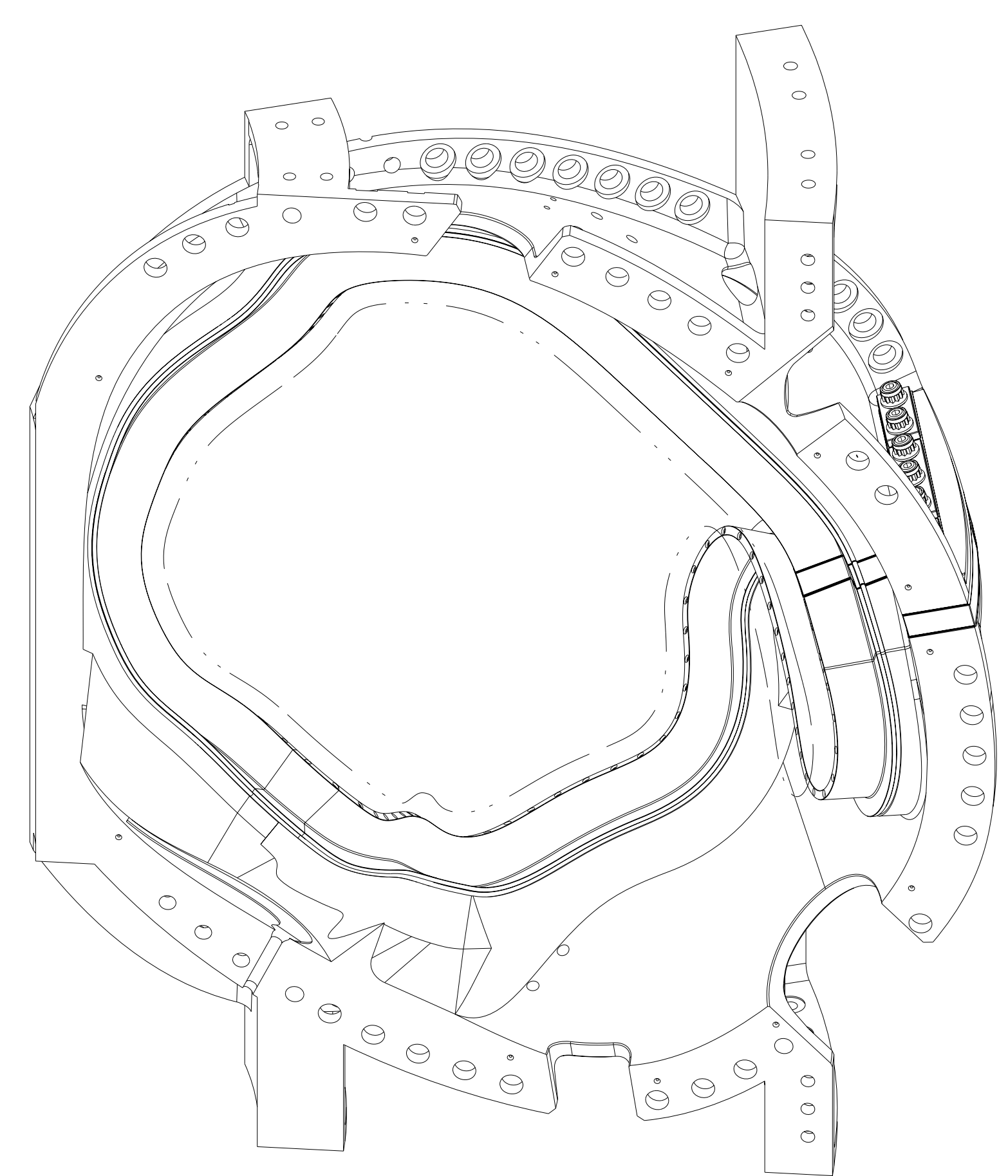
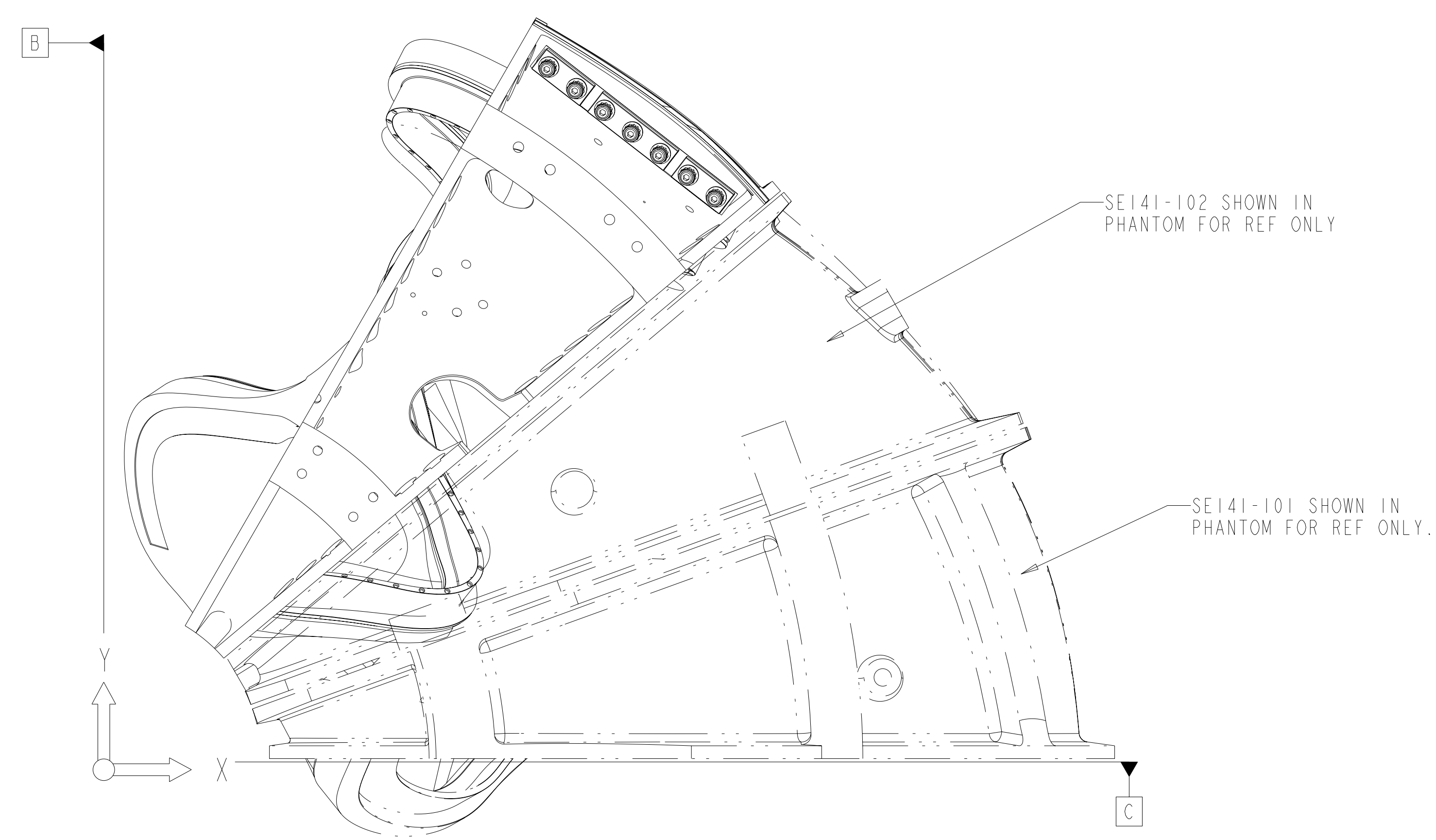


- NOTES:
- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.8M-1996.
 - INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994.
 - DIMENSIONS ARE IN INCHES.
 - DRAWING DEPICTS FINAL MACHINED STATE OF ASSEMBLY DEFINED BY PRO/ENGINEER FILE SEI41-103.ASM.
 - UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE RELATED 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).
 - DIMENSIONS AND TOLERANCES EXCLUDE PROCESS MATERIAL ALLOWANCES WHICH MAY ADD MASS.
 - APPROXIMATE WEIGHT = 5080 LBS.
 - MATCH DRILL OR BEAM TO ACHIEVE RUNNING FIT BETWEEN PARTS AND ASSEMBLY.
 - LUBRICATE THREADED SURFACES WITH THRED-GARD ANTI-SEIZE COMPOUND FROM FEDERAL PROCESS CORP, CLEVELAND, OH
 - SEE LATEST REVISION OF SPECIFICATION NCSX-CSPEC-141-03 FOR ADDITIONAL REQUIREMENTS.
 - BOND INSULATING SLEEVE (F/N 5) TO WINDING FORM (F/N 2) USING LOCTITE 411 PER MANUFACTURER'S INSTRUCTIONS.
 - ITEM NO. 4 HOLE DIAMETERS TO MATCH OD OF ITEM NO. 6 PLUS .001 TO .002 FOR CLEARANCE FIT
 - ITEM NO. 7 MAY BE DIVIDED INTO TWO PARTS IF NECESSARY. HOLE DIAMETERS TO MATCH OUTER DIA OF ITEM NO. 5 PLUS .001 TO .002 FOR CLEARANCE FIT.
 - TORQUE ITEM NO. 8 TO 1500 +/-30 FT-LBS.

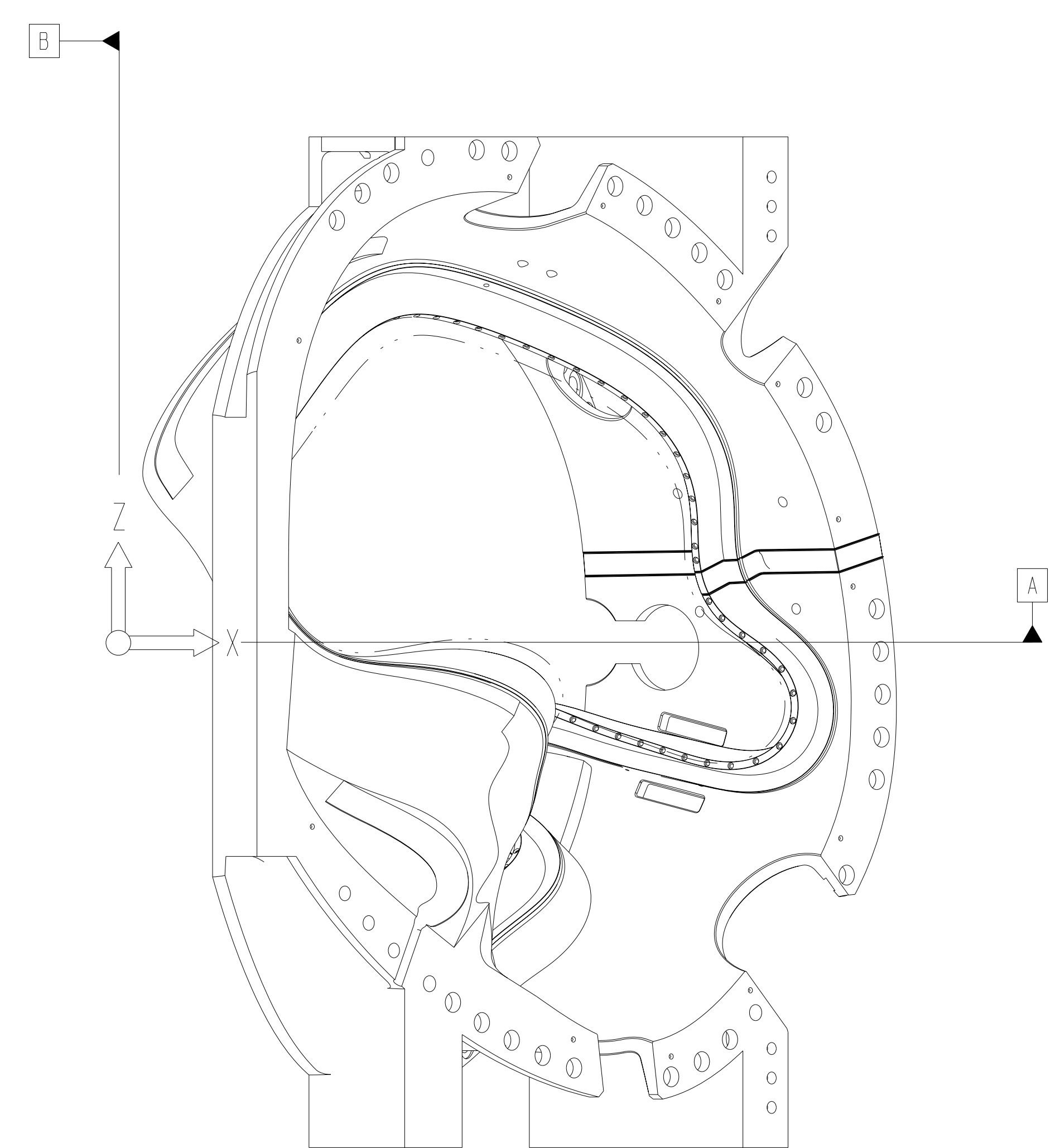


ISOMETRIC VIEW
SCALE 0.1

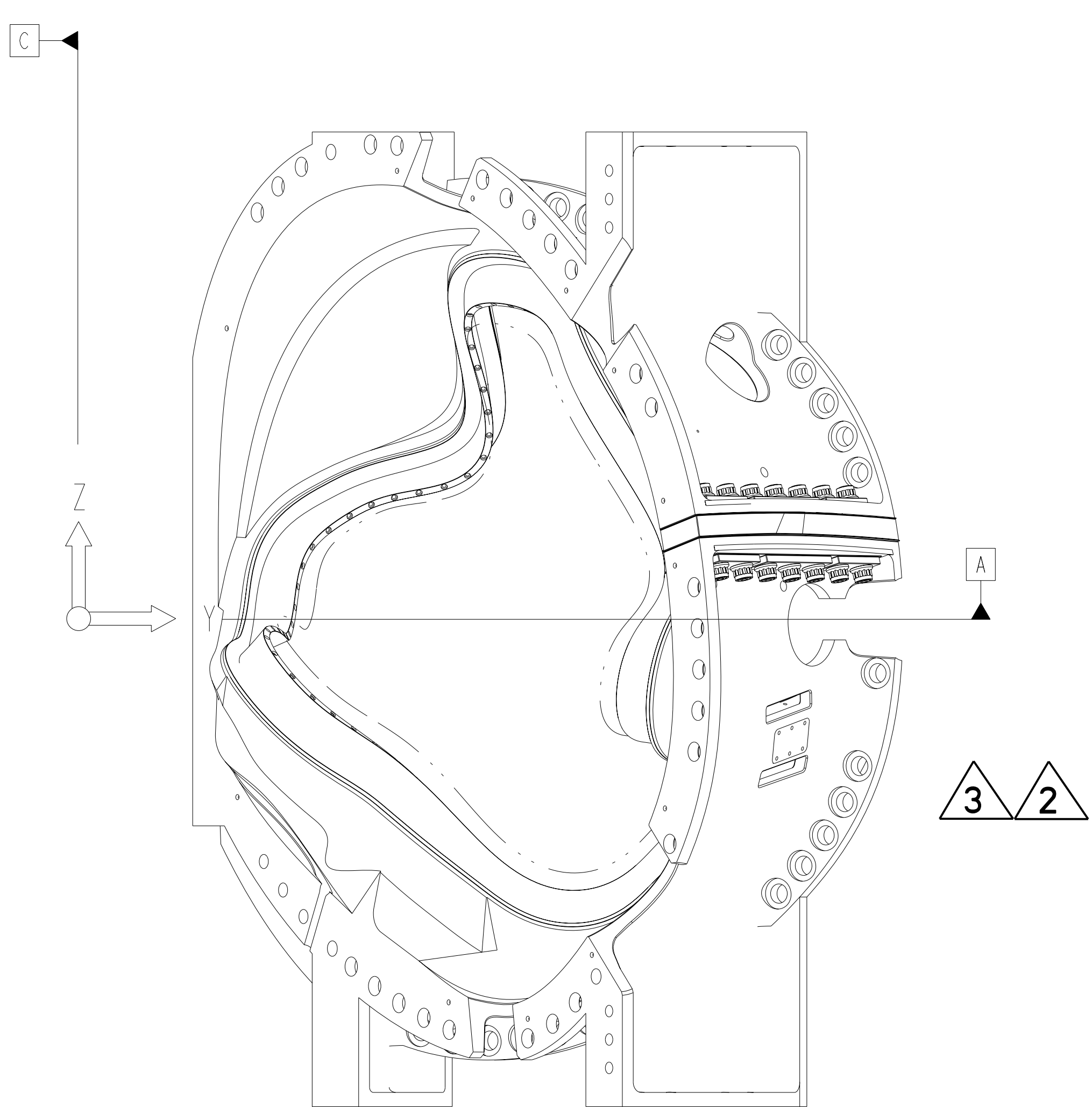
ECN-5197 approved and decision made to apply ECN stamp vs. updating impacted drawings. This ECN prohibits the continued use of "Thred Gard" lubricant to bolts.
(See ECN-5197 for Details)

ECN-5140R2 - This ECN makes polodial break shim and studs electrically connected to the winding form.
See ECN-5140R2 for details.

RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting:



SCALE 0.1



REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
3	REVISED ASM AND DRAWING PER ECN-5026	GLL	10/05/03	MJC			DEW					
2	REVISED ASSEMBLY AND DRAWING PER ECN 5009	GLL	7/05/03	MJC			DEW					
1	REVISED F/N 2 PER ECN-4903	DW	9/04/03	MJC			DEW					

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
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2	REVISED ASSEMBLY AND DRAWING PER ECN 5009	GLL	7/05/03	MJC			DEW					
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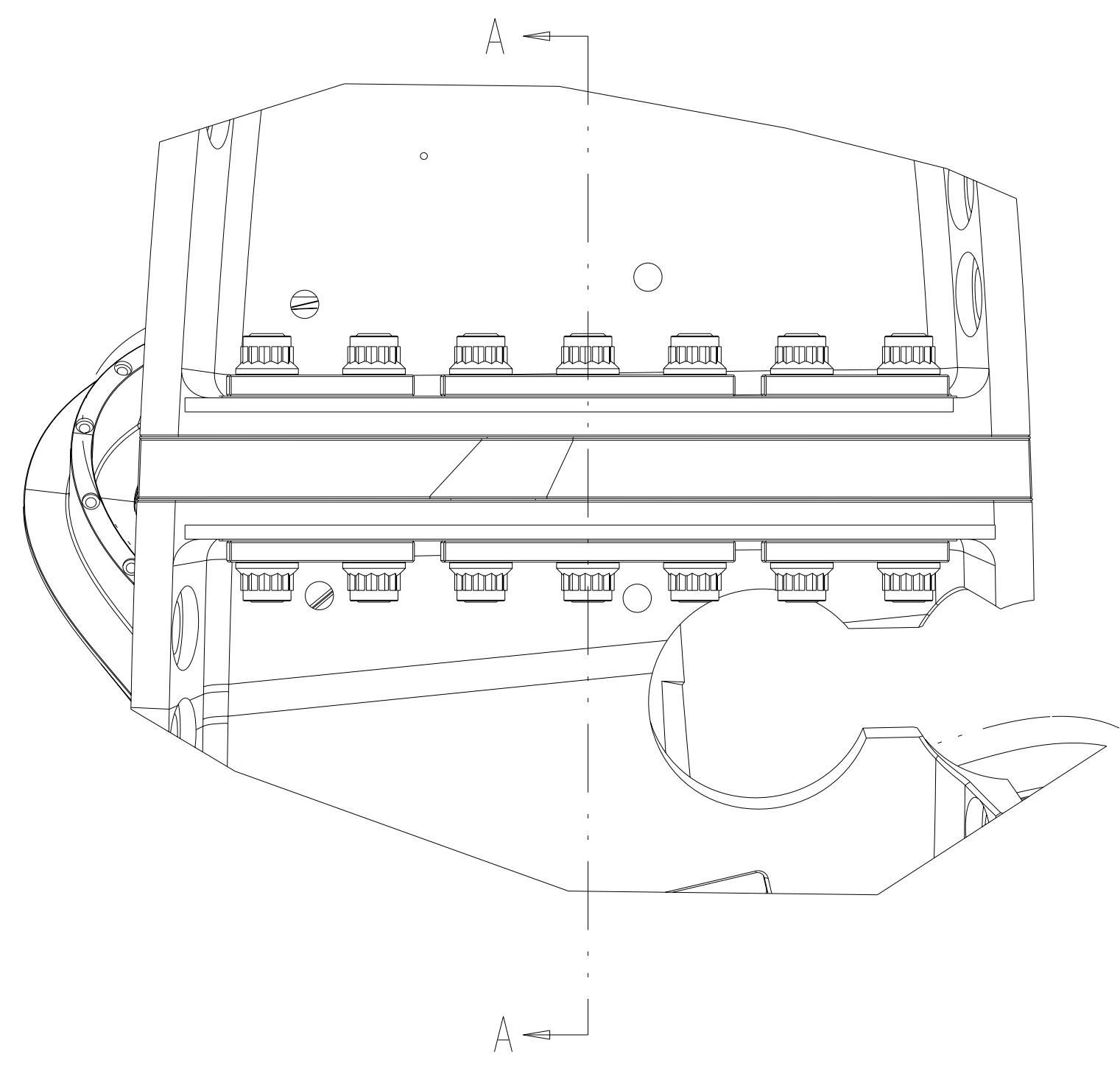
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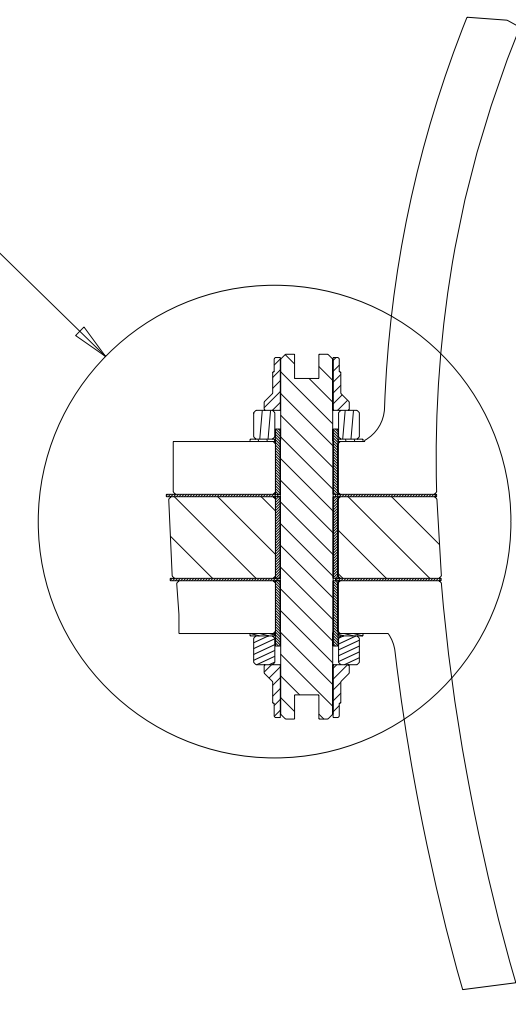
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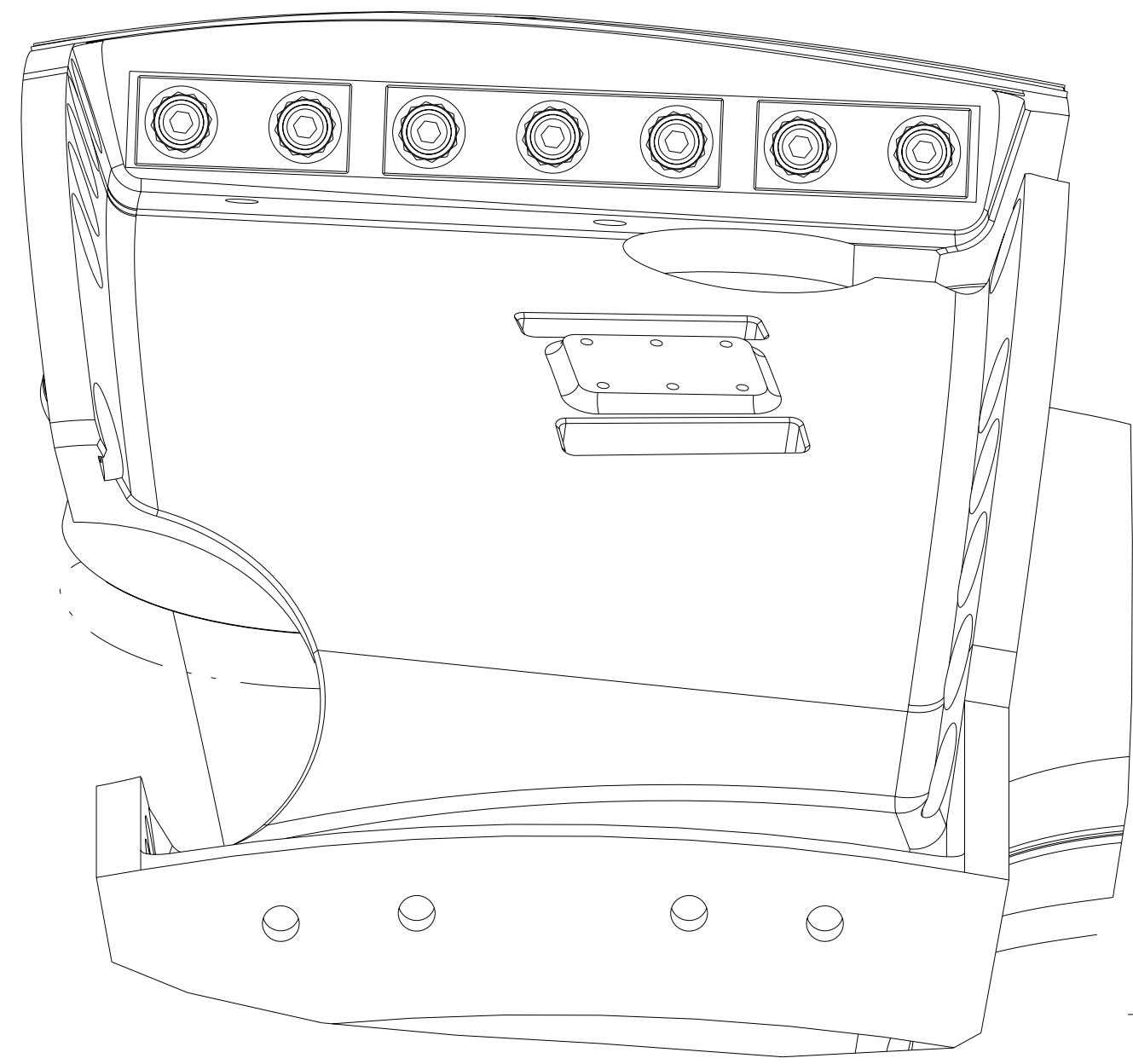
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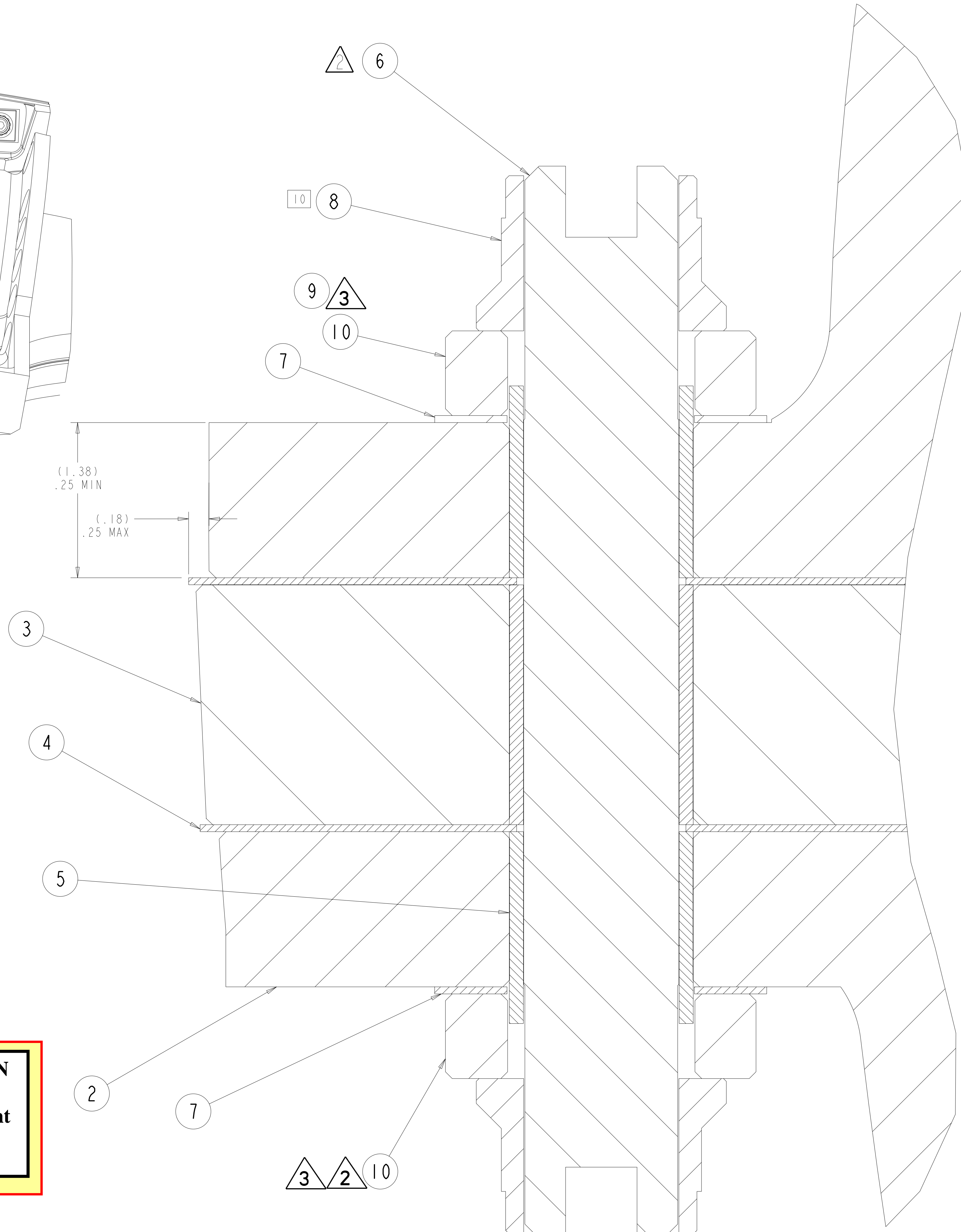
SEE DETAIL X



SECTION A-A
SCALE 0.20



POLOIDAL BREAK DETAIL



(1.38)
.25 MIN

(.18)
.25 MAX

3

4

5

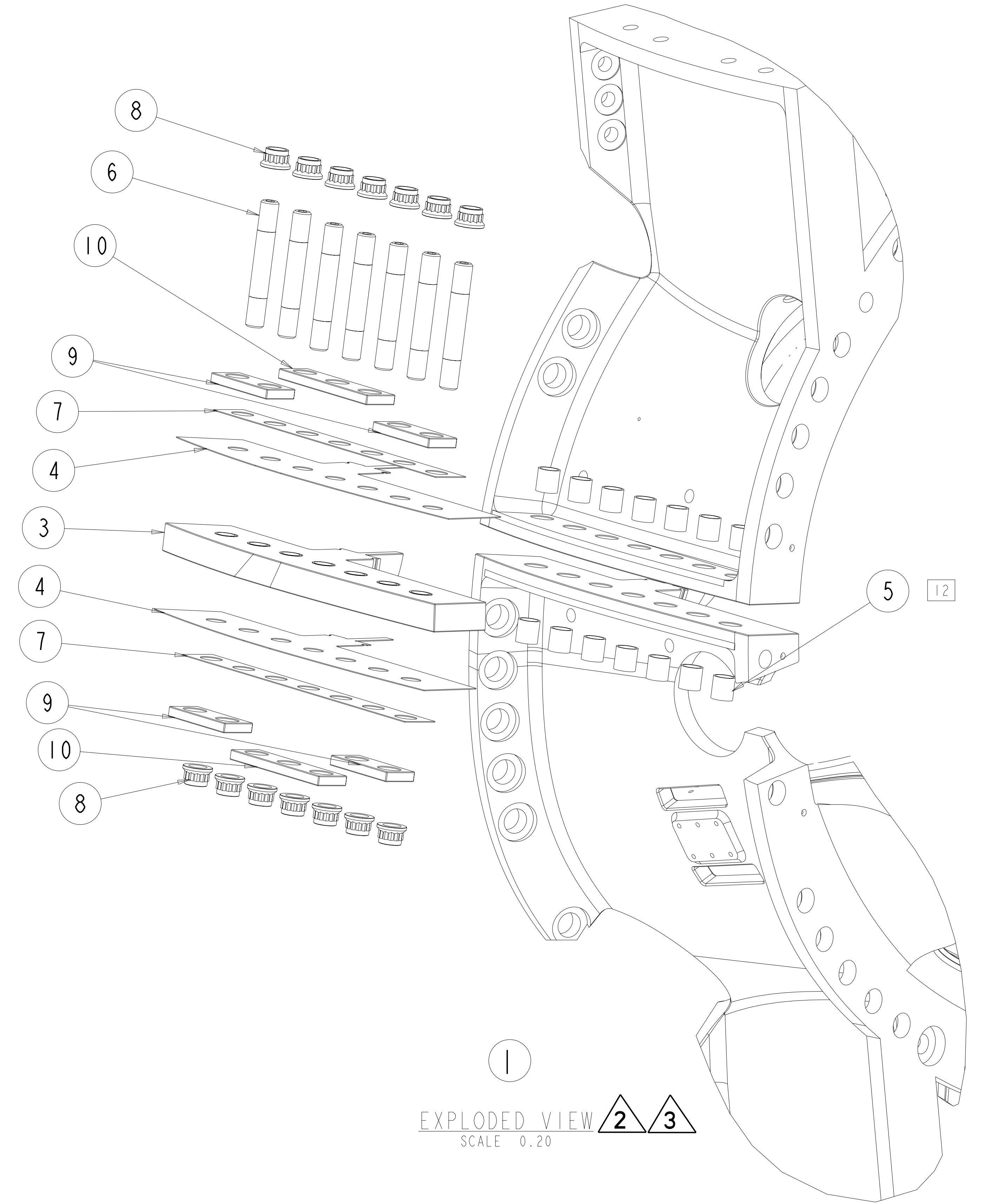
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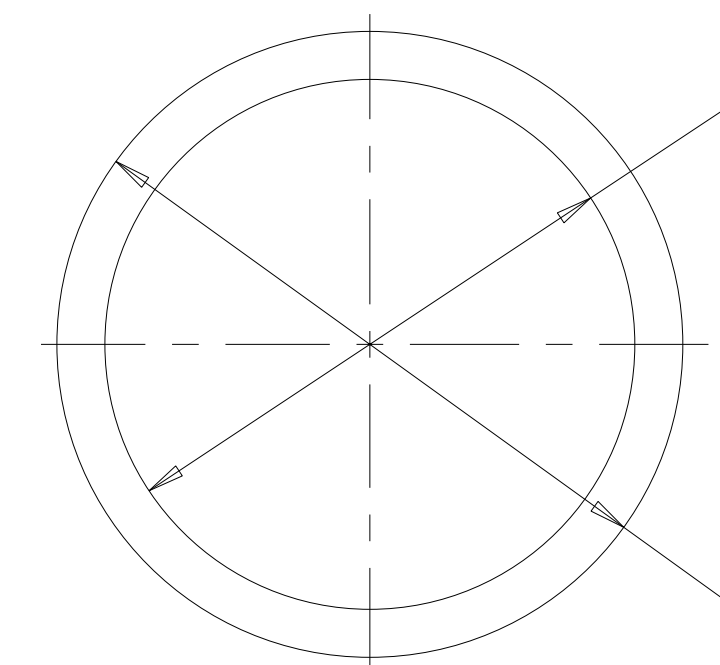
3 2

10

DETAIL X
SCALE 2.00

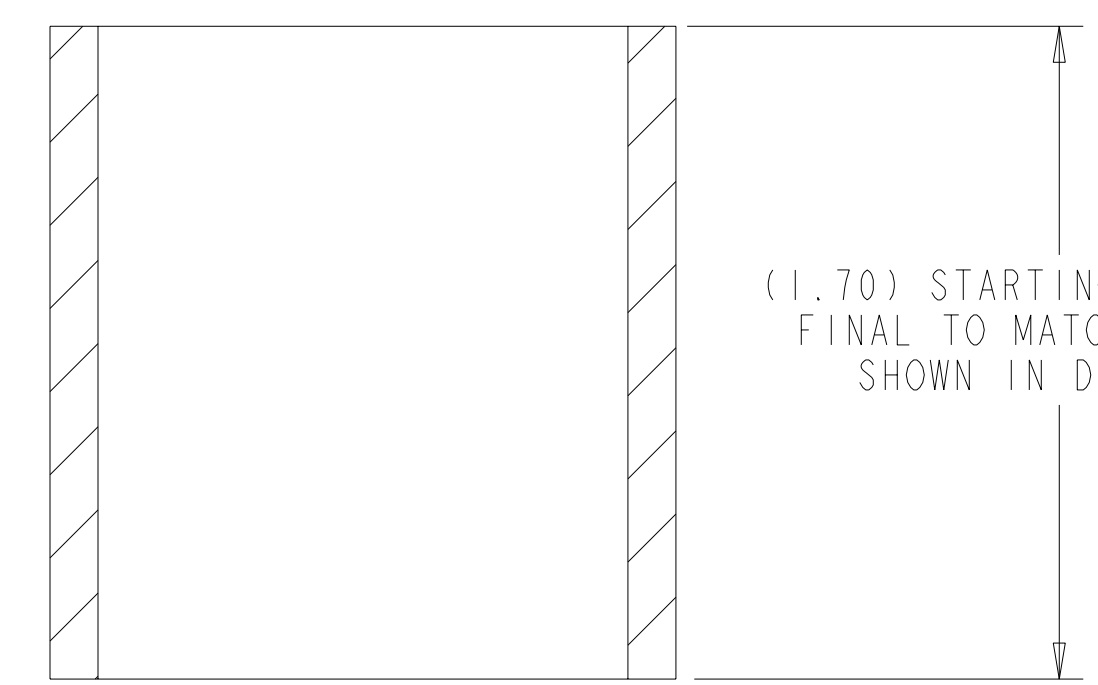
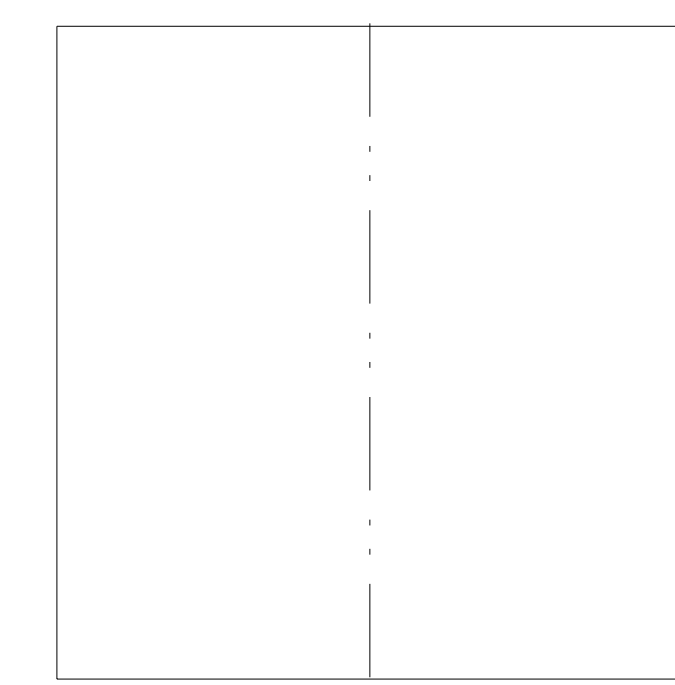


EXPLODED VIEW
SCALE 0.20



Ø1.38 REAM AT ASSEMBLY FOR
.001 TO .002 DIA CLEARANCE
WITH ITEM 6

Ø1.63 TO MATCH HOLE DIA
MINUS .001 TO .002 FOR
CLEARANCE FIT



(1.70) STARTING DIMENSION
FINAL TO MATCH OVERLAP
SHOWN IN DETAIL-X

SECTION B-B
SCALE 2.00

ECN-5197 approved and decision made to apply ECN stamp vs. updating impacted drawings. This ECN prohibits the continued use of "Thred Gard" lubricant to bolts.
(See ECN-5197 for Details)

RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting:

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									
MOD COIL WINDING FORM ASSEMBLY TYPE-C									
VERSION NO.	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS		
8	X-10	5700	3	2	2	S	U		
RELEASE LEVEL		SE141-103						REV	
Fabrication								3	

01-103