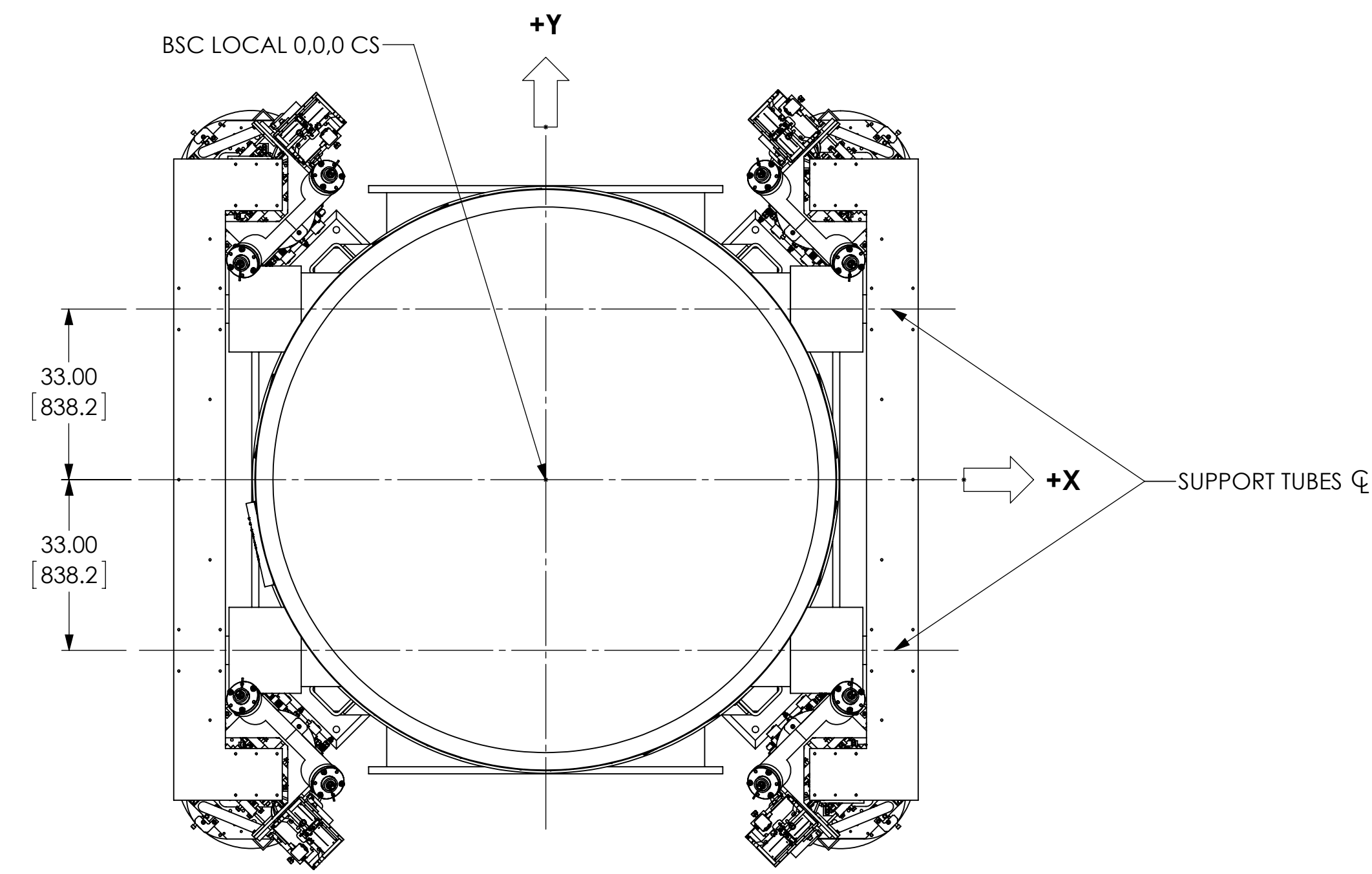
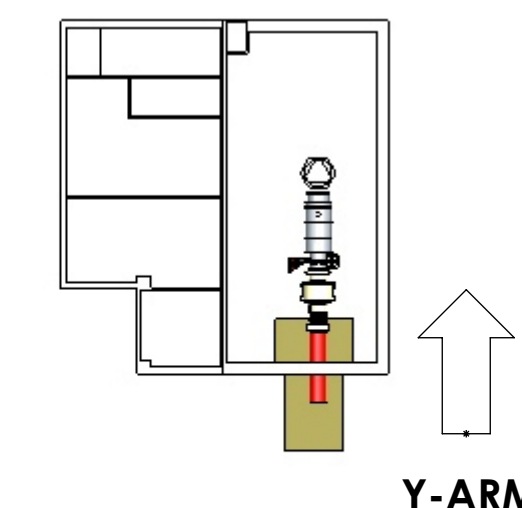
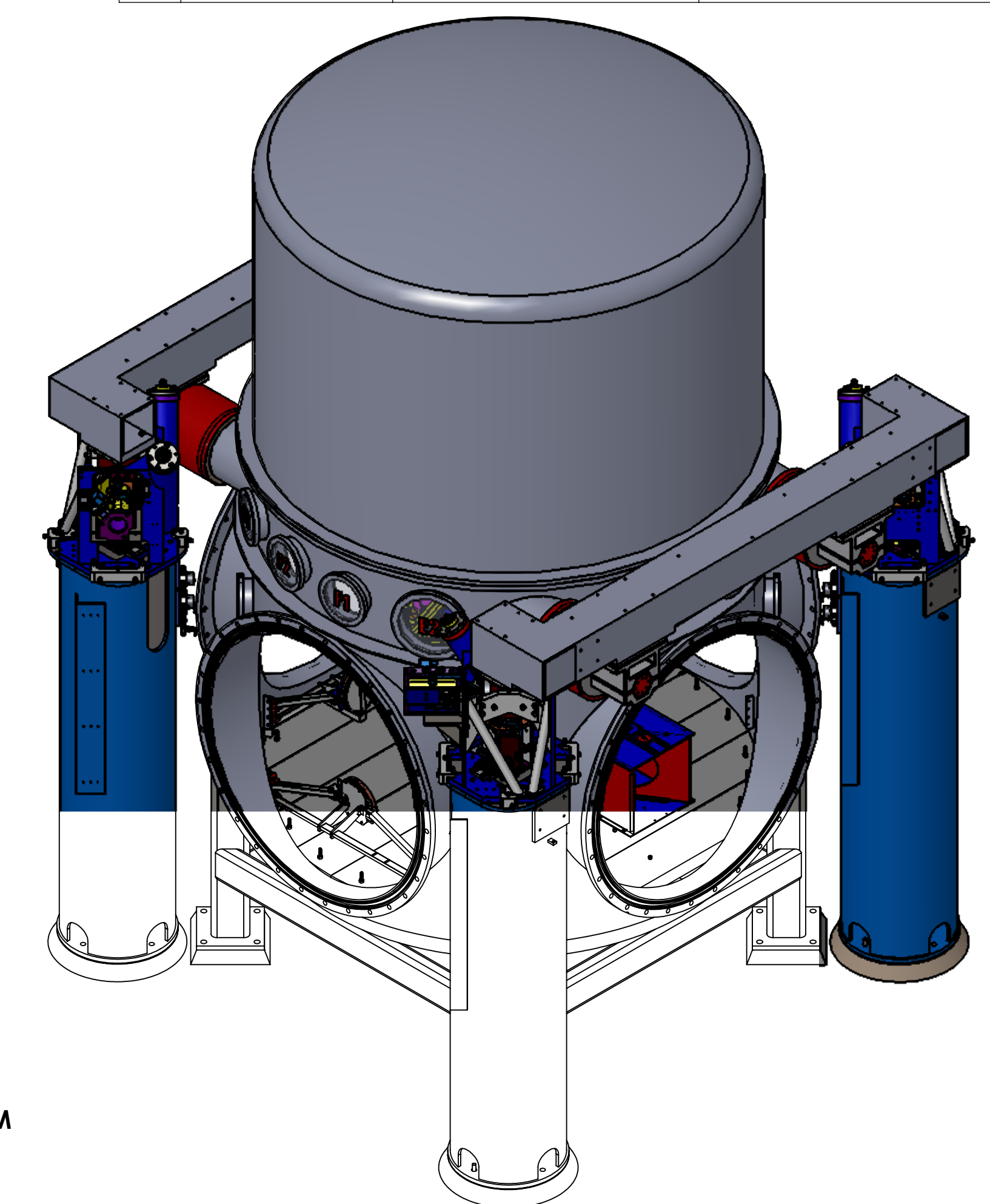


5. REFER TO DOCUMENT D1 101271 FOR OPTICAL TABLE HOLE TABULATION CONVENTION.
6. REFER TO G1000125 FOR ISI NAMING AND ORIENTATION CONVENTION.
7. REFER TO T1 100292 FOR VIEWPORT DEFINITION.

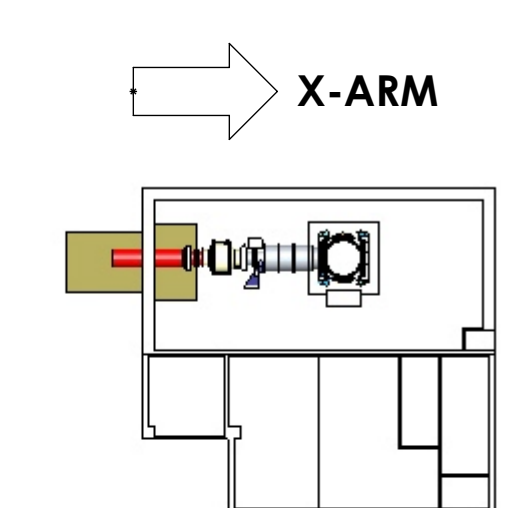
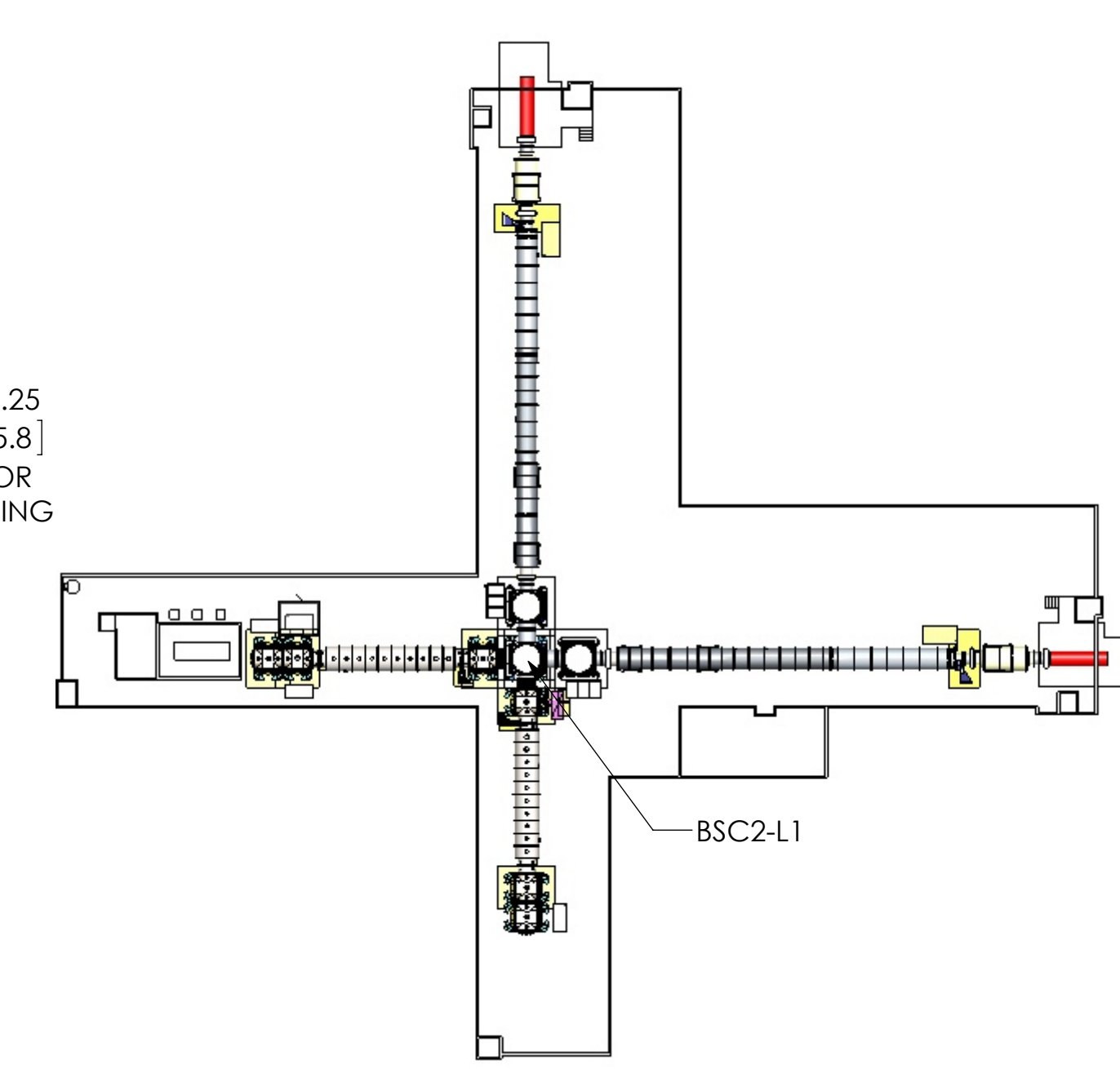
| REV. | DATE        | DCH # | DRAWING TREE # |
|------|-------------|-------|----------------|
| v5   | 08 JUN 2012 |       |                |
| v6   | 13 JUN 2012 |       |                |
| v7   | 29 JUN 2012 |       |                |



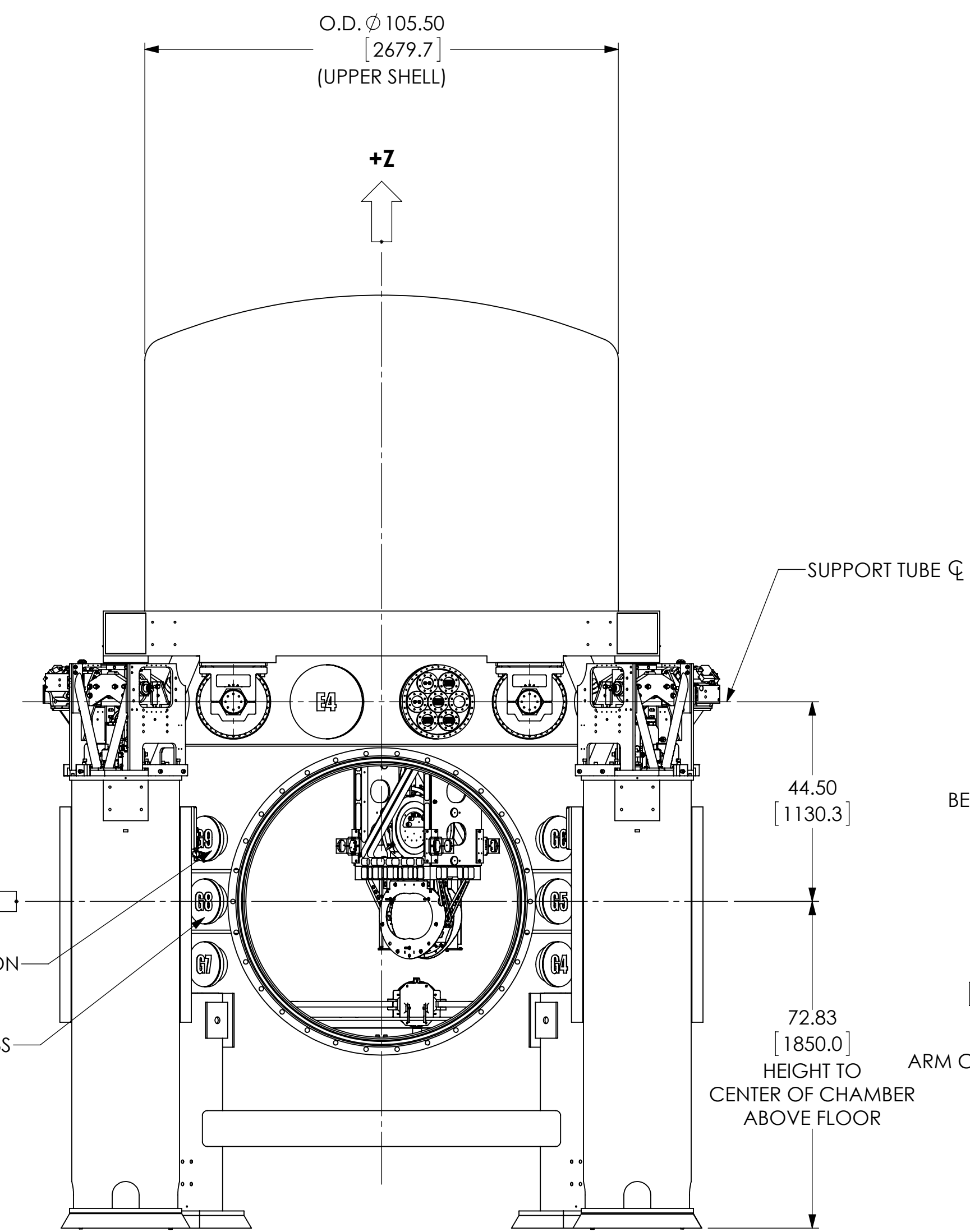
TOP VIEW



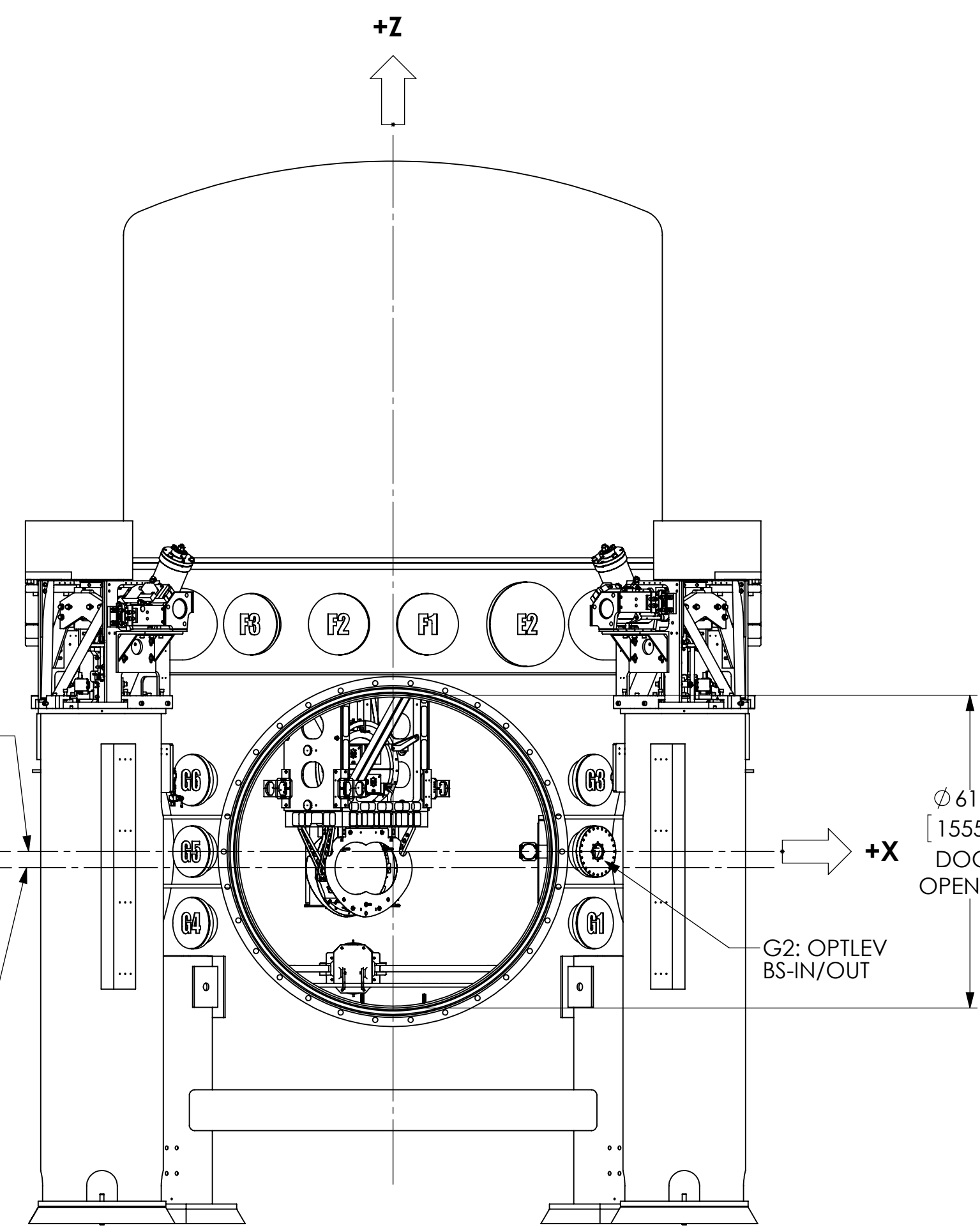
Y-ARM



X-ARM



LEFT VIEW



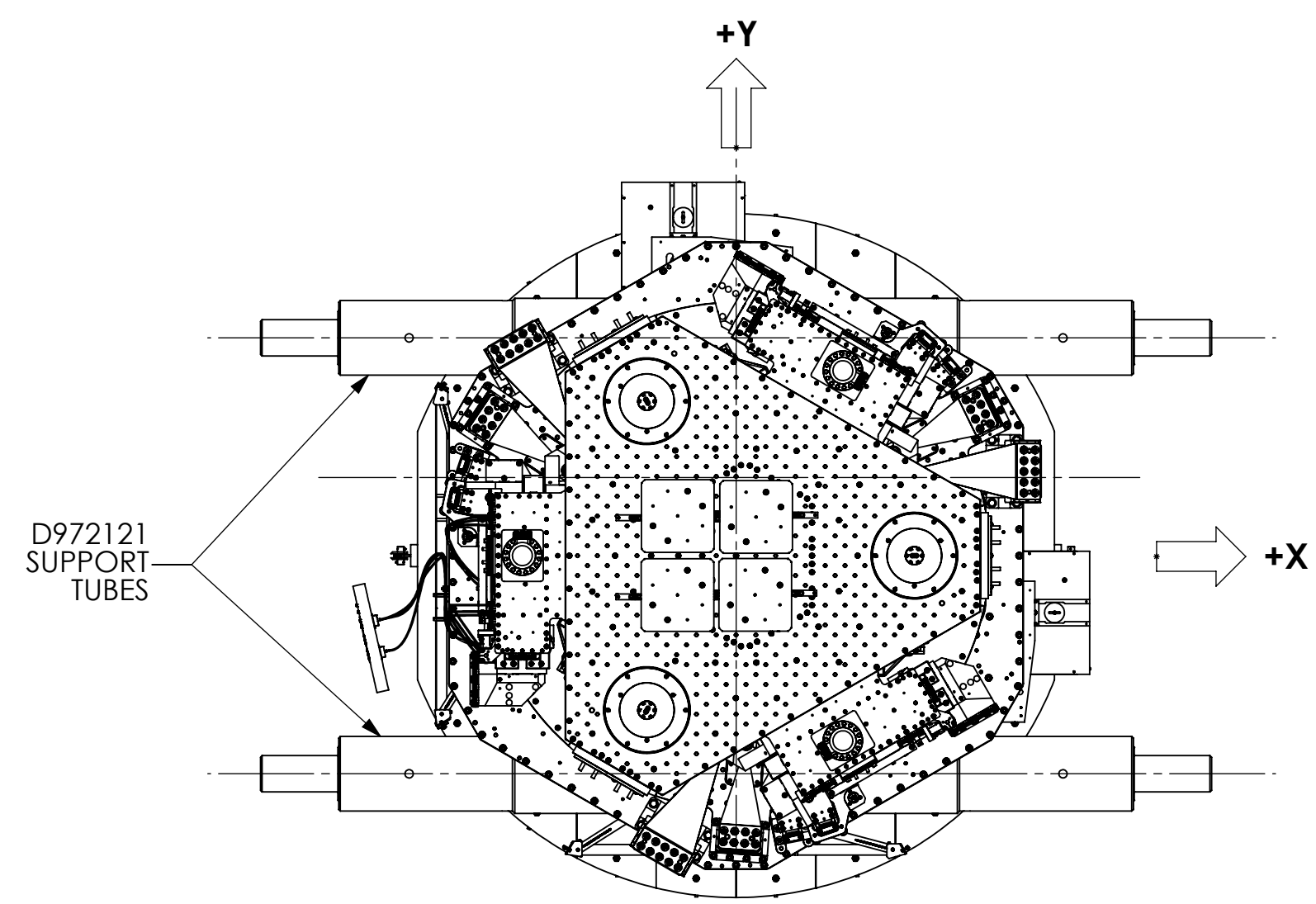
FRONT VIEW

| GLOBAL COORDINATES (mm) |     |
|-------------------------|-----|
| X                       | 0.0 |
| Y                       | 0.0 |
| Z                       | 0.0 |

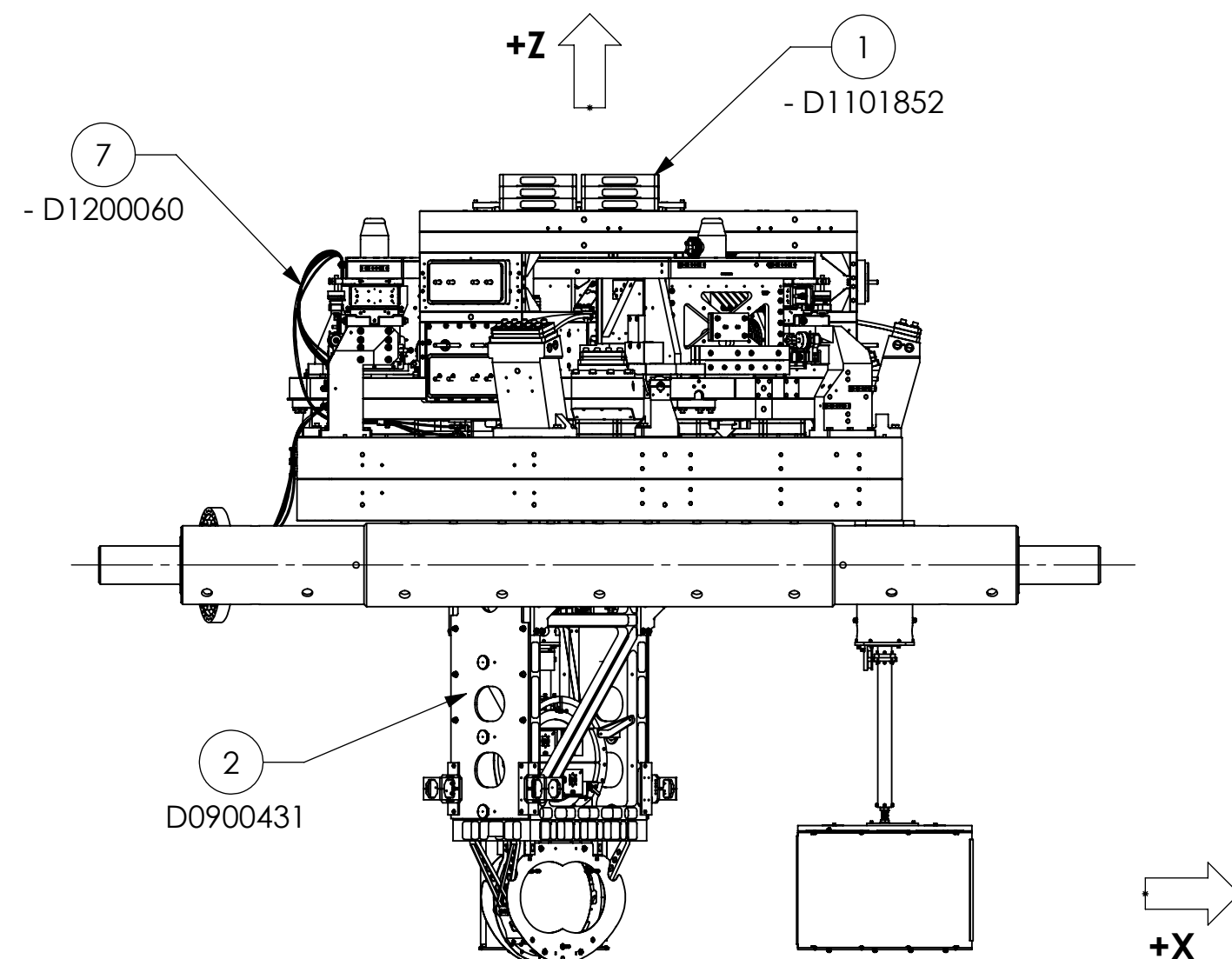
| NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)  |  |  |  | LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY |  | PART NAME  |  |
|---|--|--|--|---|--|--|--|
| 1. INTERPRET DRAWING PER ASME Y14.5-1994.<br>2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.<br>3. DO NOT SCALE FROM DRAWING.<br>4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE. |  |  |  | <b>ADVANCED LIGO</b>  |  | <b>BSC2-L1 TOP LEVEL CHAMBER ASSEMBLY, FULLY DEFINED</b>           |  |
| DIMENSIONS ARE IN INCHES [MM]<br>TOLERANCES:<br>.XX ± .01<br>.XXX ± .005<br>ANGULAR ± 0.5°  |  |  |  | SYSTEM: <b>ADVANCED LIGO</b><br>SUB-SYSTEM: <b>SUS</b><br>NEXT ASSY:          |  | DESIGNER: ED CHAVEZ<br>DRAFTER: ED CHAVEZ<br>CHECKER:<br>APPROVAL: |  |
| MATERIAL: -- FINISH: -- μinch   |  |  |  | SIZE: D DWG. NO. <b>D0900428</b>  |  | REV. <b>v7</b>   |  |
|   |  |  |  | SCALE: 1:24 PROJECTION:   |  | SHEET 1 OF 3   |  |

D0900428 Asst LIGO Systems: BSC2-L1 Top Level Chamber Assembly: PART PDM REV: K.075 DRAWING PDM REV: X.010

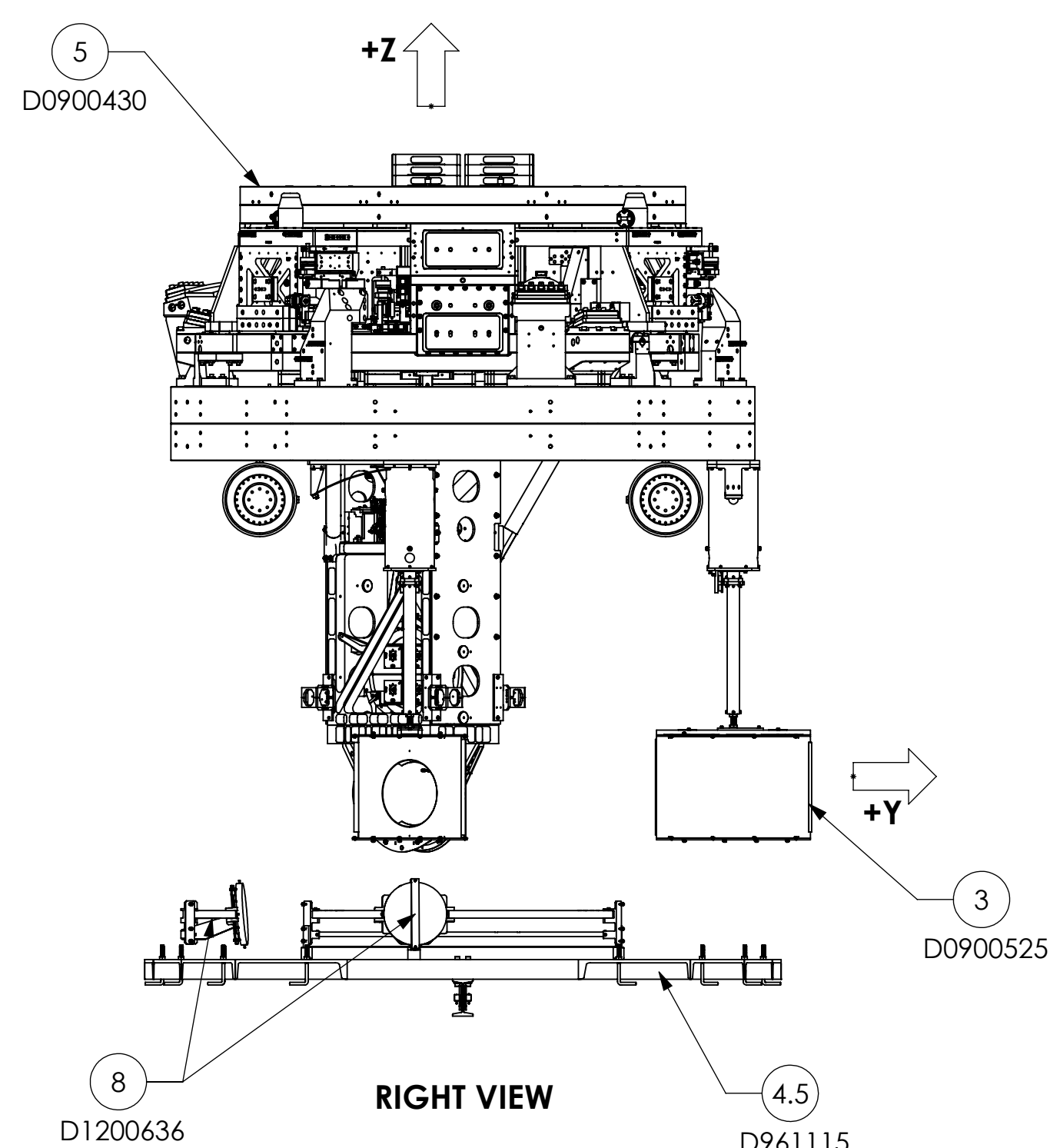




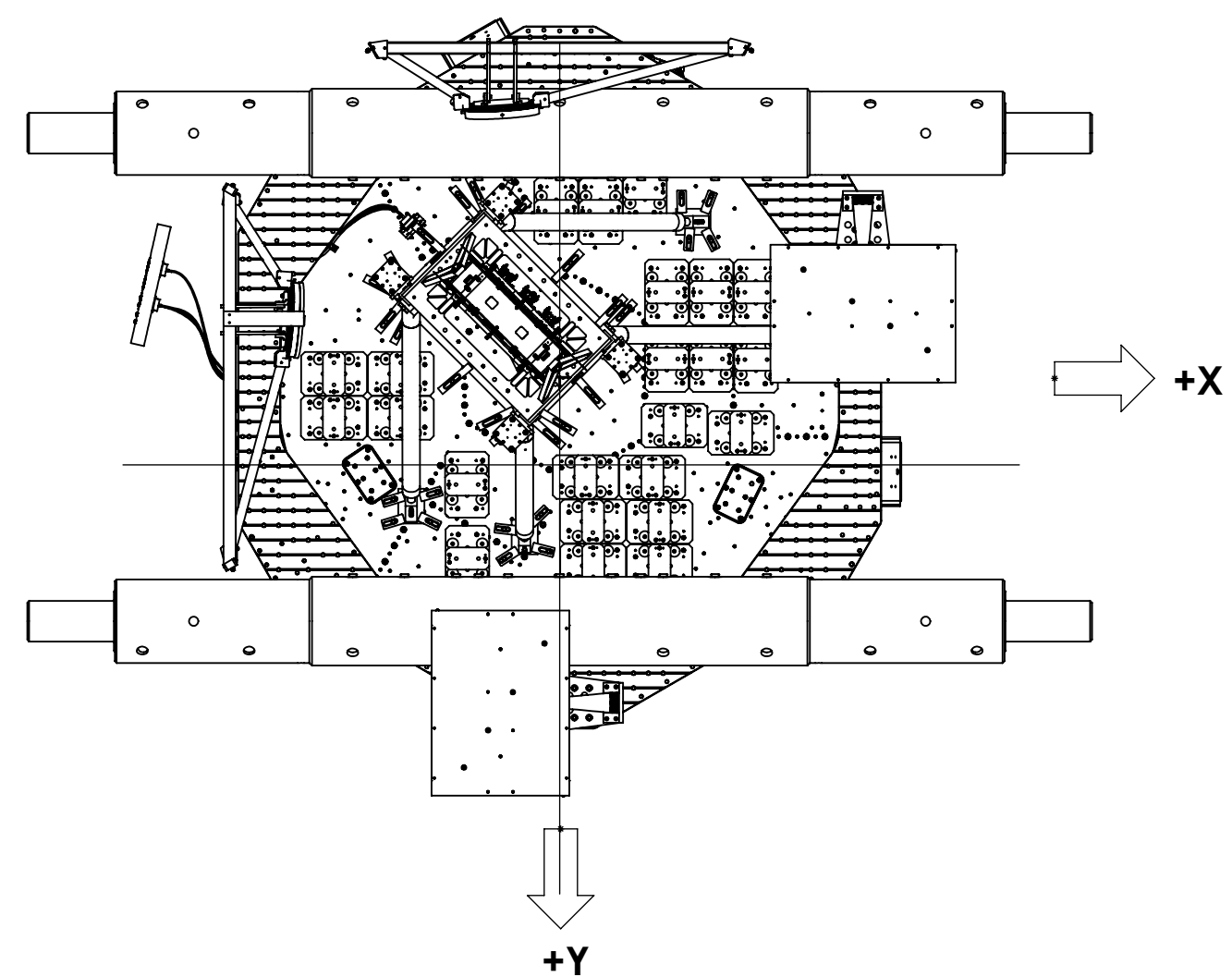
TOP VIEW



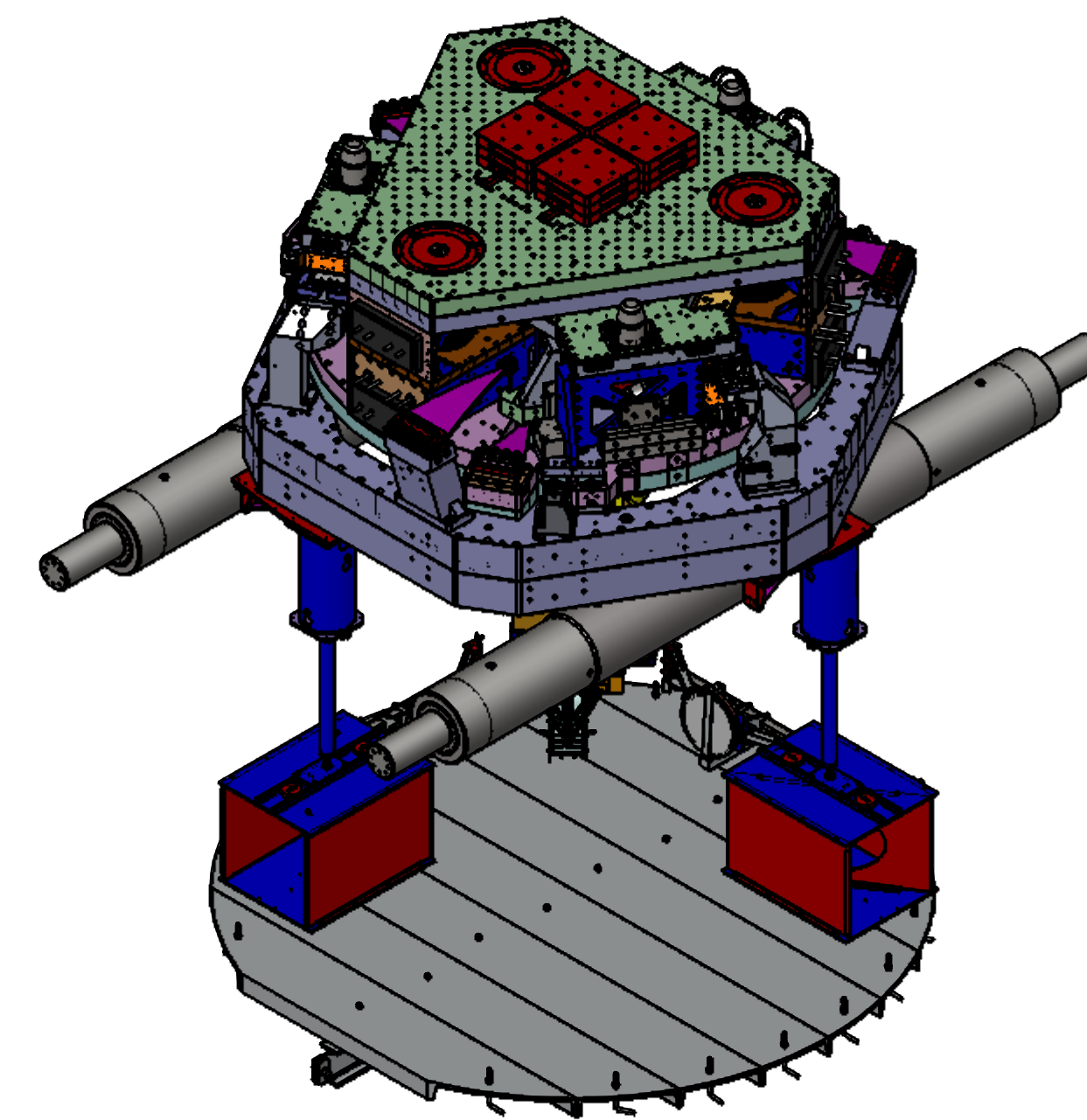
FRONT VIEW



RIGHT VIEW



BOTTOM VIEW



| ITEM NO. | PART NUMBER | DESCRIPTION   | QTY |
|----------|-------------|---|-----|
| 8        | D1200636    | AdvLIGO SUS, BSC2-L1 Local CS for CO2 ITM Steering Mirror (ITMX,ITMY) | 1   |
| 7        | D1200060    | ALIGO, CABLE HARNESS ROUTING, BSC-2                                   | 1   |
| 6        | D1000513    | HEPI ASSEMBLY, BSC gLIGO  | 1   |
| 5        | D0900430    | AdvLIGO SEI BSC2-L1, XYZ Local CS for ISI Table                       | 1   |
| 4        | D0900429    | AdvLIGO VE BSC2-L1, Vacuum Equipment Assembly                         | 1   |
| 3        | D0900525    | AdvLIGO SUS BSC2-L1, XYZ Local CS for Elliptical Baffle (ITMX,ITMY)   | 1   |
| 2        | D0900431    | AdvLIGO SUS BSC2-L1, XYZ Local CS for BS HR                           | 1   |
| 1        | D1101852    | AdvLIGO BSC2-L1 ISI Table, Payload & Suspended Masses Assy            | 1   |

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE DWG. NO. **D0900428** REV. **v7**

SCALE: 1:24 PROJECTION: SHEET 2 OF 3

D0900428 AdvLIGO Systems, BSC2-L1 Top Level Chamber Assembly, PART PDM REV: X.075, DRAWING PDM REV: X.010

8

7

6

5

4

3

2

1

H

G

F

E

D

C

B

A

+Y

KEEL MASS  
D1030143  
REMOVED FOR  
CARTRIDGE

+X

+X

D1003140  
SPREADER BAR  
ADDED FOR  
CARTRIDGE

TOP VIEW  
(LOOKING DOWN)  
CARTRIDGE ASSY.  
CONFIGURATION  
(KEEL MASS REMOVED)

BOTTOM VIEW  
(LOOKING UP)

+Y

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|            |             |              |
|------------|-------------|--------------|
| SIZE       | DWG. NO.    | REV.         |
| D          | D0900428    | v7           |
| SCALE: 1:8 | PROJECTION: | SHEET 3 OF 3 |

8

7

6

5

4

3

2

1

H

G

F

E

D

C

B

A

+

+

+

D0900428 Asst LIGO Systems, BSC211 Top Level Chamber Assembly, PART.PDM.REV.-K.075, DRAWING.PDM.REV.-X.010