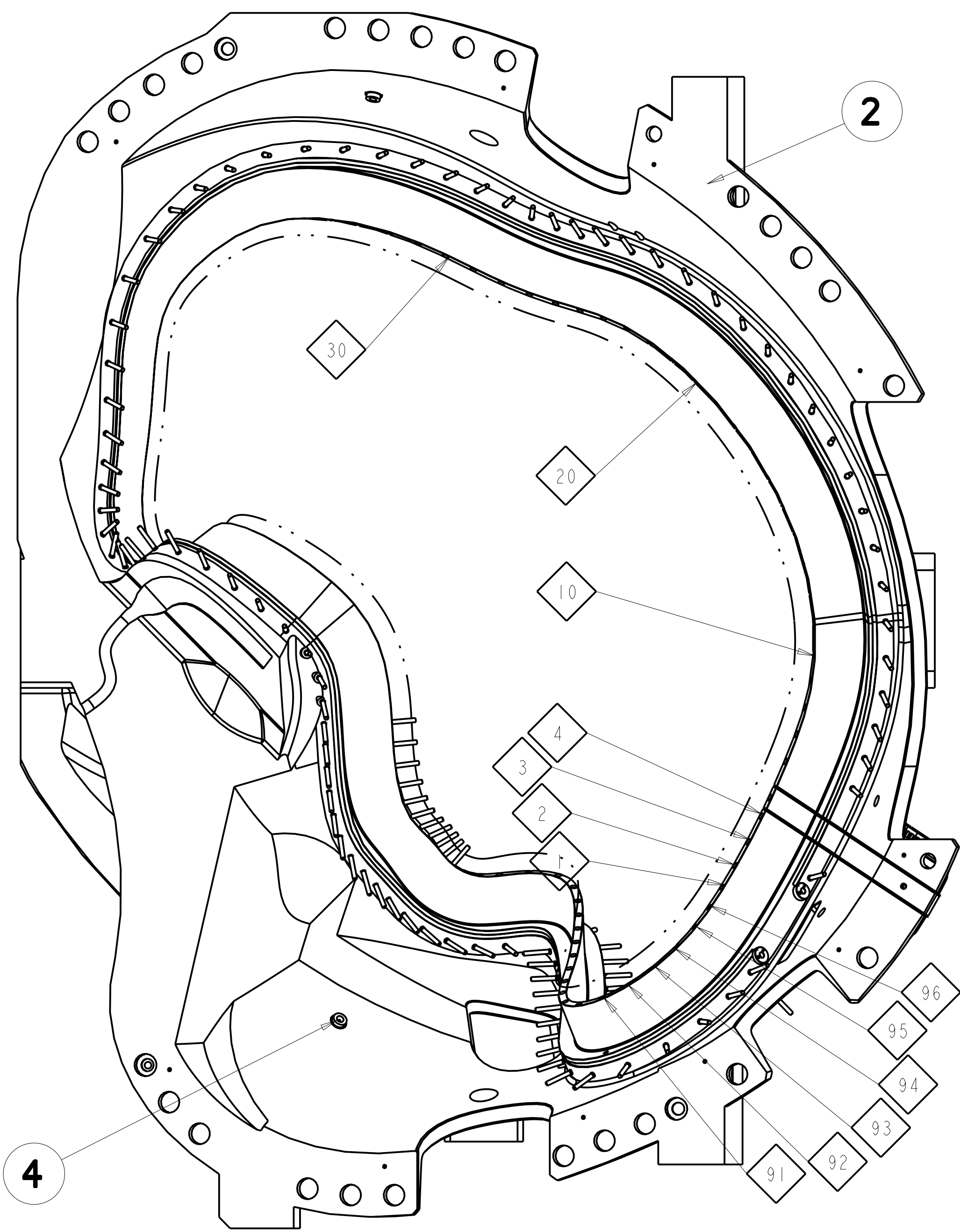


HOLE NUMBERING SEQUENCE
LEAD BLOCK AREA (TOP VIEW)
SCALE 0.38

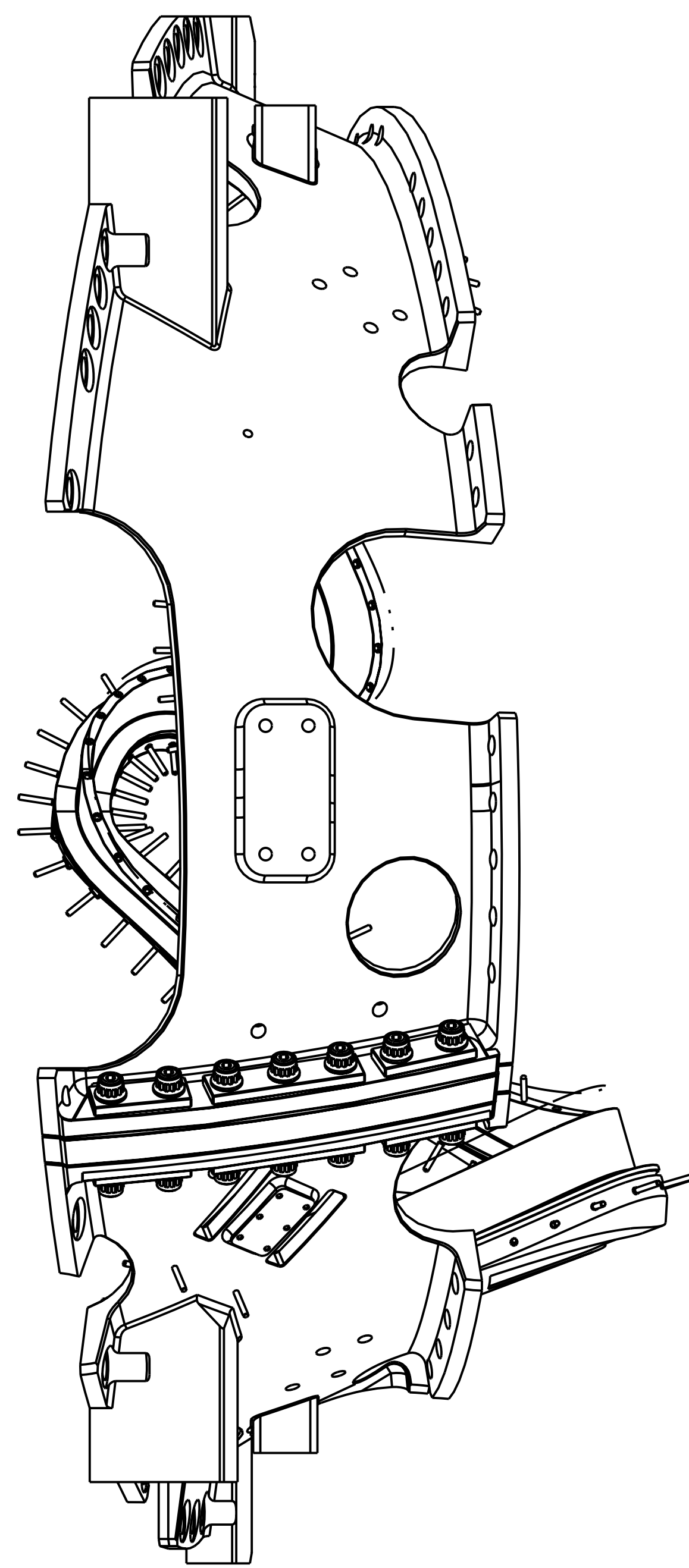
NOTES:

- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.8M-1996.
- INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994.
- DIMENSIONS ARE IN INCHES.
- DRAWING DEPICTS FINAL MACHINED STATE OF PART DEFINED BY PRO/ENGINEER FILE SE141-122.ASM.
- UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE RELATED TO DATUM A- (PRIMARY X-Y PLANE, TOP)
DATUM B- (SECONDARY Y-Z PLANE, SIDE)
DATUM C- (TERTIARY X-Z PLANE, FRONT)
- DIMENSIONS APPLY AT TEMPERATURE OF 20-30°C (68-86°F)
- SEE LATEST REVISION OF PROCEDURE D-NCSX-MCF-001 FOR ADDITIONAL REQUIREMENTS.
- 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.
- IN CLAMP POSITIONS 63 THRU 73 WELD STUDS (ITEM 17) TO SEPTUM.



1 WINDING FORM AND STUD ASM

SCALE 0.13



WELDING ENGINEER
APPROVED: G. GETTELFINGER DATE: 10/06

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FABRICATION / INSTALLATION**
PPPL Drafting:

CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
11	-17	STUD, 3/8-16UNC-2A X 2-1/8" LNG	INCONEL 625	N/A	17
1	-16	1" Ø STUD EXTENSION SIDE "A" MOUNT	UNS 31600	N/A	16
1	-15	1" Ø STUD EXTENSION SIDE "A" MOUNT	UNS 31600	N/A	15
1	-14	1" Ø STUD EXTENSION SIDE "A" MOUNT	UNS 31600	N/A	14
1	-13	1" Ø STUD EXTENSION SIDE "B" MOUNT	UNS 31600	N/A	13
1	-12	1" Ø STUD EXTENSION SIDE "B" MOUNT	UNS 31600	N/A	12
1	-11	1" Ø STUD EXTENSION SIDE "B" MOUNT	UNS S31600	N/A	11
1	-10	LEAD BLOCK MOUNT #4 (SIDE B LEFT)	UNS S31600	N/A	10
1	-9	LEAD BLOCK MOUNT #3 (SIDE B RIGHT)	UNS S31600	N/A	9
1	-8	LEAD BLOCK MOUNT #2 (SIDE A LEFT)	UNS S31600	N/A	8
1	-7	LEAD BLOCK MOUNT #1 (SIDE A RIGHT)	UNS S31600	N/A	7
2	-6	STUD 3/8-16 UNC-2A X3.5 LG	UNS S31600	N/A	6
181	-5	STUD, 3/8-16UNC -2A X 2.5 LG	UNS S31600	N/A	5
7	AR	SE780-011	METROLOGY TARGET		
1	SE141-149	TYPE-B VPI GROOVE FILLER PIECE			
1	SE141-102	TYPE-B MCFW			
AR	X	-1	MODULAR COIL TYPE-B WINDING FORM AND STUD ASSEMBLY		

PARTS LIST

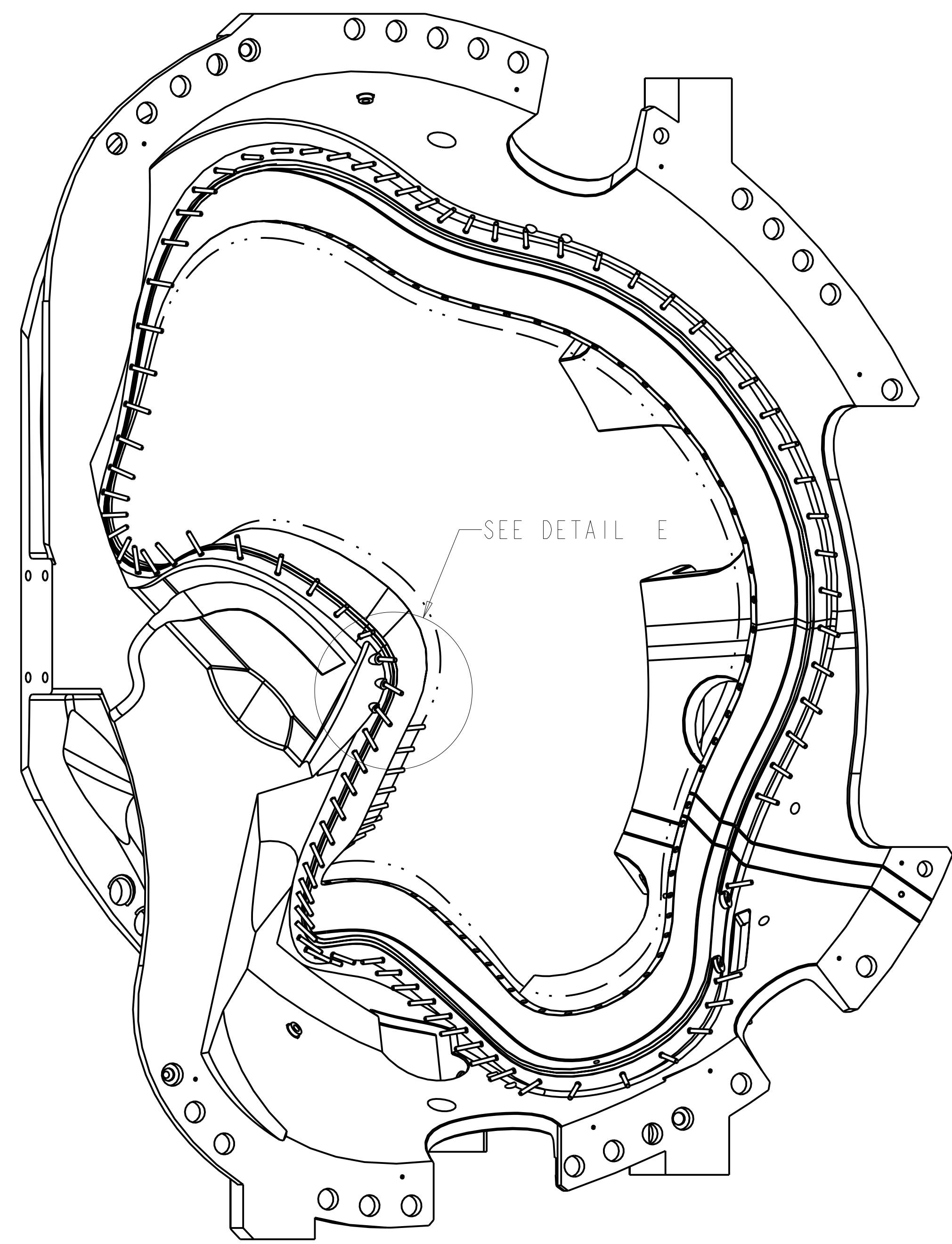
NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE 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

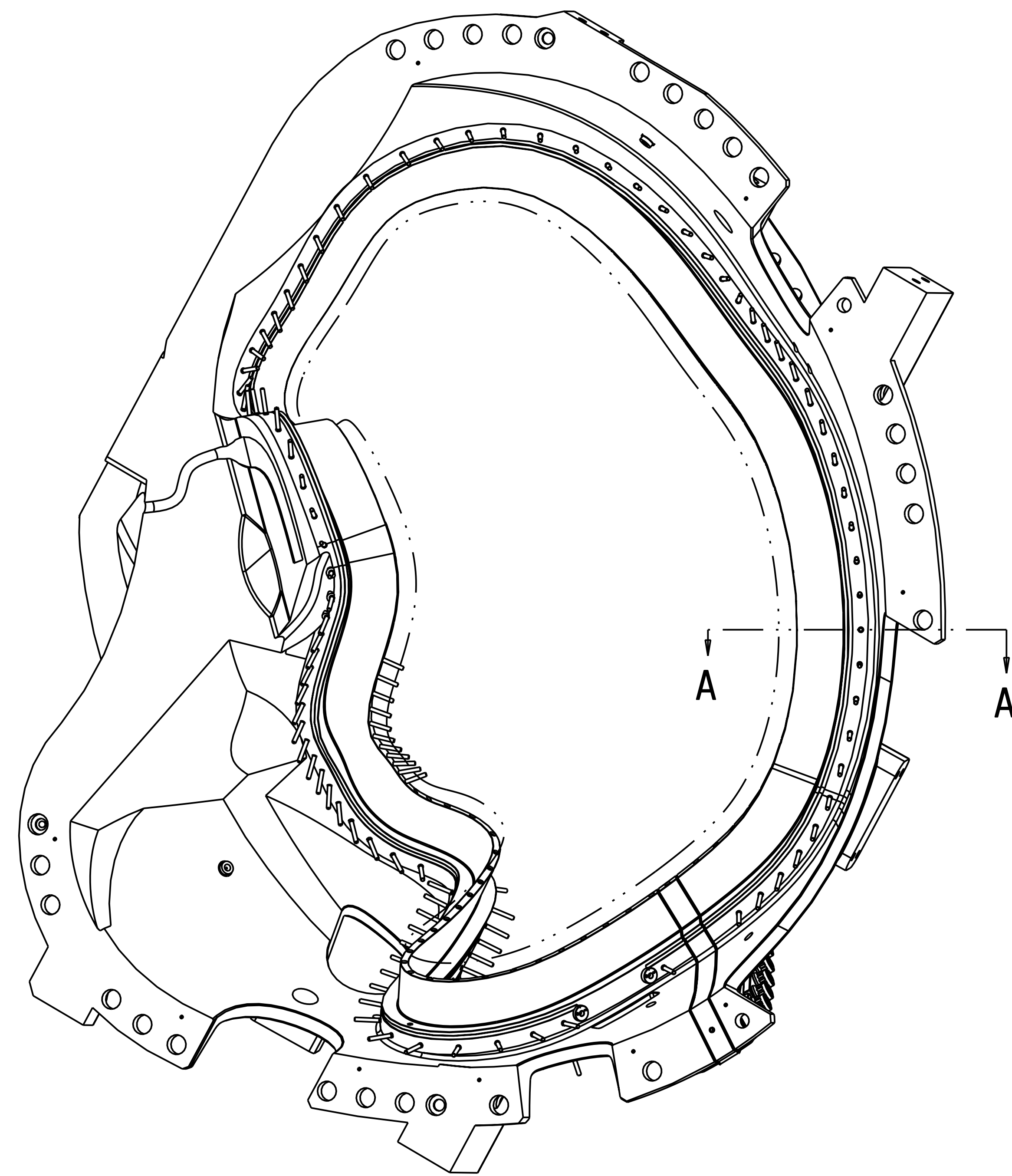
REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
1	REVISE PART AND DRAWING PER ECN 5199	BLL	11-06	MJC	11-08	DEW						

SCALE NOTED	
TOLERANCES UNLESS OTHERWISE SPECIFIED	DES D WILLIAMSON 03/06
FRACTIONS	DRW G LOVETT 03/06
XX DECIMALS ±.01	CHK MIKE COLE 03/06
XXX DECIMALS ±.005	PE D WILLIAMSON 03/06
ANGLES ±0°15'	DEPT :
BREAK SHARP EDGES 06 MAX	REO :
FINISH 125 UNLESS OTHERWISE SPECIFIED	PPPL DRFT J SIEGEL 03/06

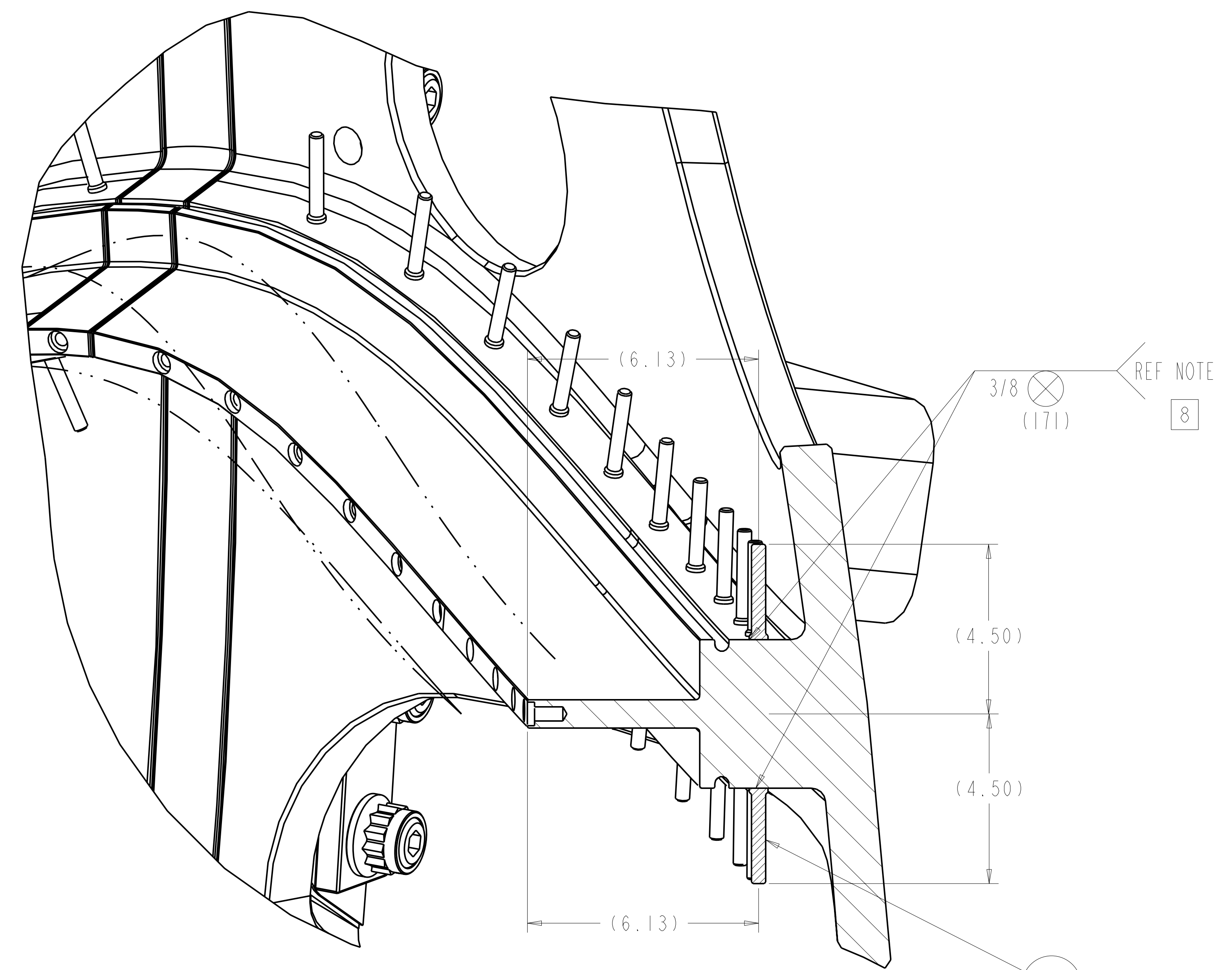
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC. Oak Ridge, Tennessee			
PROJECT NAME: NATIONAL COMPACT STELLARATOR EXPERIMENT			
MODULAR COIL TYPE-B WINDING FORM AND STUD WELDMENT			
VERSION NO.	PLANT	BLDG	FL
4	X-10	5700	3
RELEASE LEVEL	SE141-122		
Fabrication			



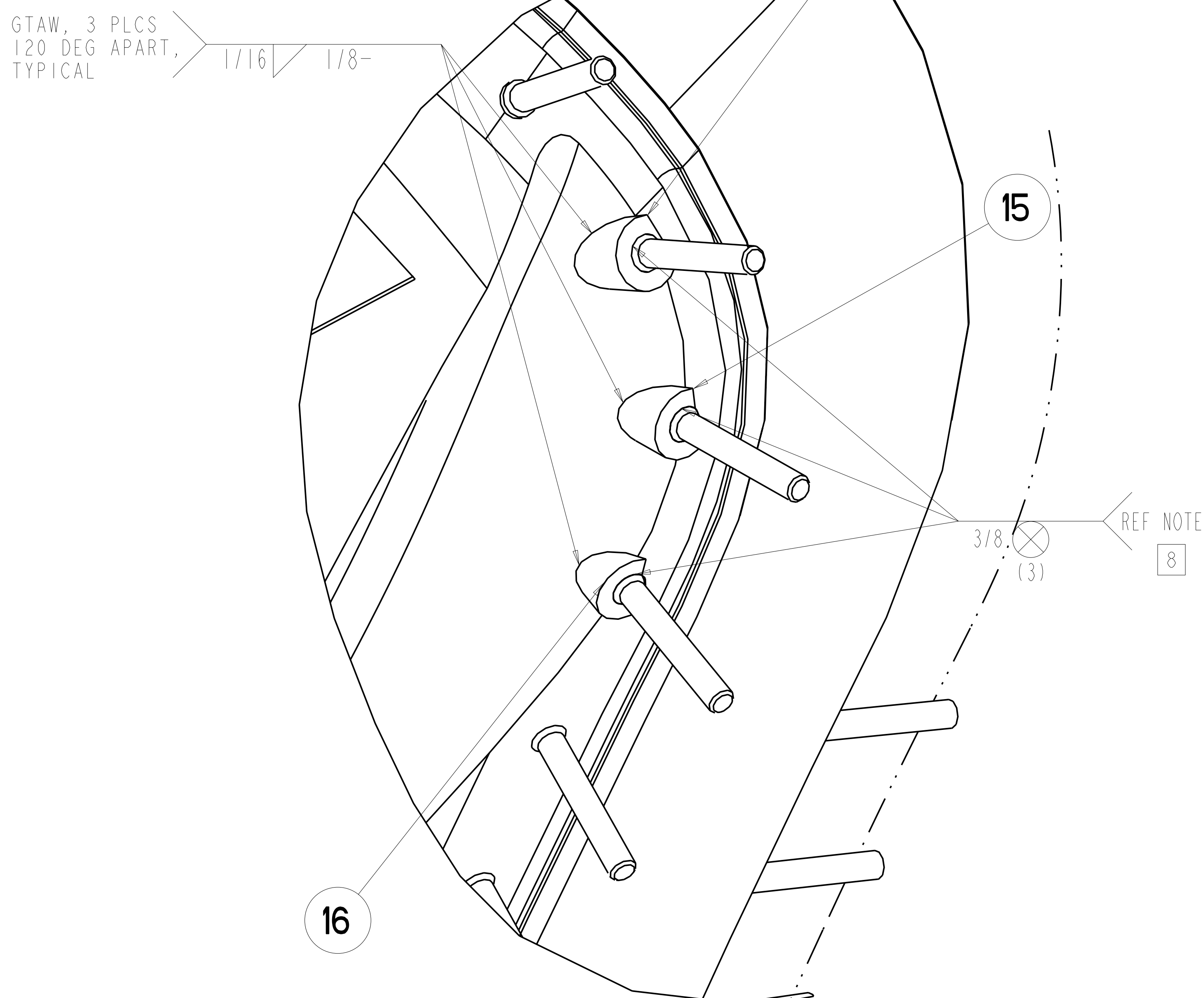
SIDE-A VIEW
SCALE 0.13



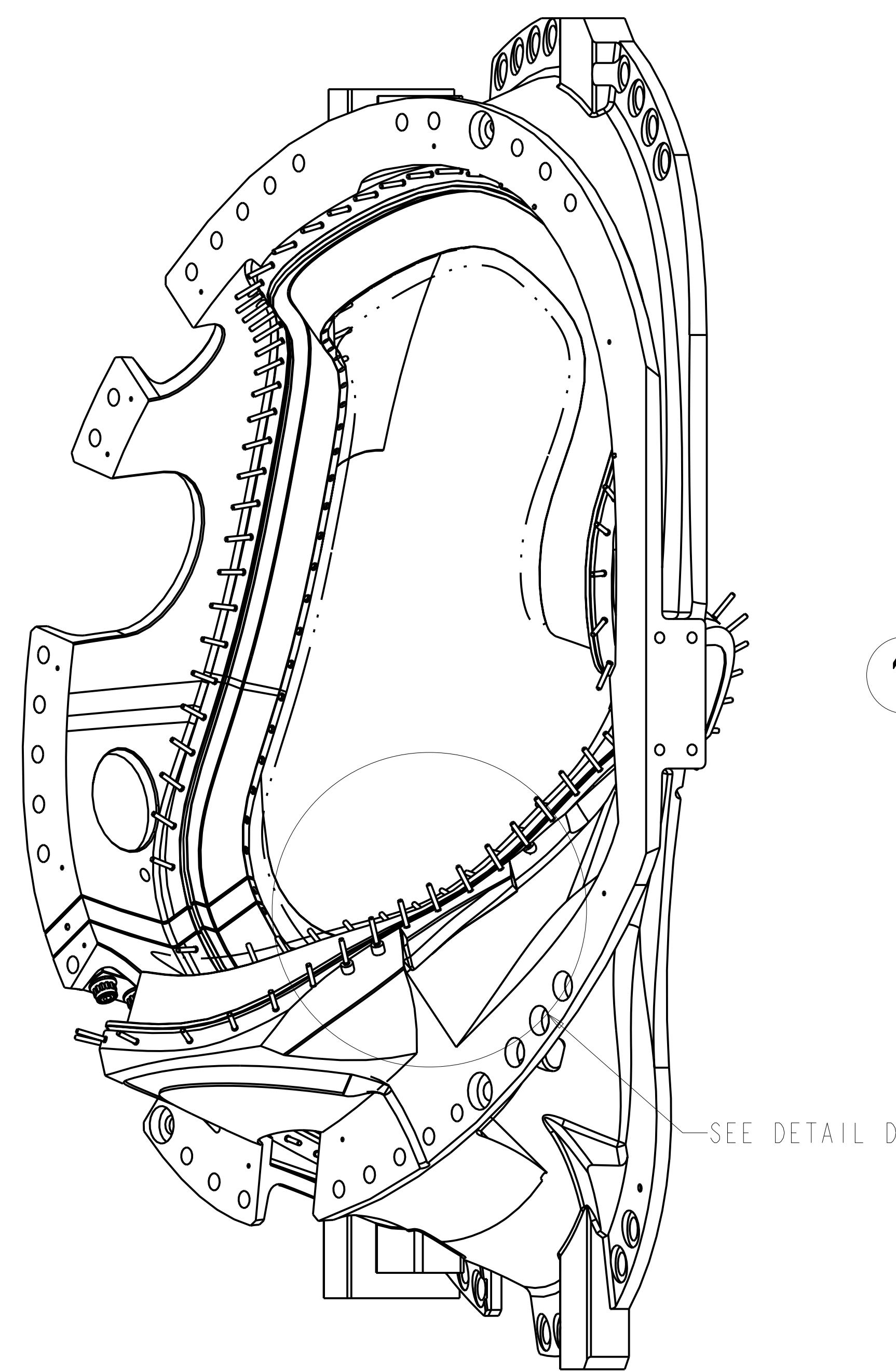
SIDE-A VIEW
SCALE 0.13



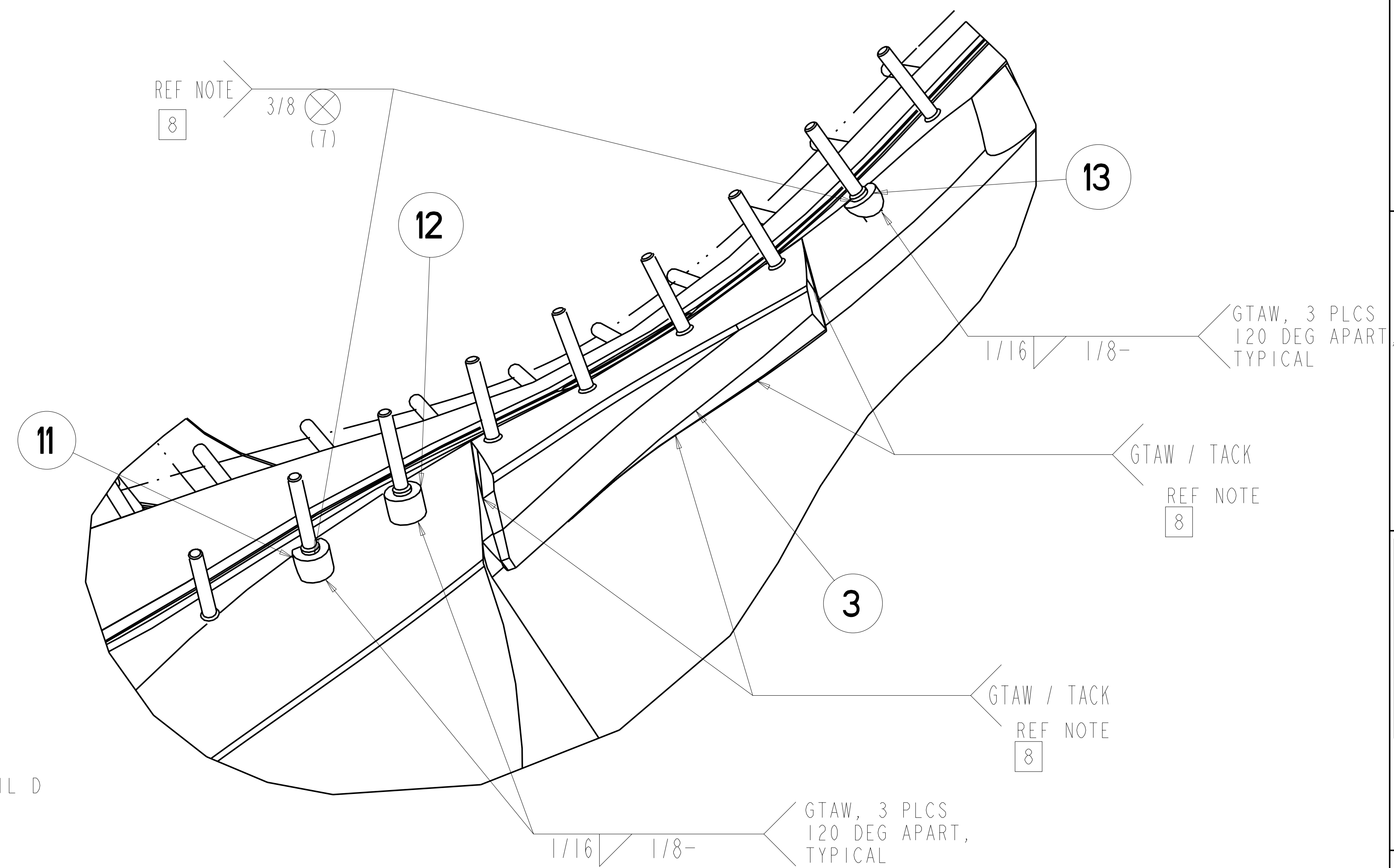
SECTION A-A
SCALE 0.50
STUDS NORMAL TO SECTION AT EACH LOCATION



DETAIL E
SCALE 1.00



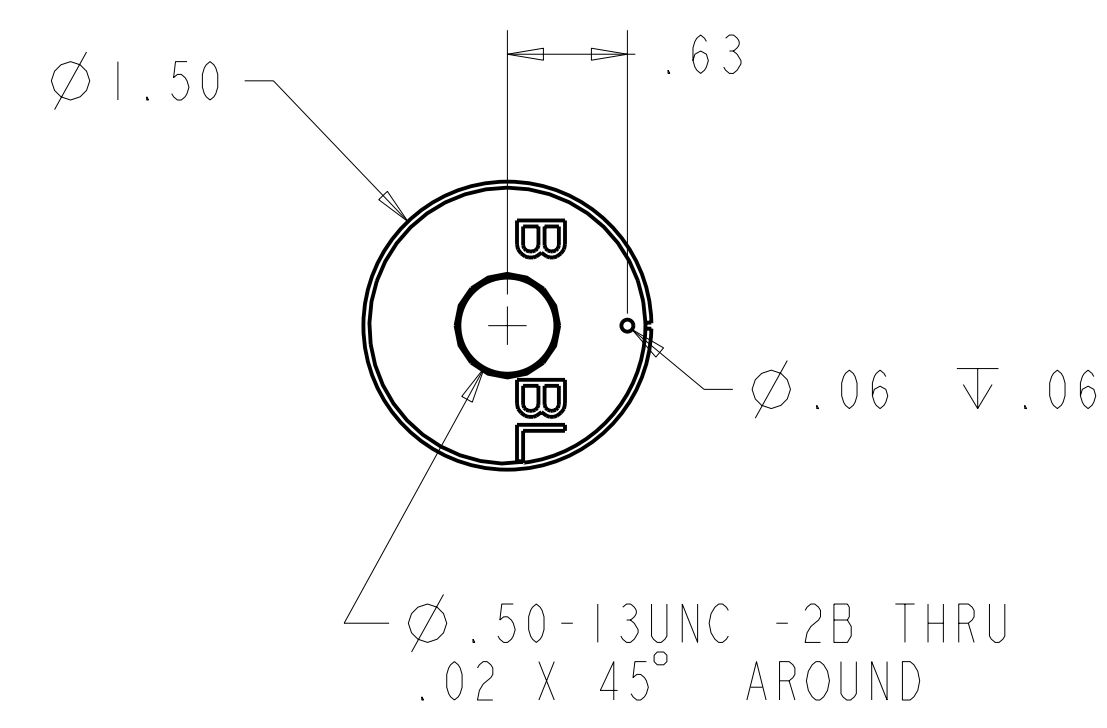
SIDE-B VIEW
SCALE 0.13



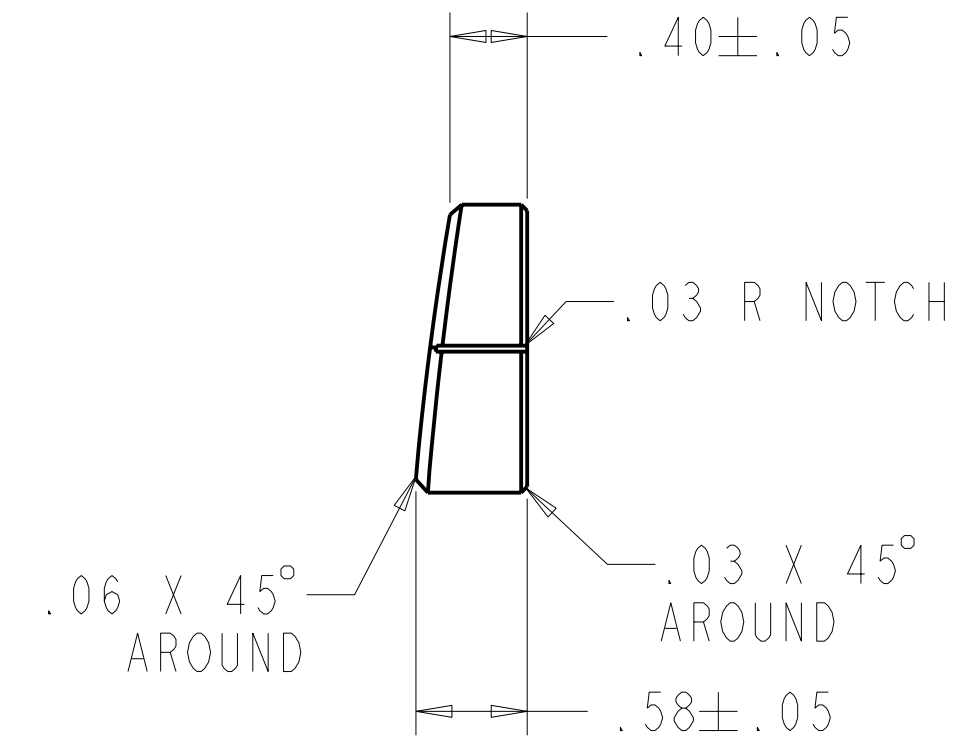
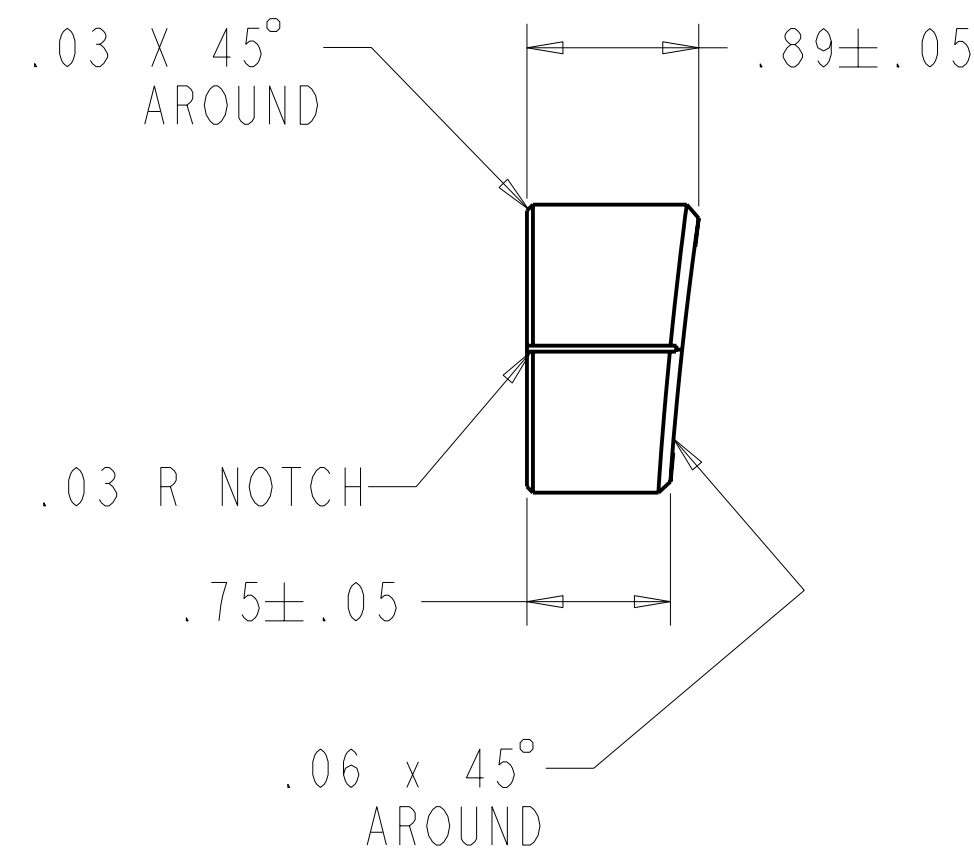
DETAIL D
SCALE 0.50

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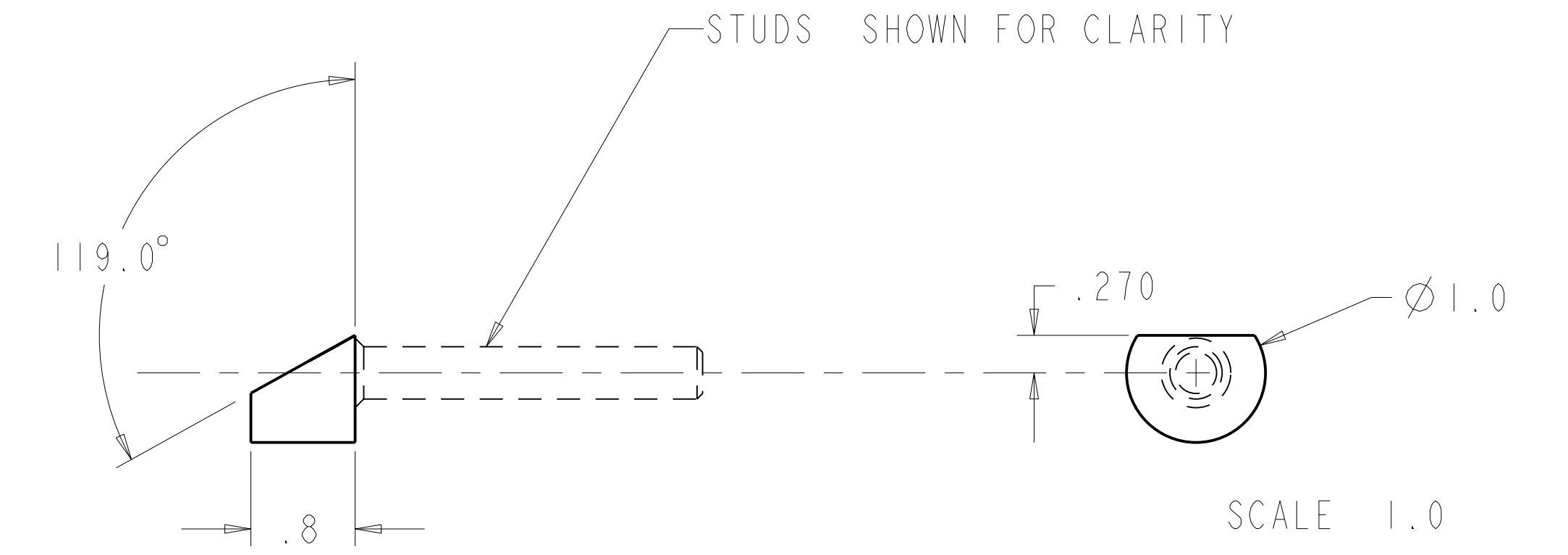
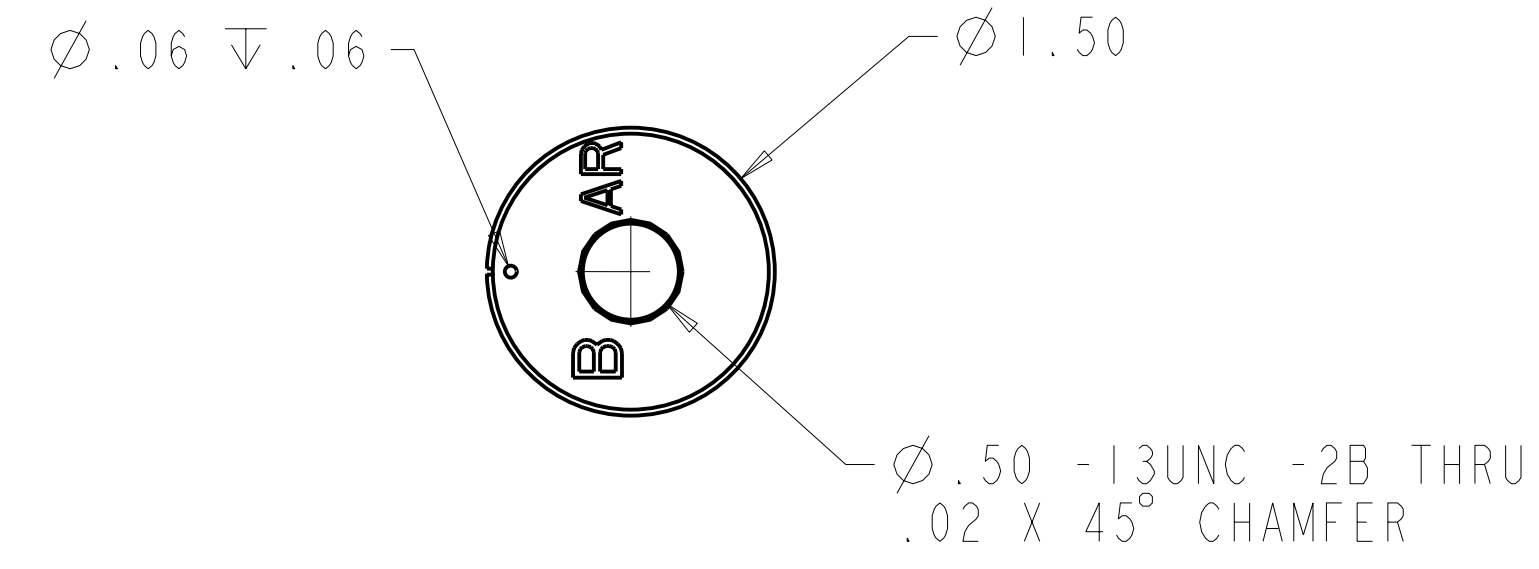
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee PROJECT TITLE:							
UT-BATTELLE NATIONAL COMPACT STELLARATOR EXPERIMENT							
MODULAR COIL TYPE-B WINDING FORM AND STUD WELDMENT							
VERSION NO.	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS
4	X-10	5700	3	2	5	S	U
RELEASE LEVEL		SE141-122				REV	
Fabrication						1	



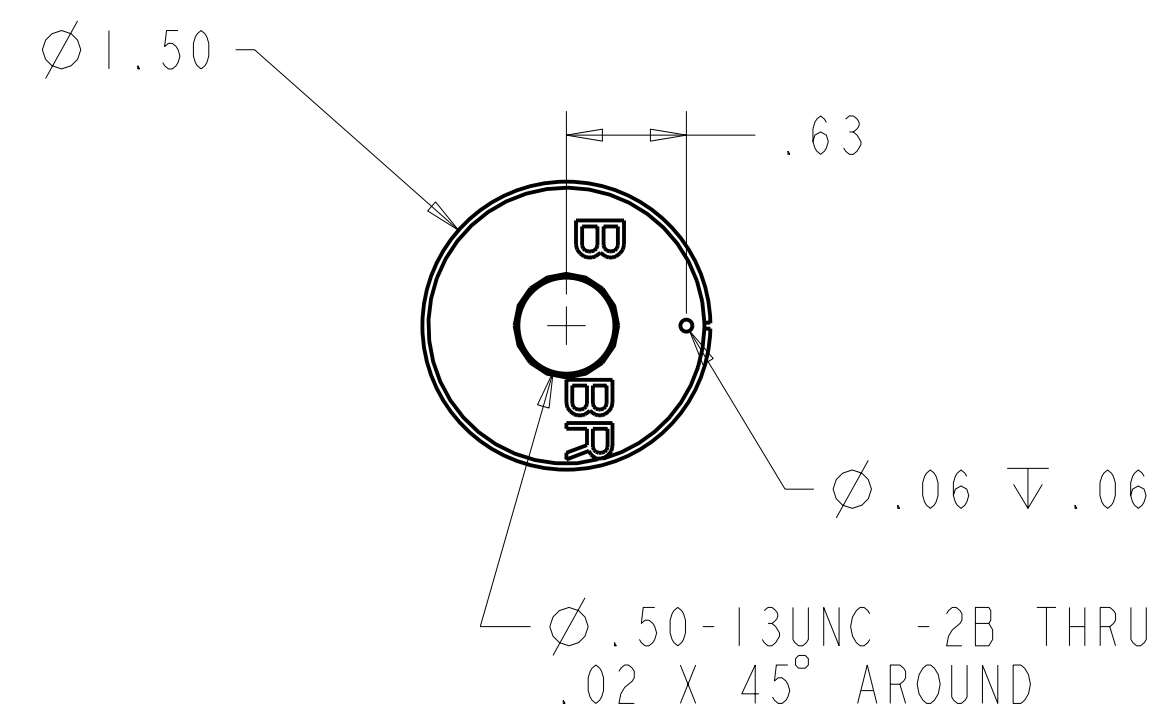
10 SIDE-B LEFT
SCALE 1.0



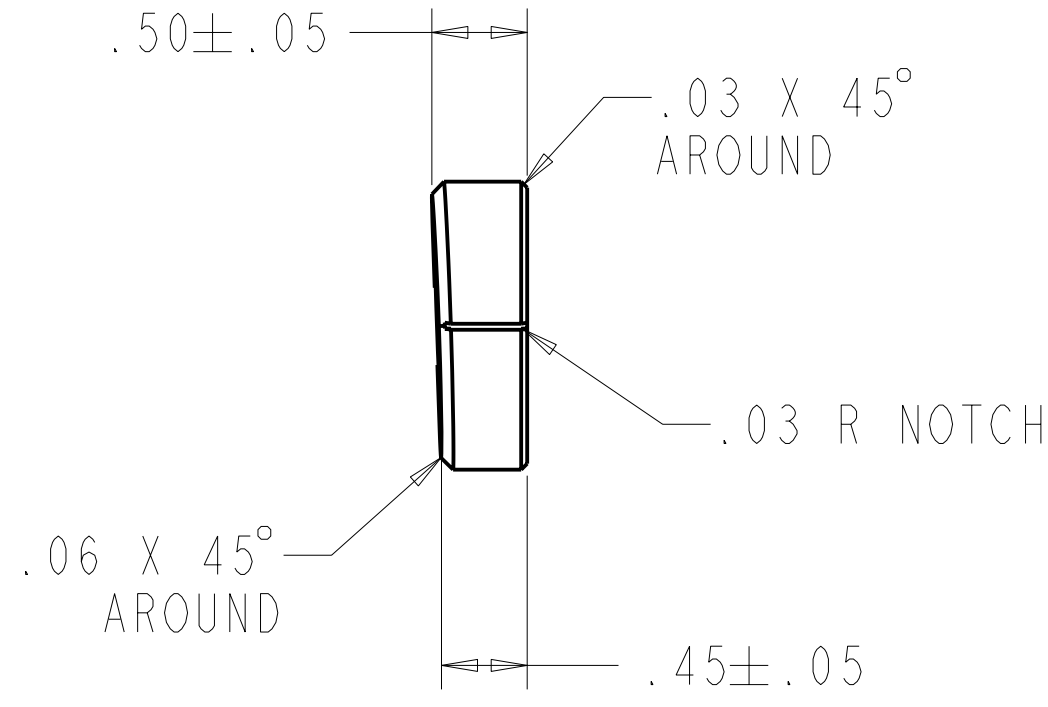
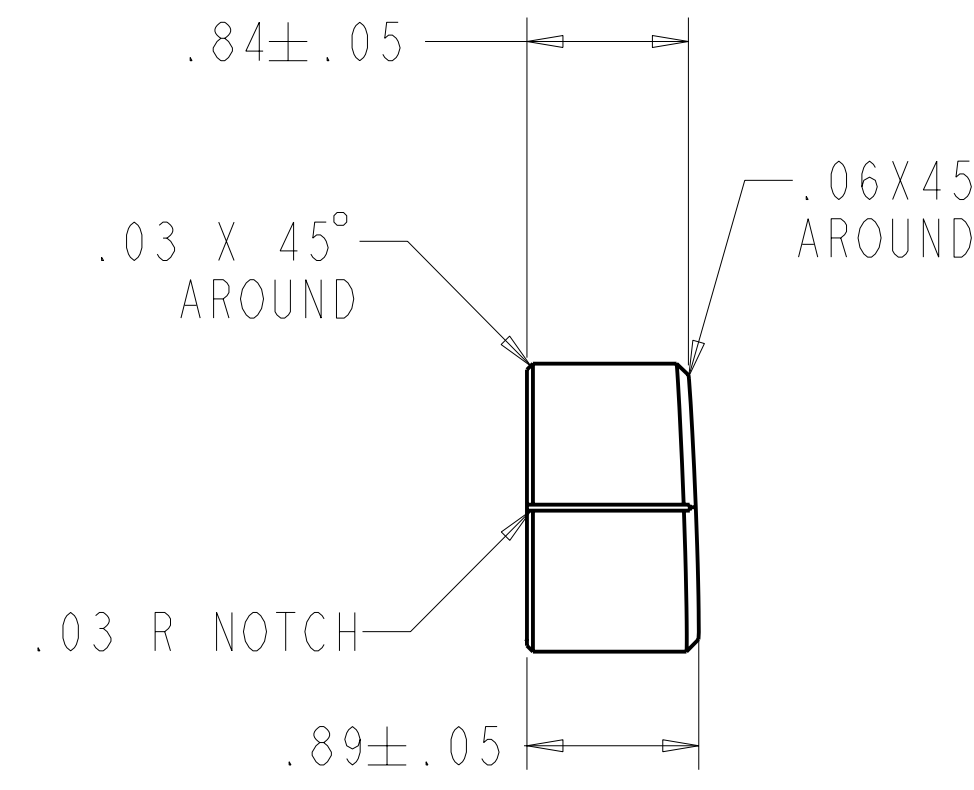
7 SIDE-A RIGHT



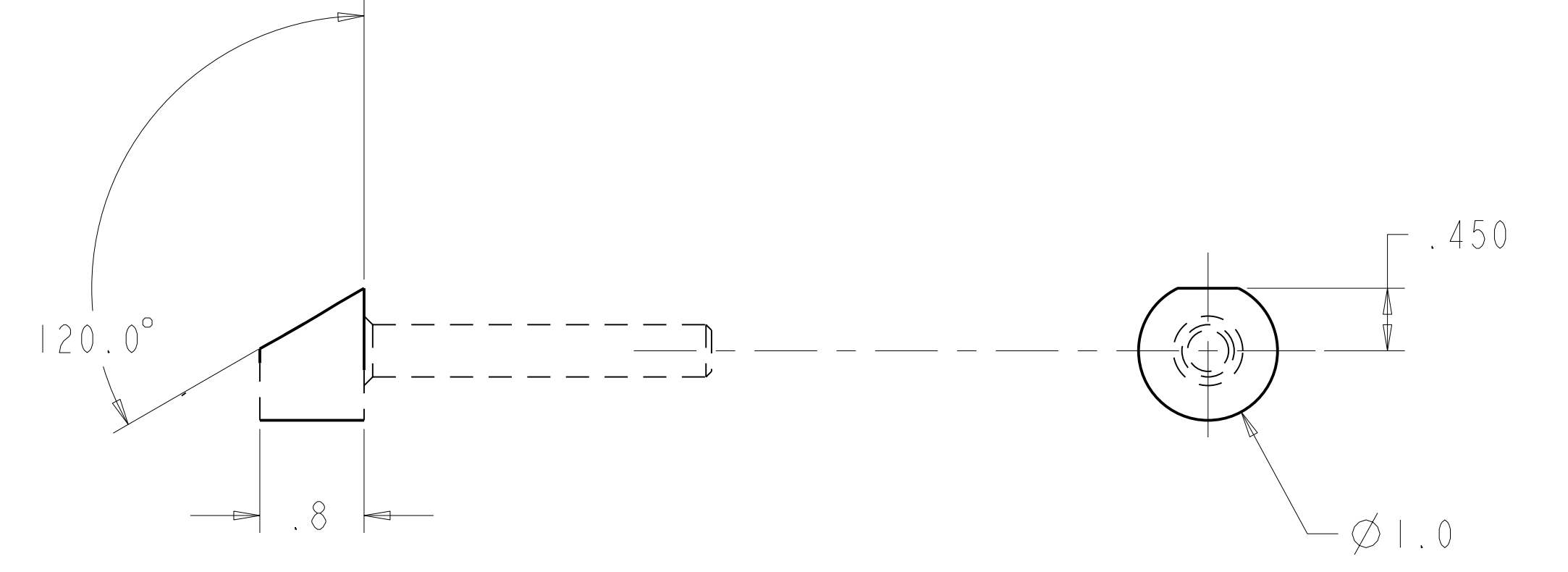
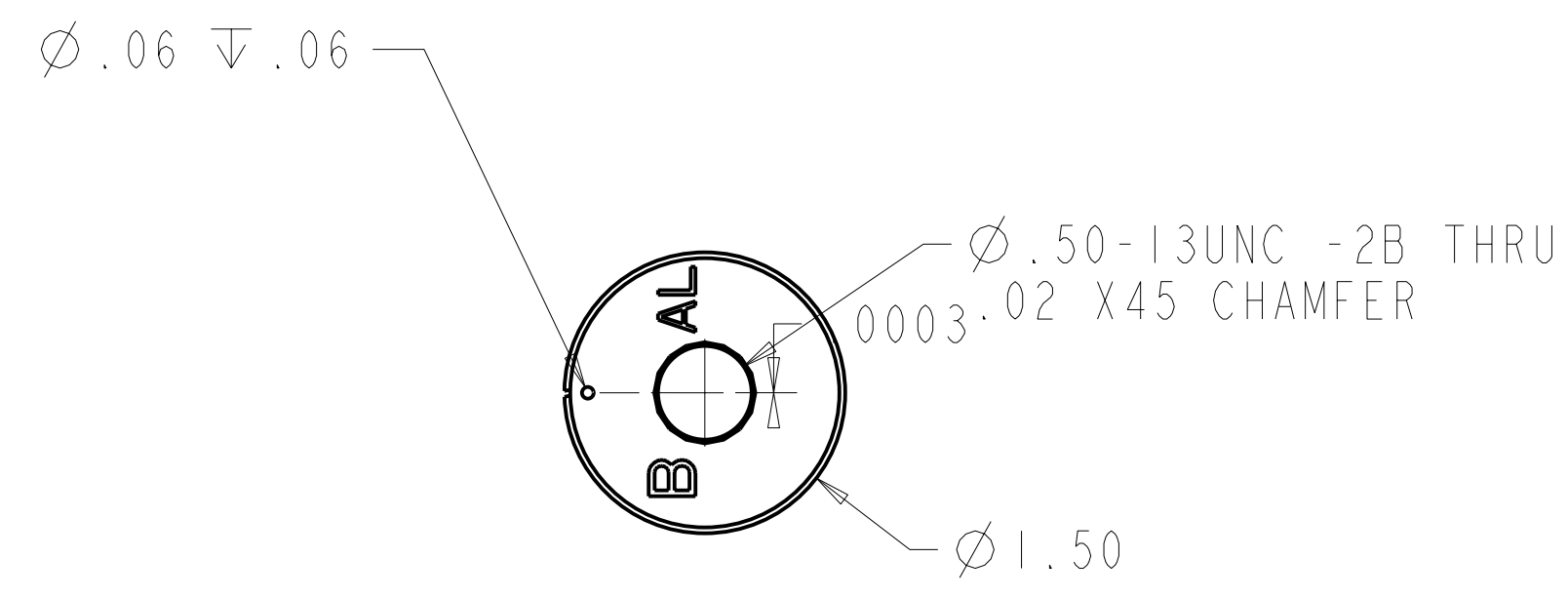
11



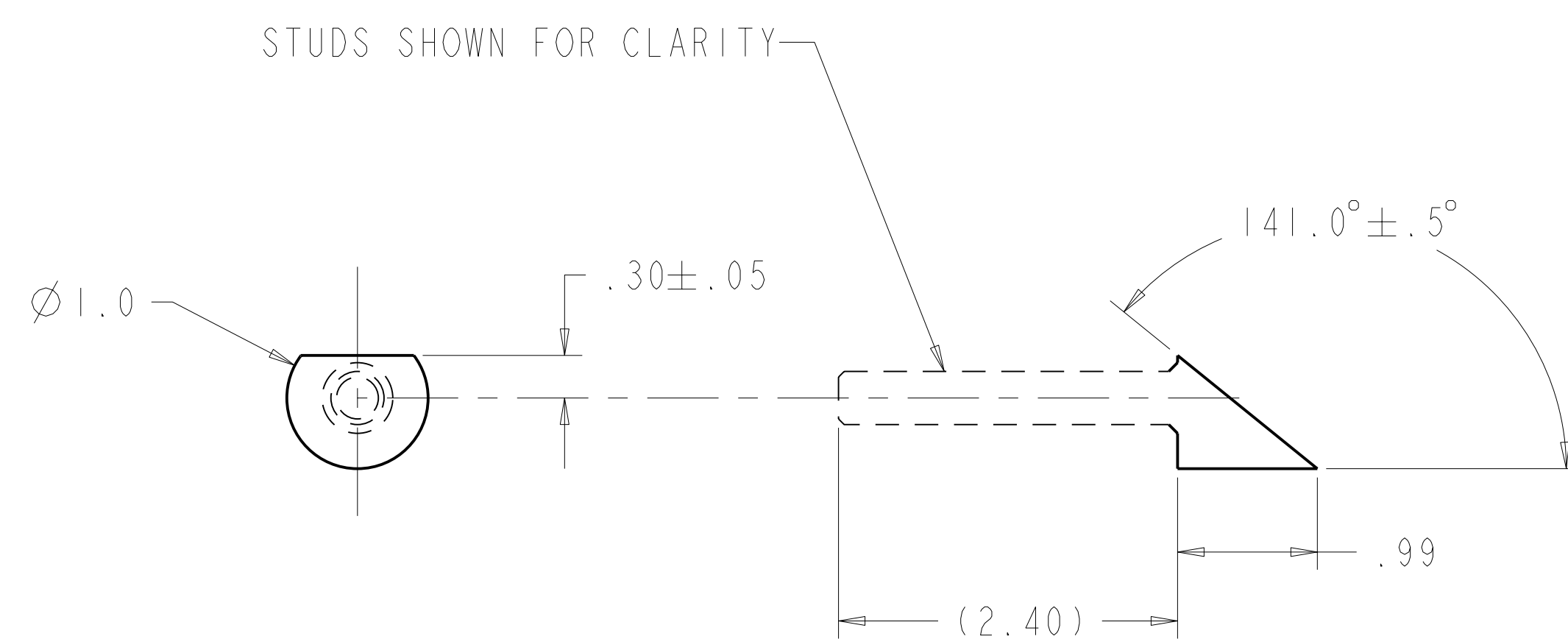
9 SIDE-B RIGHT



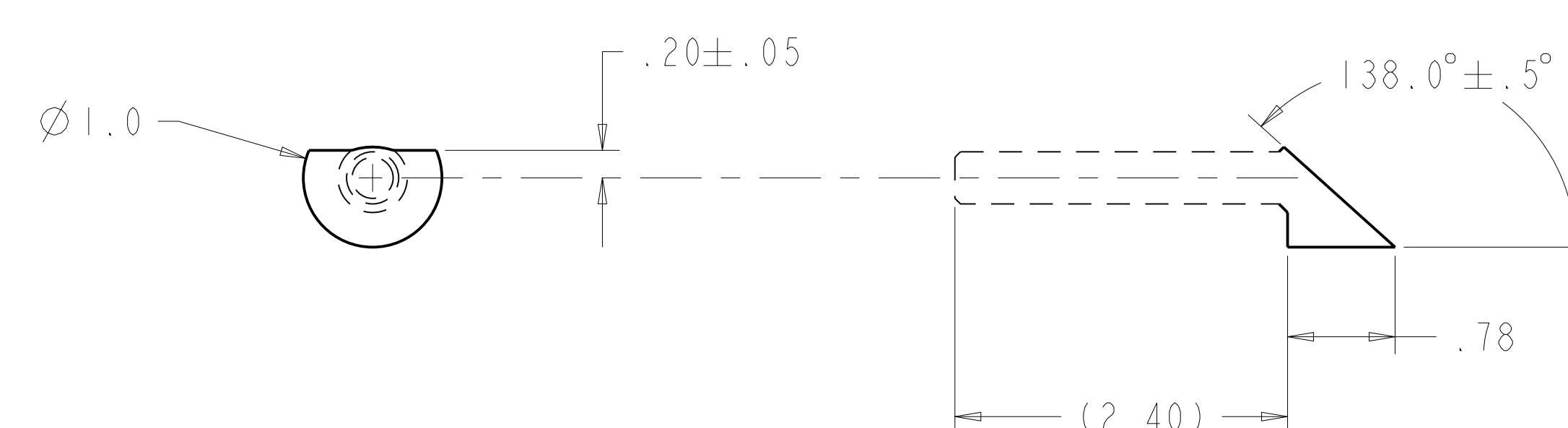
8 SIDE-A LEFT



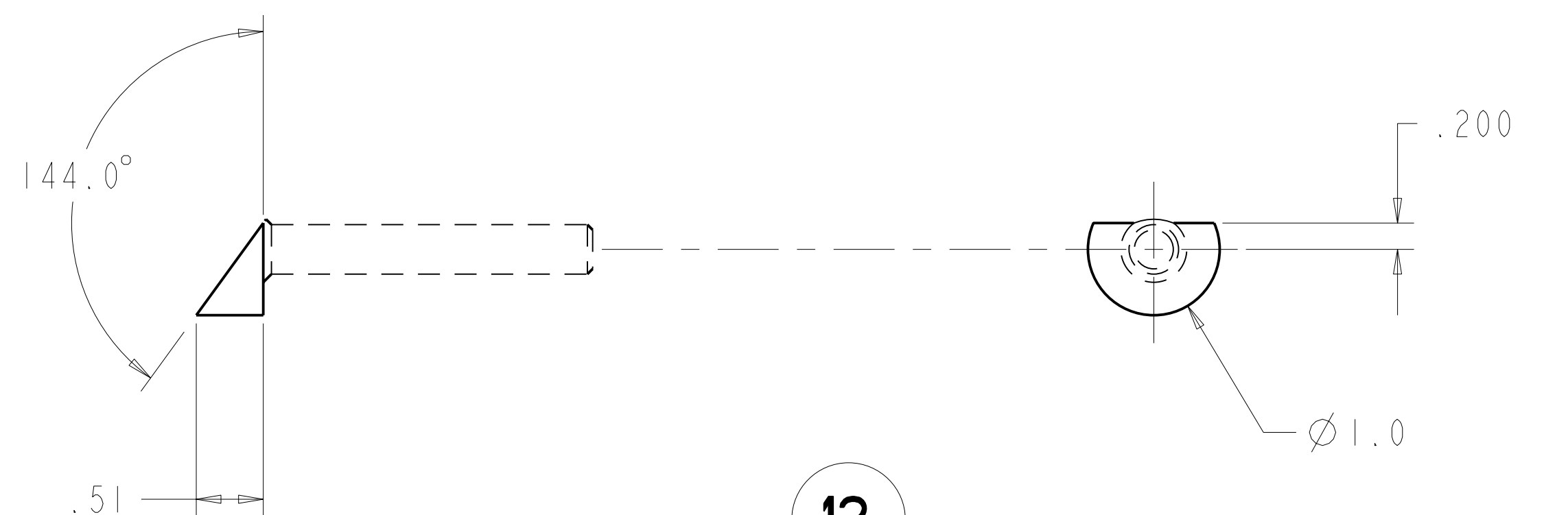
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SCALE 1.0



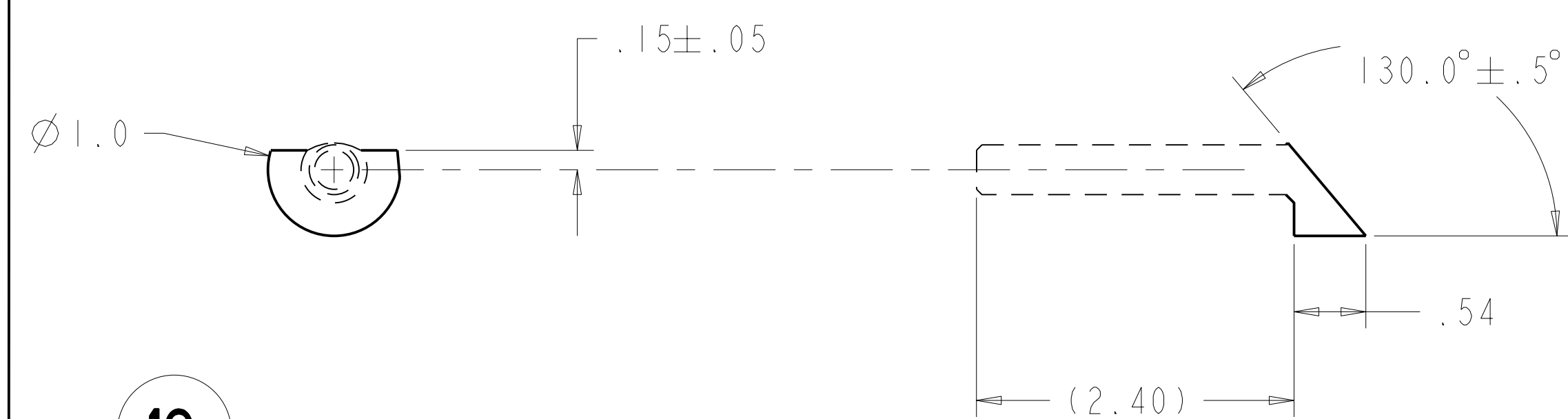
14
SCALE 1.0



15
SCALE 1.0



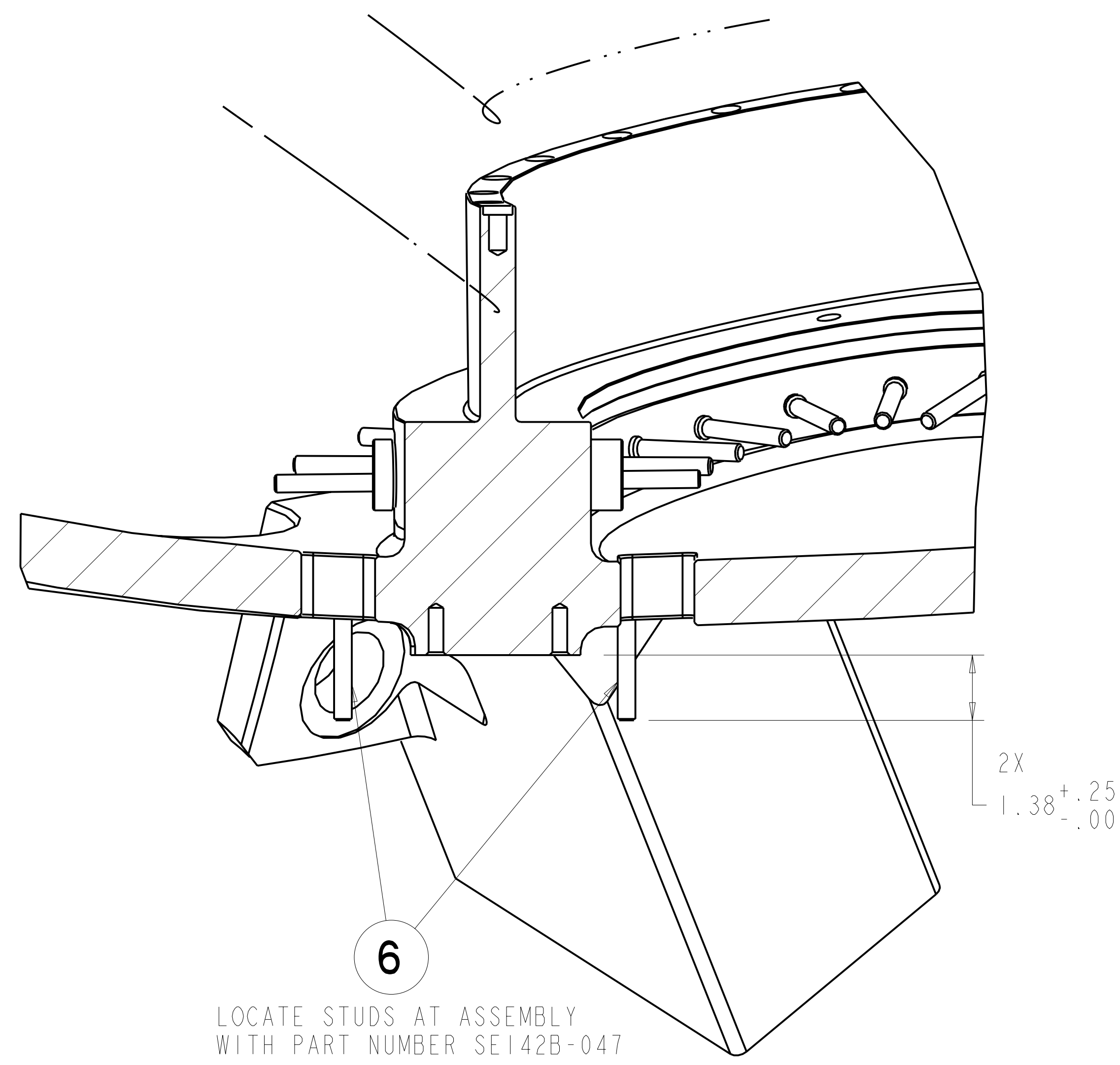
13
SCALE 1.0



16
SCALE 1.0

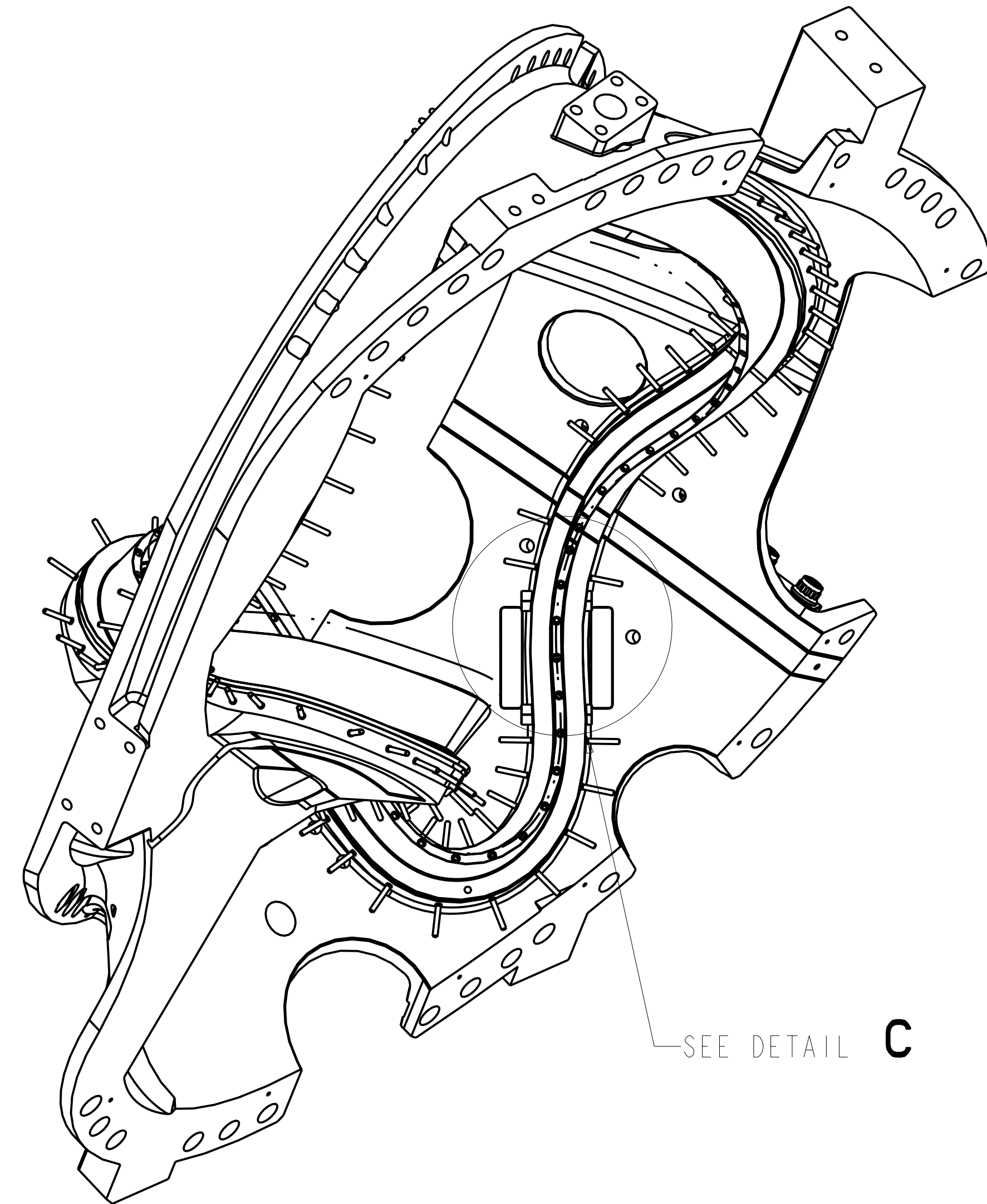
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PPPL Drafting:

Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under UT-BATTELLE U.S. GOVERNMENT CONTRACT DE-AC05-00OR22725 UT-BATTELLE, LLC. Oak Ridge, Tennessee PROJECT NAME:						
NATIONAL COMPACT STELLARATOR EXPERIMENT						
MODULAR COIL TYPE-B WINDING FORM AND STUD WELDMENT						
VERSION NO:	PLANT	BLDG	FL	SHT	OF	TYPE CLASS
4	X-10	5700	3	3	5	S U
RELEASE LEVEL		SE141-122			REV I	
Fabrication						

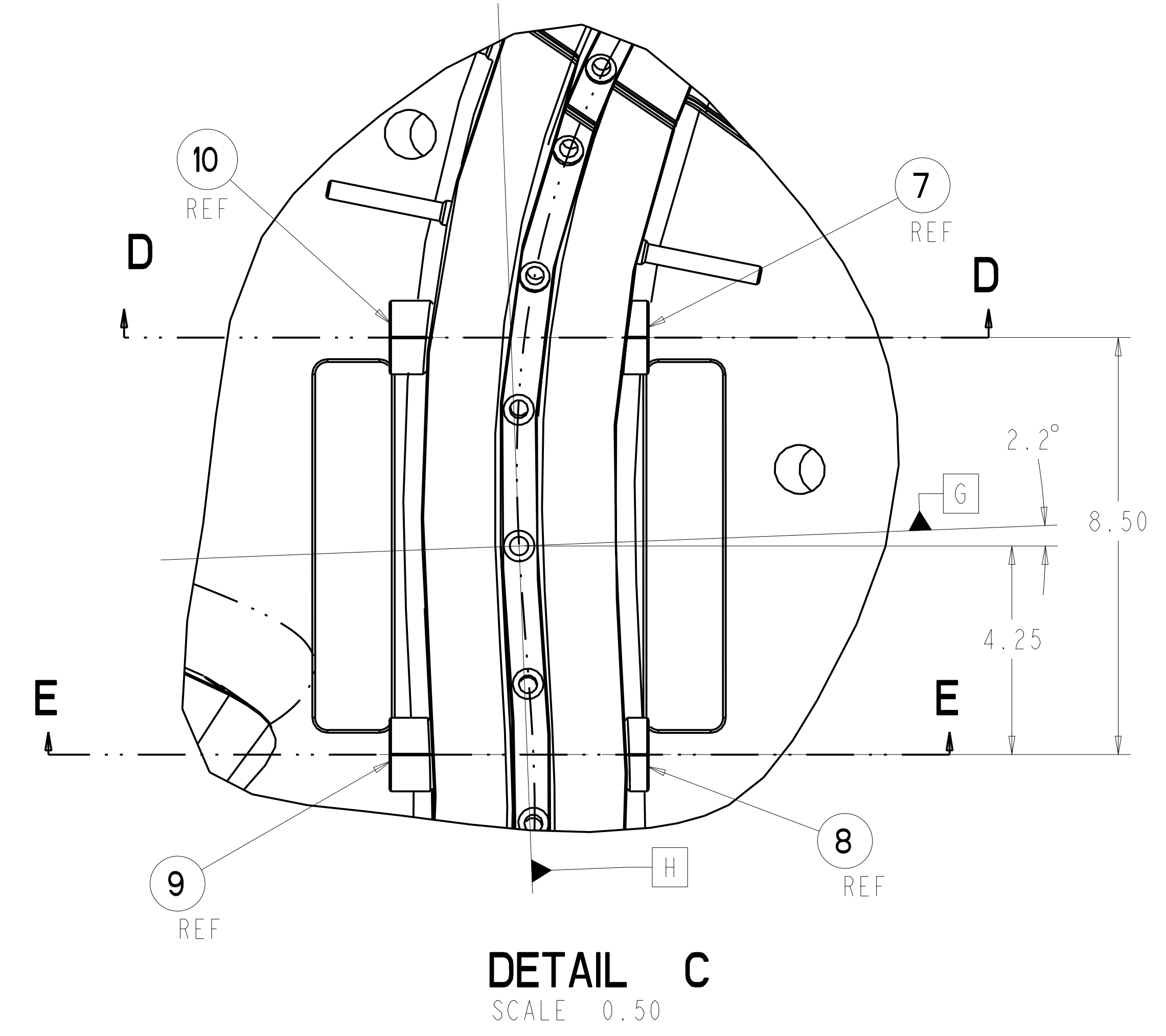


LOCATE STUDS AT ASSEMBLY WITH PART NUMBER SEI42B-047

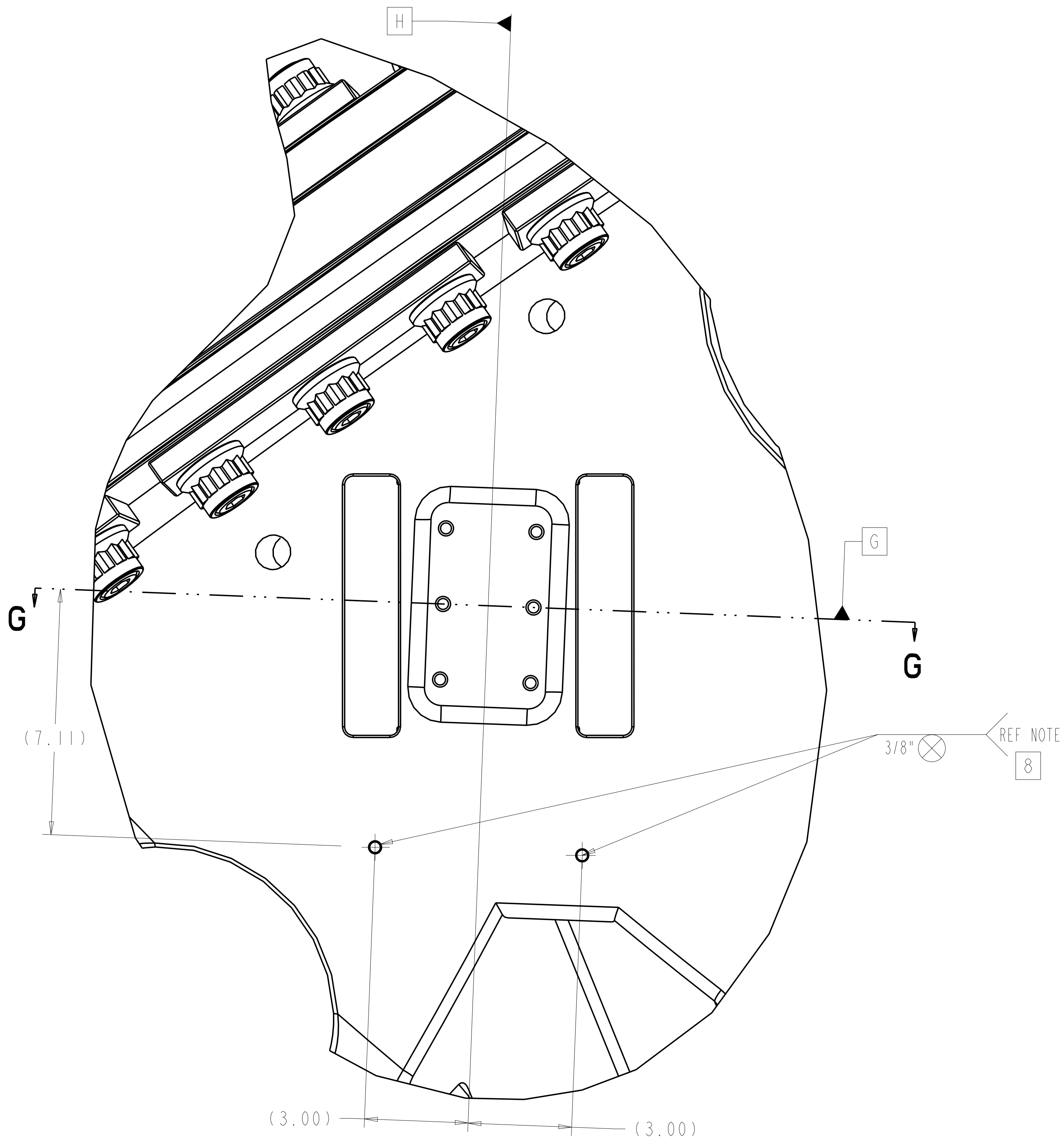
SECTION G-G



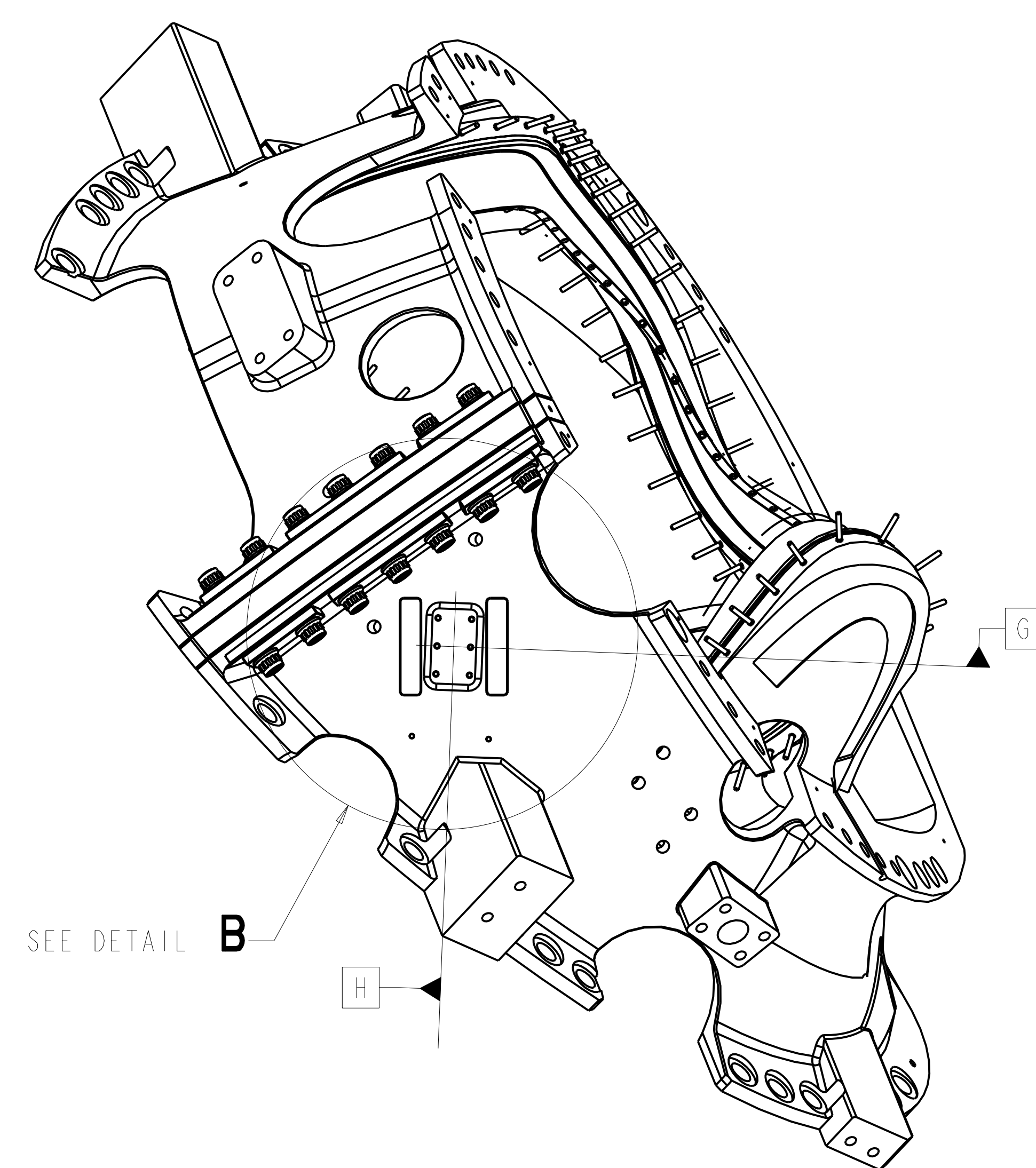
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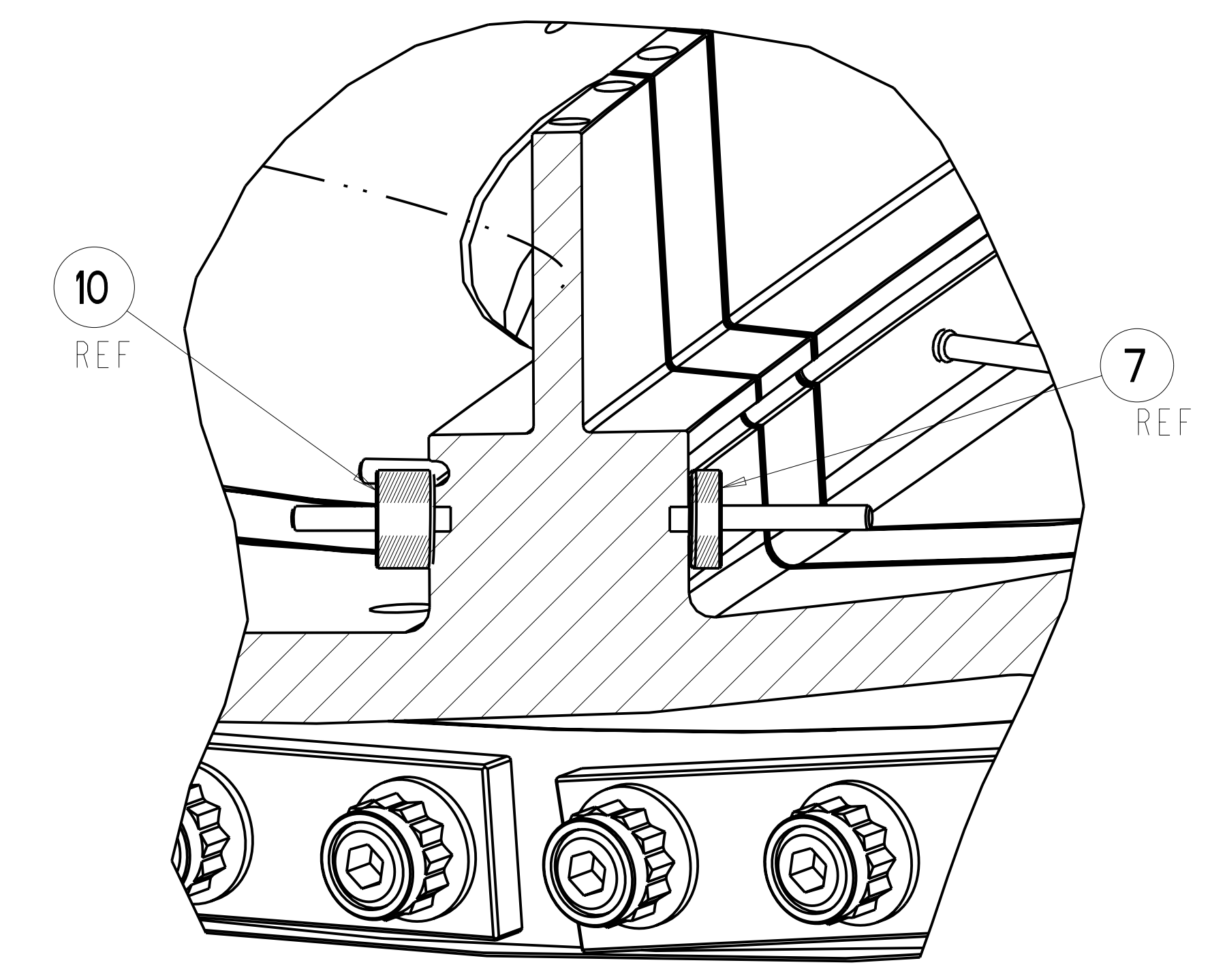
DETAIL C
SCALE 0.50



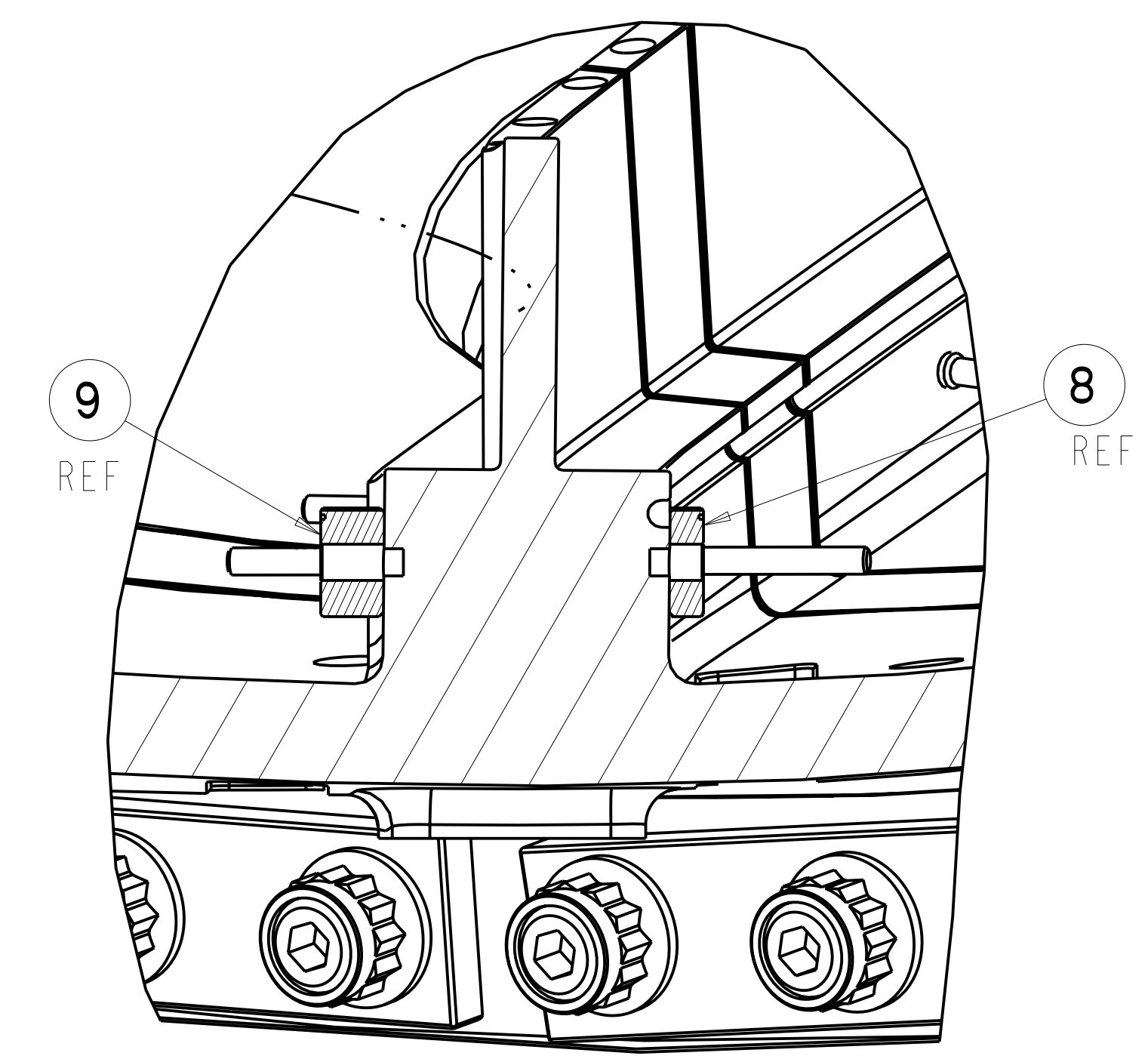
DETAIL B
SCALE 0.50



SCALE 0.13



SECTION D-D



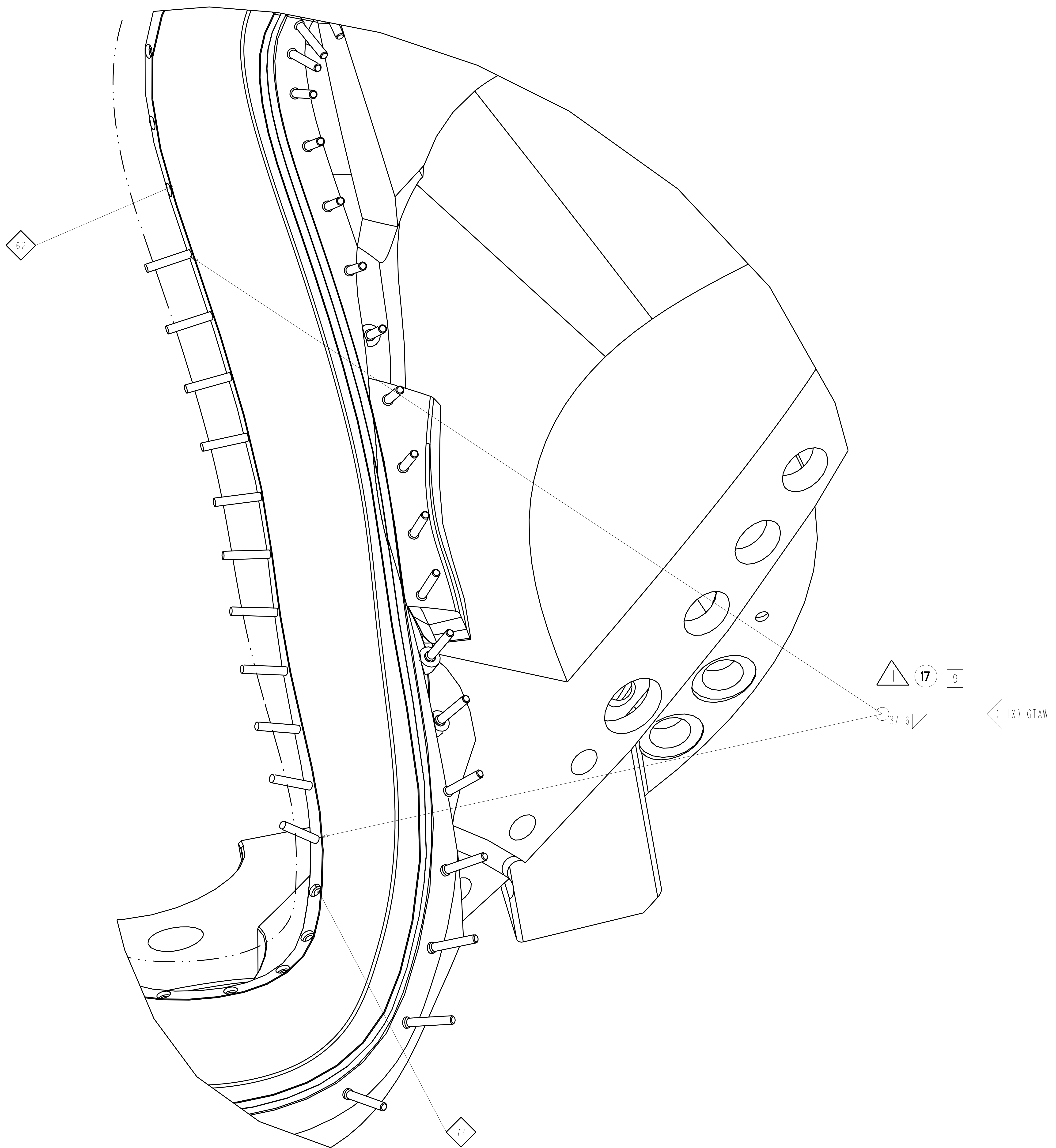
SECTION E-E

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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:									
UT-BATTELLE NATIONAL COMPACT STELLARATOR EXPERIMENT									
MODULAR COIL TYPE-B WINDING FORM AND STUD WELDMENT									
VERSION NO:	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS		
4	X-10	5700	3	4	5	S	U		
RELEASE LEVEL		SEI41-122						REV	
WIP								I	

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B
A



PARTIAL VIEW
SCALE 0.50

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Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE UT-BATTELLE, LLC. Oak Ridge, Tennessee <small>PROJECT NAME</small>							
NATIONAL COMPACT STELLARATOR EXPERIMENT							
MODULAR COIL TYPE-B WINDING FORM AND STUD WELDMENT							
VERSION NO:	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS
4	X-10	5700	3	5	5	S	U
RELEASE LEVEL		SE141-122				REV	
Fabrication						I	