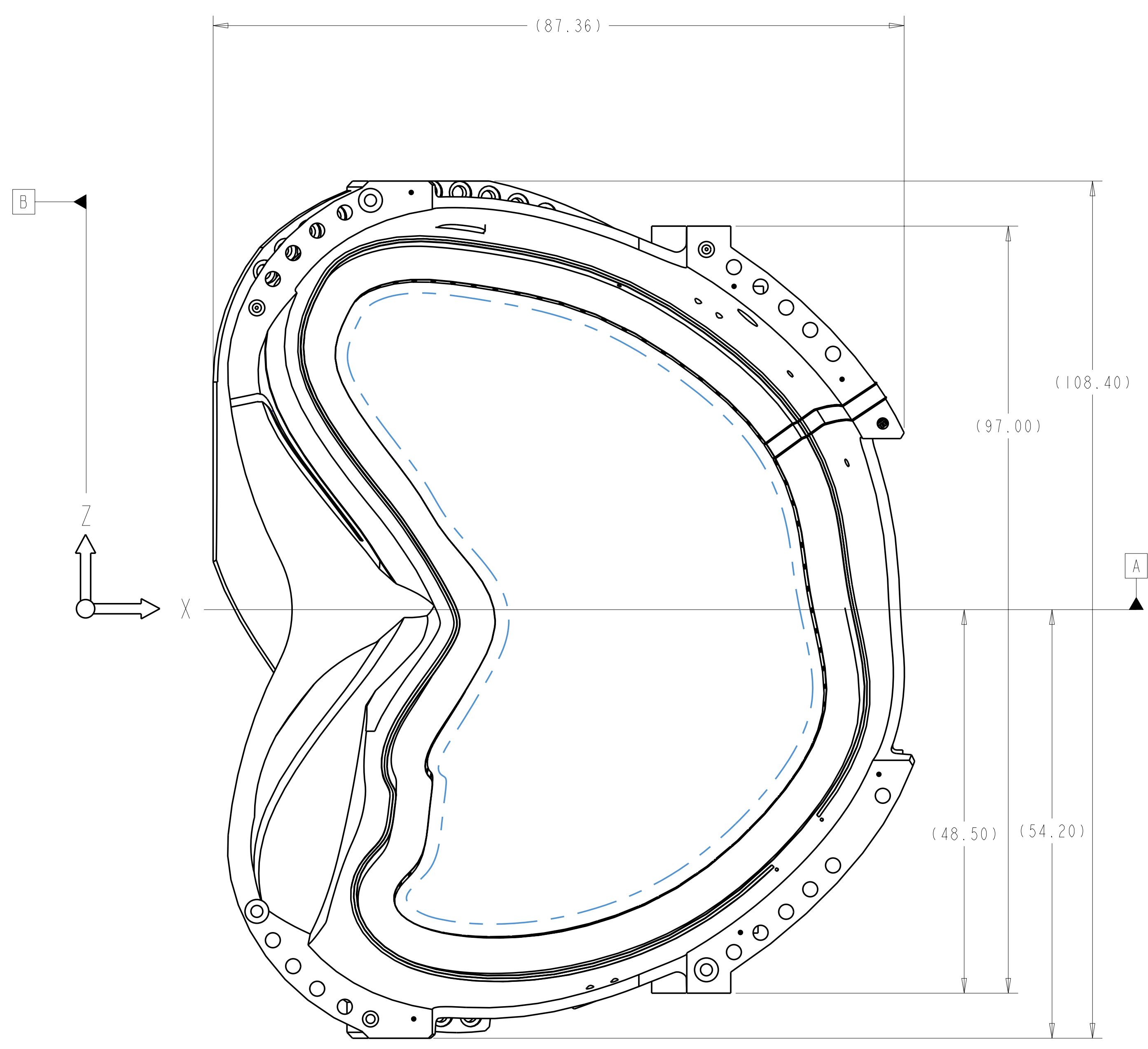
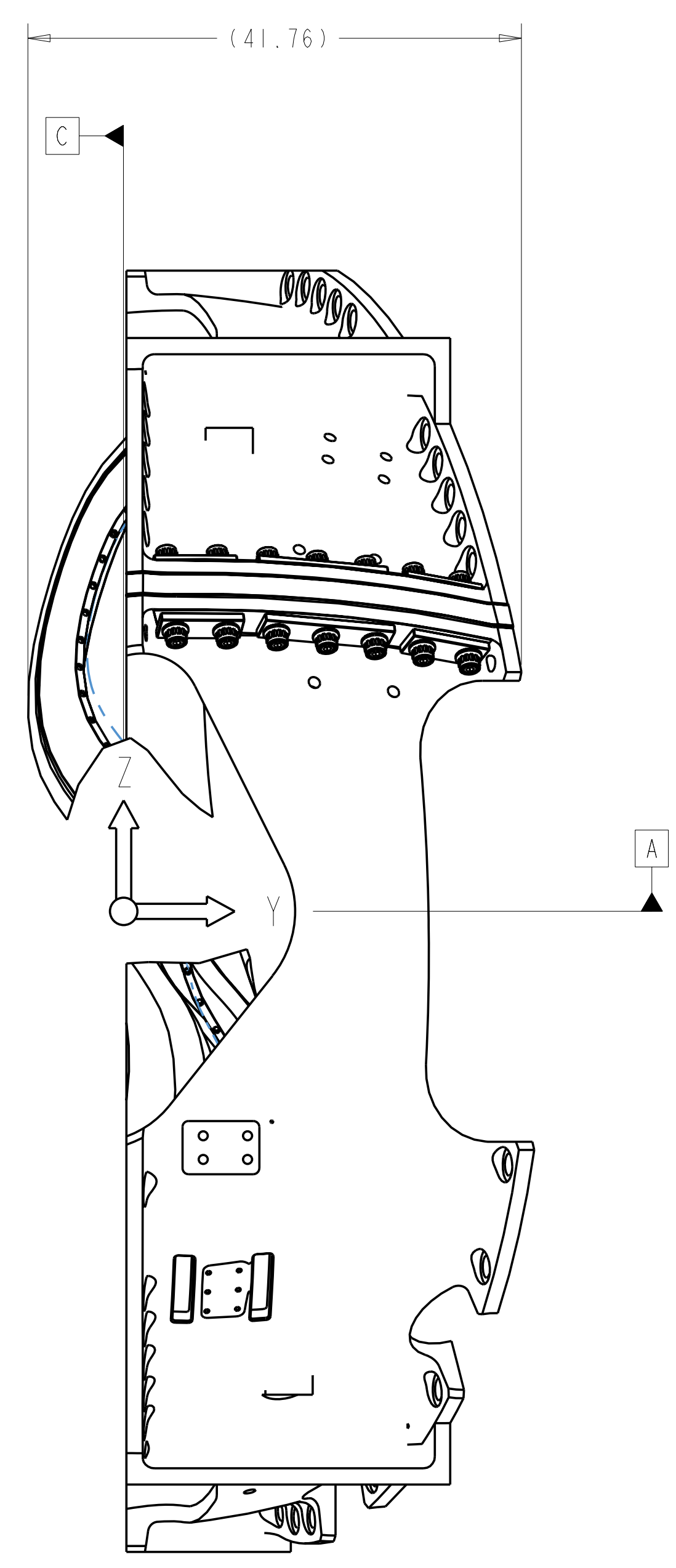


ISOMETRIC VIEW
 SCALE 0.10



SCALE .10



- 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 SEI41-101.PRT.
 - 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 = 4965 LBS.
 - MATCH DRILL OR REAM AS REQUIRED TO ACHIEVE RUNNING FIT BETWEEN PARTS AT 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.

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-5140R3 - This ECN makes polodial break shim and studs electrically connected to the winding form.
 See ECN-5140R3 for details.

RELEASED FOR FABRICATION / INSTALLATION
 PPPL Drafting:

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE	REVISION APPROVAL
3	REVISED ASM AND DRAWING PER ECN 5059	GLL	12/09	MJC			DEW						
2	REVISED ASSEMBLY AND DRAWING PER ECN 5009	GLL	7-08	MJC			DEW						
1	REVISED F/N 2 PER ECN-4903	DW	9/04	MJC			DEW						

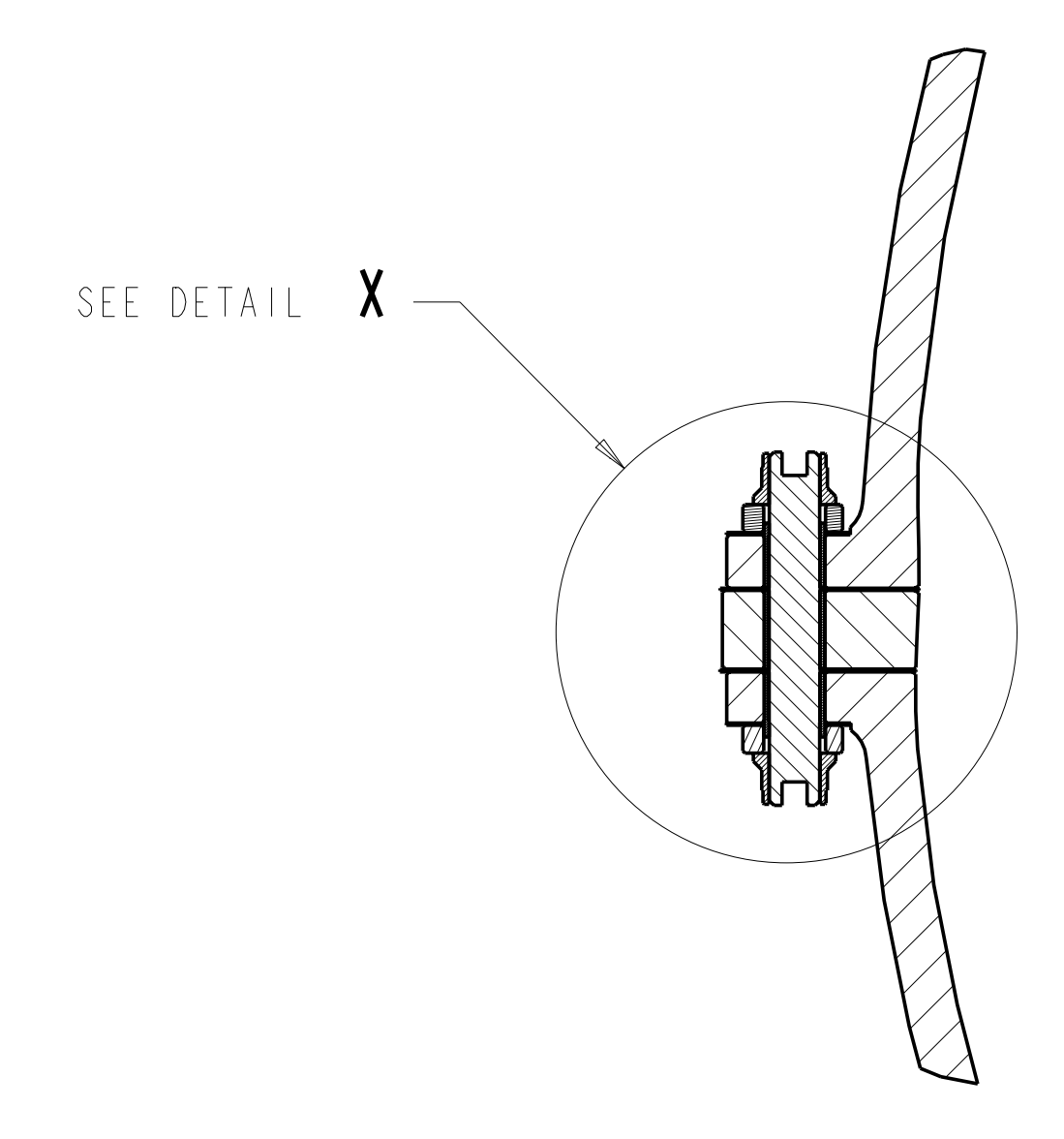
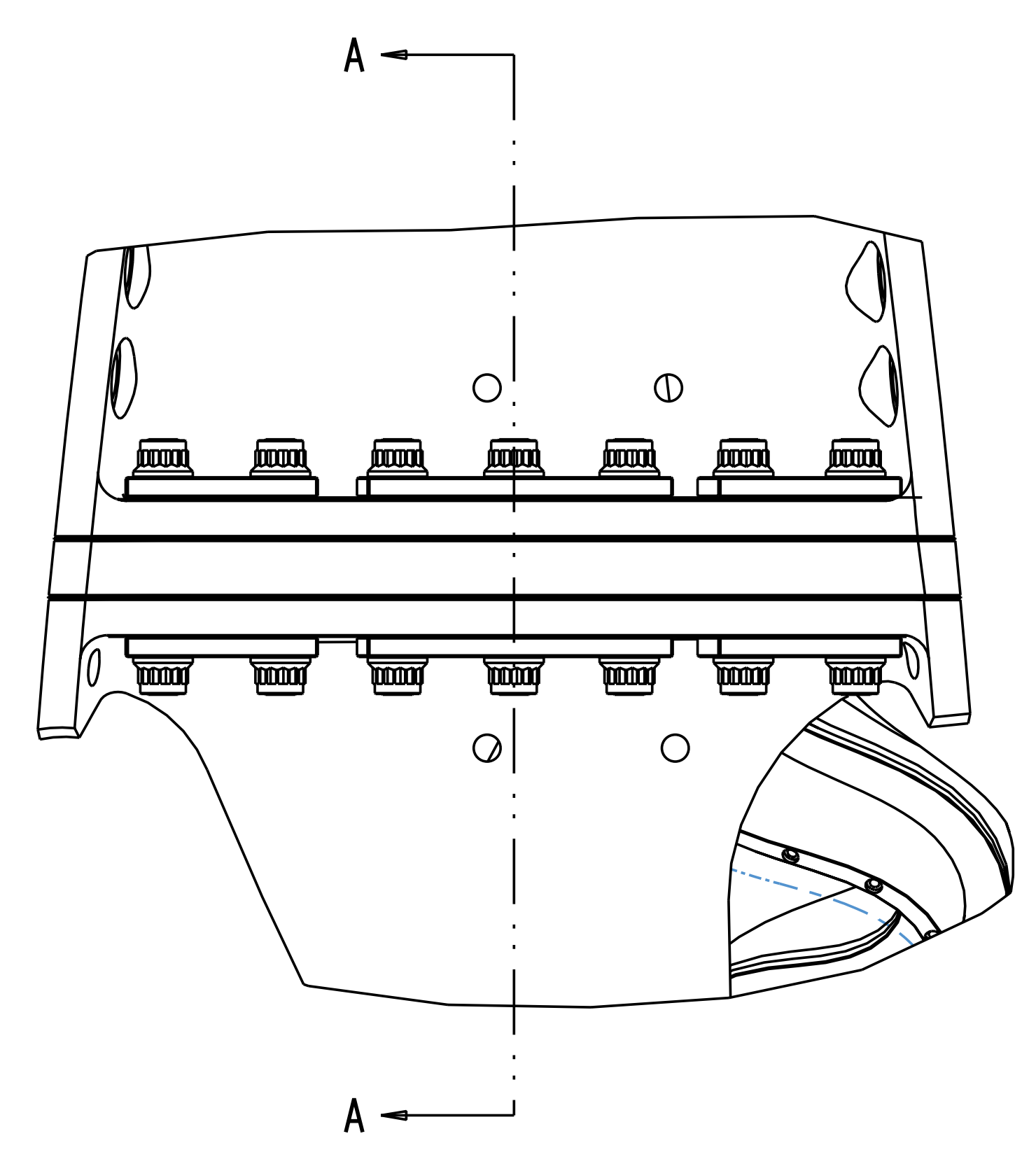
QTY	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPECIFICATION	FIND NO
2	SEI41-142	BEARING PLATE - LONG		10
4	SEI41-141	BEARING PLATE - SHORT		9
14	DS141-060	NUT, 12PT HEX 1.375-6UNC-2B		8
2	-7	INS SHEET, 26 X 3 X .063 THK	NEMA GRADE G-11CR	7
7	DS141-036	STUD, 1.375-6UNC-2A X 9.5 LG		6
14	-5	INS BUSHING, 1.63 OD X 1.38 ID X 1.7 LG	NEMA GRADE G-11CR	5
1	-4	INS SHEET, 15 X 32 X .063 THK	NEMA GRADE G-11CR	4
1	SEI41-048	POL BREAK SHIM ASSEMBLY TYPE-A		3
1	SEI41-114	PRODUCTION WINDING FORM TYPE-A		2
AR	X	-1	MOD COIL WINDING FORM ASSEMBLY TYPE-A	1

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.

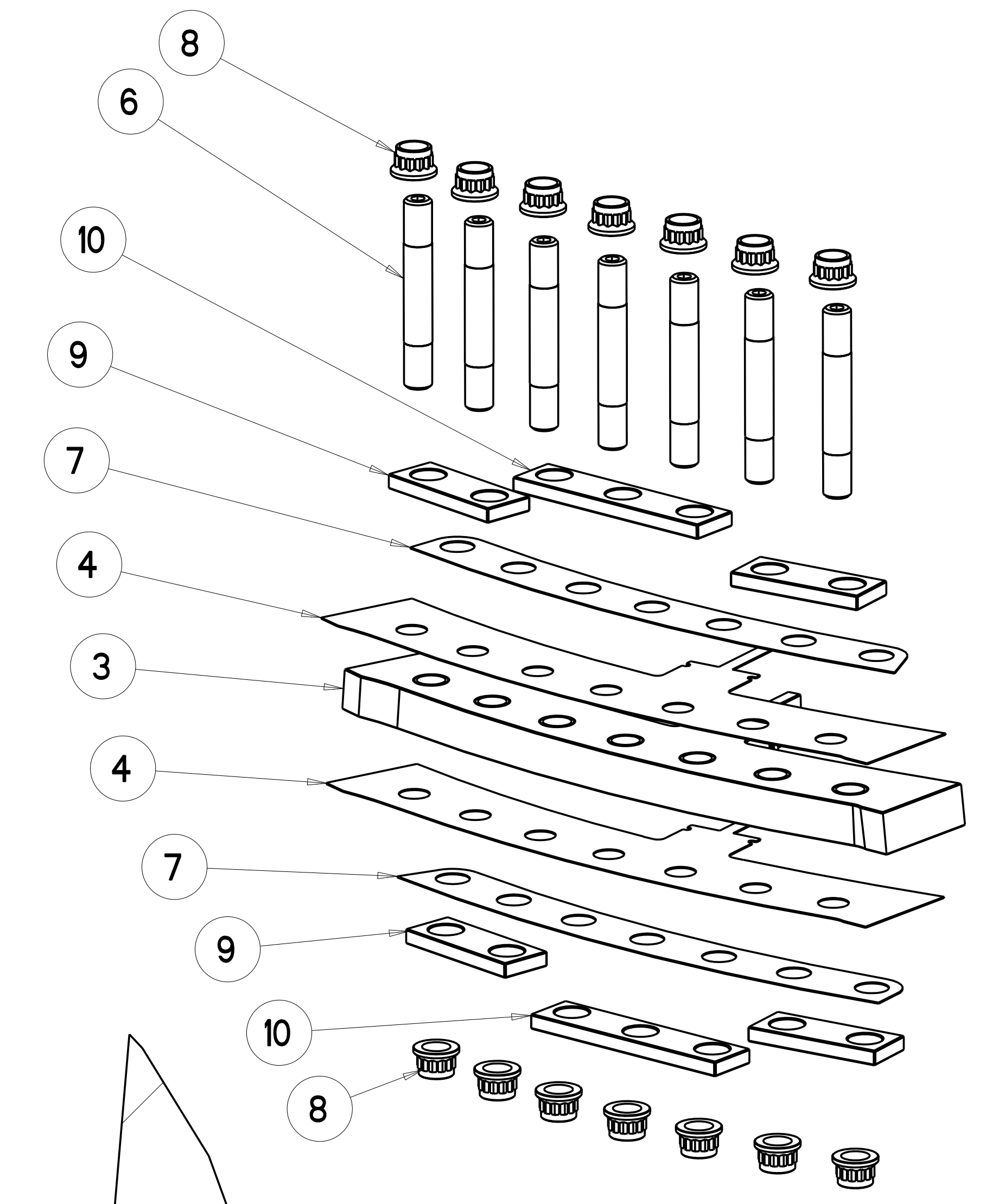
P THIS DRAWING PRODUCED ON PRO-ENGINEER

SCALE NOTED	DES T BROWN 6-30-04	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
TOLERANCES UNLESS OTHERWISE SPECIFIED	DRW P MILLER 6-30-04	
FRACTIONS	CHK M COLE 6-30-04	
XX DECIMALS ± .01	DEPT :	
XXX DECIMALS ± .005	PE D WILLIAMSON 6-30-04	MOD COIL WINDING FORM ASSEMBLY TYPE-A
ANGLES ±0°15'	PJ :	
BREAK SHARP EDGES .06 MAX	RED :	VERSION NO. 3 PLANT X-10 BLDG 5700 FL 3 SHT OF 1 TYPE S CLASS U
FINISH .125 UNLESS OTHERWISE SPECIFIED	PPPL DRFT J SIEGEL 6-30-04	RELEASE LEVEL Fabrication SEI41-101

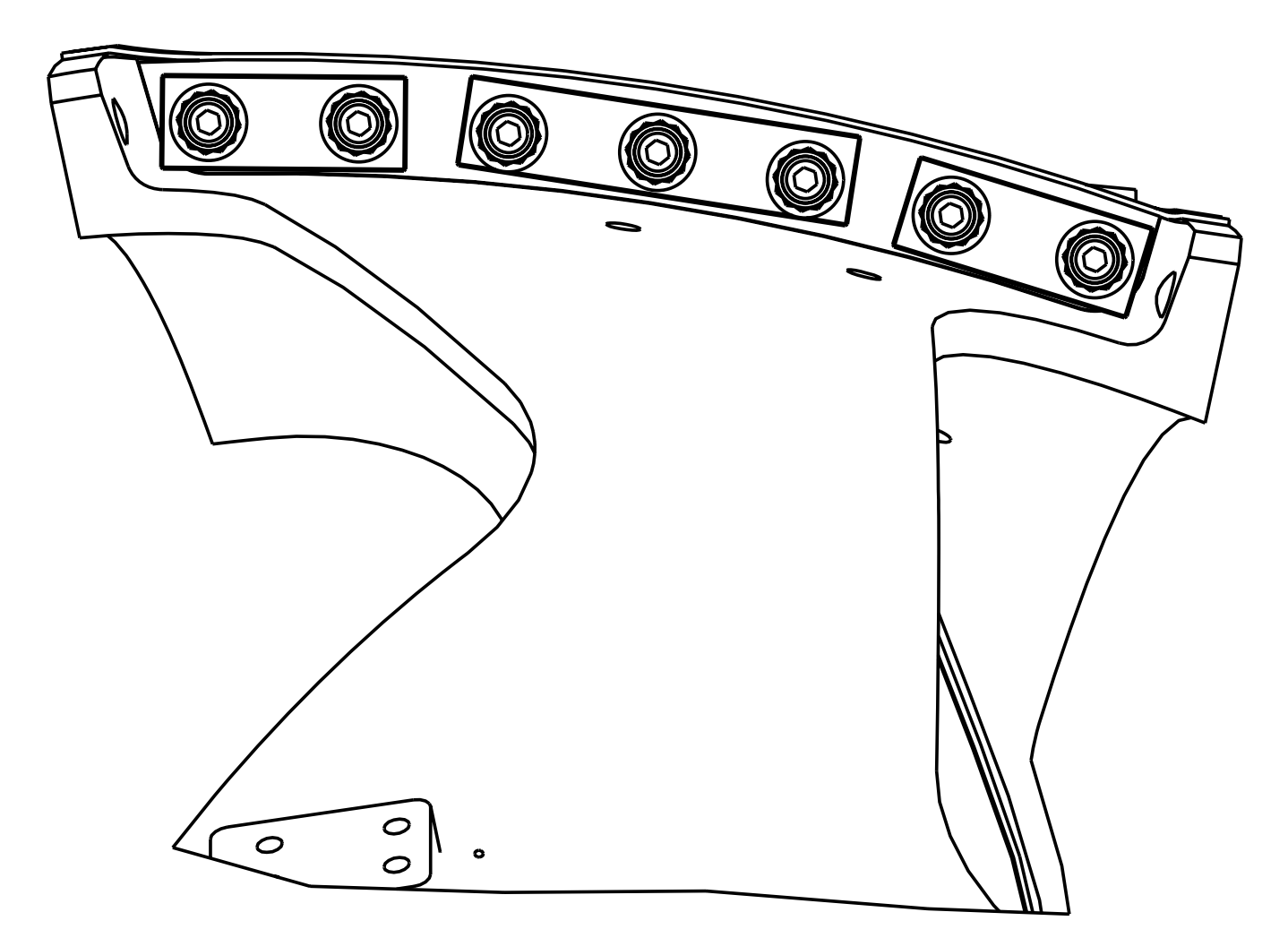
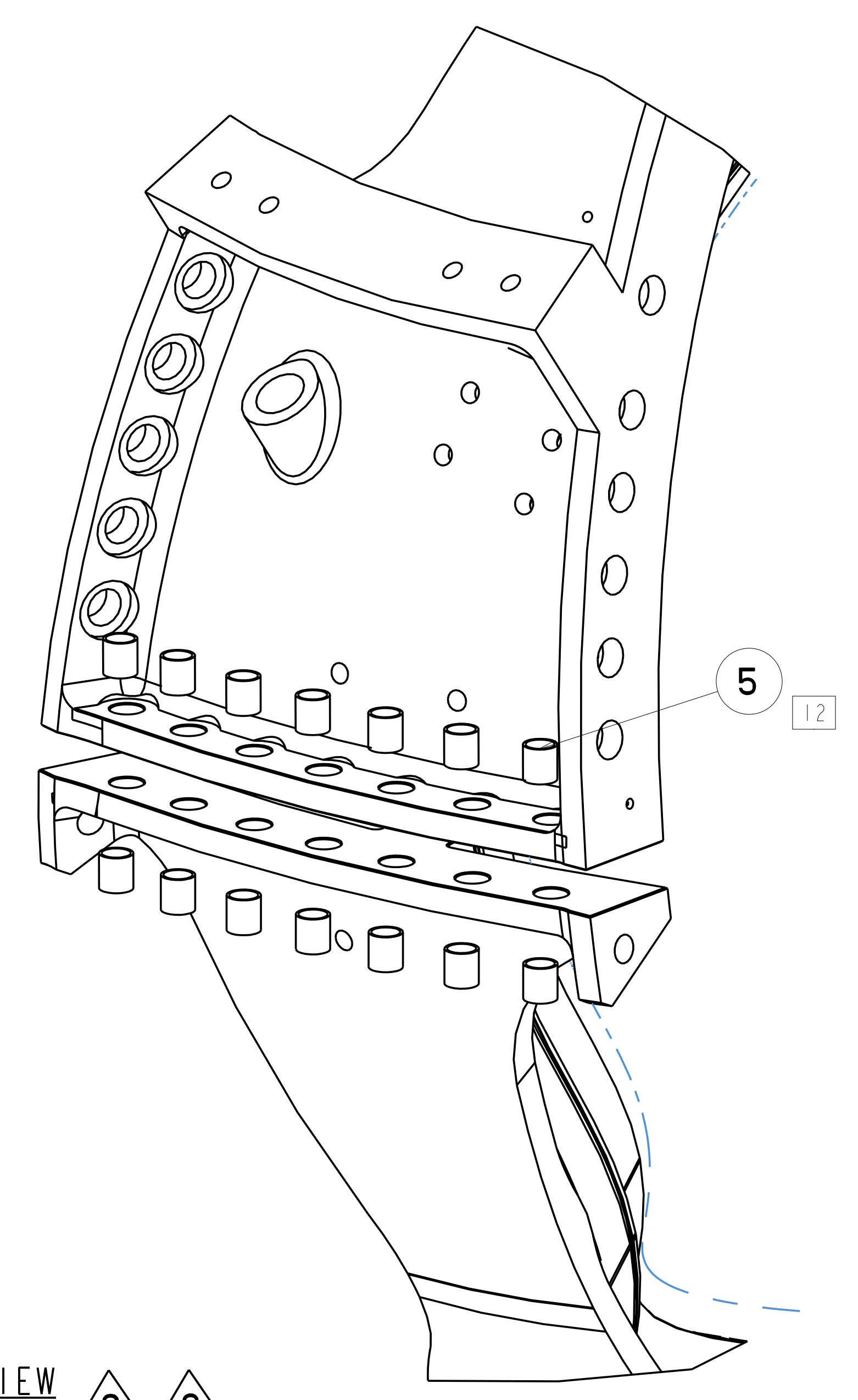
FOR NOTES AND PARTS LIST SEE SHEET 1



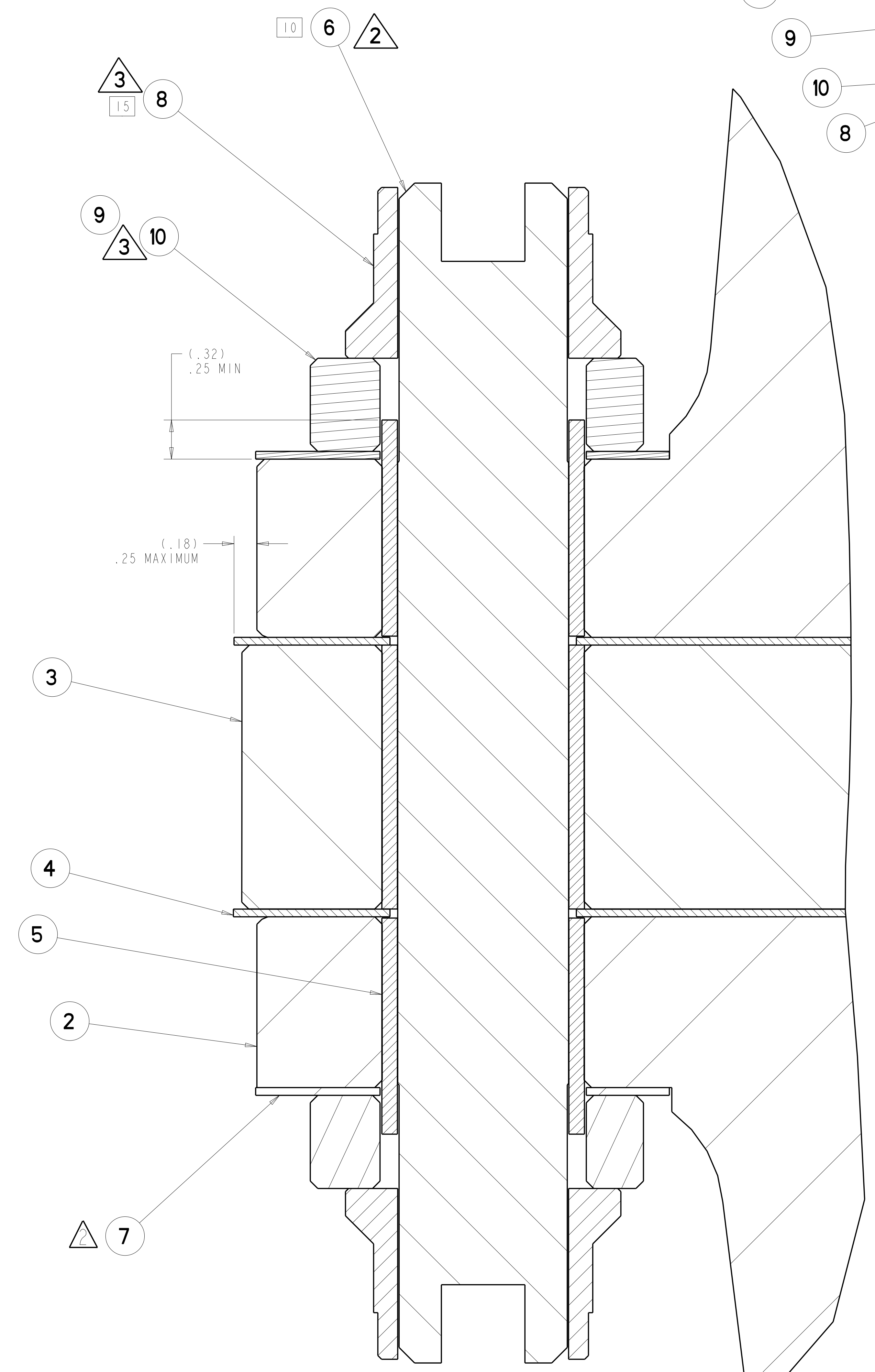
SECTION A-A
 SCALE 0.20



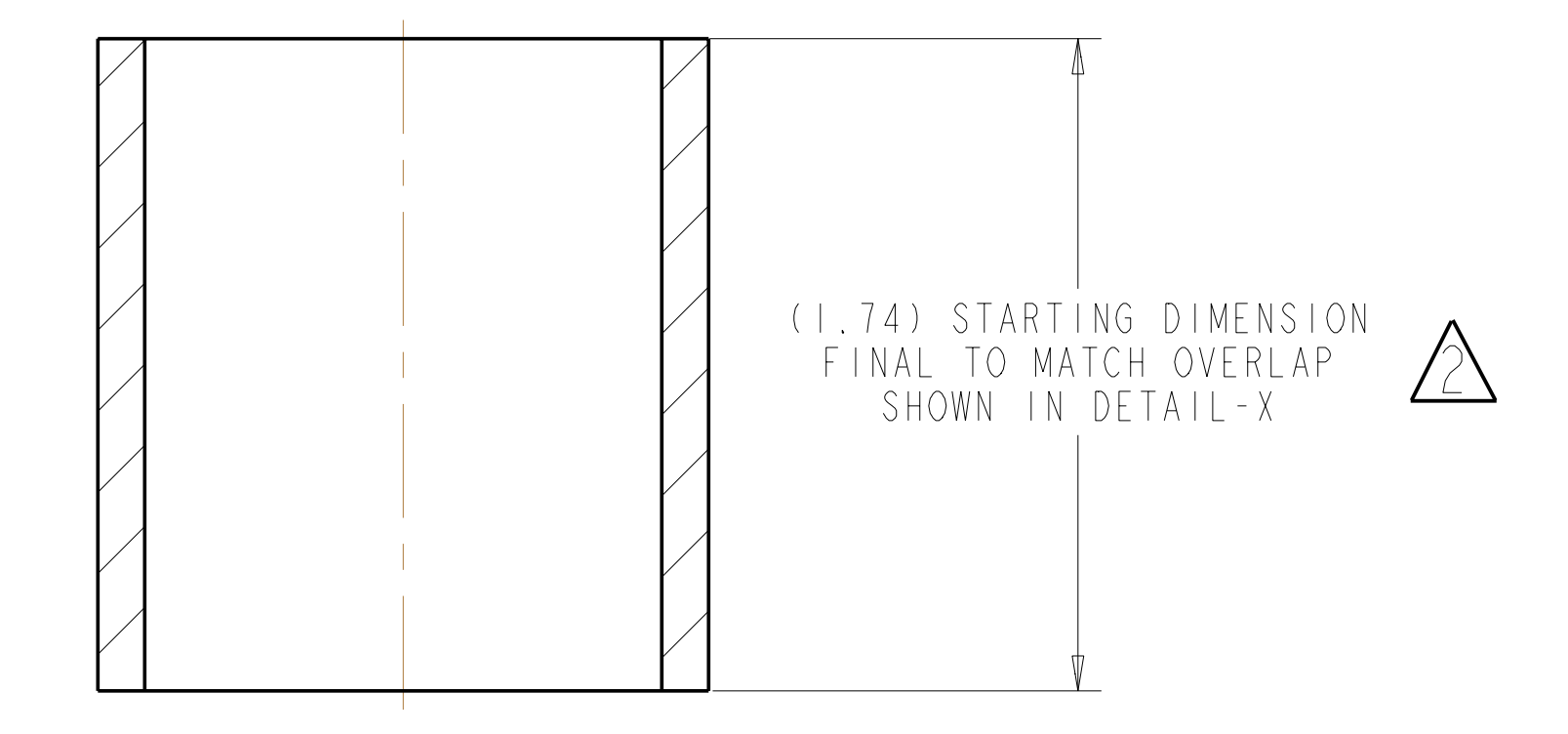
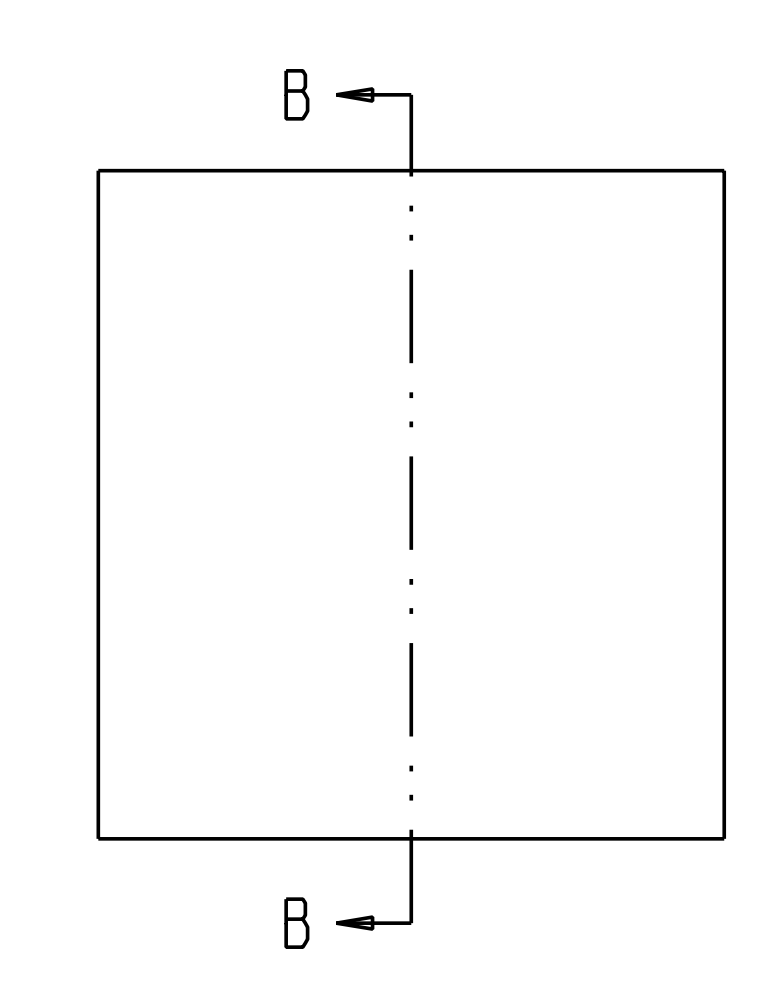
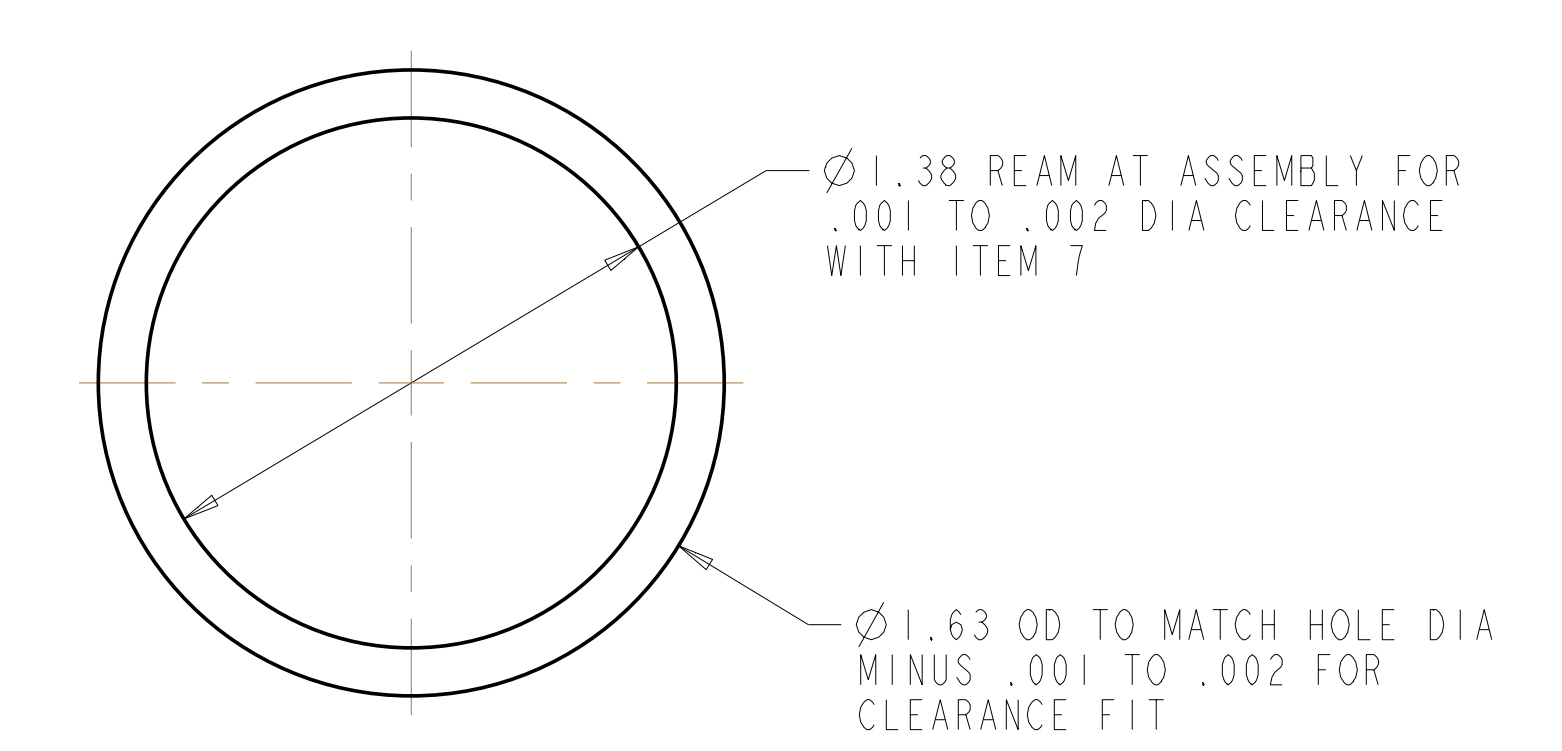
1 EXPLODED VIEW
 SCALE 0.20



POLOIDAL BREAK DETAIL



DETAIL X
 SCALE 2.00



5 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:

Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee							
UT-BATTELLE NATIONAL COMPACT STELLARATOR EXPERIMENT							
MOD COIL WINDING FORM ASSEMBLY TYPE-A							
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS	
3	X-10	5700	3	2	S	U	
RELEASE LEVEL	SEI41-101						REV
Fabrication							3

H
 G
 F
 E
 D
 C
 B
 A