B) 46-V-B

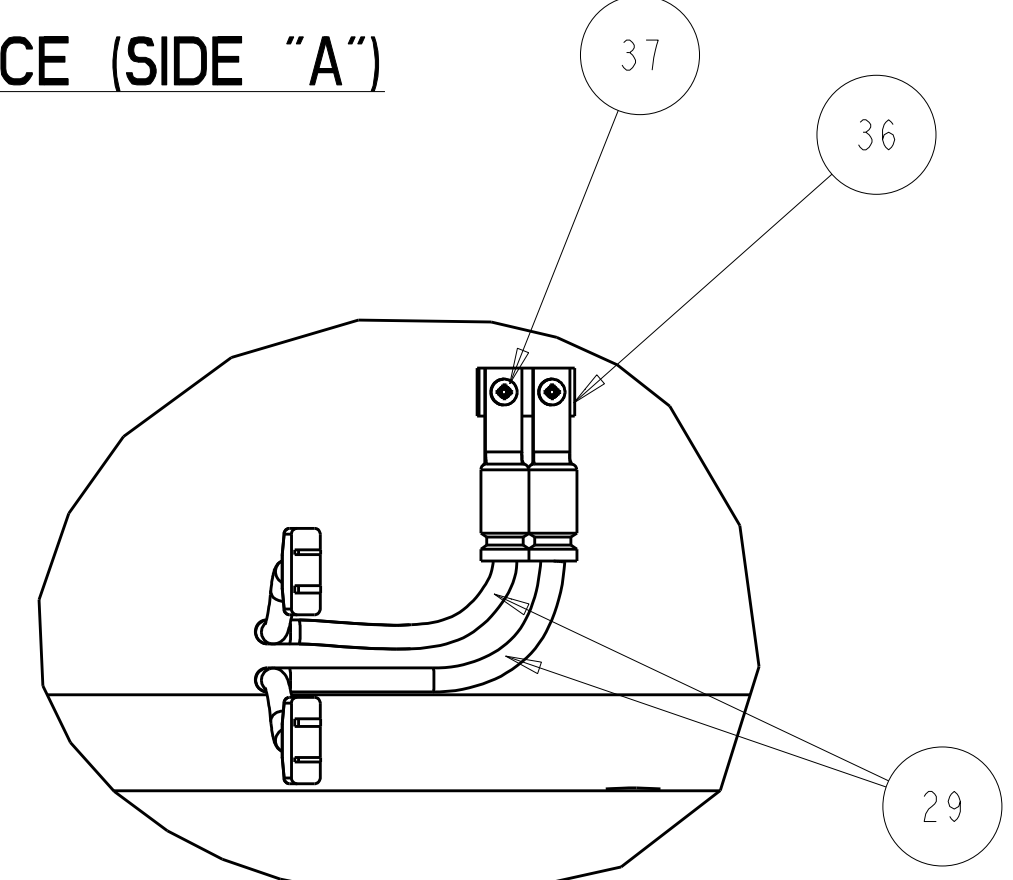
- NOTES:
 1. DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2000.
 2. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M
 3. DIMENSIONS ARE IN INCHES
 4. DIMENSIONS APPLY AT ROOM TEMPERATURE. OPERATING TEMP 80 K.
 5. LEADS AREA SHALL BE COVERED OR SPRAYED WITH AN INSULATING MATERIAL TO PREVENT DEBRIS FROM CAUSING AN ELECTRICAL SHORT DURING OPERATION.
 6. VENDOR INFORMATION: ASPEN AEROGELS, INC
 30 FORBES RD
 NORTHBOROUGH, MA 01532
 508-691-1111 OR WWW.AEROGEL.COM
 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 "C" COIL: REMOVE ALL STUDS AFTER CLAMP AND INSULATION BLANKETS ARE ASSEMBLED (POST VPI).



CUT-AWAY VIEW SHOWING WINDING INSTALLATION SEQUENCE (SIDE "A")
 SCALE 0.25



DETAIL A
 SCALE 0.250



DETAIL C
 SCALE 0.500

AR	SEI42B-030	WIRE CLAMP		38
2	91735A146	PAN HEAD SCREW	316 SST	37
1	SE123-155	THERMOCOUPLE MTG BLOCK		36
4	91950A031	3/8 FLAT WASHER		35
4	94819A049	3/8-16 UNC HEX NUT	316 SST	34
12	SE142C-014	INSULATING SLEEVE	NEMA GRADE G-11CR	33
2	SE142C-015	3"x8"x12" FLUX LOOP BOX		32
10	AR	FOS-N-BA-CI-FI-M2-R3-ST	FIBER OPTIC STRAIN GAGE	31
2	SS-810-1-8	BLEED VALVE		30
11	2	XCIB-K-4-2-3	THERMOCOUPLE	29
11	2	XCIB-K-3-2-10	THERMOCOUPLE	28
13	SE141-204	FLANGE BUSHINGS		27
16	5FF-5-4	TRULY TUBULAR BRAZETYTE	BRAZETYTE	26
AR	SE142C-011	TUBE CLAMP		25
2	SE142C-020	POL BR CONNECTOR ASSEMBLY		24
9	3	90FF-4	TRULY TUBULAR 1/4 ELBOW	23
9	2	10FF-4	TRULY TUBULAR 1/4 UNION	22
6	AR	-21	WINDING FORM INSULATION ASSY	21
AR	SE142C-010	CLAMP ASSEMBLY		20
12	AR	SE142C-248	SIDE B COOLING TUBES	19
1	SE142C-488	SIDE "B" CHILL PLATES (SIDE)		18
1	SE142C-486	SIDE "B" UPPER CHILL PLATES (TOP)		17
AR	SE142C-243	SIDE "B" GROUNDWRAP		16
1	SE142C-241	SIDE "B" WINDING ASSEMBLY		15
1	SE142C-484	SIDE "B" LOWER CLADDING (BASE)		14
1	SE142C-482	SIDE "B" UPPER CLADDING (SEPTUM)		13
AR	SE142C-258	SIDE A COOLING TUBES		12
1	SE142C-388	SIDE A LOWER CHILL PLATES (SIDE)		11
1	SE142C-386	SIDE A UPPER CHILL PLATES (TOP)		10
AR	SE142C-253	SIDE-A WP GROUNDWRAP		9
1	SE142C-251	SIDE "A" WINDINGS ASSEMBLY		8
1	SE142C-384	SIDE "A" LOWER CLADDING (BASE)		7
1	SE142C-382	SIDE "A" UPPER CLADDING (SEPTUM)		6
1	SE142C-080_2	TYPE "C" LEADS ASSEMBLY		5
1	SE142C-050	TYPE "C" TERMINAL ASSEMBLY		4
13	TEMP_060831A	STUDS (SEE NOTE 13)		3
1	SE141-103	MOD COIL WINDING FORM ASSEMBLY TYPE-A		2
AR	-1	MCWF-TYPE C ASM		1

SEI40-003	CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
			← NEXT ASSEMBLY			

PARTS LIST

NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE RIGHTS OF OTHERS. NO LIABILITY IS ASSUMED WITH RESPECT TO THE USE OF, OR FOR DAMAGES RESULTING FROM THE USE OF, ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS. DRAWINGS MADE AVAILABLE FOR INFORMATION TO BIDDER ARE NOT TO BE USED FOR OTHER PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

P THIS DRAWING PRODUCED ON PRO-ENGINEER

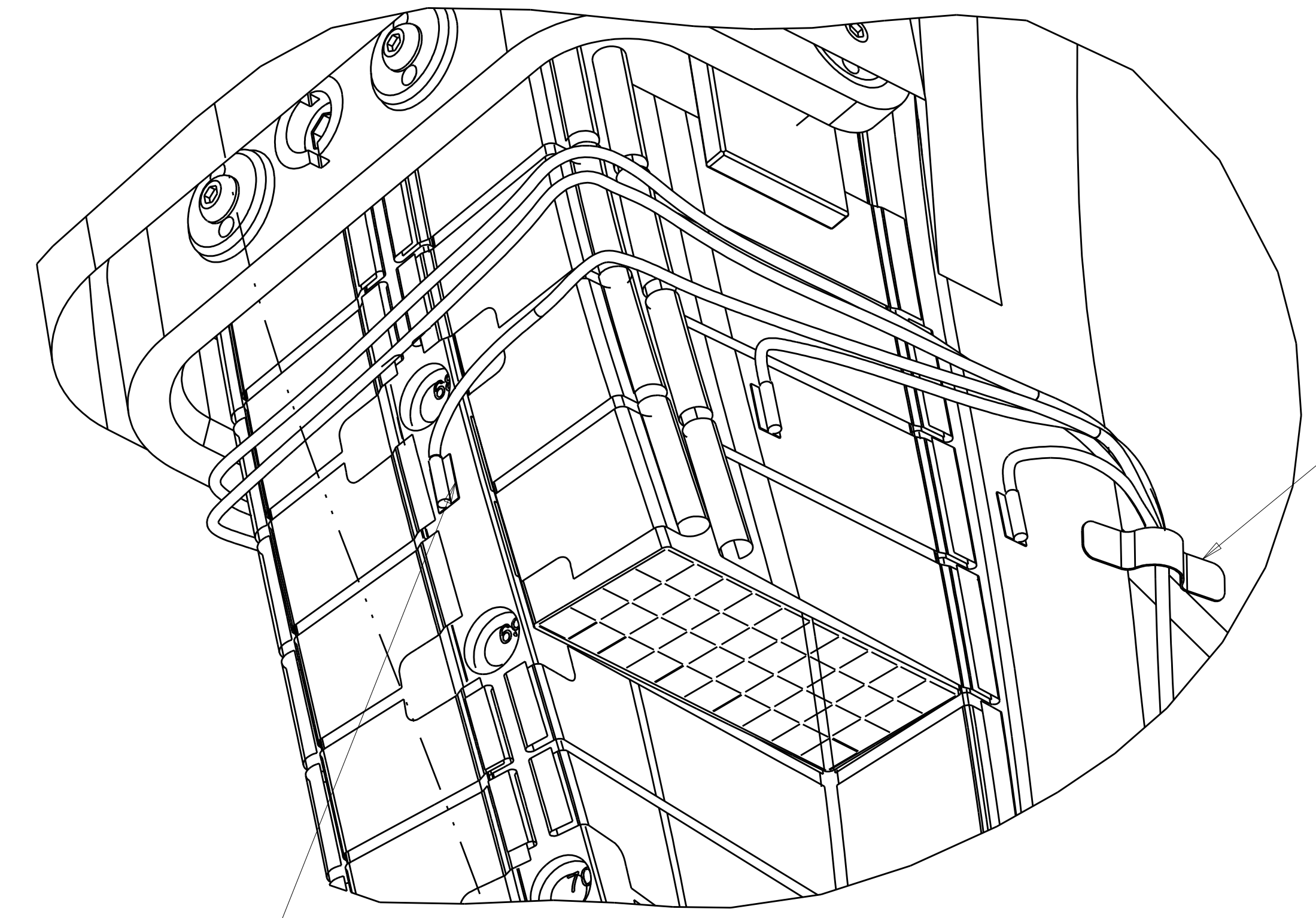
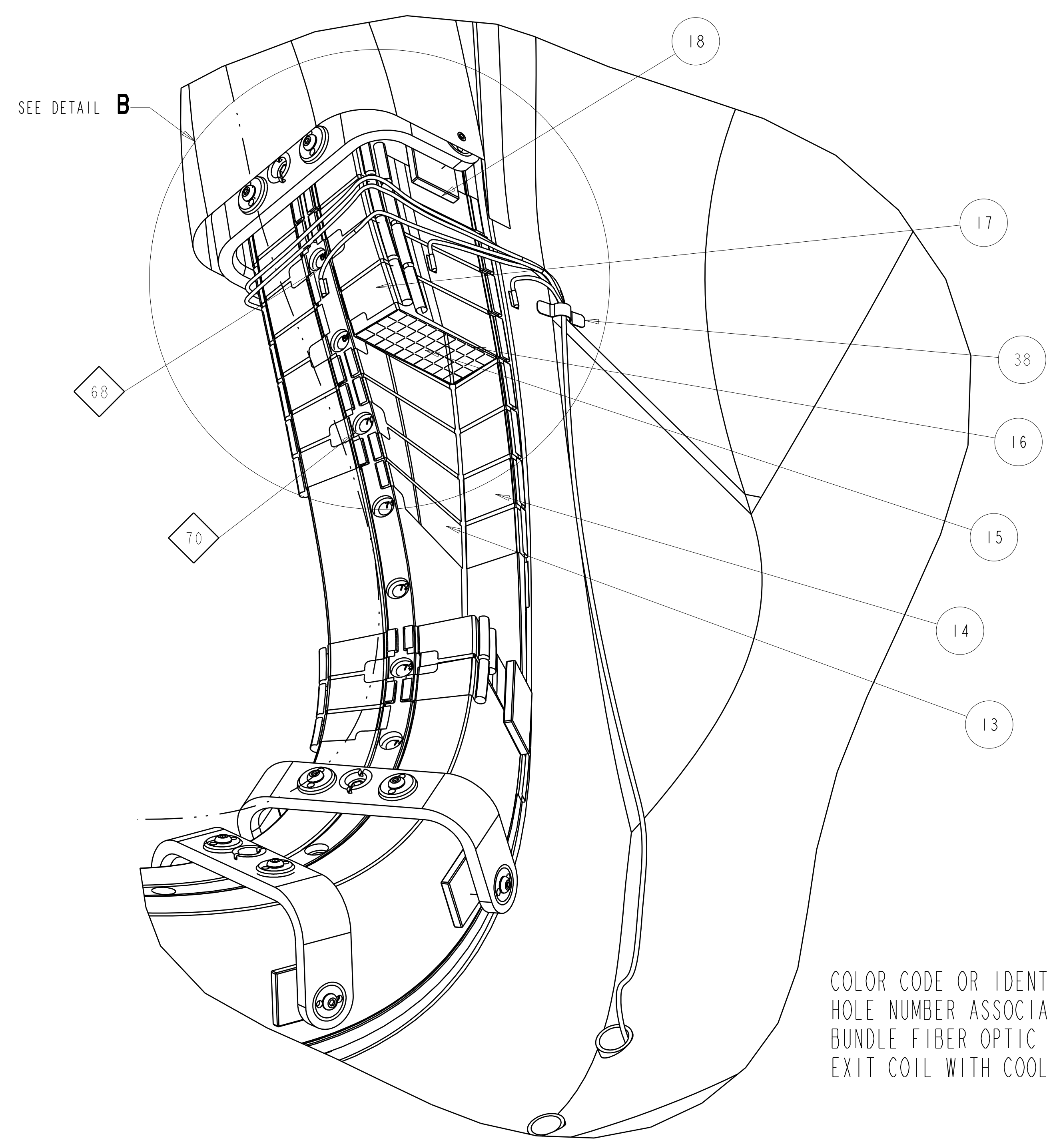
REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
0	ORIGINAL ISSUE	GL	06/07									

SCALE	NOTED	DES	DATE
		D WILLIAMSON	06/07
		DRW G LOVETT	06/07
		CHK MIKE COLE	06/07

VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
29+	ORNL	5700	3	1	2	S

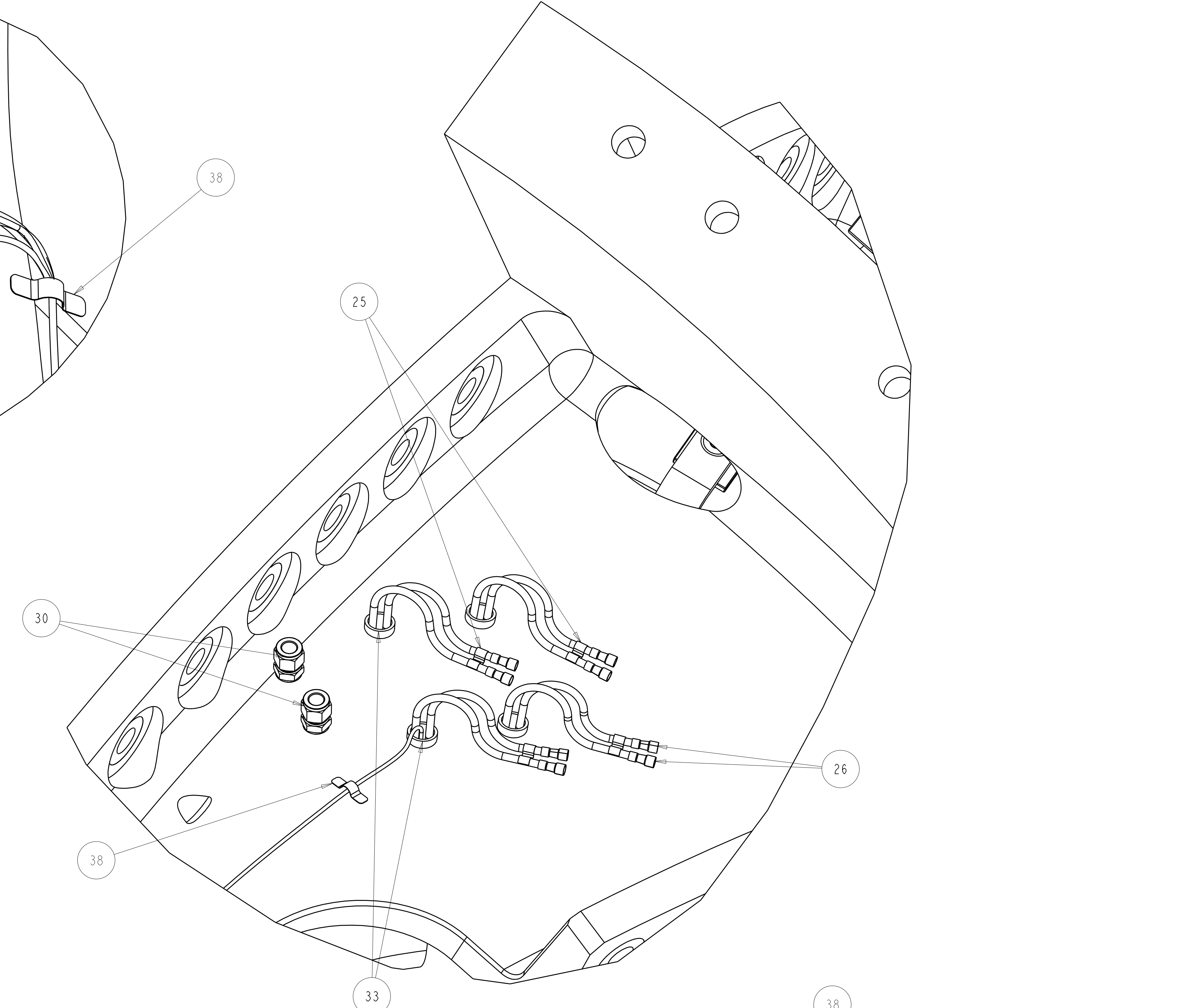
SEI40-103

A

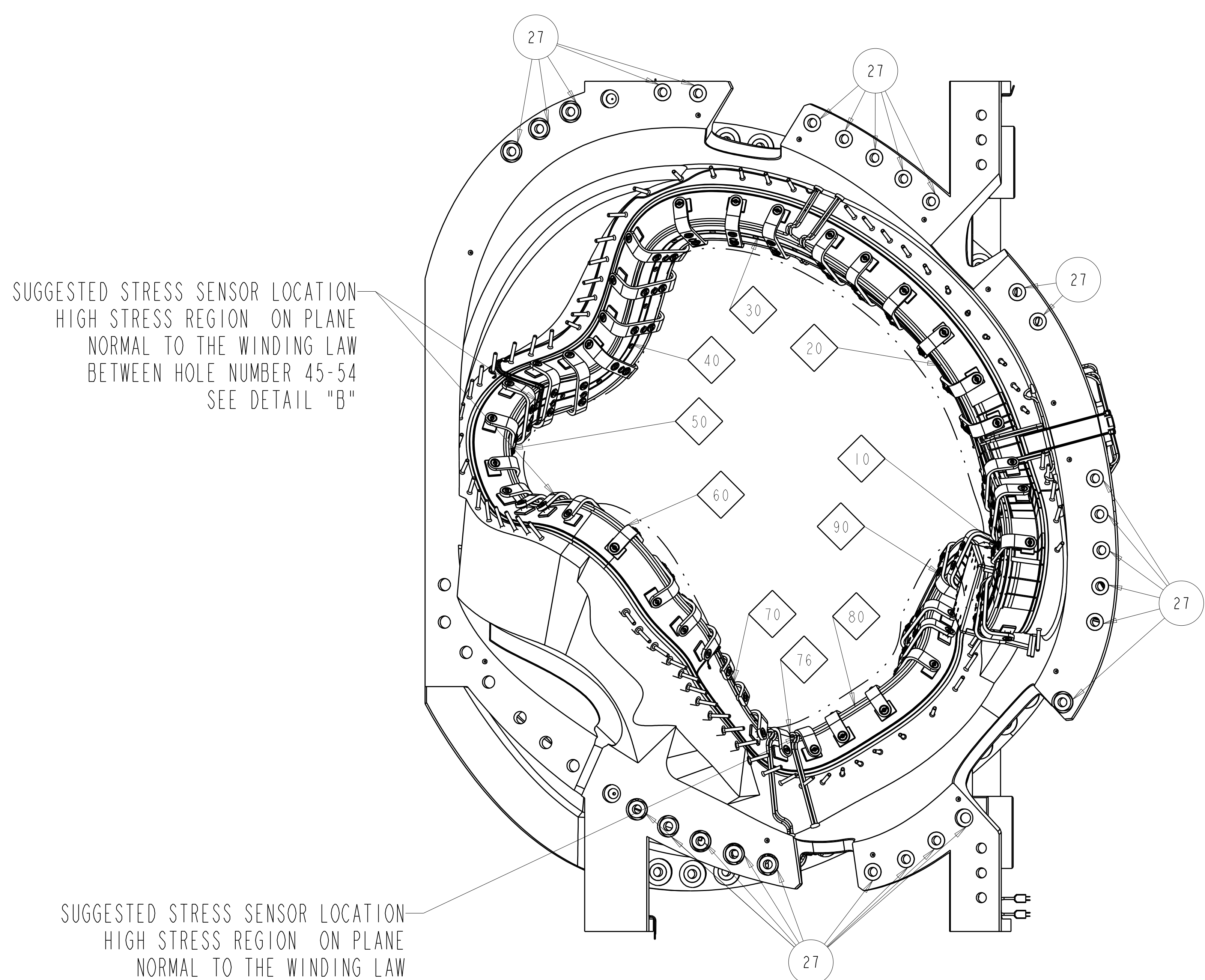


LOCATE STRAIN SENSORS AND LABEL AS SHOWN
 1 EACH ON TOP OF TEE (ie 68-T-TOP)
 2 EACH ON SIDE CHILL PLATE
 ie (SIDE A) 68-C-A AND (SIDE B) 68-C-B
 2 EACH ALONG FORM BELOW VPI GROOVE
 ie (SIDE A) 68-V-A AND (SIDE B) 68-V-B

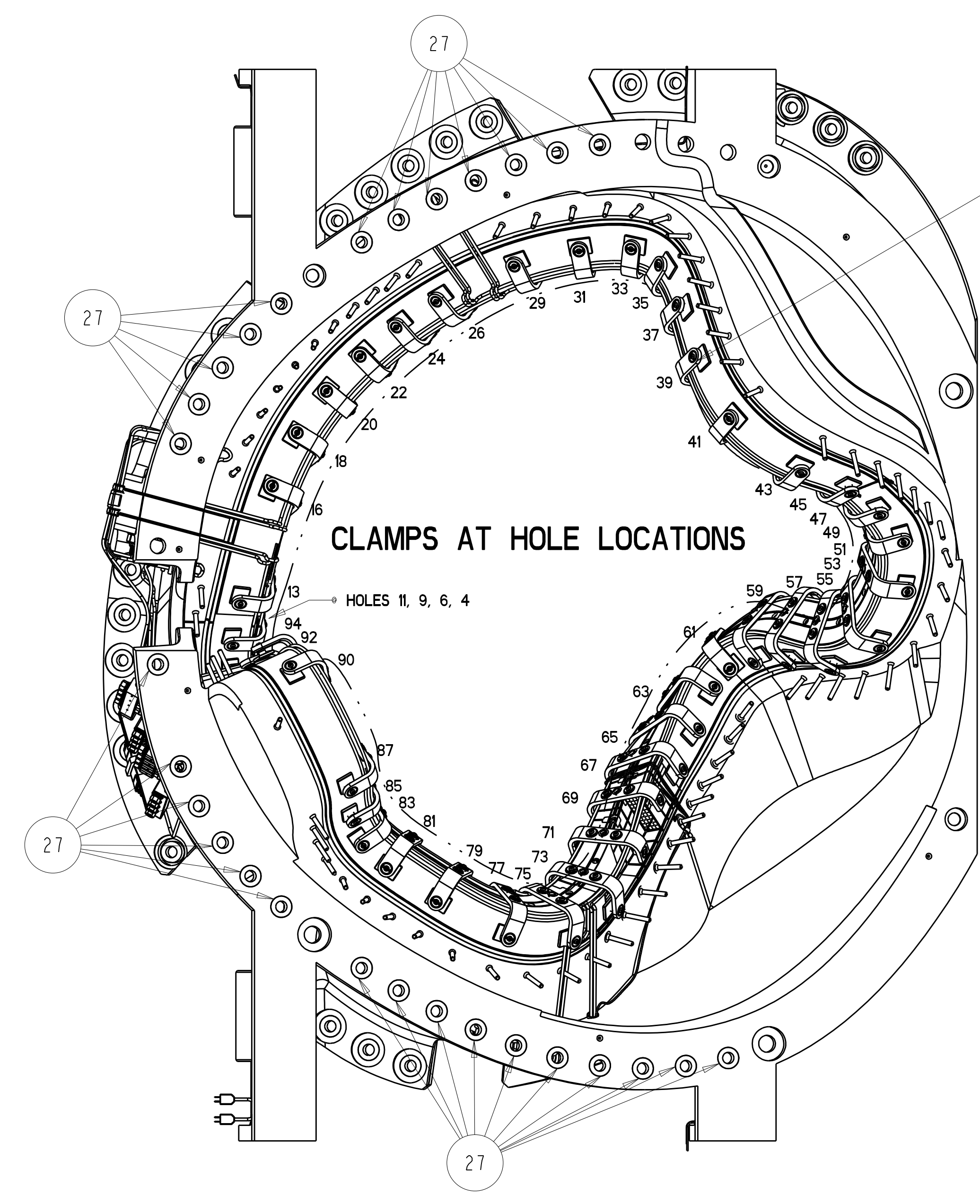
COLOR CODE OR IDENTIFY EACH CABLE WITH HOLE NUMBER ASSOCIATED AND LOCATION
 BUNDLE FIBER OPTIC STRAIN SENSOR CABLE
 EXIT COIL WITH COOLING TUBES.



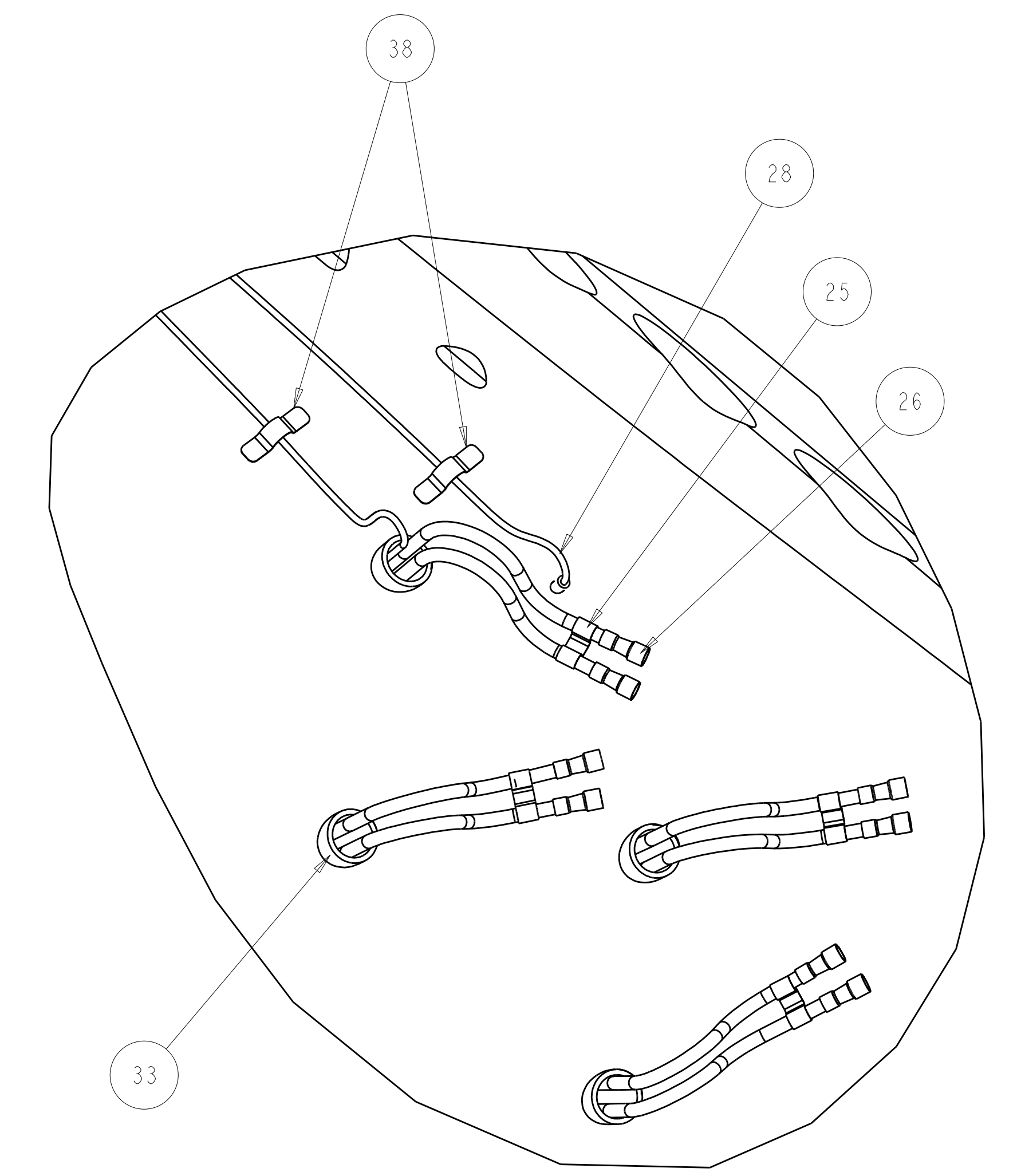
CUT-AWAY VIEW SHOWING WINDING ASSEMBLY SEQUENCE (SIDE "B")
SCALE 0.500



SIDE "A" VIEW



SIDE "B" VIEW



PARTIAL BOTTOM VIEW
SCALE 0.500

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					
NATIONAL COMPACT STELLARATOR EXPERIMENT							
TYPE C MCWF FINAL COIL ASSEMBLY							
VERSION NO. 37	PLANT ORNL	BLDG 5700	FL 3	SHT OF 2	TYPE S	CLASS U	
RELEASE LEVEL WIP	SE140-103					REV 0	

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