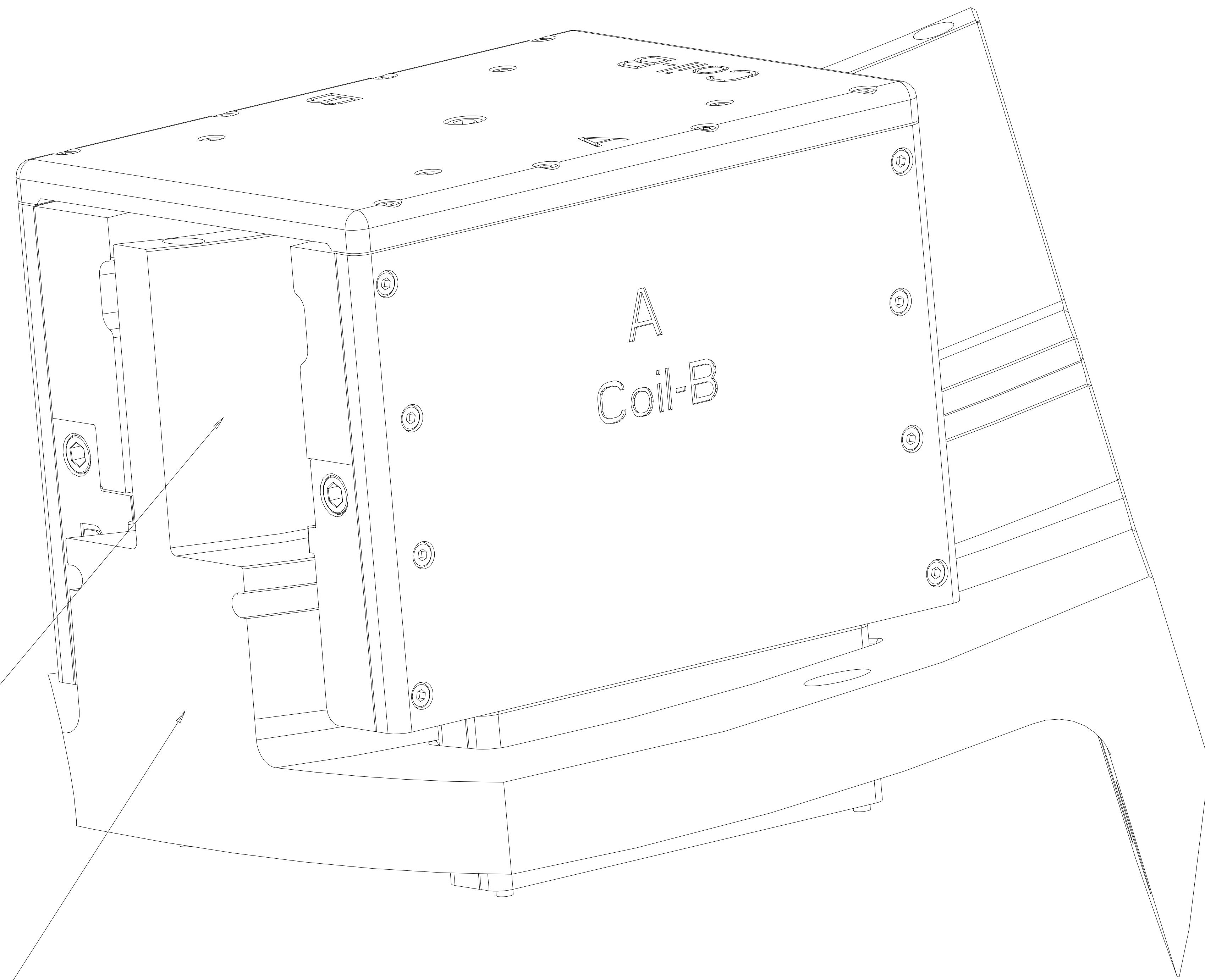


NOTES:

- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2000.
- INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M
- DIMENSIONS ARE IN INCHES
- DIMENSIONS APPLY AT ROOM TEMPERATURE. OPERATING TEMP 80 K.
- MAGNETIC PERMEABILITY NOT TO EXCEED 1.02 AS TESTED BY A SEVERN INDICATOR, AVAILABLE FROM:
SEVERN ENGINEERING
555 OLD STAGE RD., SUITE 14
AUBURN, ALABAMA 36830

- AVAILABLE FROM:
McMASTER CARR
600 COUNTY LINE RD
ELMHURST, IL 60126
- LUBRICATE THREADED SURFACE OF ITEM 13, 16, AND 18 WITH THREE-GARD ANTI-SEIZE COMPOUND FROM FEDERAL PROCESS CORP, CLEVELAND, OH.
- TORQUE ITEM NO. 13 TO 18 FT-LBS.
TORQUE ITEM NO. 18 AND 20 TO 38 FT-LBS.
- SHIM AS REQUIRED BETWEEN ITEM 2, 3 AND 5
- MEASURE DISTANCE FROM LOWER BLOCK MOUNTING HOLES TO BASE OF TEE. GRIND BOLT LENGTH IF REQUIRED TO PREVENT BOLT FROM TOUCHING TEE. MINIMUM BOLT ENGAGEMENT SHALL BE .3 IN.
- ALL FASTENERS GOING INTO THE GICR LEAD BLOCKS SHALL BE COATED WITH RTV 108 TO PREVENT THE FASTENERS FROM VIBRATING LOOSE.



1
ISOMETRIC VIEW
SCALE 1.00

| REV | DESCRIPTION | BY | DATE | CHK | DEPT | DATE | PE | REQ | DATE | ORNL | DOE | DATE |
|------------|-------------|------------|------|-----|------|------|----|-----|------|------|-----|------|
| 9 | AR | | -21 | | | | | | | | | |
| 1 | | | -20 | | | | | | | | | |
| 1 | | | -19 | | | | | | | | | |
| 6 7 8 10 | 2 | | -18 | | | | | | | | | |
| 6 | 4 | | -17 | | | | | | | | | |
| 6 7 8 10 | 2 | | -16 | | | | | | | | | |
| 6 | 4 | 92185A626 | | | | | | | | | | |
| 6 | 28 | 92185A540 | | | | | | | | | | |
| 6 7 8 | 1 | 93615A526 | | | | | | | | | | |
| 1 | | SE142C-285 | | | | | | | | | | |
| 1 | | SE142B-184 | | | | | | | | | | |
| 1 | | SE142B-221 | | | | | | | | | | |
| 1 | | SE142B-220 | | | | | | | | | | |
| 2 | | SE142C-183 | | | | | | | | | | |
| 8 | | SE142C-226 | | | | | | | | | | |
| 1 | | SE142B-137 | | | | | | | | | | |
| 1 | | SE142B-135 | | | | | | | | | | |
| 1 | | SE142B-136 | | | | | | | | | | |
| 1 | | SE142B-134 | | | | | | | | | | |
| 1 | | SE141-122 | | | | | | | | | | |
| 1 | | | | | | | | | | | | |
| SE140-102 | | | | | | | | | | | | |
| SE142B-080 | | | | | | | | | | | | |

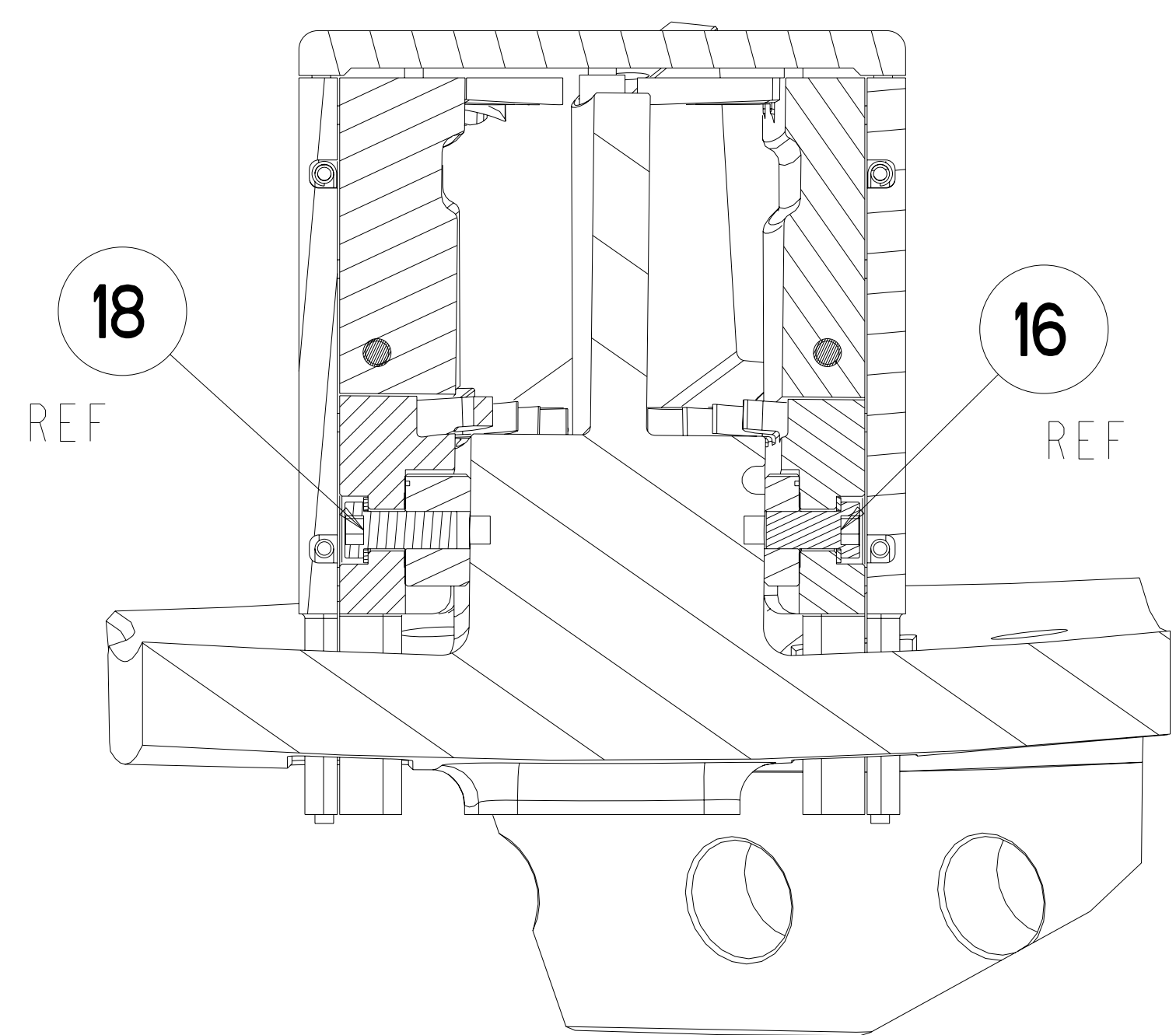
RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting

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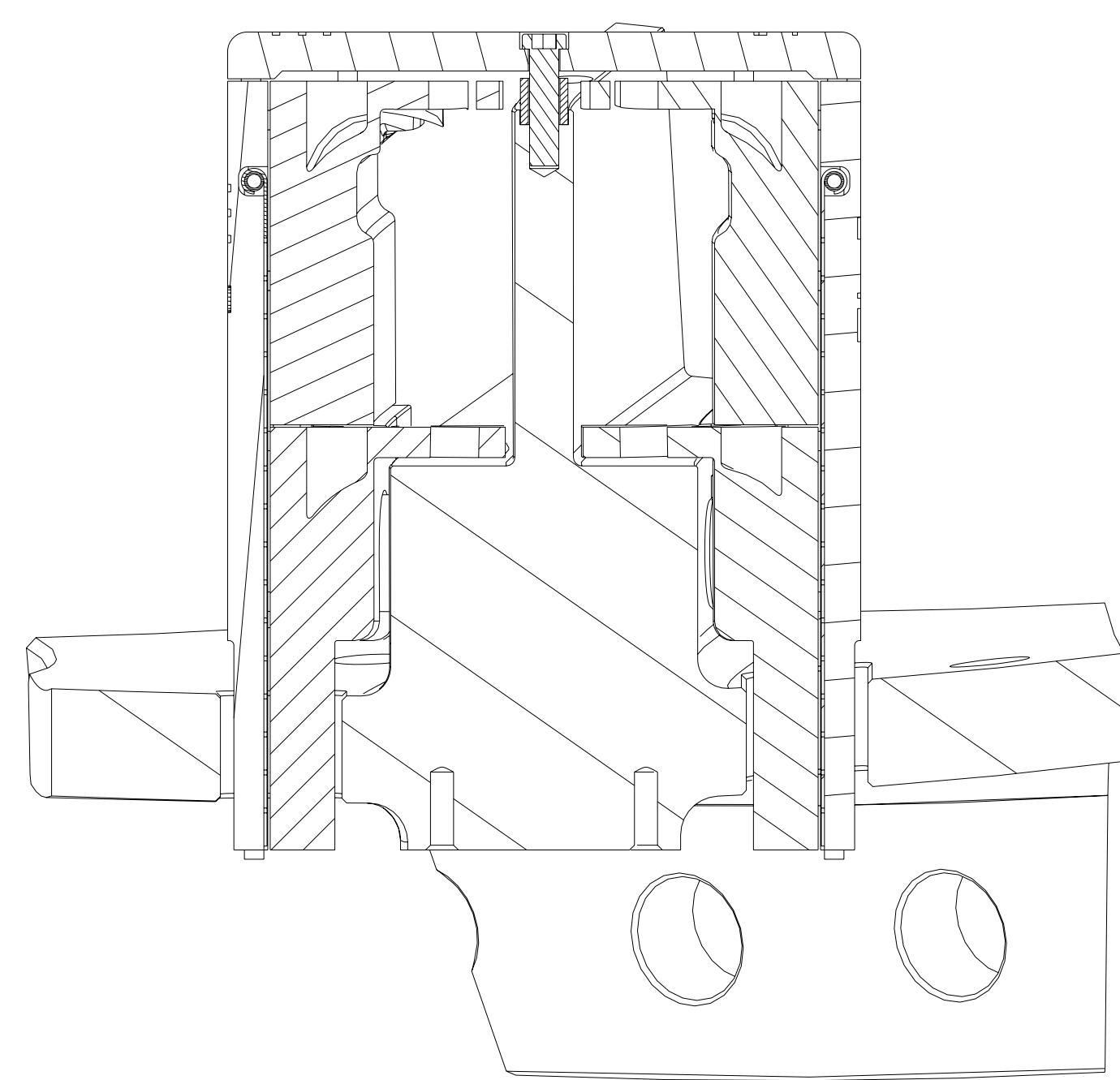
P THIS DRAWING PRODUCED ON PRO-ENGINEER

| | | |
|--|--------------------------|---|
| SCALE NOTED | DES: D WILLIAMSON 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 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | DRW: G LOVETT 03/06 | PROJECT NAME: NATIONAL COMPACT STELLARATOR EXPERIMENT |
| FRACTIONS XX DECIMALS ±.01 | CHK: M. J. COLE 04/06 | TYPE "B" LEADS WINDING BLOCKS ASSEMBLY |
| XXX DECIMALS ±.005 | DES: D WILLIAMSON 04/06 | VERSION NO. 17 |
| ANGLES ±0°15' | CR: : | PLANT X-10 |
| BREAK SHARP EDGES 06 MAX | PJ: : | BLDG 5700 |
| FINISH .125 UNLESS OTHERWISE SPECIFIED | RD: : | FL 3 |
| | PPPL DRFT J SIEGEL 04/06 | SHT 1 |
| | | OF 2 |
| | | TYPE S |
| | | CLASS U |
| | | REV 0 |

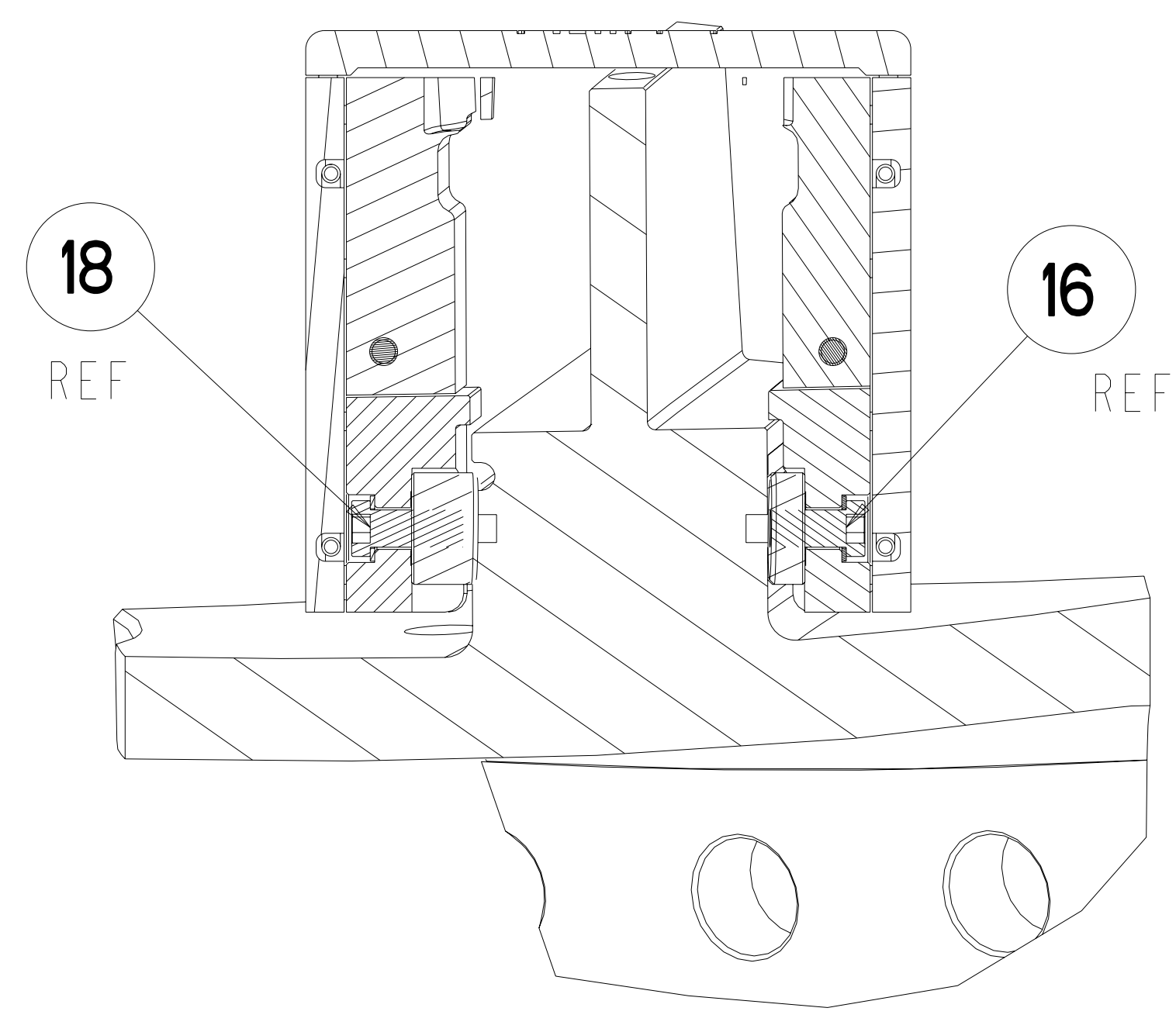
| REV | DESCRIPTION | BY | DATE | CHK | DEPT | DATE | PE | REQ | DATE | ORNL | DOE | DATE |
|-----|---------------------------|----|------|-----|------|------|----|-----|------|------|-----|------|
| | REVISION OR ISSUE PURPOSE | | | | | | | | | | | |



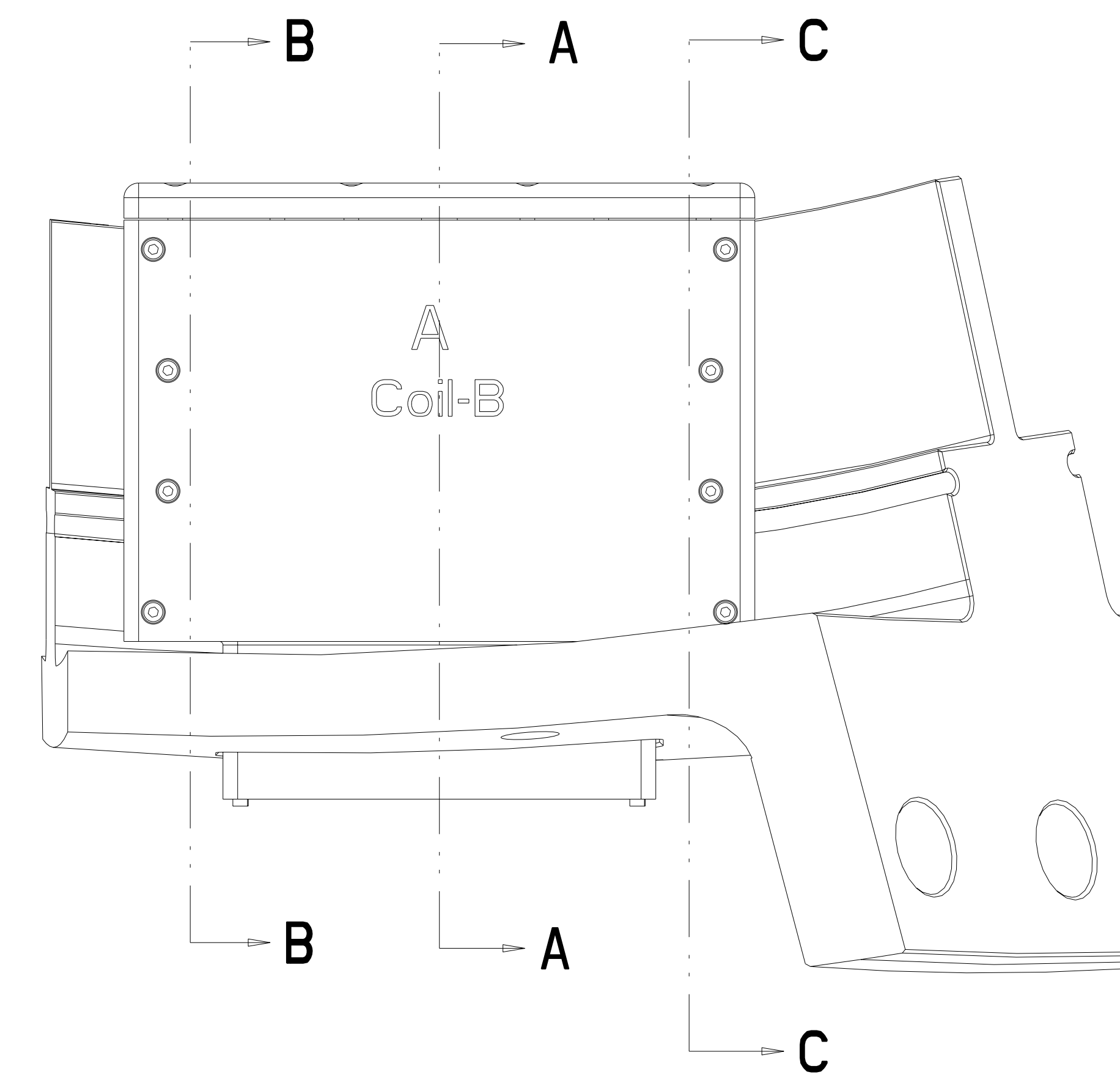
SECTION B-B



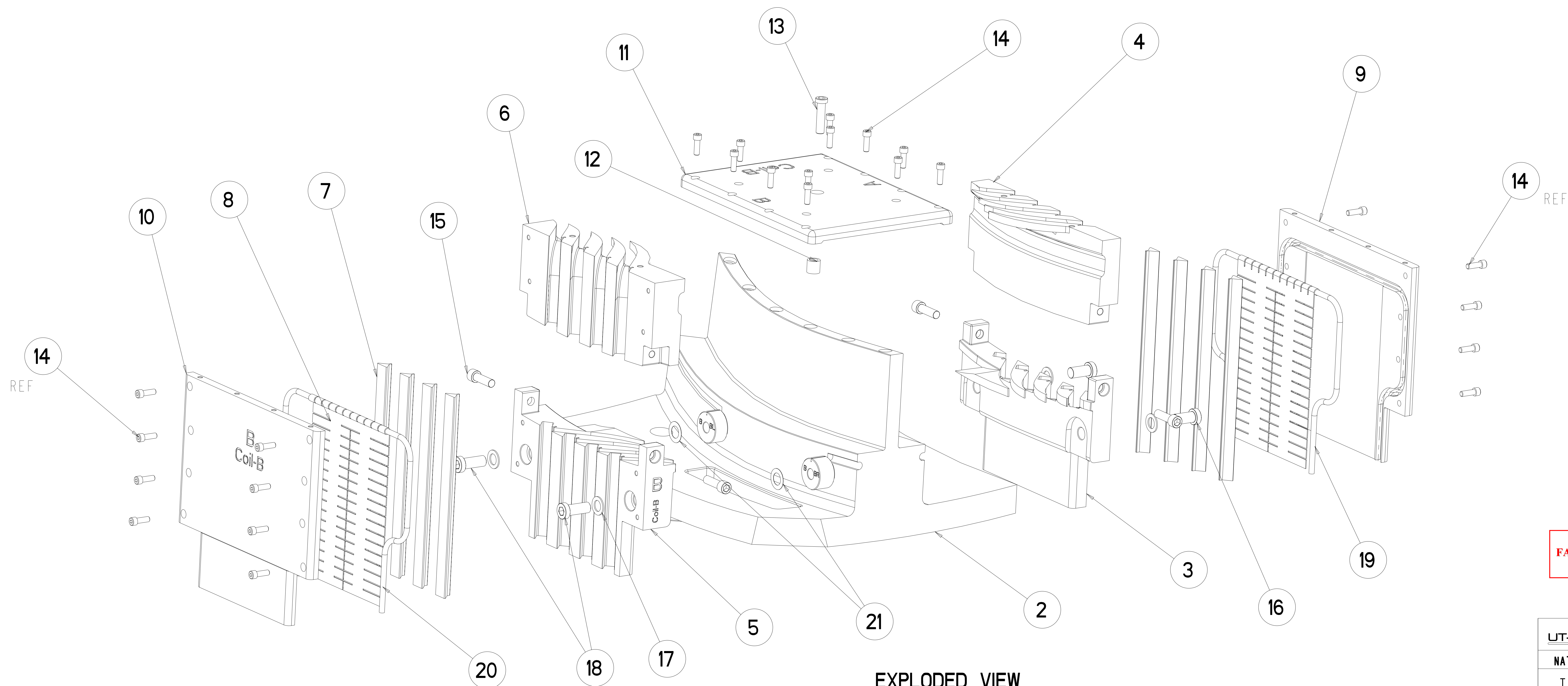
SECTION A-A



SECTION C-C



SIDE VIEW
SCALE 0.500



EXPLODED VIEW

SCALE 0.500

**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 | | | | | |
| NATIONAL COMPACT STELLARATOR EXPERIMENT | | PROJECT NAME | | | | | |
| TYPE "B" LEADS WINDING BLOCKS ASSEMBLY | | PROJECT NAME | | | | | |
| VERSION NO. | PLANT | BLDG | FL | SHT | OF | TYPE | CLASS |
| 17 | X-10 | 5700 | 3 | 2 | 2 | S | U |
| RELEASE LEVEL | SE 142B-080 | | | | | | REV |
| Fabrication | | | | | | | 0 |