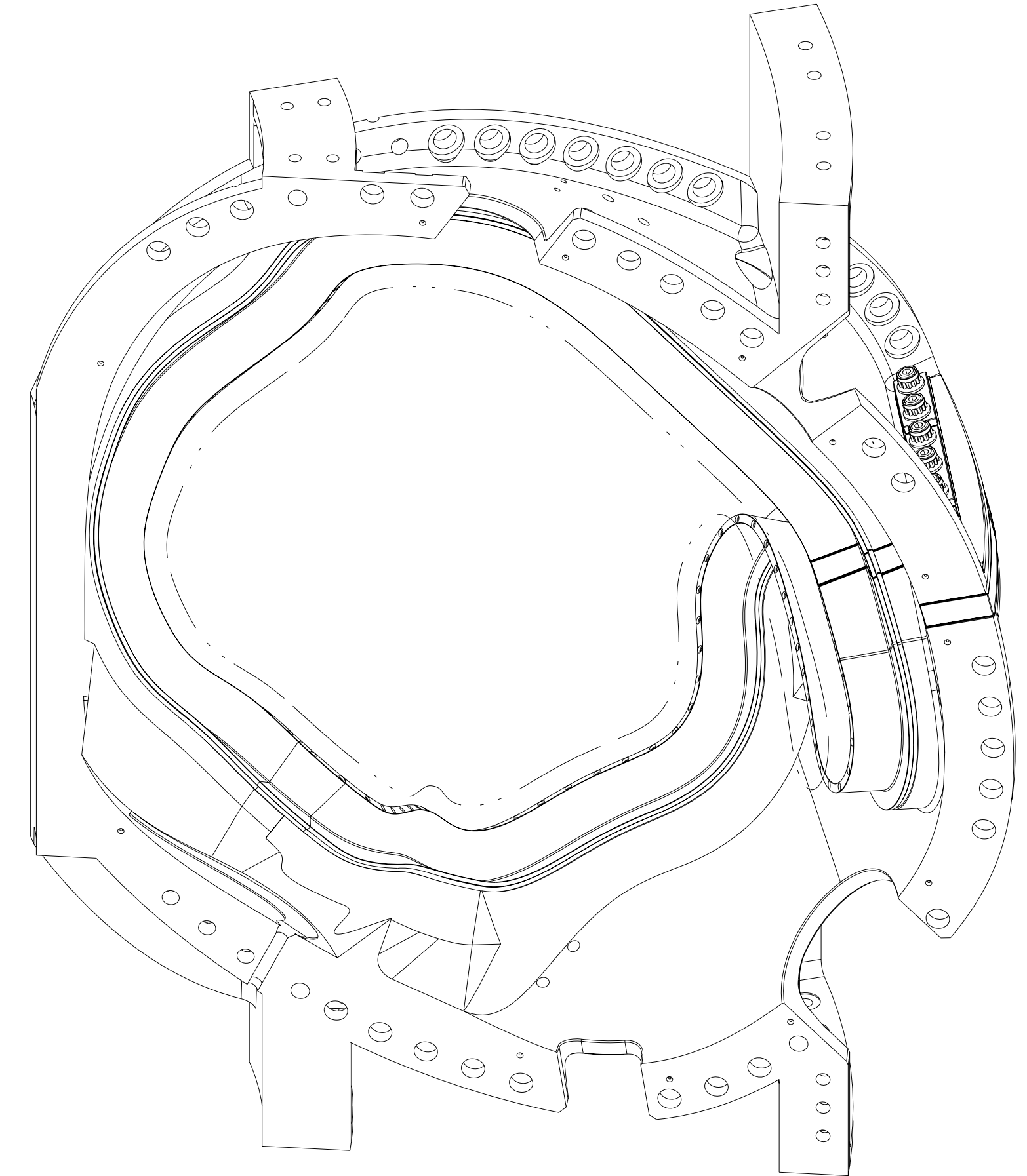
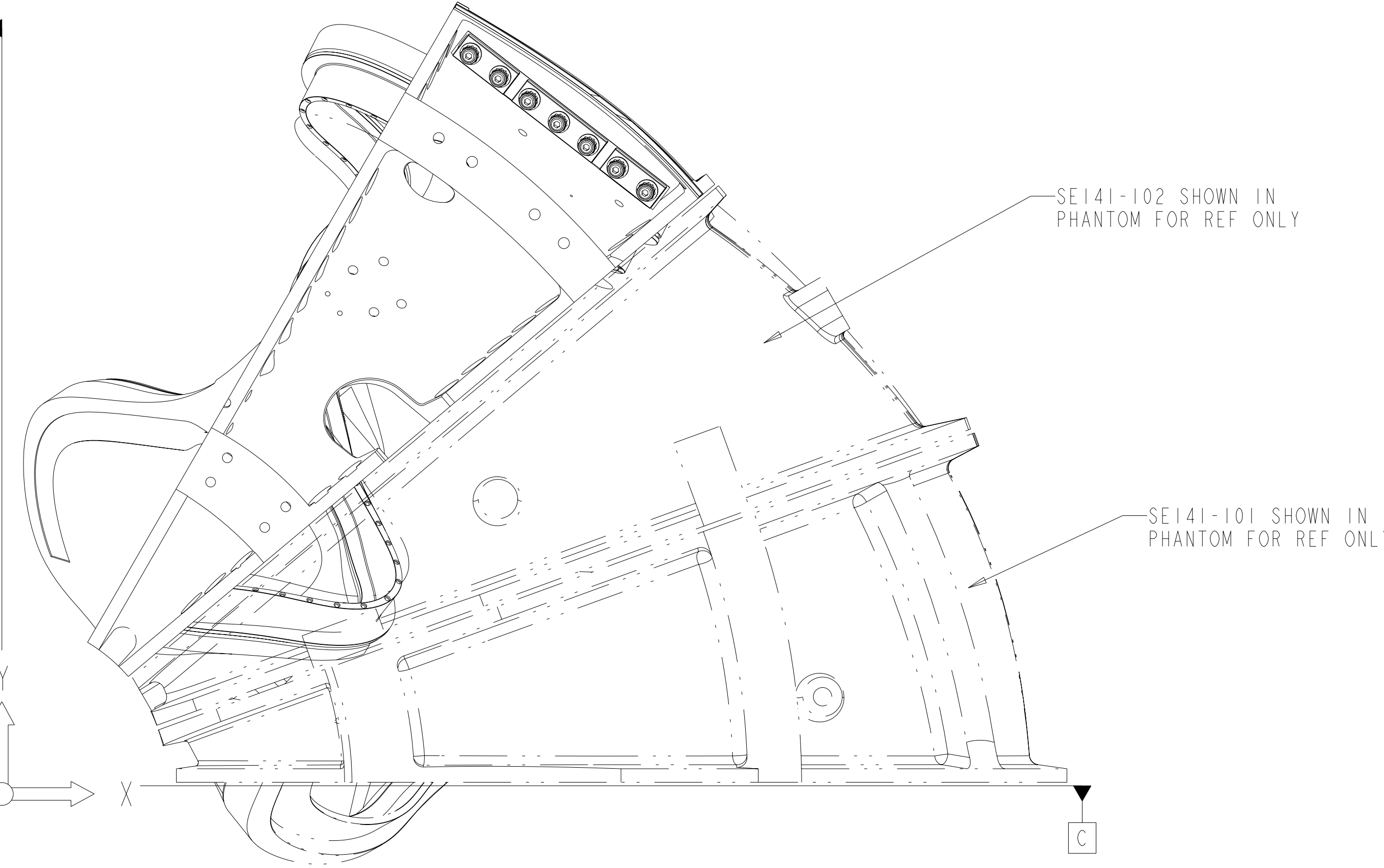
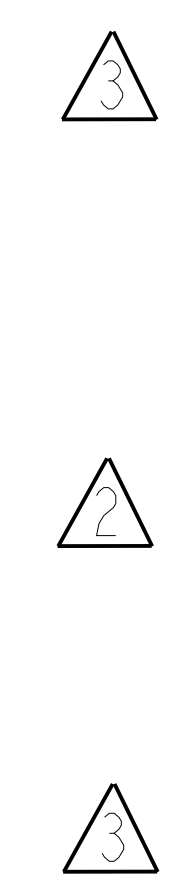


NOTES:

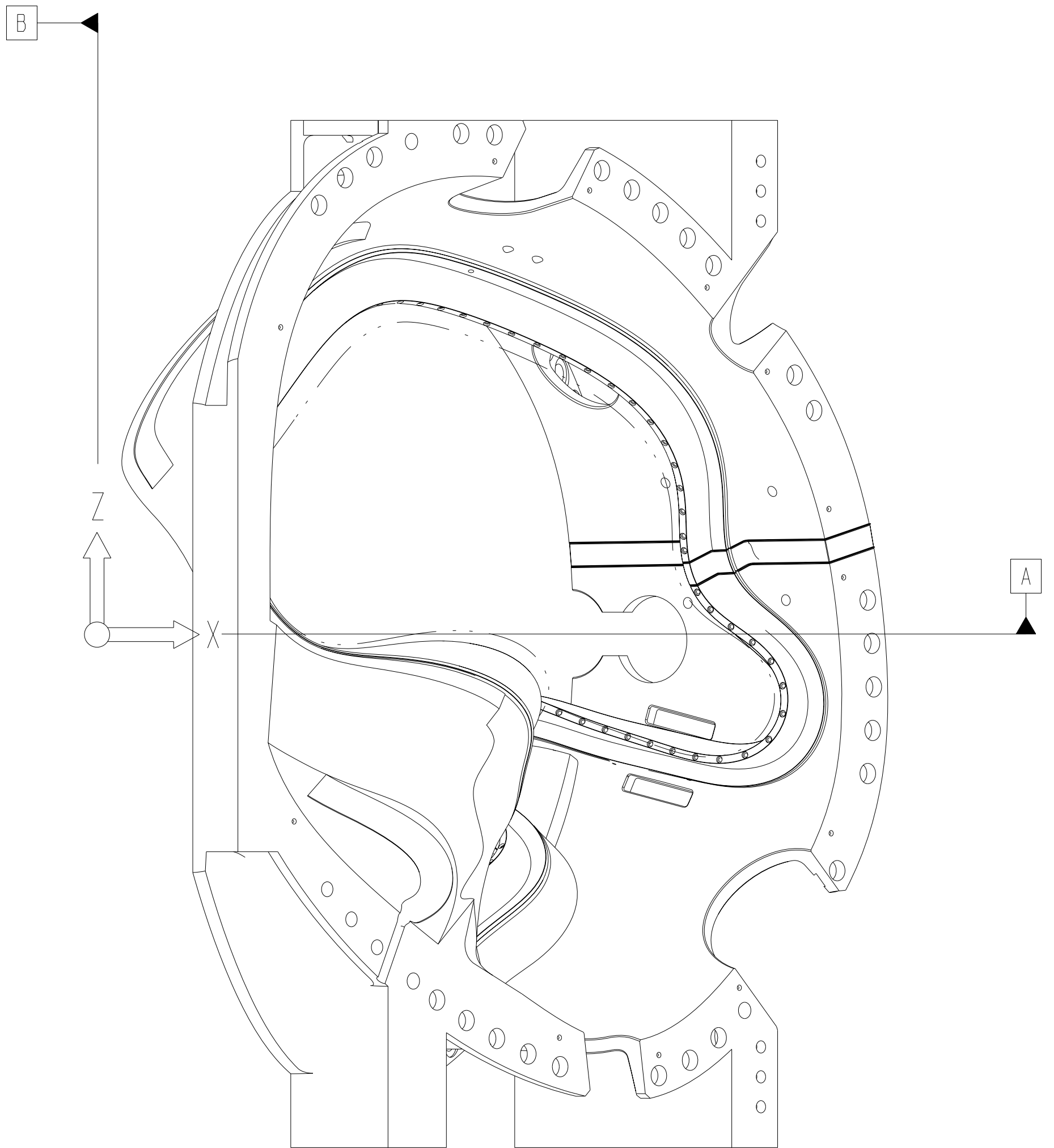
- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.8M-1996.
- INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994.
- DIMENSIONS ARE IN INCHES.
- DRAWING DEPICTS FINAL MACHINED STATE OF ASSEMBLY DEFINED BY PRO/ENGINEER FILE SEI41-103.ASM.
- UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE RELATED TO DATUM 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.



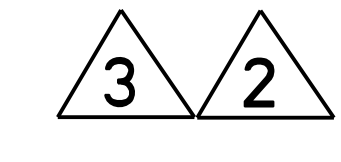
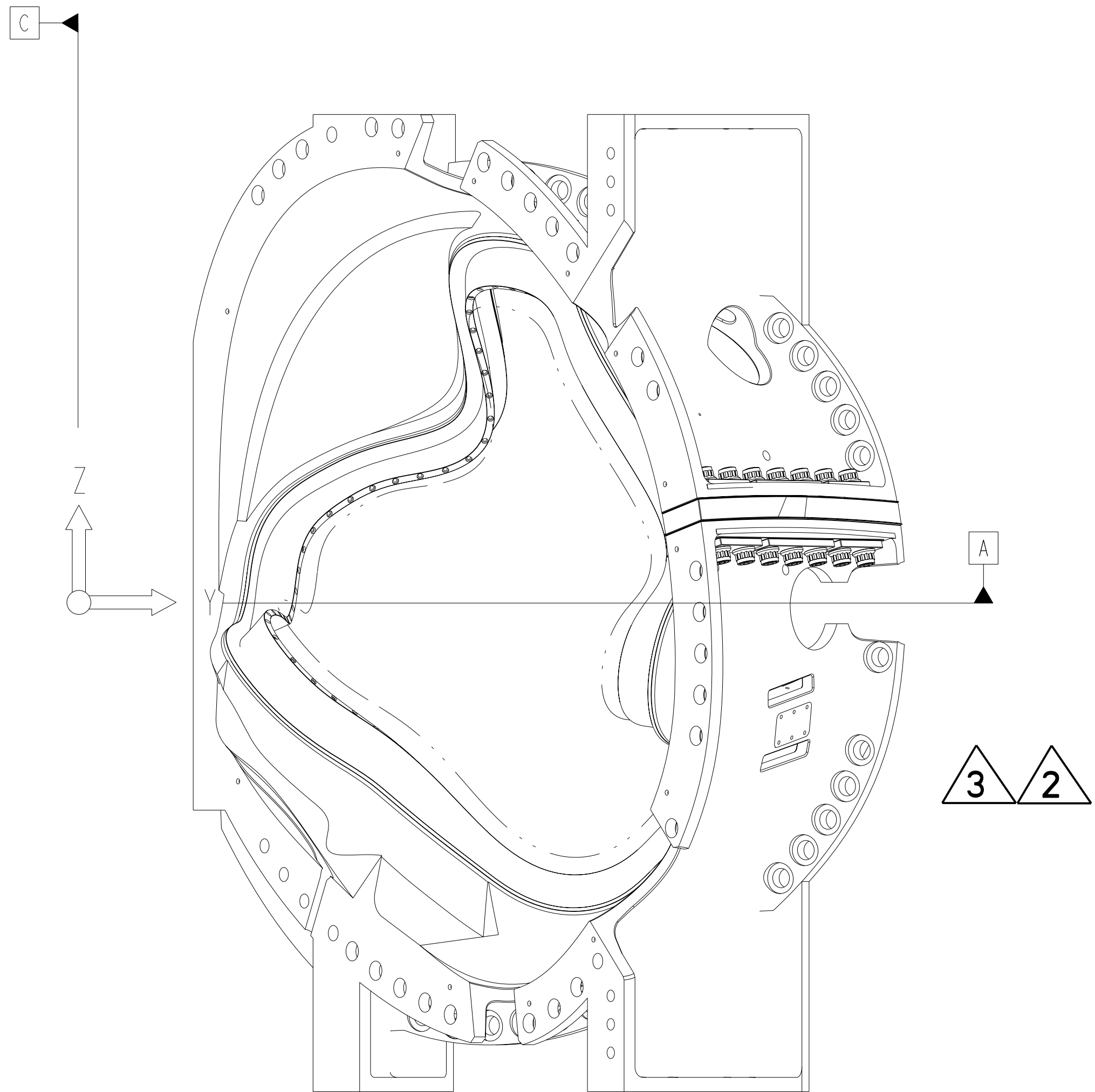
ISOMETRIC VIEW
SCALE 0.1

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)

RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting:



SCALE 0.1



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

QTY	DESCRIPTION	UNIT	FIND NO
2	SEI41-138 BEARING PLATE, LONG		10
4	SEI41-137 BEARING PLATE, SHORT		9
14	DSI41-060 NUT, 1/2PT HEX 1.375-6UNC-2B		8
2	-7 INSULATING SHEET 3 X 26 X .063 NEMA GRADE G-1ICR		7
7	DSI41-036 STUD, 1.375-6UNC-2A X 9.5 LG		6
14	-5 INS BUSHING, 1.63 OD X 1.38 ID X 1.68 LG NEMA GRADE G-1ICR		5
2	-4 INS SHEET, 15 X 32 X .063 THK NEMA GRADE G-1ICR		4
1	SEI41-078 POL BREAK SHIM ASSEMBLY TYPE-C		3
1	SEI41-116 PRODUCTION WINDING FORM TYPE-C		2
AR	X -1 MOD COIL WINDING FORM ASSEMBLY TYPE-C		1

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 PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

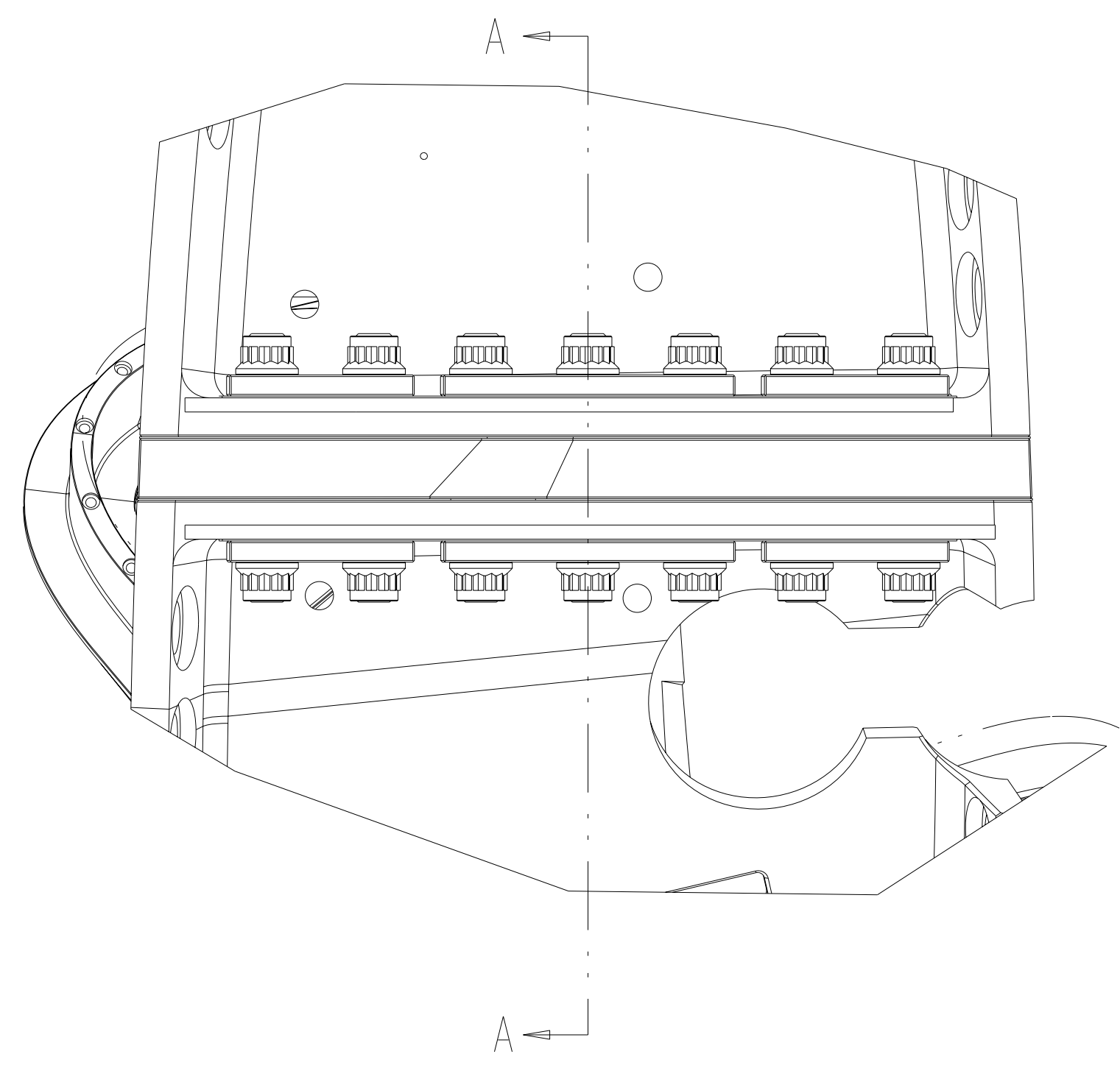
P THIS DRAWING PRODUCED ON PRO-ENGINEER

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

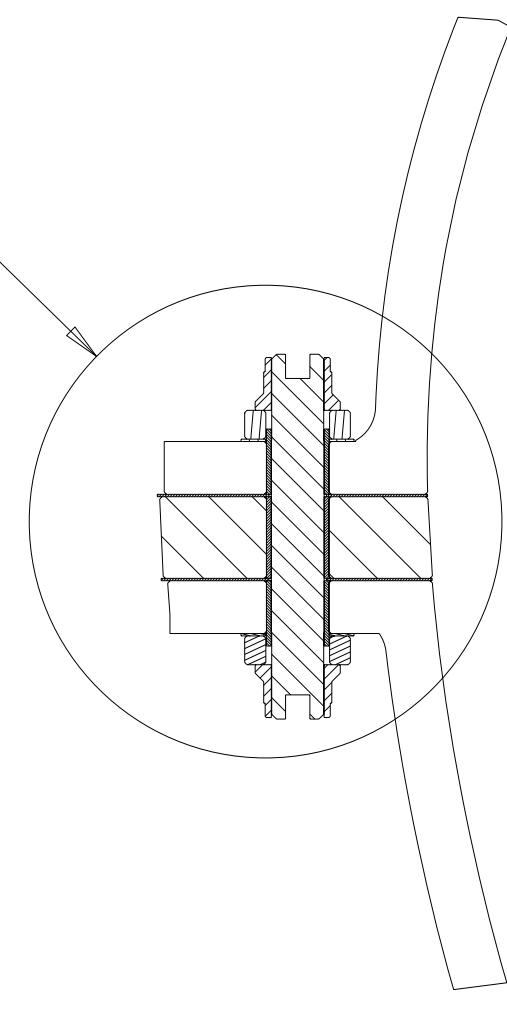
DESIGN: T BROWN 6-30-04
DRAWN: G LOVETT 6-30-04
CHK: M COLE 6-30-04
PE: D WILLIAMSON 6-30-04
PPPL DRFT: J SIEGEL 6-30-04

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
MOD COIL WINDING FORM ASSEMBLY TYPE-C

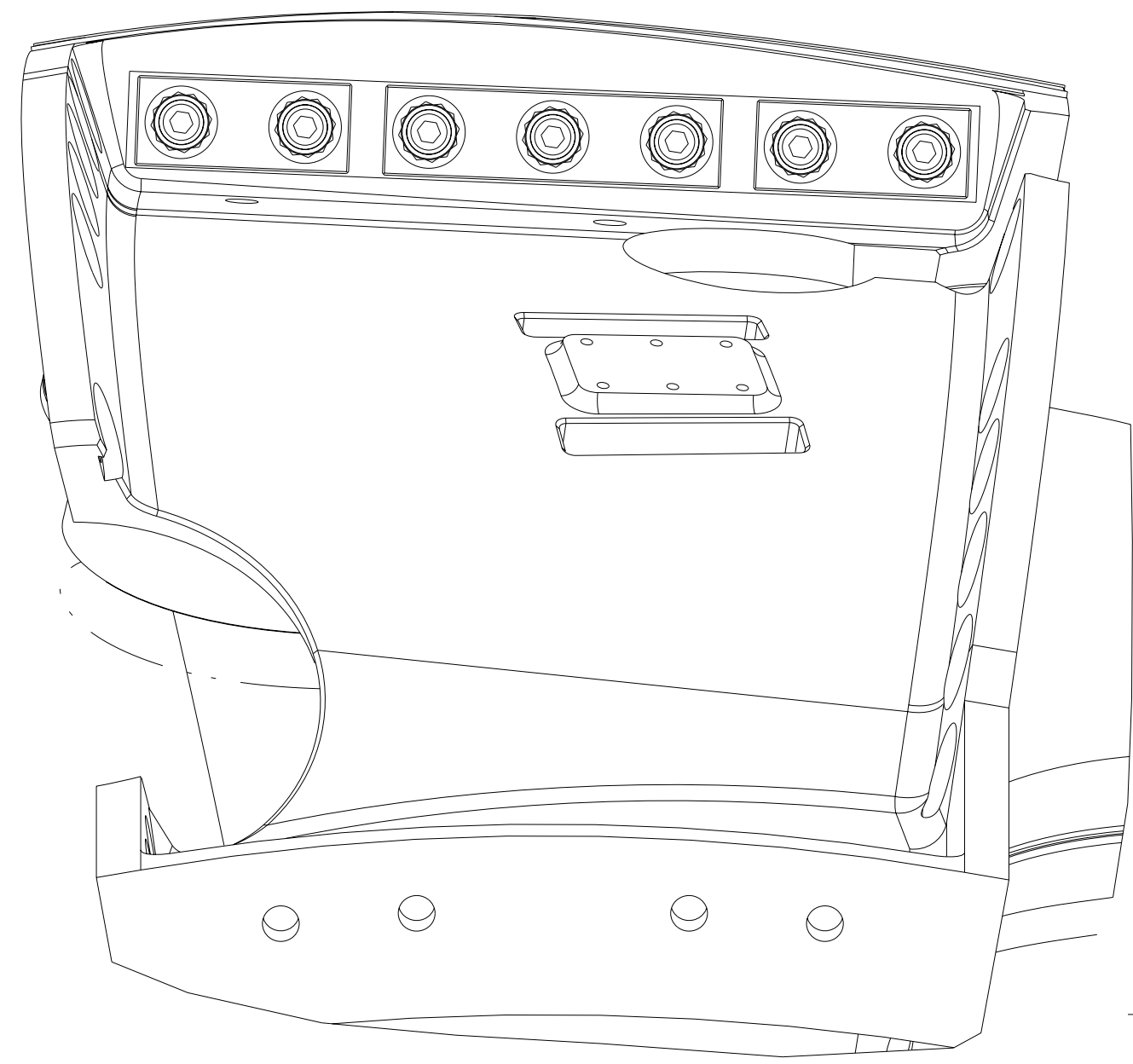
VERSION NO.	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS
B	X-10	5700	3	1	2	S	U
RELEASE LEVEL	SEI41-103						
Fabrication							



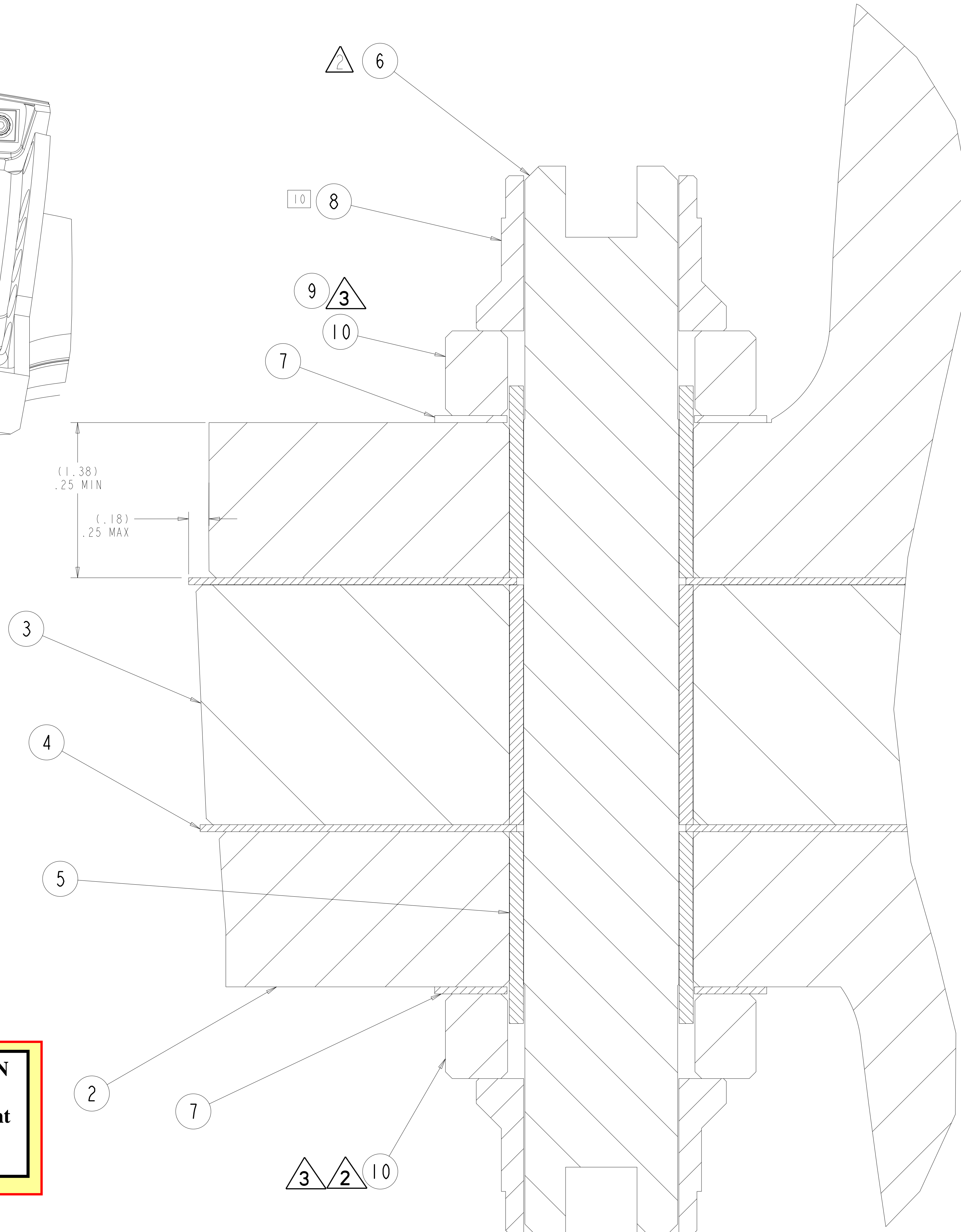
SEE DETAIL X



SECTION A-A
SCALE 0.20



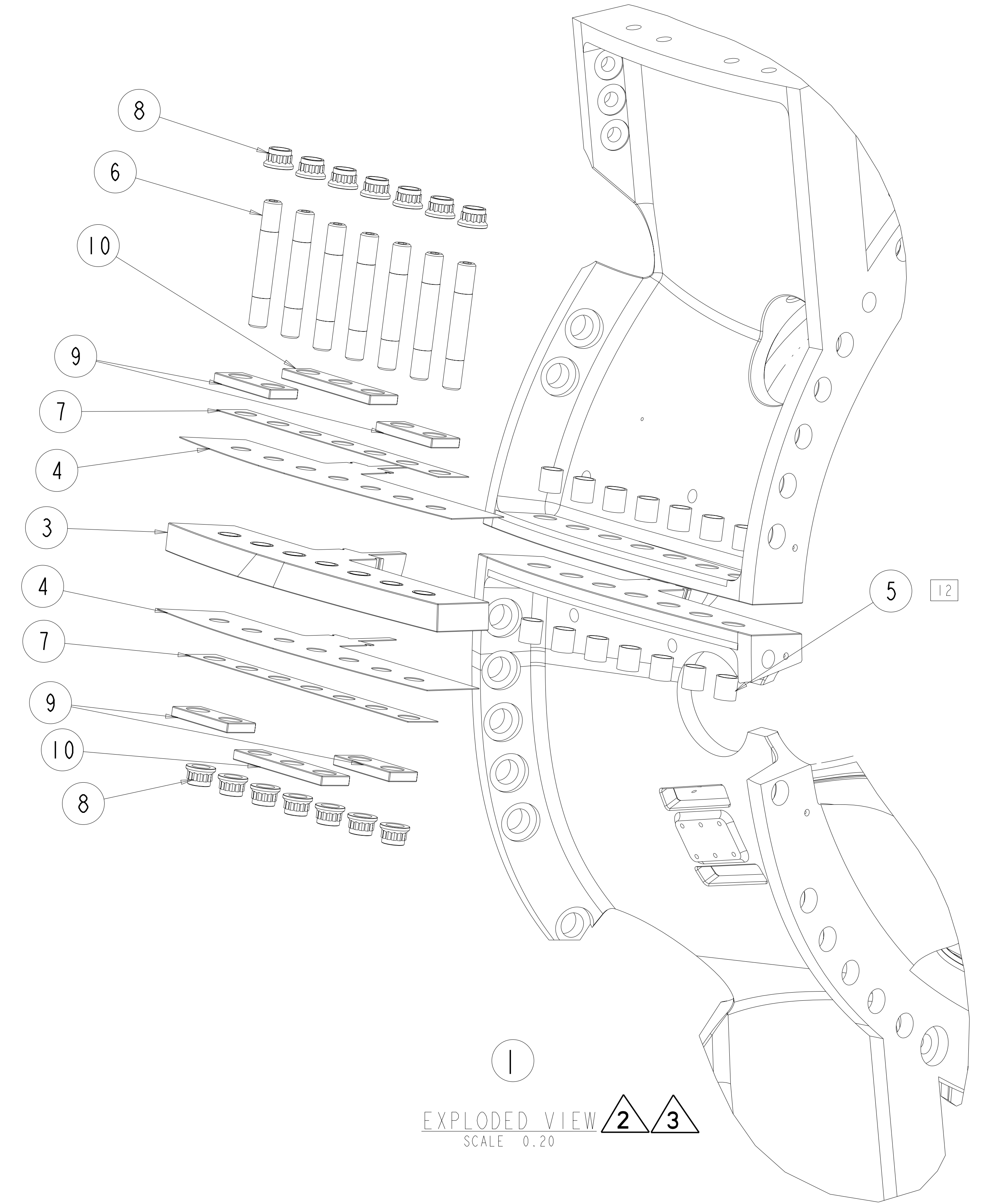
POLOIDAL BREAK DETAIL



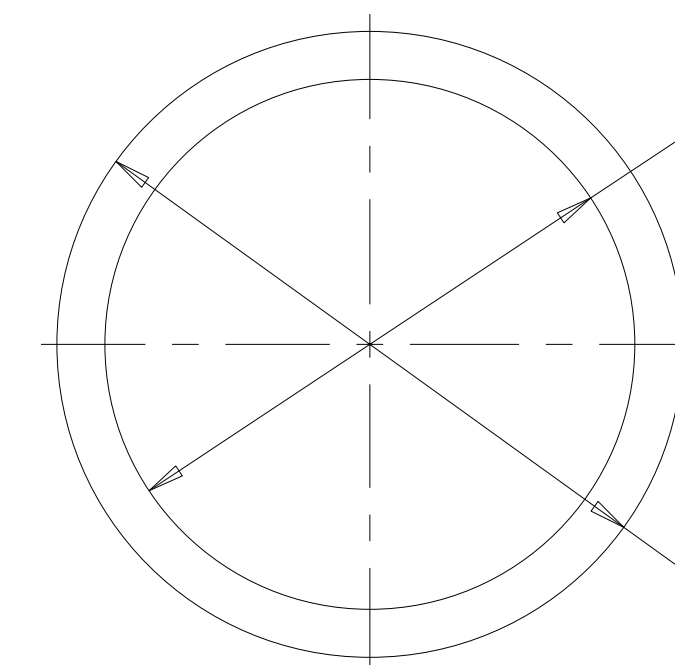
(1.38)
.25 MIN

(.18)
.25 MAX

DETAIL X
SCALE 2.00

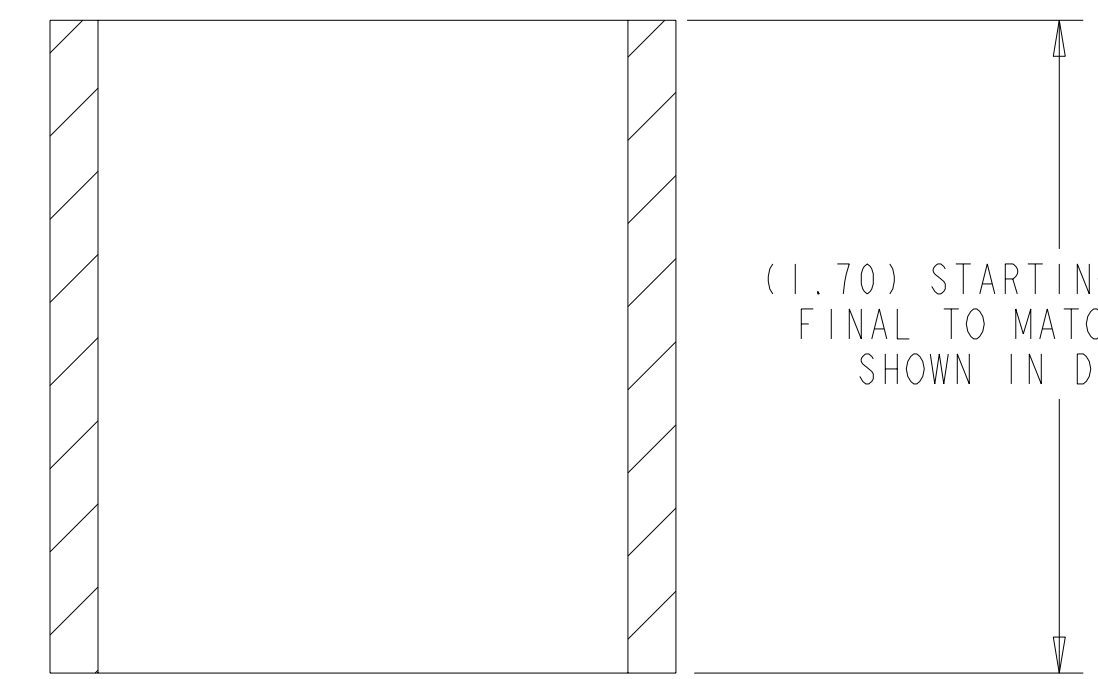
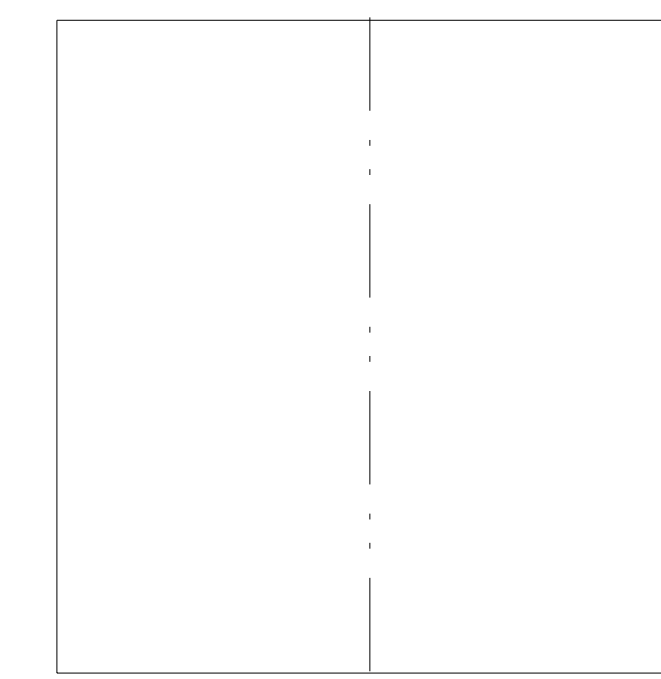


EXPLODED VIEW
SCALE 0.20



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	

01-103-103