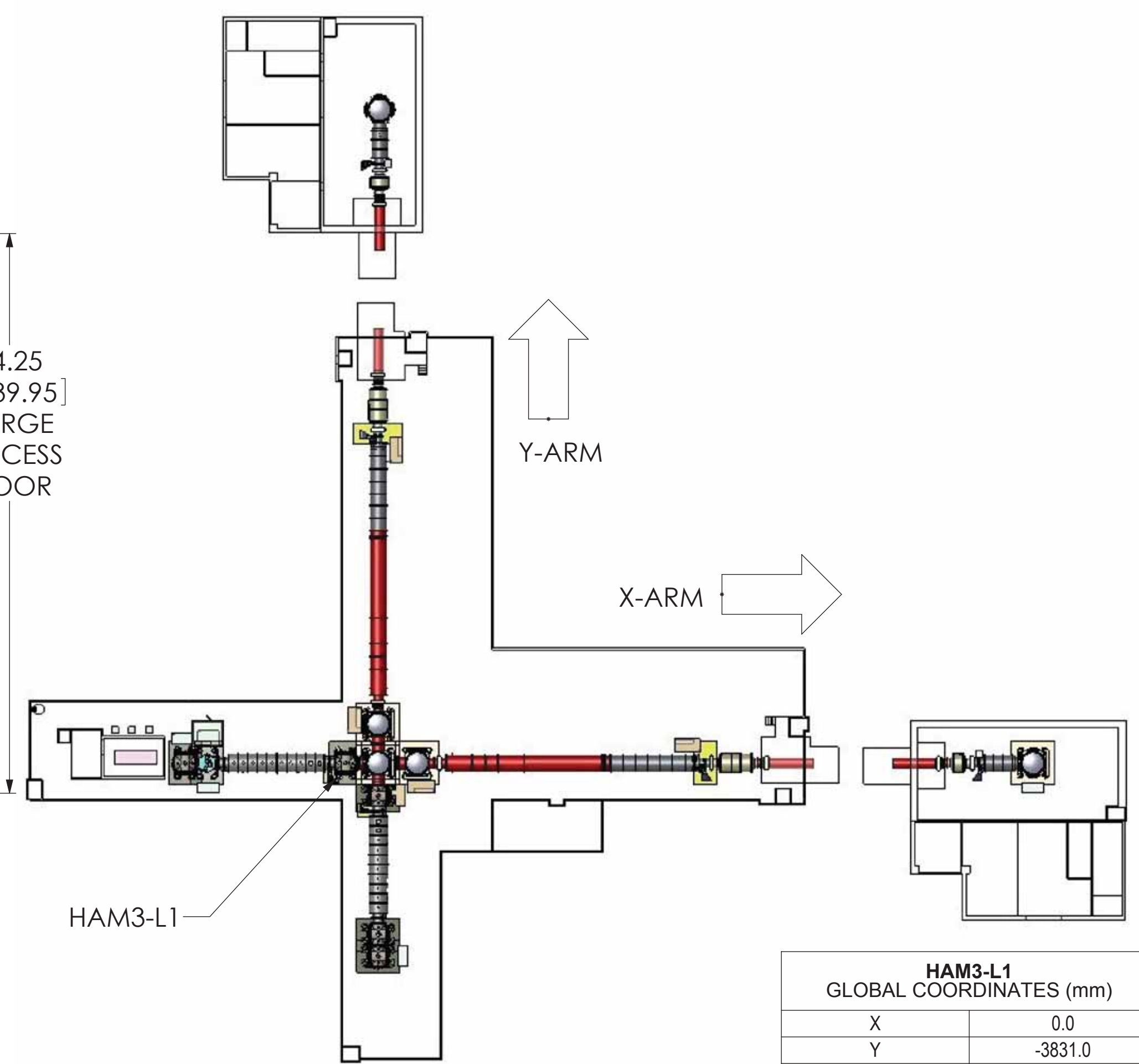
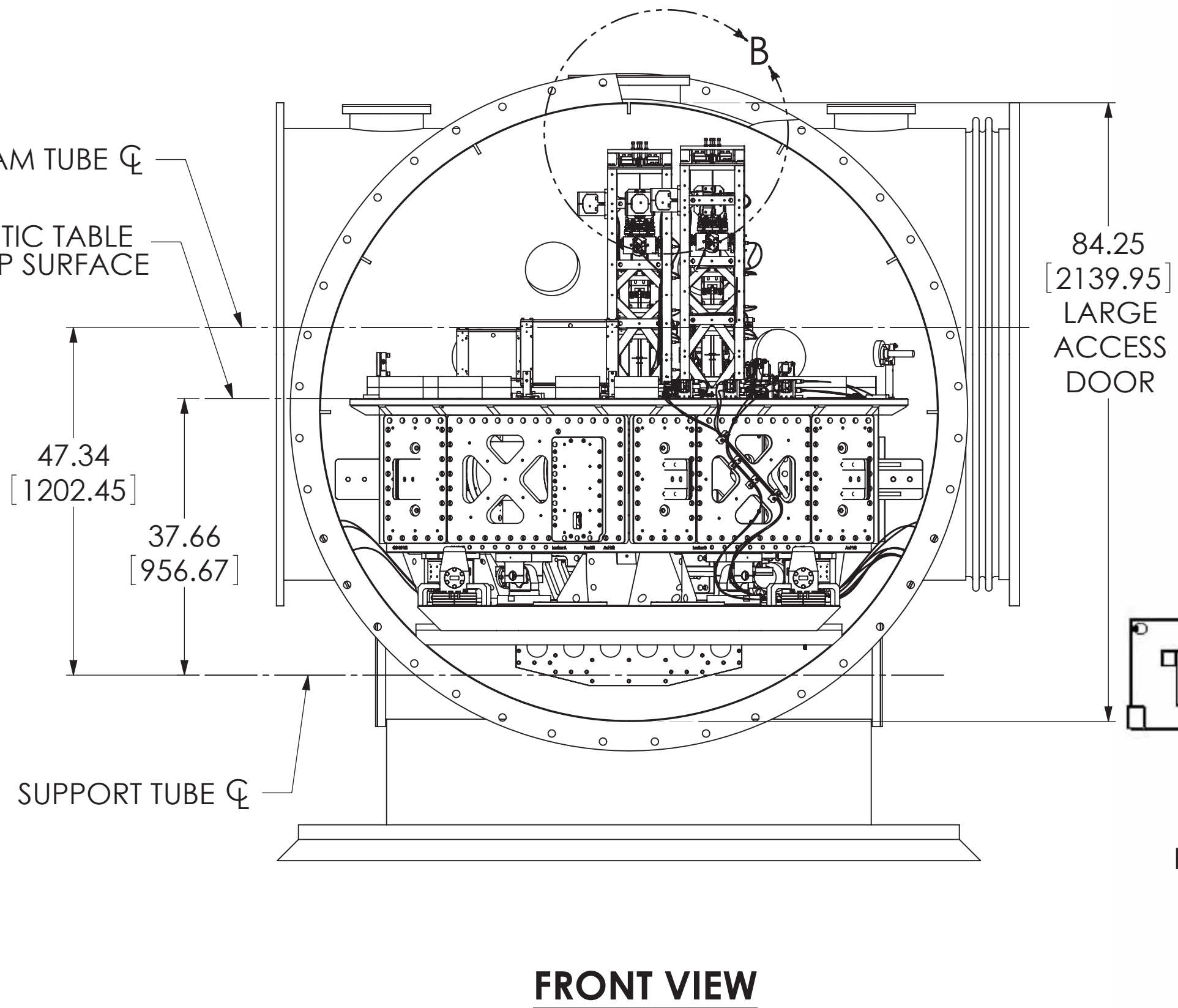
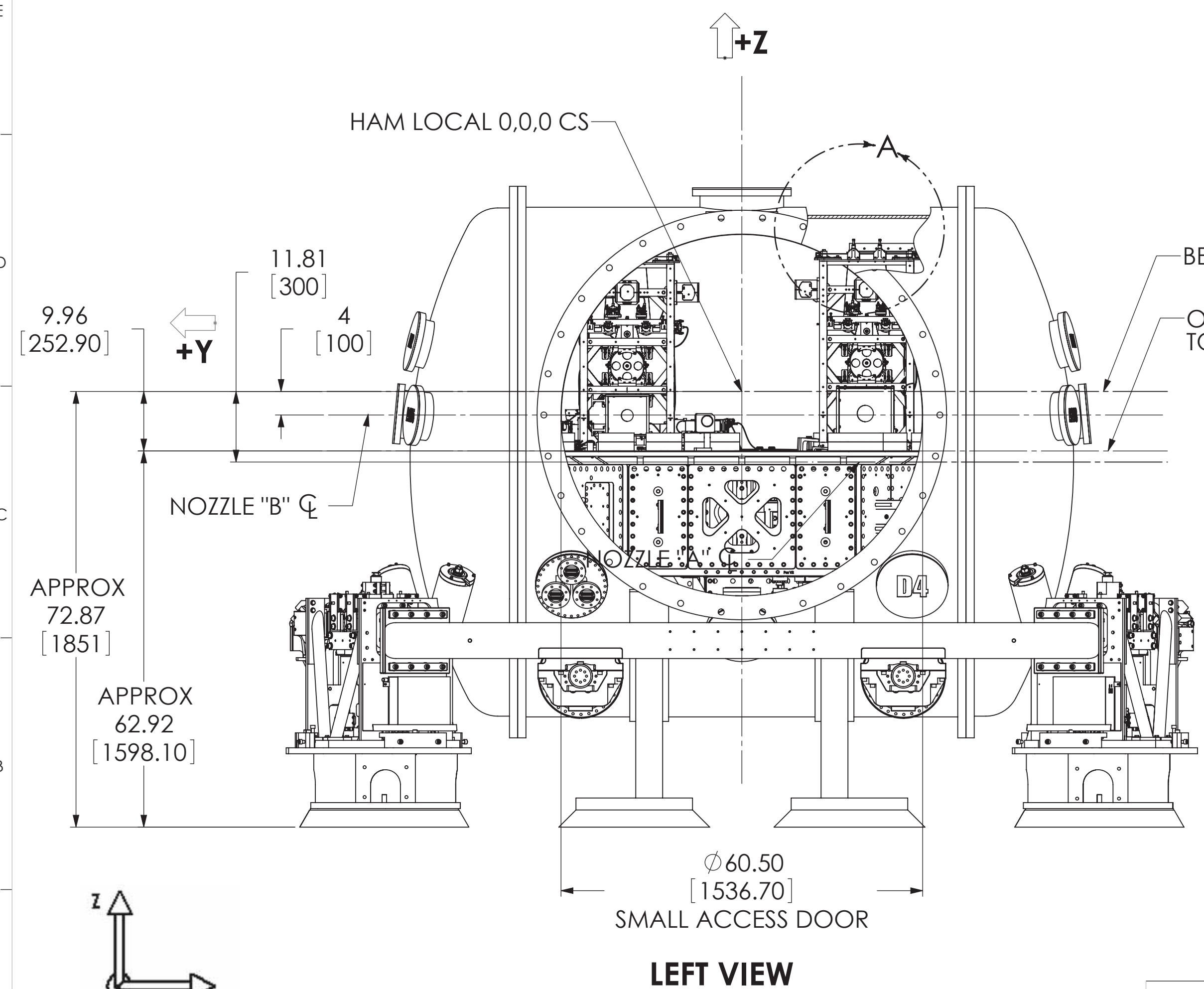
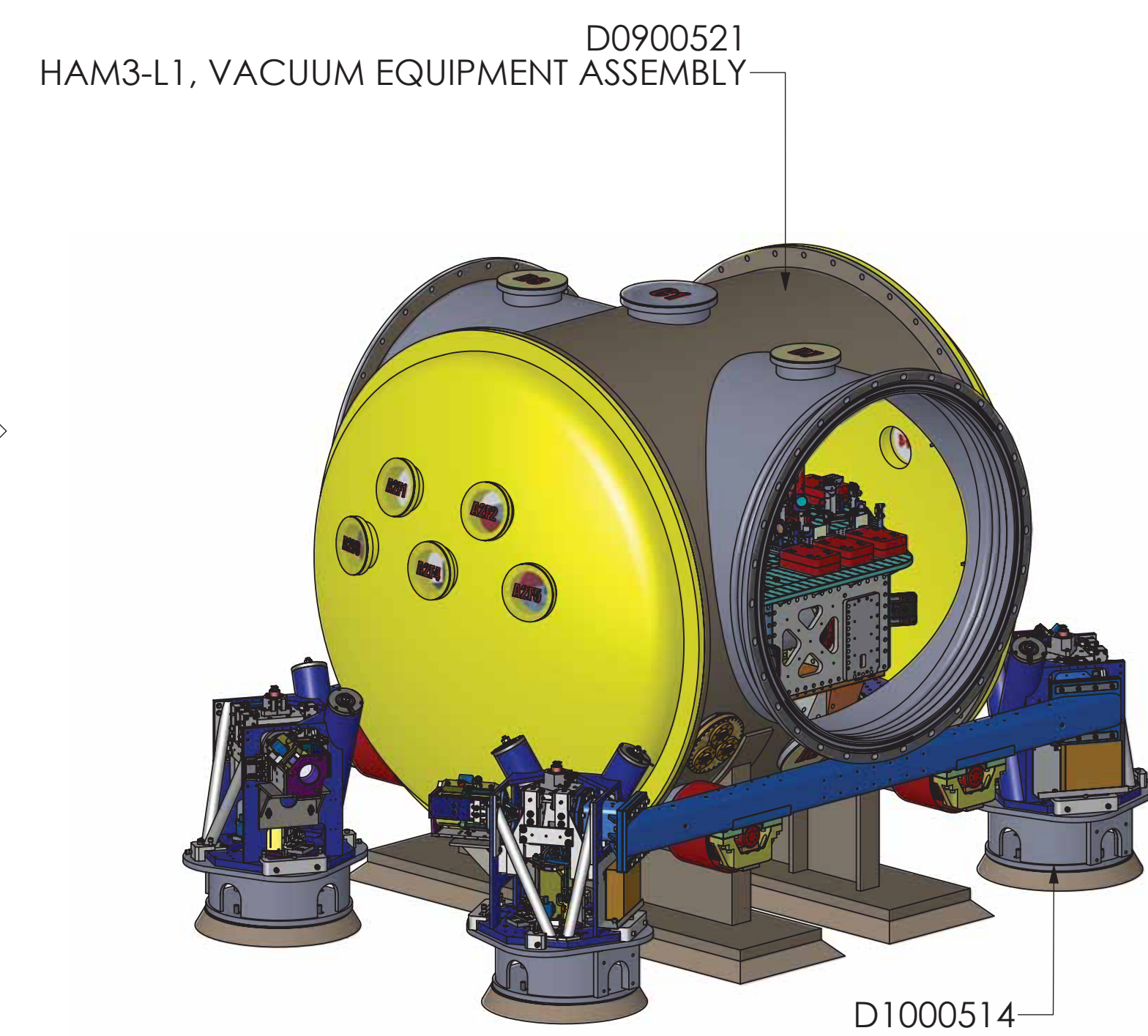
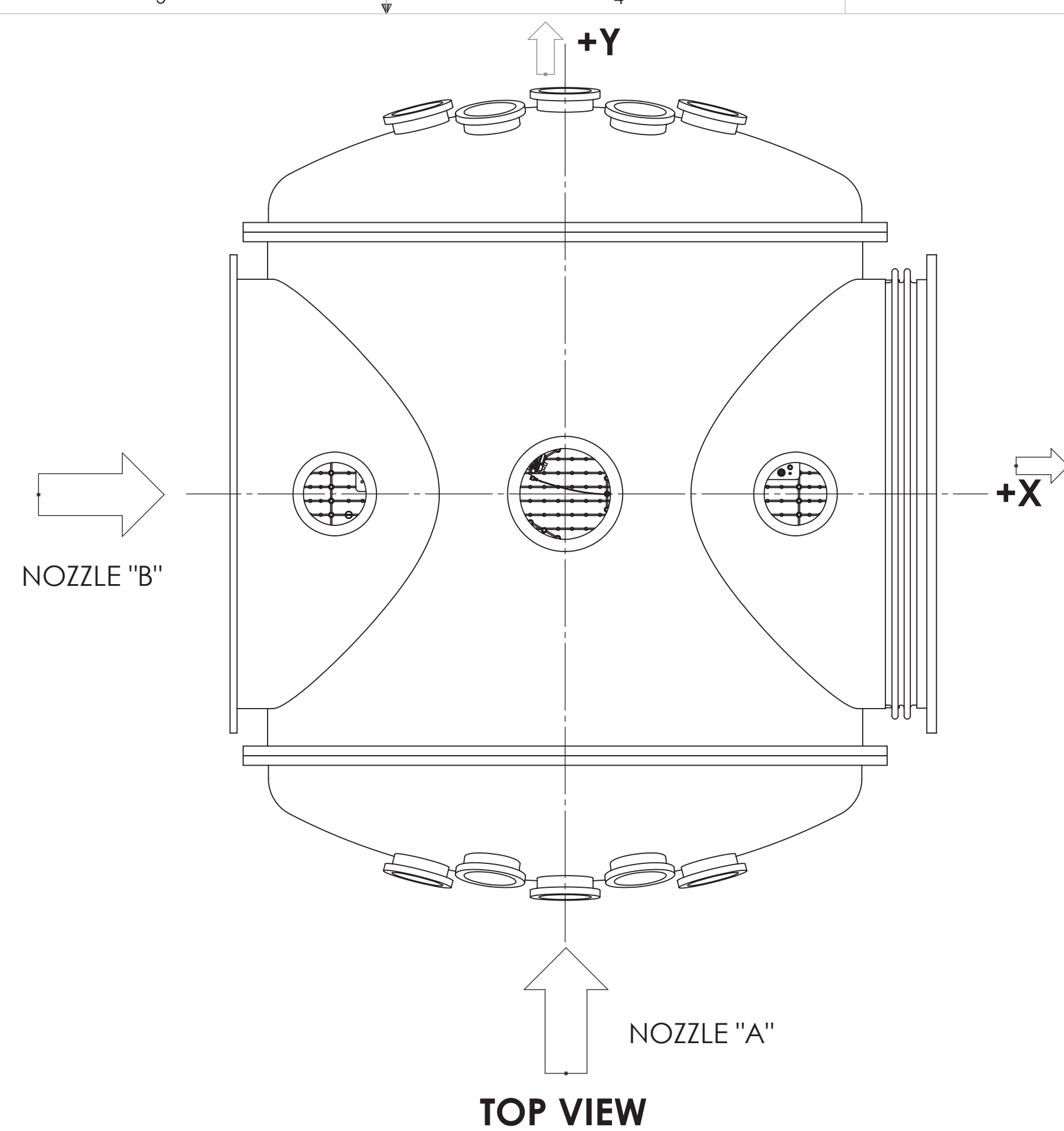
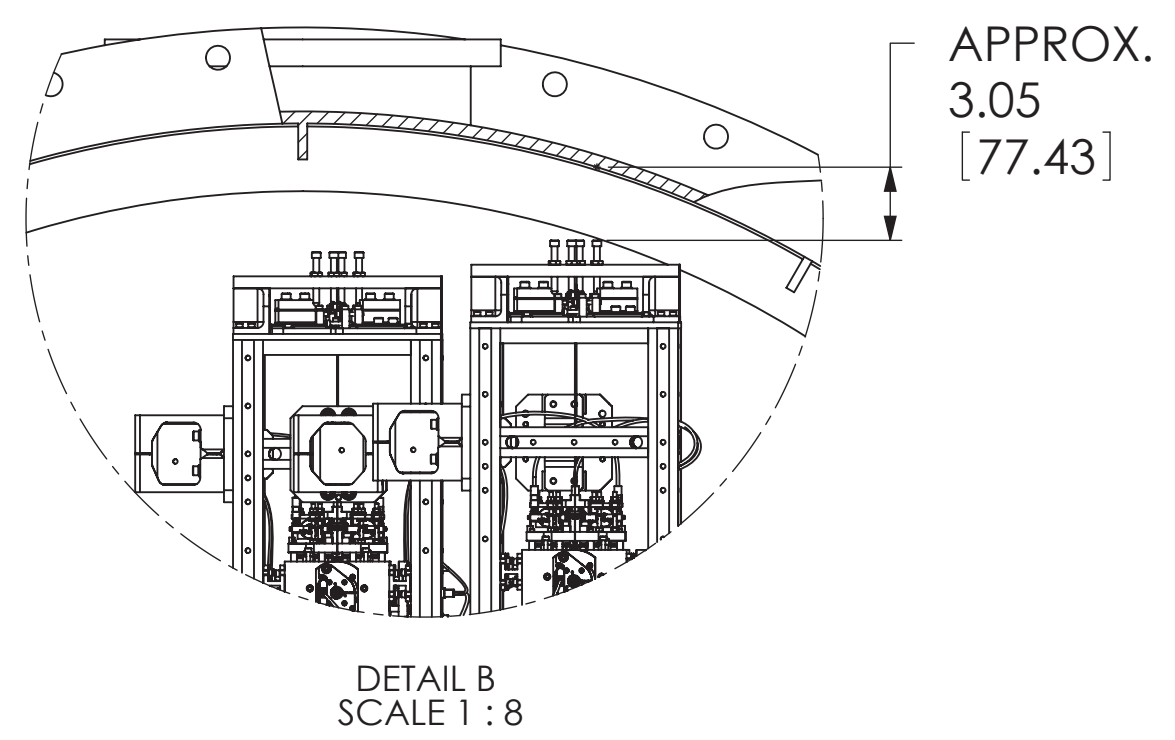
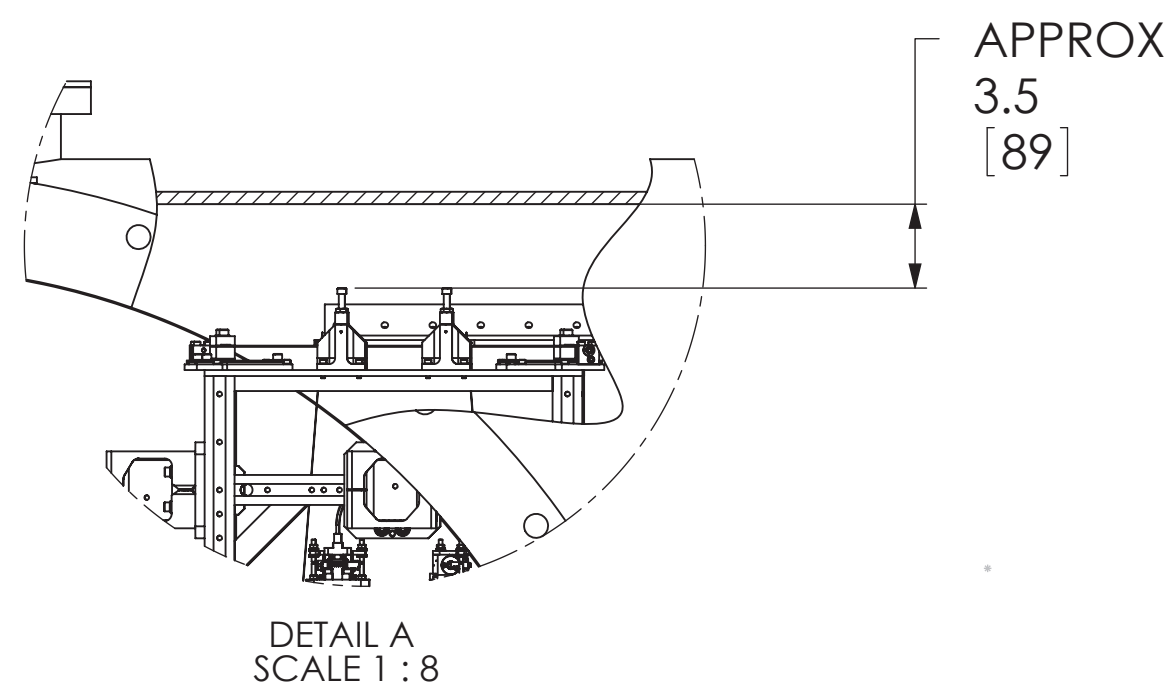


| REV. | DATE        | DCH #       | DRAWING TREE # |
|------|-------------|-------------|----------------|
| v12  | 06 NOV 2013 | E1300817-x0 |                |
| v13  | 19 DEC 2013 | E1300972-x0 |                |



| HAM3-L1 GLOBAL COORDINATES (mm) |         |
|---------------------------------|---------|
| X                               | 0.0     |
| Y                               | -3831.0 |
| Z                               | 0.0     |



| NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) |               |
|--|---------------|
| MATERIAL   | --            |
| FINISH   | -- $\mu$ inch |

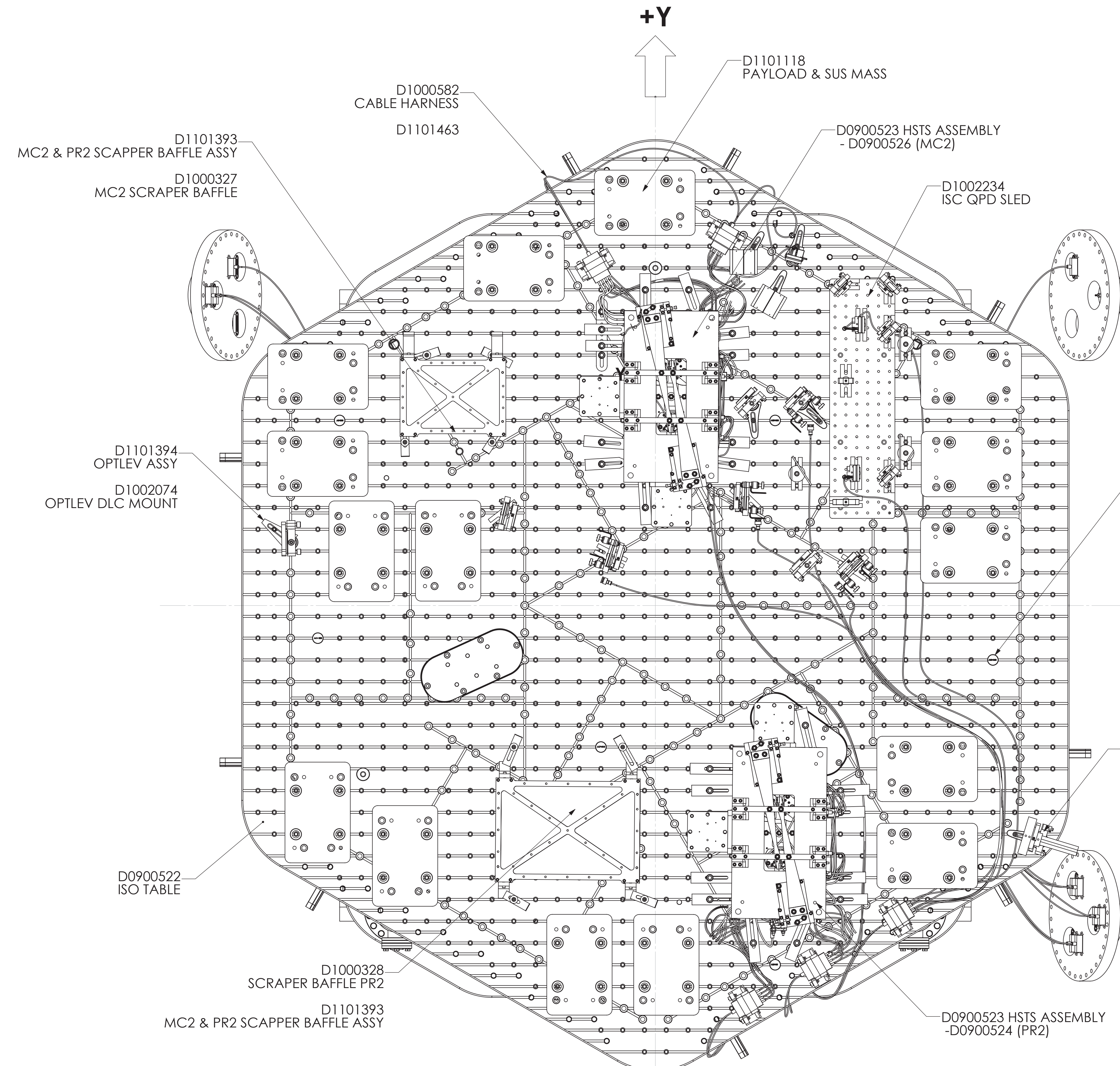
| LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY |               | PART NAME  |             |
|---|---------------|--|-------------|
| SYSTEM  | ADVANCED LIGO | HAM3-L1 TOP LEVEL CHAMBER ASSEMBLY, FULLY DETAILED |             |
| SUB-SYSTEM  | SYS           | DESIGNER   | ED CHAVEZ   |
| NEXT ASSY   |               | DRAFTER  | 27 JUL 2009 |
|   |               | CHECKER  | SEE DCC     |
|   |               | APPROVAL   | SEE DCC     |
|   |               | SIZE   | D           |
|   |               | DWG. NO.   | D0900520    |
|   |               | REV.   | v13         |
|   |               | SCALE  | 1:16        |
|   |               | PROJECTION   |             |
|   |               | SHEET 1 OF 4                                       |             |

D:\0900520\AdvLIGO Systems\HAM3-L1 Top Level Chamber Assembly\ALL PART PDM REV. X-081 DRAWING PDM REV. X-014

8 7 6 5 4 3 2 1

H  
G  
F  
E  
D  
C  
B  
A

D0900520 AdvLIGO Systems: HAM3-L1 Top Level Chamber Assembly: ALL PART PDM REV: X-081, DRAWING PDM REV: X-014



SEE DRAWING D1101309 FOR POSITIONS OF FIDUCIALS

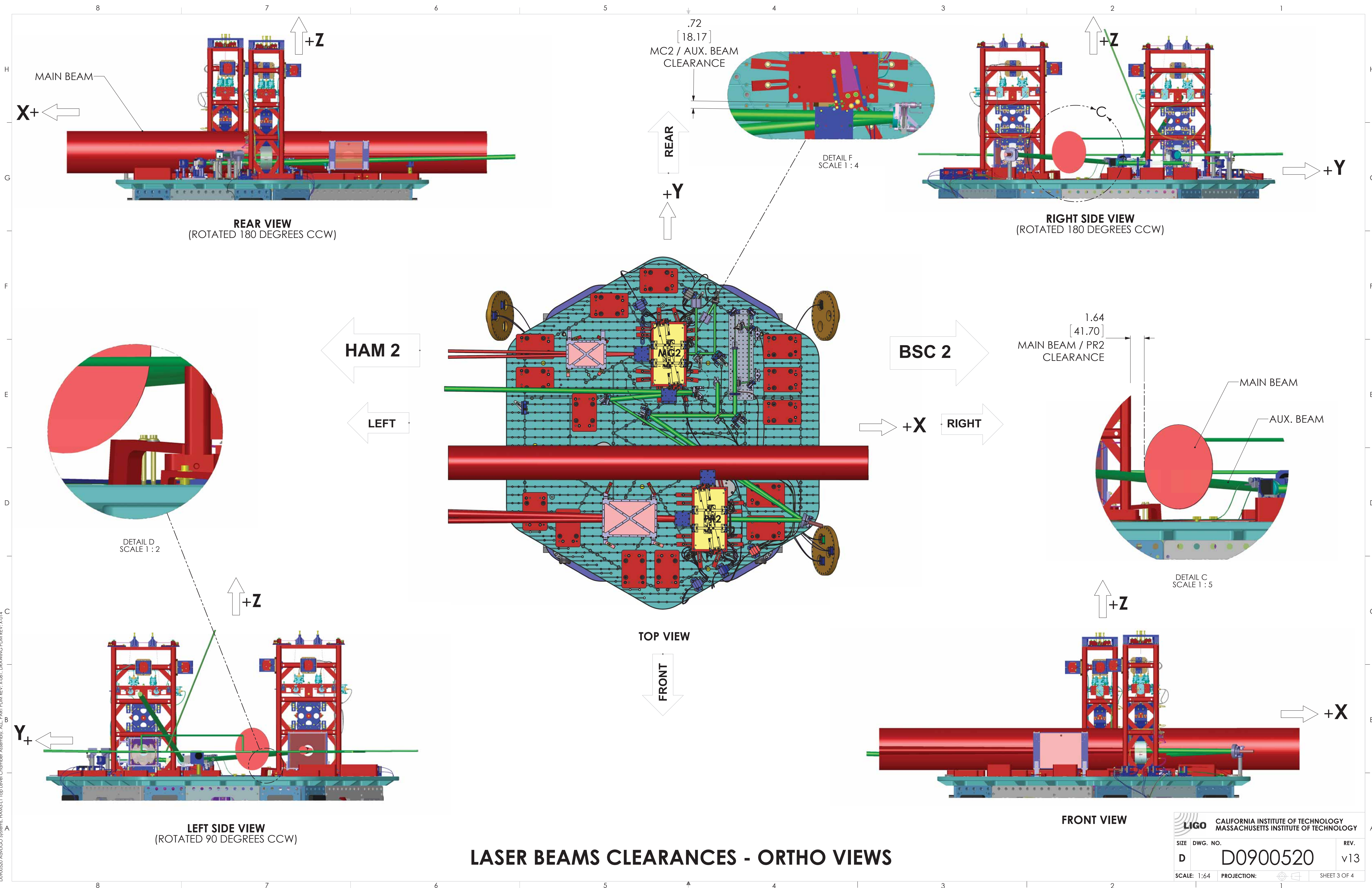
| ITEM NO. | PART NUMBER | DESCRIPTION   | QTY. |
|----------|-------------|---|------|
| 12       | D1201242    | AdvLIGO SEI HAM3-L1, XYZ Local CS for ISC BLK GLASS BEAM DUMPS  | 1    |
| 11       | D1101309    | FIDUCIAL KIT, OPTIC TABLE, 1/4-20                               |      |
| 10       | D1101463    | CABLE HARNESS ROUTING, HAM 3                                    | 1    |
| 9        | D1101394    | AdvLIGO SEI HAM3-L1, XYZ Local CS for OptLev DLC Component      | 1    |
| 8        | D1002235    | AdvLIGO SEI HAM3-L1, XYZ LOCAL CS for IO Optic Mount Components | 1    |
| 7        | D1002234    | AdvLIGO SEI HAM3-L1, XYZ Local for ISC Components               | 1    |
| 6        | D1101118    | AdvLIGO HAM3-L1 ISI Table, Payload & Suspended Mass Assembly    | 1    |
| 5        | D1000514    | HEPI ASSEMBLY, HAM, aLIGO SEI                                   | 1    |
| 4        | D1101393    | AdvLIGO SUS HAM3-L1, XYZ Local for MC2 and PR2 Scraper Baffle   | 1    |
| 3        | D0900523    | AdvLIGO SUS HAM3-L1, XYZ Local CS for HSTS (PR2,MC2)            | 1    |
| 2        | D0900522    | AdvLIGO SEI HAM3-L1, XYZ Local CS for ISO Table                 | 1    |
| 1        | D0900521    | AdvLIGO VE HAM3-L1, Vacuum Equipment Assembly                   | 1    |

PARTS LIST

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

|            |             |              |
|------------|-------------|--------------|
| SIZE       | DWG. NO.    | REV.         |
| D          | D0900520    | v13          |
| SCALE: 1:5 | PROJECTION: | SHEET 2 OF 4 |

8 7 6 5 4 3 2 1

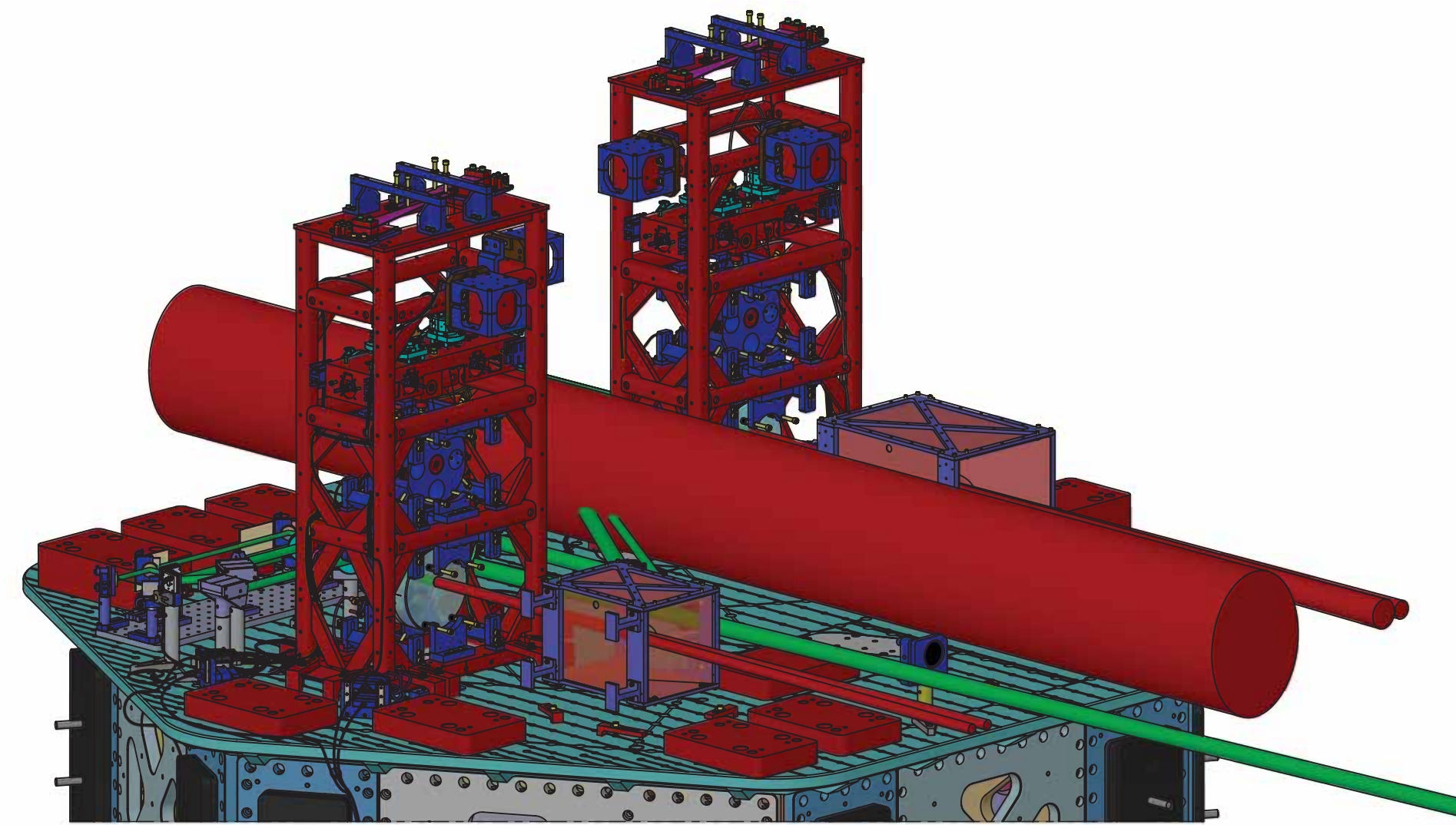


**LASER BEAMS CLEARANCES - ORTHO VIEWS**

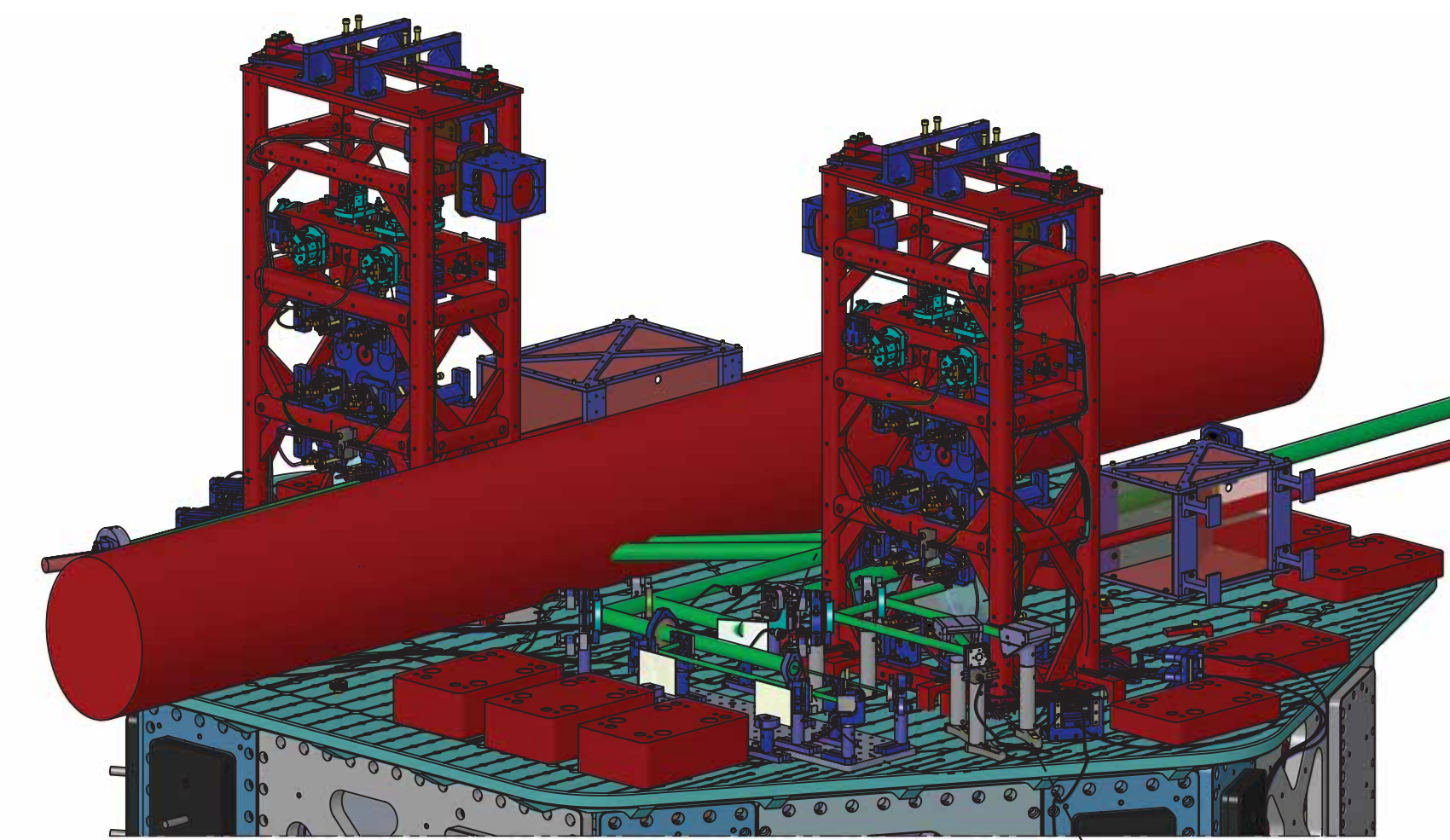
**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

|             |             |              |
|-------------|-------------|--------------|
| SIZE        | DWG. NO.    | REV.         |
| D           | D0900520    | v13          |
| SCALE: 1:64 | PROJECTION: | SHEET 3 OF 4 |

DDP00520 Asst LIGO Systems: HAM2-1 Top Level Chamber Assembly: ALL PART PDM REV: X-081 DRAWING PDM REV: X-014



ISO REAR - LEFT

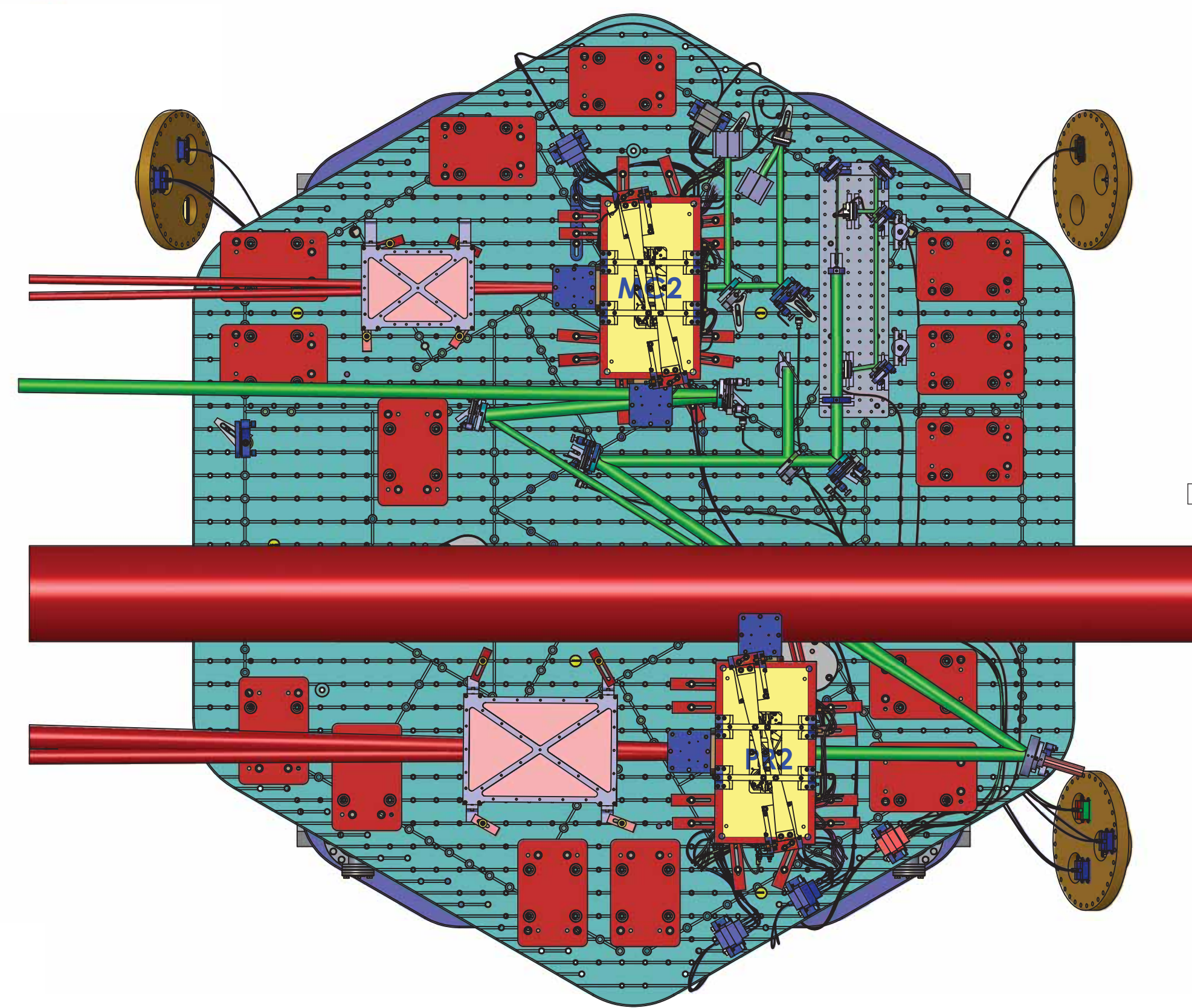


ISO REAR - RIGHT

E



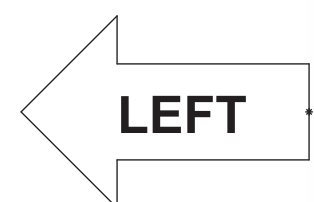
DETAIL E  
SCALE 1 : 4



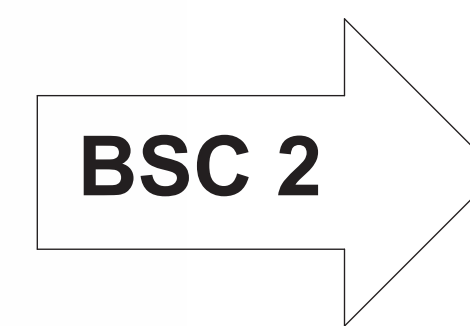
TOP VIEW



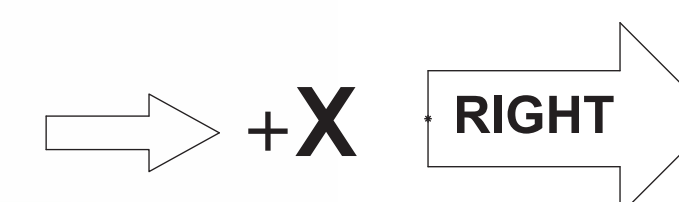
HAM 2



LEFT



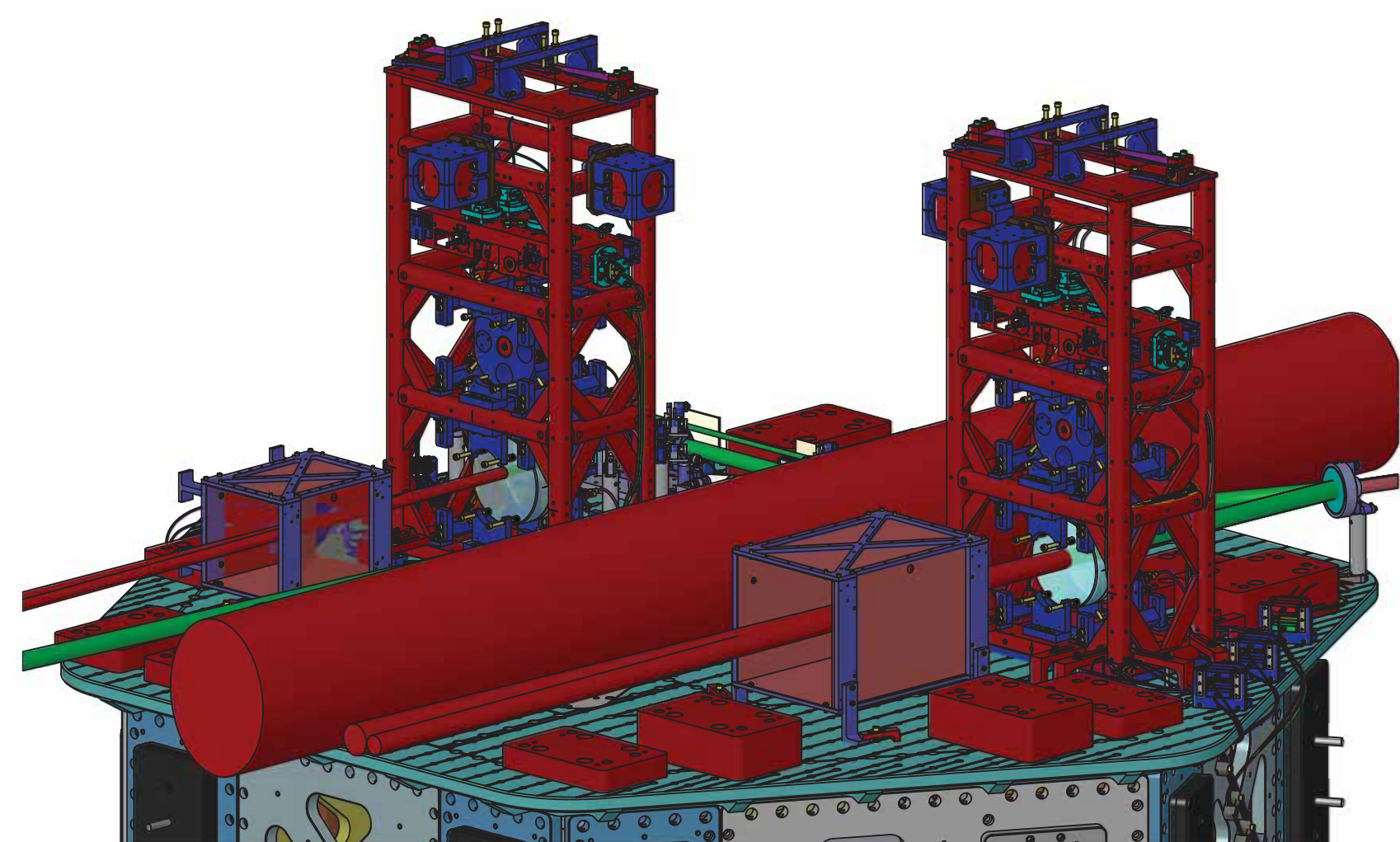
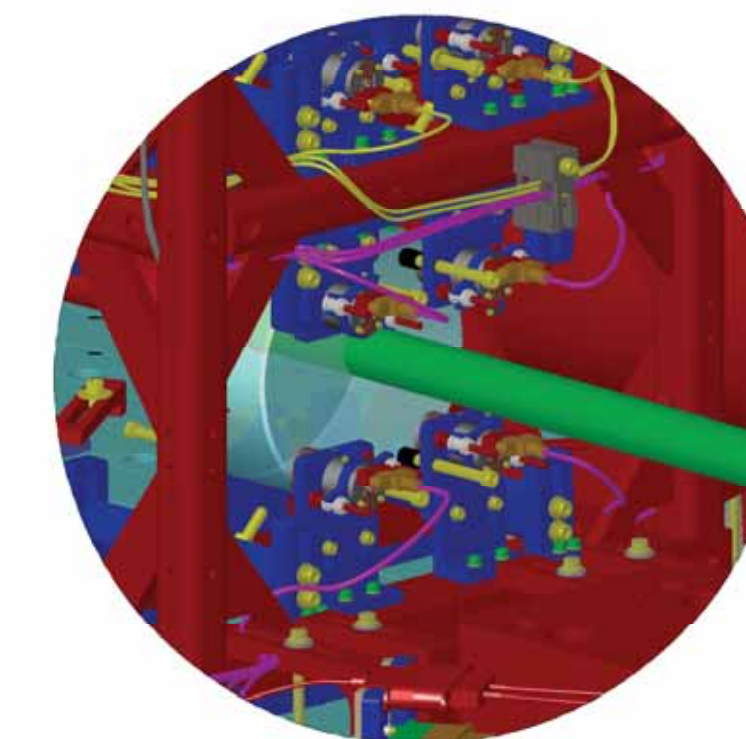
BSC 2



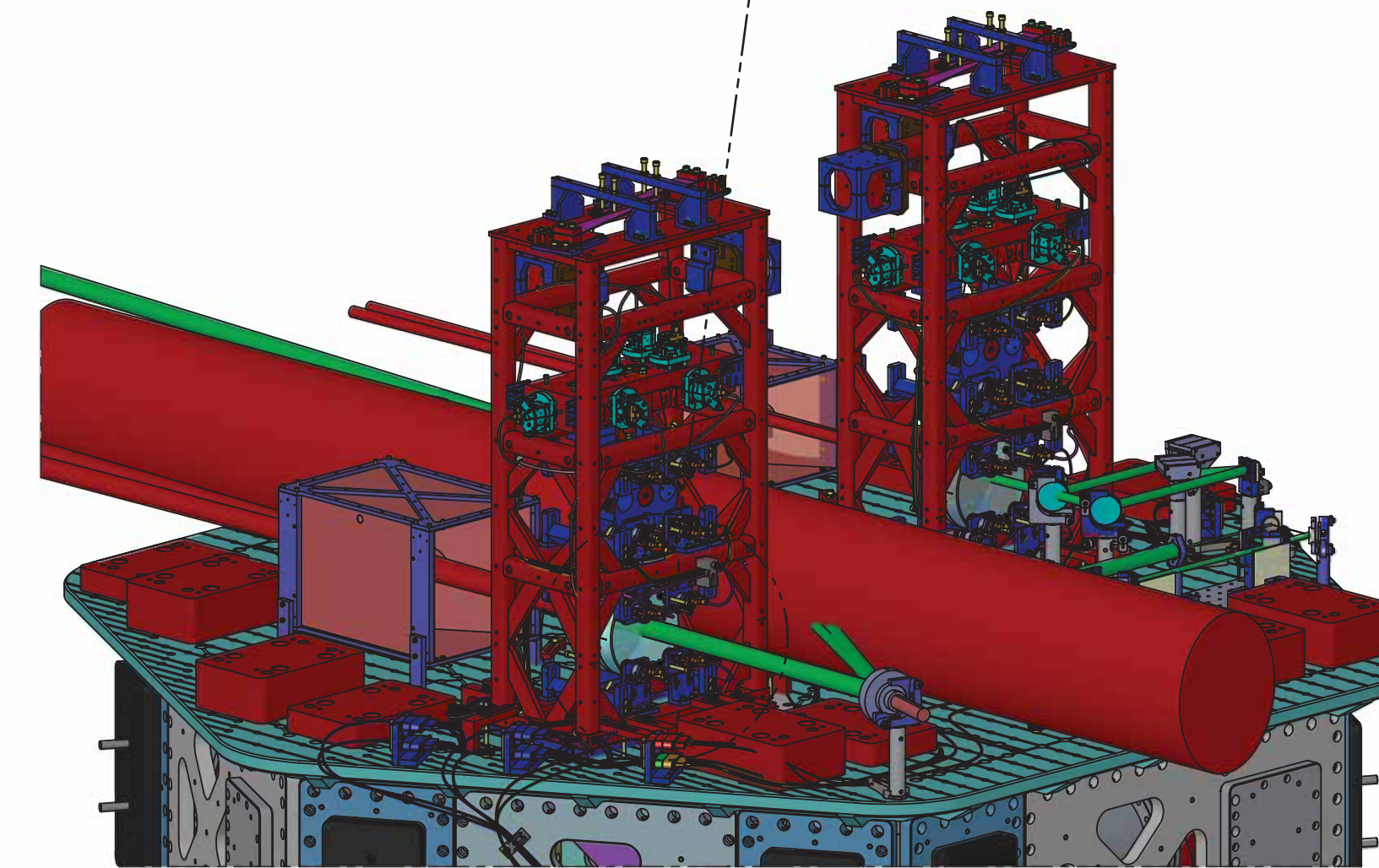
+X

RIGHT

PR2 CABLES - AUX. BEAM CLEARANCE  
SCALE 1 : 4



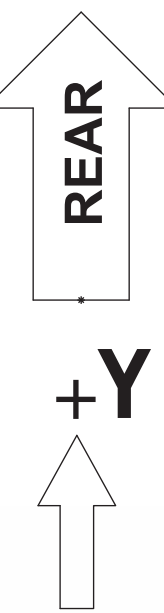
ISO FRONT - LEFT



ISO FRONT - RIGHT



FRONT



REAR

+Y

# LASER BEAMS CLEARANCES - ISO VIEWS

|   |             |
|---|-------------|
| CALIFORNIA INSTITUTE OF TECHNOLOGY<br>MASSACHUSETTS INSTITUTE OF TECHNOLOGY |             |
| SIZE DWG. NO.   | REV.        |
| D D0900520  | v13         |
| SCALE: 1:64   | PROJECTION: |
| SHEET 4 OF 4  |             |

DD0900520 Aux LIGO Systems: HAM3-L1 Top Level Chamber Assembly: ALL PART PDM REV: X-081, DRAWING PDM REV: X-014