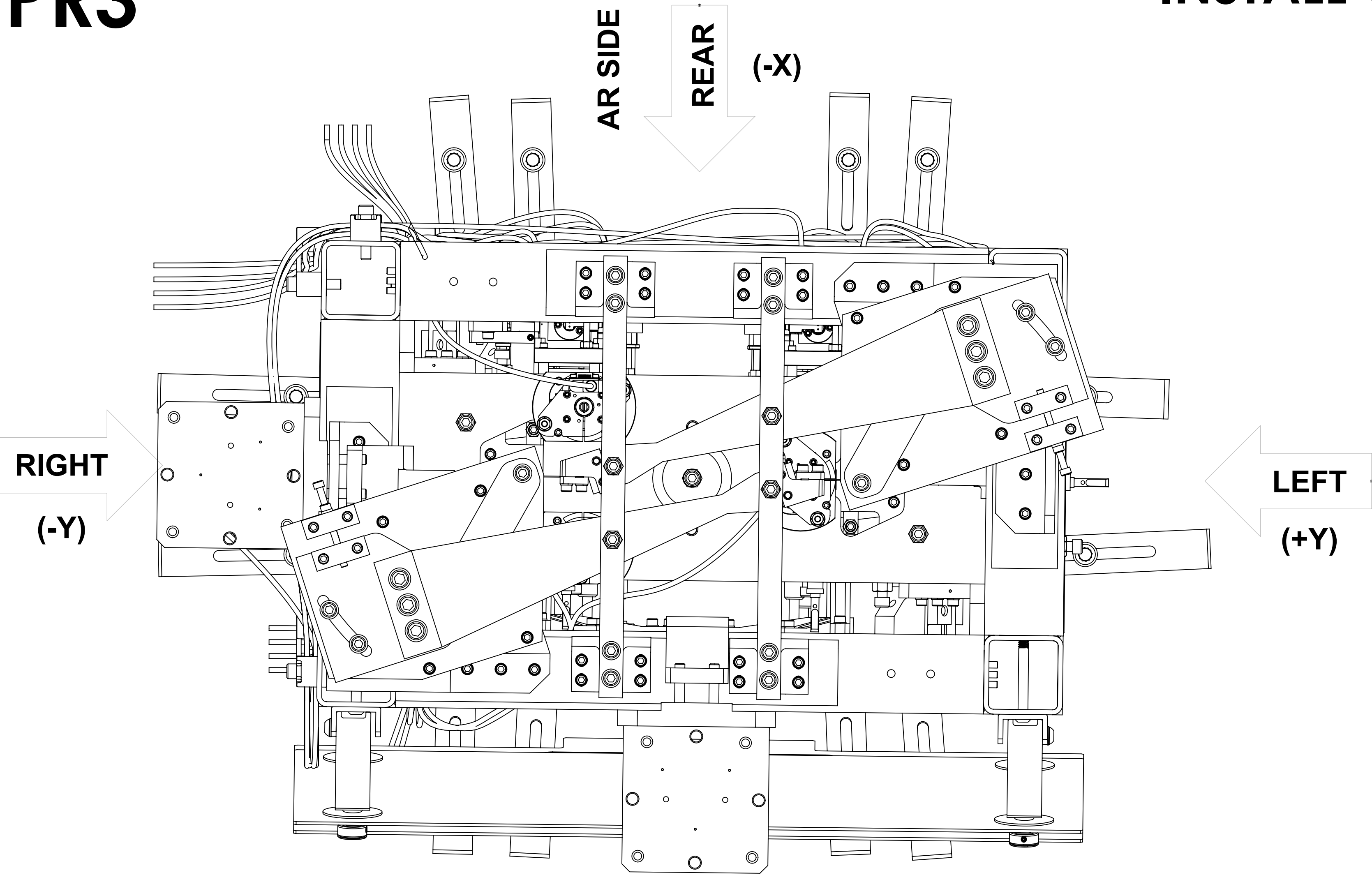


PR3

INSTALL CONFIGURATIONS (i.e.:IN CHAMBER - DOORS CLOSED)

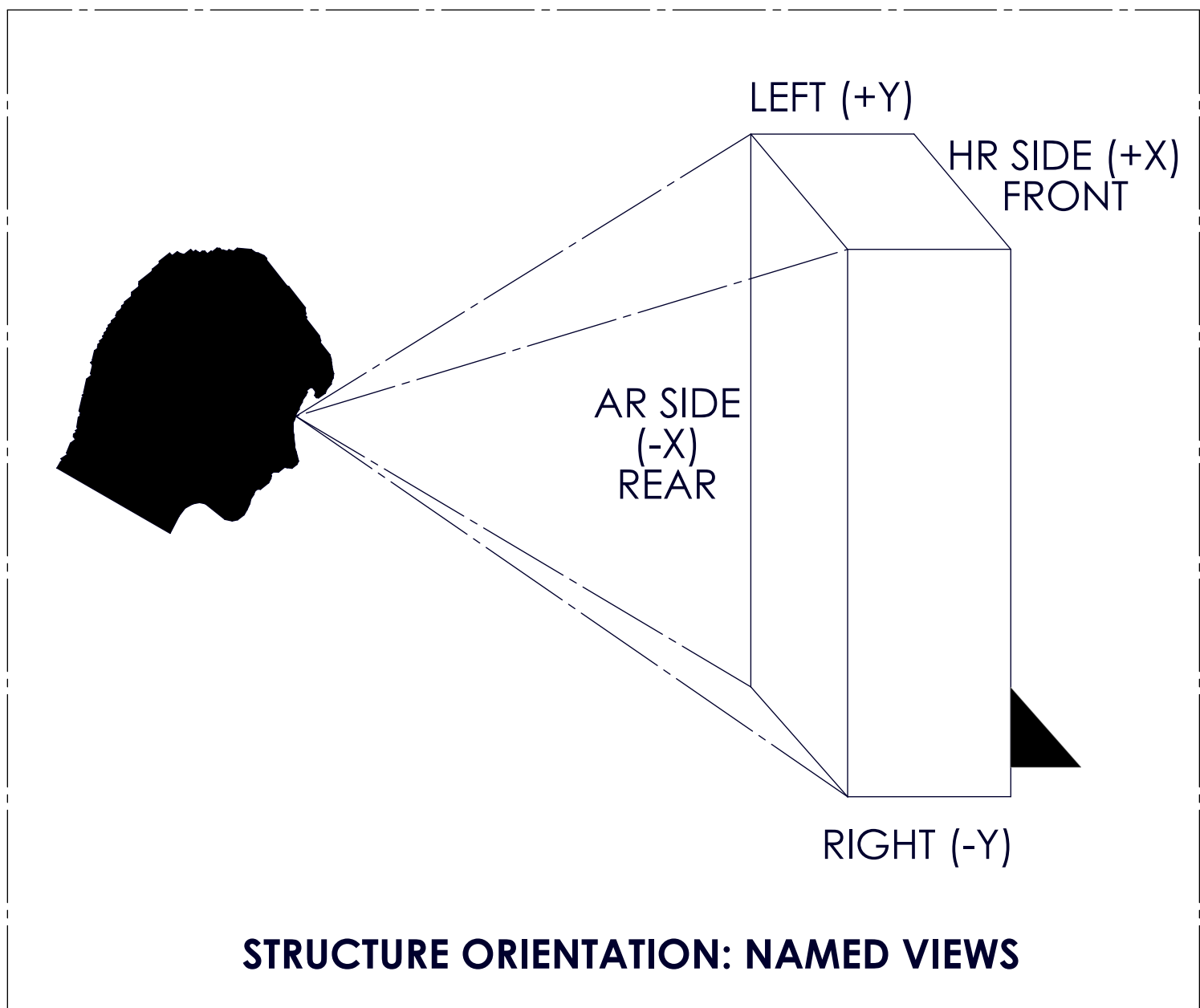
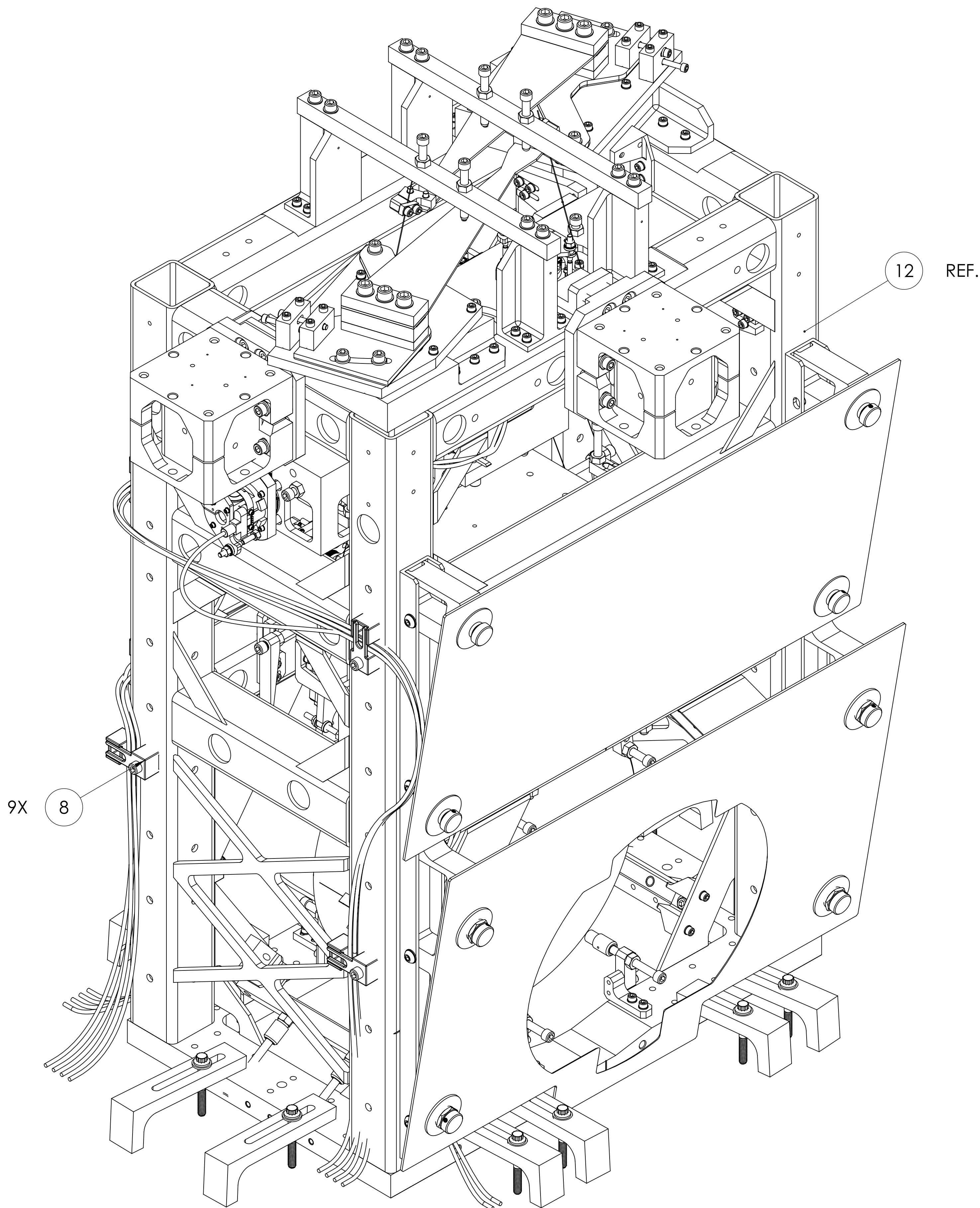
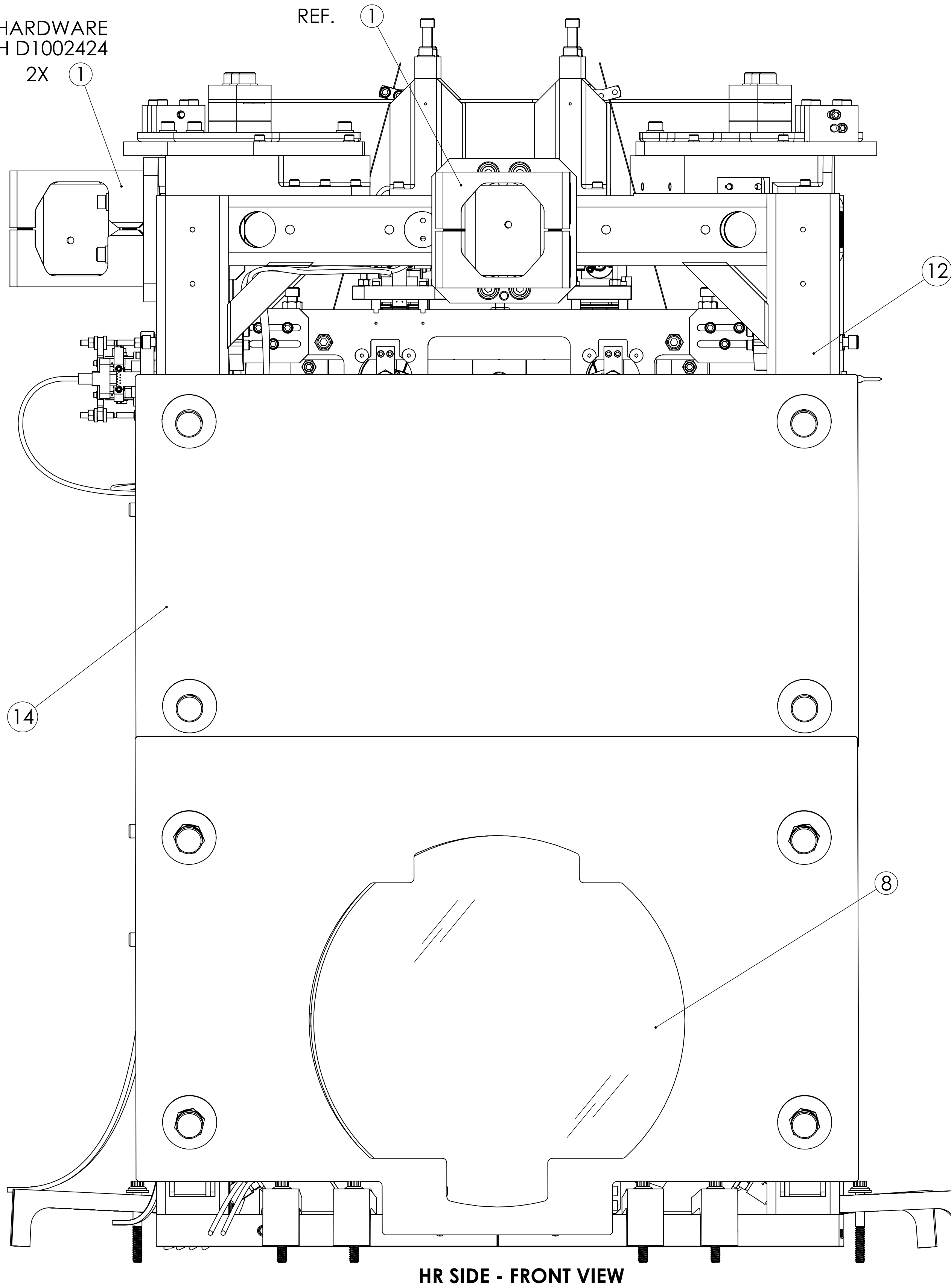
REV.	DATE	DCN #	DRAWING TREE #
V1	10 AUG 2011	-	-
v11	18 SEP 2017	E1700274-x0	-
-	-	-	-

- ① REFERENCED DOCUMENTATION:
- 1.1 LIGO-E1 100109, HAM SUS CONTROLS ARRANGEMENT.
 - 1.2 LIGO-D1 101493, OSEM ORIENTATION.
 - 1.3 LIGO-D1 101463, SYSTEM CABLING DIAGRAM.
 - 1.4 LIGO-D1002424, VIBRATION ABSORBER ORIENTATION.
 - 1.5 LIGO-E1 100411, CABLE CLAMP TORQUE.
 - 1.6 LIGO-D1 101296, HAM ISI HOLE TAB.
2. SEE SHEETS 4,5,6,7,AND 8 FOR CABLE ROUTE DETAILS.



TOP VIEW
(SEE SHEET 3, FOR DOG CLAP DETAILS)

ATTACH USING HARDWARE
SUPPLIED WITH D1002424



LOCAL COORDINATES - REFERENCE

Xmm	Ymm	Zmm	YAW °
381.5	-177.4	-94.5	180.65°

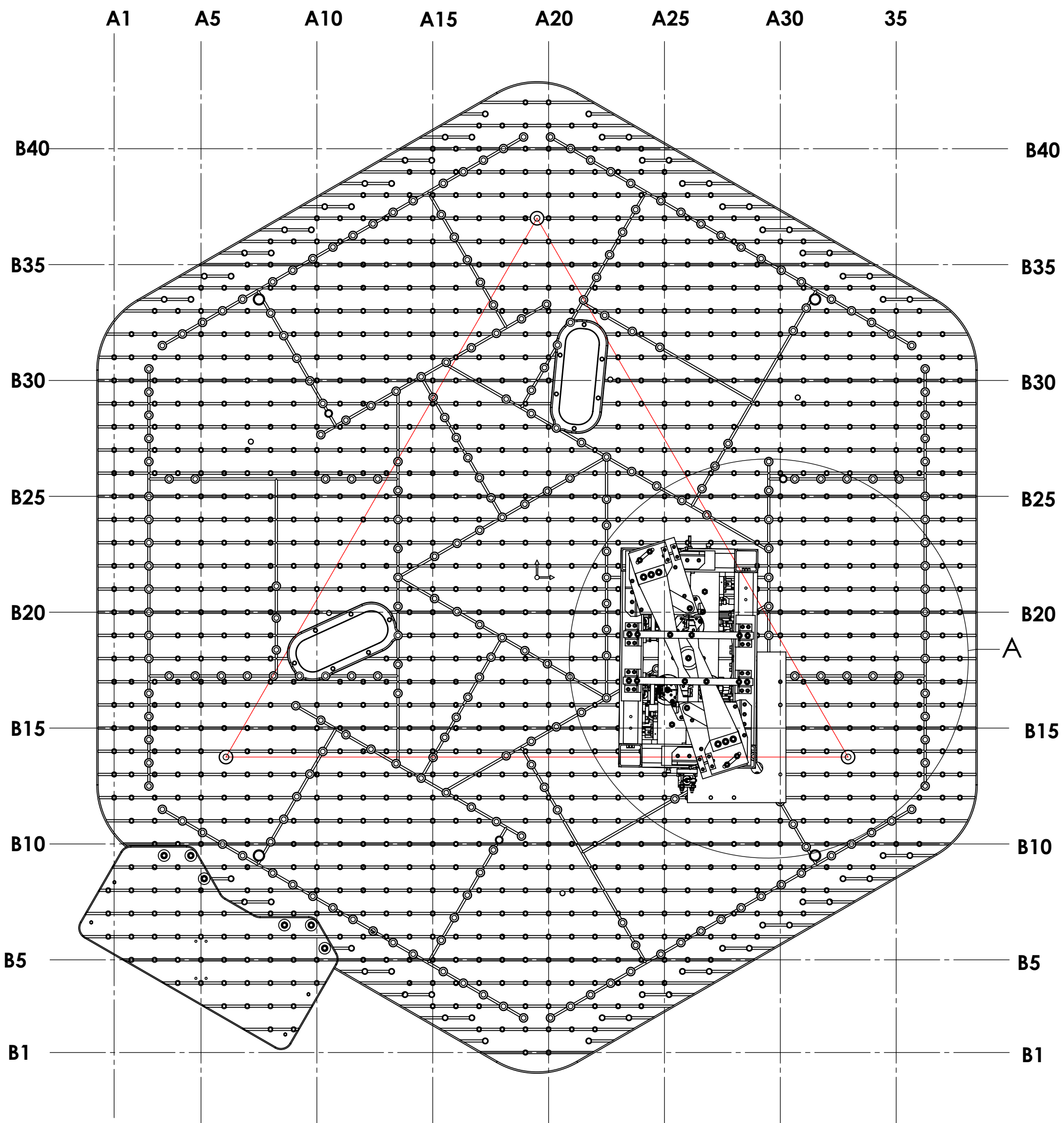
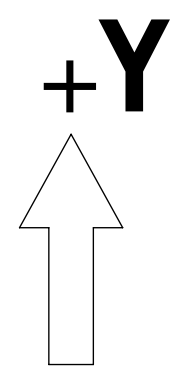
REFER TO DRAWING D1101233 FOR HAM2-L1
INSTALLATION PLATE LAYOUT

TABLE 1: HAM2-L1 PR3 CABLING SPECIFICATIONS, FROM/TO DES.					
ROUTE NO.	FROM OSEM POSITION	TO CB FLOOR DES.	QP LEG DES.	CABLE PART NO.	NOM. CABLE LENGTH (IN)
1	M3-UL (S)	CB-1 (SECOND)	A	D1000234	78
	M3-LL (N)		B		
	M3-UR (N)		C		
	M3-LR (S)		D		
2	M2-UL (S)	CB-1 (FIRST)	A	D1000234	60
	M2-LL (N)		B		
	M2-UR (N)		C		
	M2-LR (S)		D		
3	M1-T3 (N)	CB-2 (FIRST)	A	D1000234	66
	M1-LF (N)		B		
	M1-RT (S)		C		
	M1-SD (S)		D		
4	M1-T1 (S)	CB-2 (SECOND)	C	D1000234	78
	M1-T2 (S)		D		
NOTE : ROUTE NO. 4 IS A SHARED CABLE, SEE D0900415 FOR QP LEGS 'A' AND 'B' ROUTING					

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
14	D1700239	gLIGO, SLIC, HLTS BAFFLE ASSY.	1
13	N-2520-A UC COMPONENTS OR EQ.	HEX NUT 1/4-20, Ag PLATED	1
12	D070447	HLTS OVERALL ASSEMBLY	1
11	MS15795-810 OR EQ.	WASHER, FLAT, 1/4	A/R
10	92196A555 OR EQ. McMaster-CARR	SCREW, SHC, 1/4-20 X 3.25 LG.	A/R
9	2AL2.00-12SL	1/4-20 X 2.00 12PT BOLT	12
8	D1101372	PR3 L1 OPTICS ASSEMBLY	1
7	D0902462	CLAMP ASSY., UHV COMPATIBLE	9
6	D1100785-620	WASHER, FLAT, .38 X .620 O.D.	12
5	D1001376-03	AdvLIGO HAM Optics Table Dog Clamp 1.1L	3
4	D1001376-02	AdvLIGO HAM Optics Table Dog Clamp 1.1M	8
3	D1001376-01	AdvLIGO HAM Optics Table Dog Clamp 1.1S	1
2	D1000158	L1 H1 PR3 INSTALLATION PLATE	1
1	D1002424	VIBRATION ABSORBER ASSEMBLY	2
PART NAME		PARTS LIST	
AdvLIGO SUS HAM2-L1, XYZ Local CS for HLTS (PR3)			

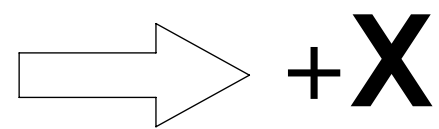
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME								
						AdvLIGO SUS HAM2-L1, XYZ Local CS for HLTS (PR3)								
MATERIAL -- -- pinch				SYSTEM		SUB-SYSTEM		DESIGNER		SIZE	DWG. NO.	REV.		
				ADVANCED LIGO		SUS		DRAFTER		K. BUCKLAND	10 AUG 2011	E	D0900368	v11
				NEXT ASSY				CHECKER		SEE DCC	SEE DCC			
								APPROVAL		SEE DCC	SEE DCC	SCALE: 1:2	PROJECTION:	
														SHEET 1 OF 9
4				3		2		1						

PR3



TOP VIEW ^(1.6)

REF. TRIANGLE: SEE D1000125 FOR
ISI NAMING AND ORIENTATION CONVENTION



AR SIDE

B25

B20

B15

A25

A30

A35

D1000158 IO L1 H1 PR3
INSTALLATION PLATE

ATTACH SCREW
AT LOCATION A30/B17

B25

B20

B15

HR SIDE

A25

A30

A35

ATTACH SCREW
AT LOCATION A27/B12

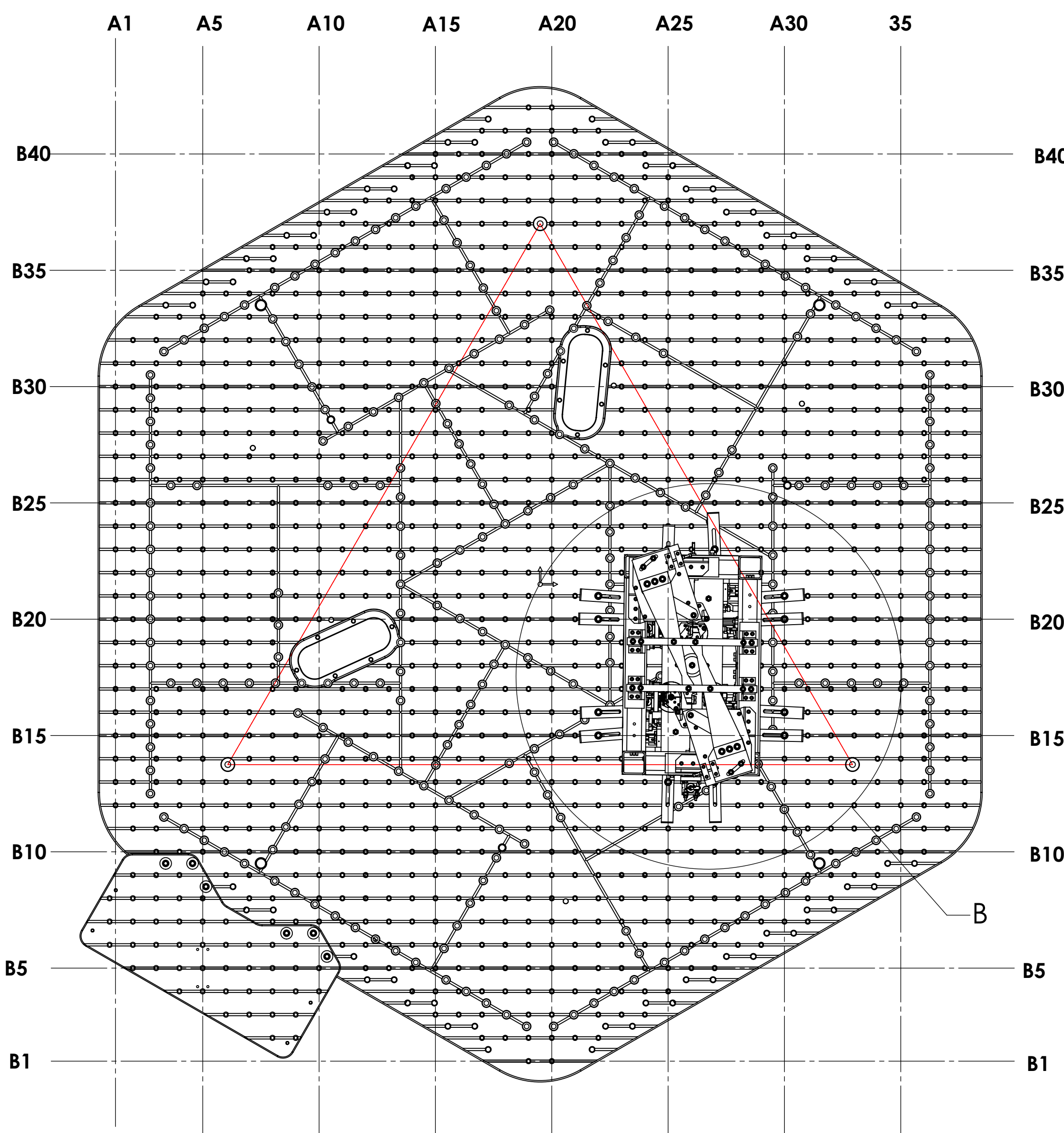
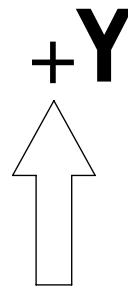
ATTACH SCREW AT LOCATION A30/B13

DETAIL A
SCALE 1 : 1.5

TOP VIEW SHOWING INSTALLATION PLATE LOCATION ^(1.6)
OPTICAL TABLE SHOWN FOR STRUCTURE LOCATION AND ORIENTATION ONLY.
DOG CLAMPS, VIBRATION ABSORBERS AND HARDWARE REMOVED FOR CLARITY

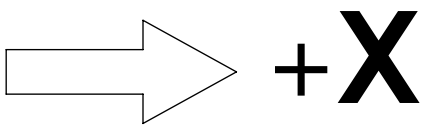
ALIGNMENT PLATE INSTALLATION / LOCATION

PR3



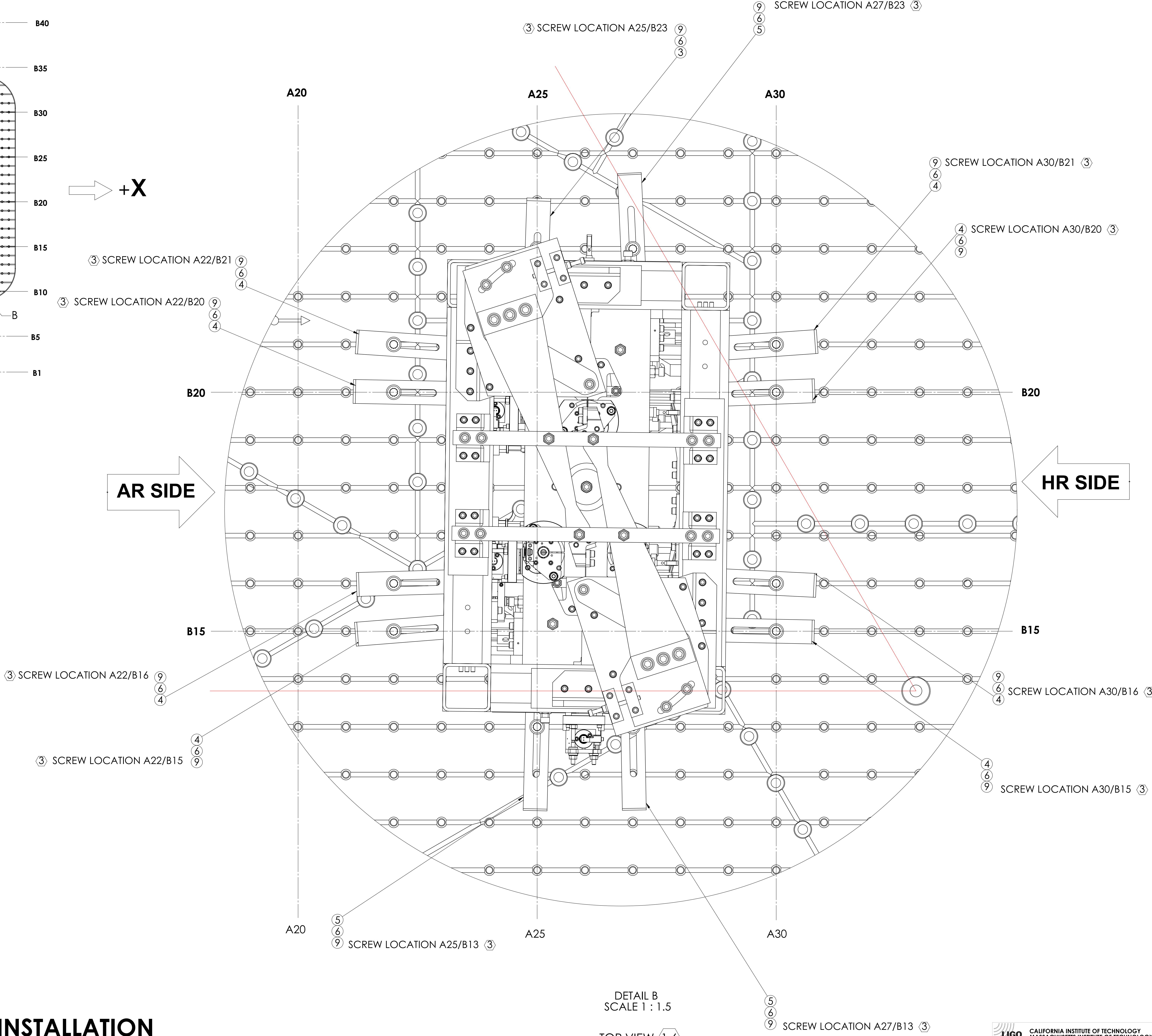
TOP VIEW 1.6

REF. TRIANGLE: SEE D1000125 FOR
ISI NAMING AND ORIENTATION CONVENTION



AR SIDE

HR SIDE



DETAIL B
SCALE 1 : 1.5

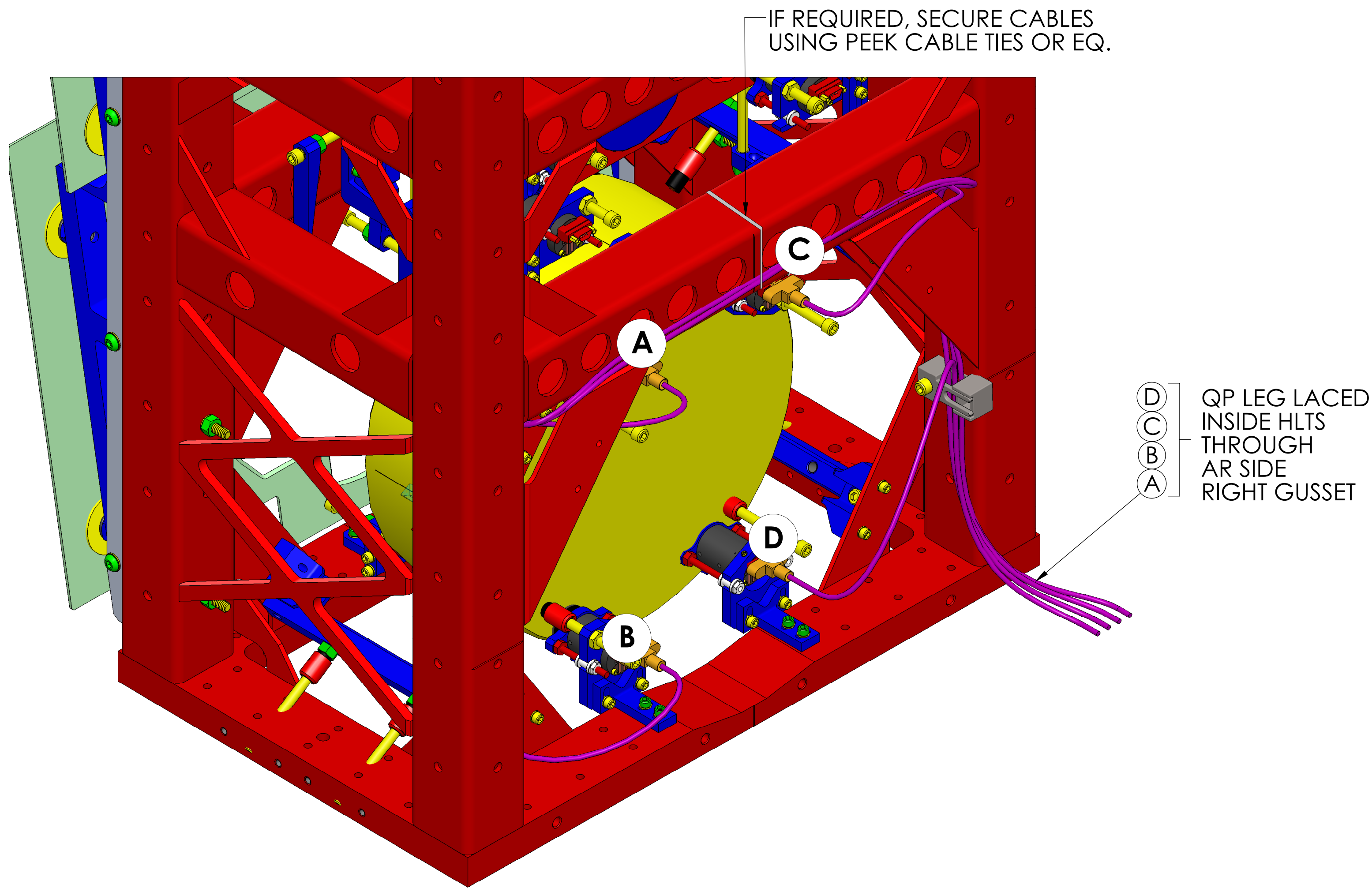
TOP VIEW 1.6

OPTICAL TABLE SHOWN FOR STRUCTURE AND DOG CLAMP LOCATIONS AND ORIENTATION

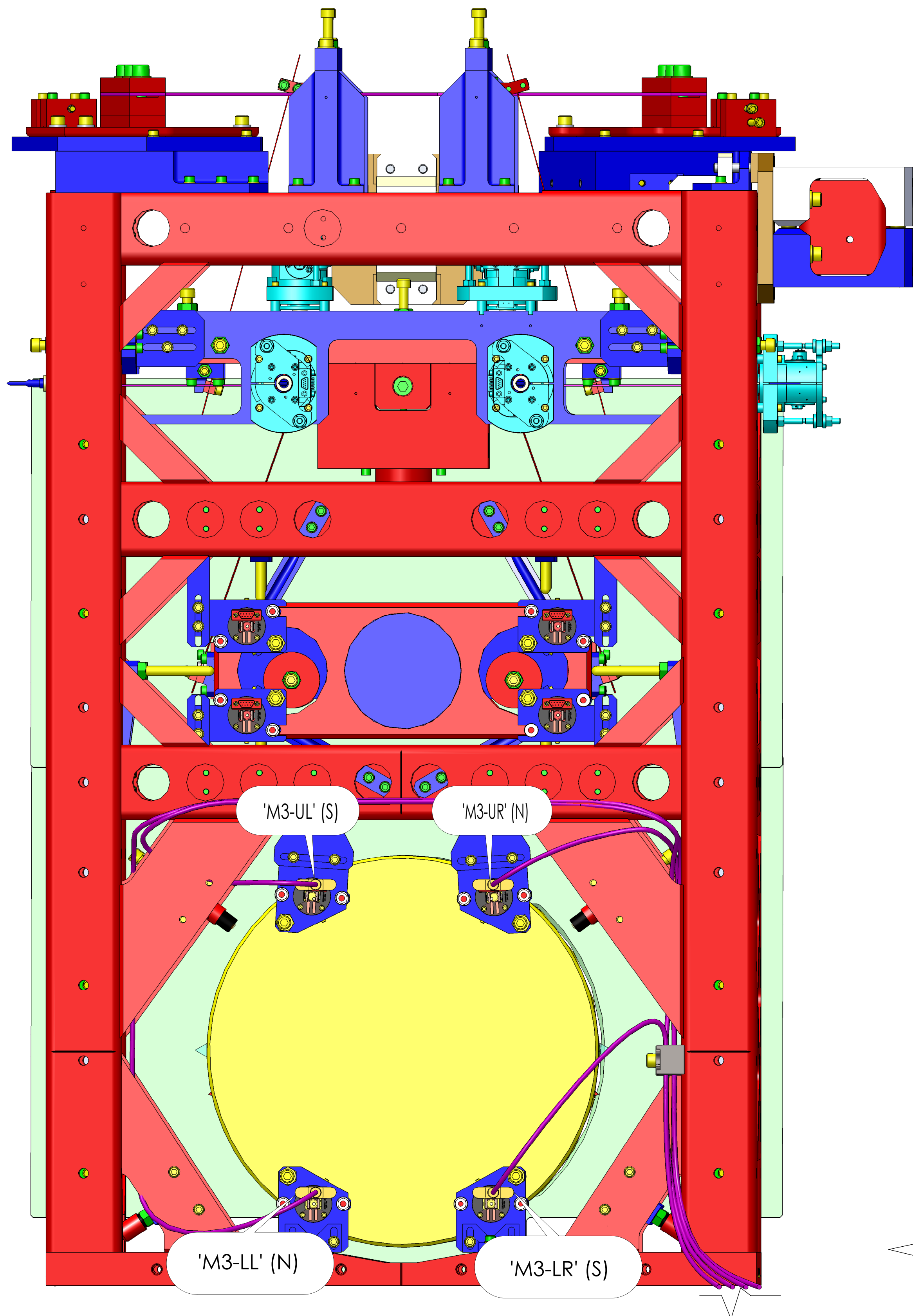
DOG CLAMPS IDENTIFICATION / INSTALLATION

(3) TORQUE TO 100 IN LBS (USE STANDARD 12 PT SOCKET)

PR3

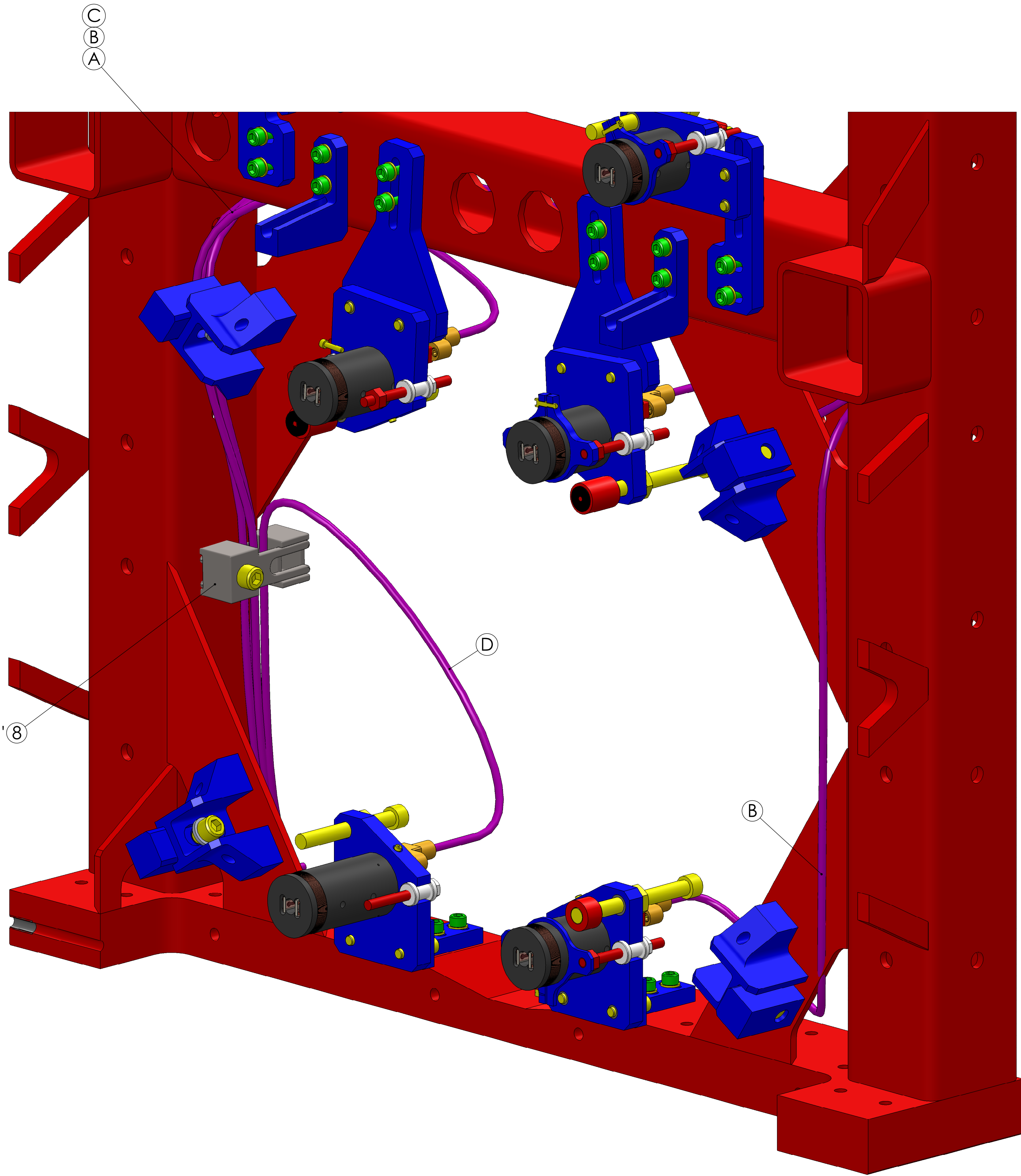
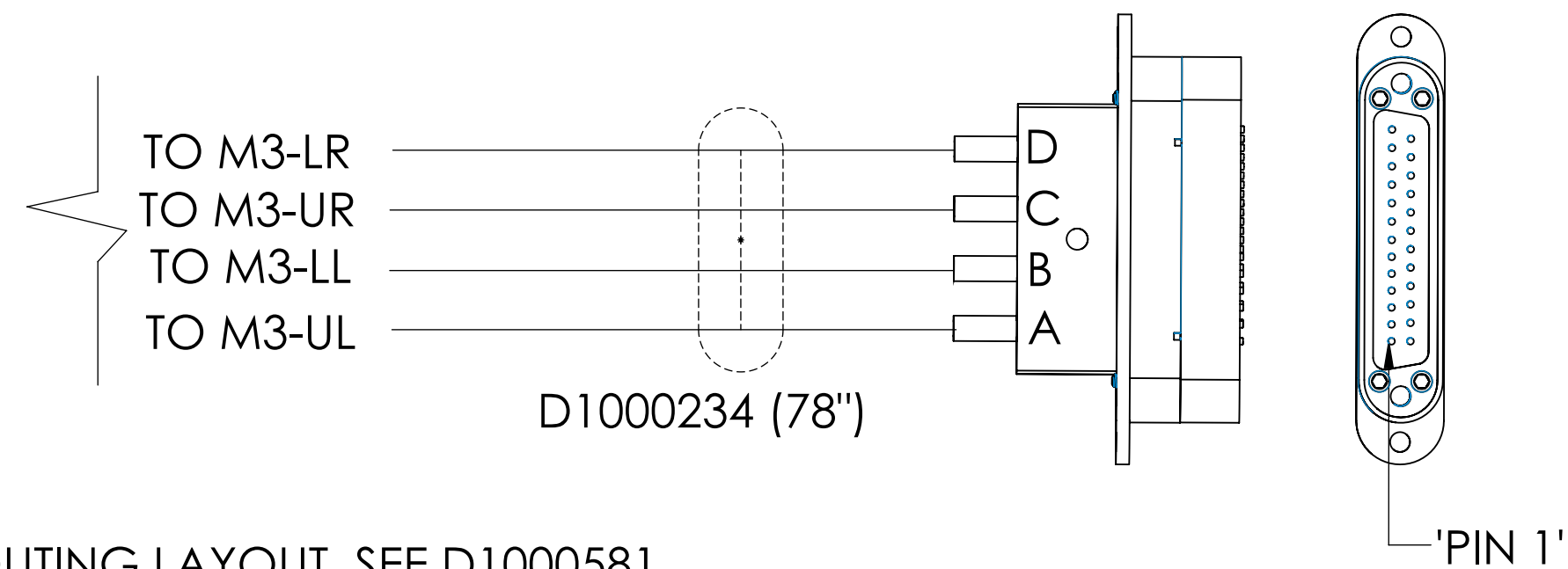


AR SIDE 1.5
ISO VIEW- REAR LEFT (-X)



AR SIDE - REAR (-X)
(END CONNECTORS, NOT SHOWN FOR CLARITY)

FOR SYSTEM CABLING DIAGRAM, CABLE BRACKET LOCATION/ORIENTATION WRT CHAMBER, & ROUTING LAYOUT SEE D1000581.



ISO VIEW - FRONT LEFT
BROKEN OUT SECTION
(AS VIEWED FROM INSIDE)

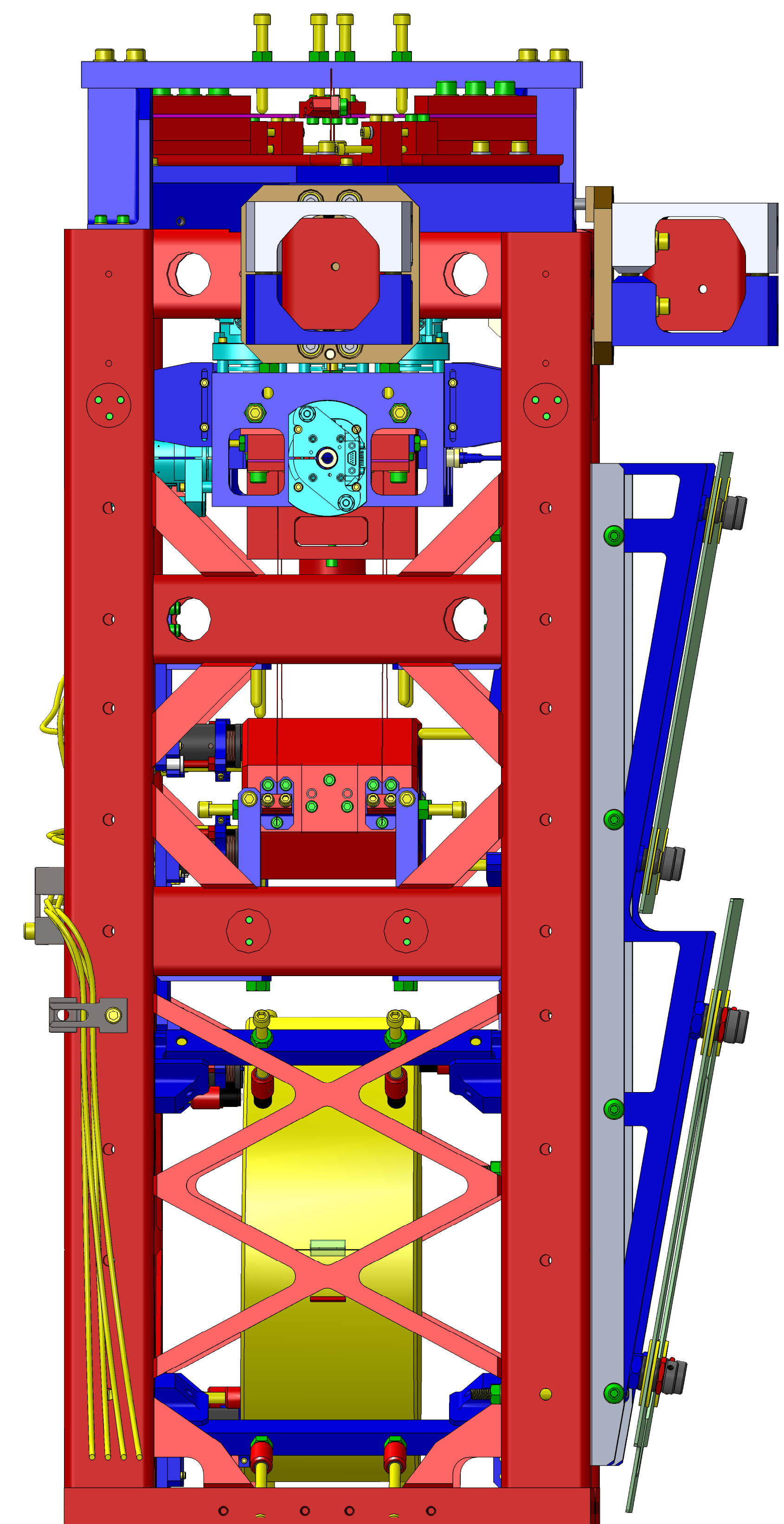
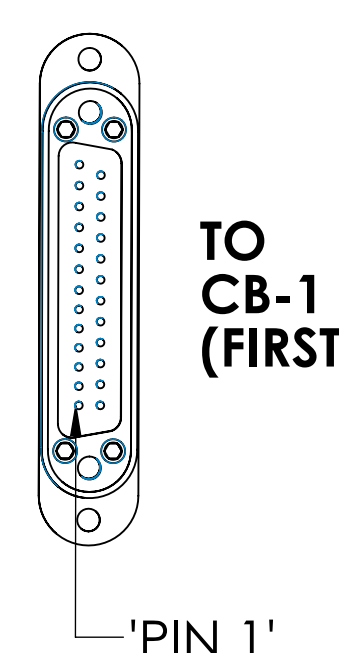
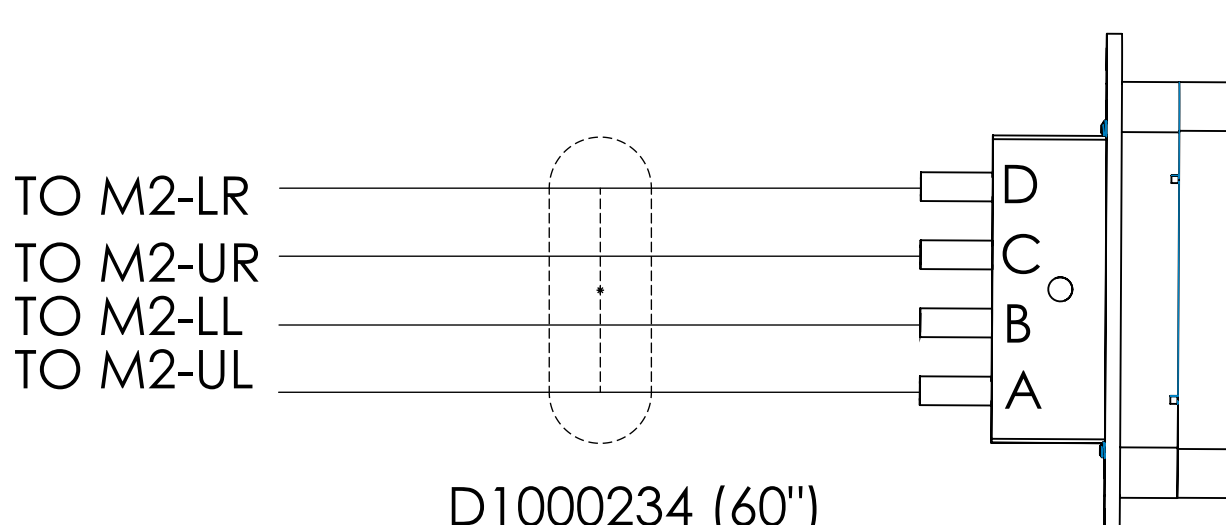
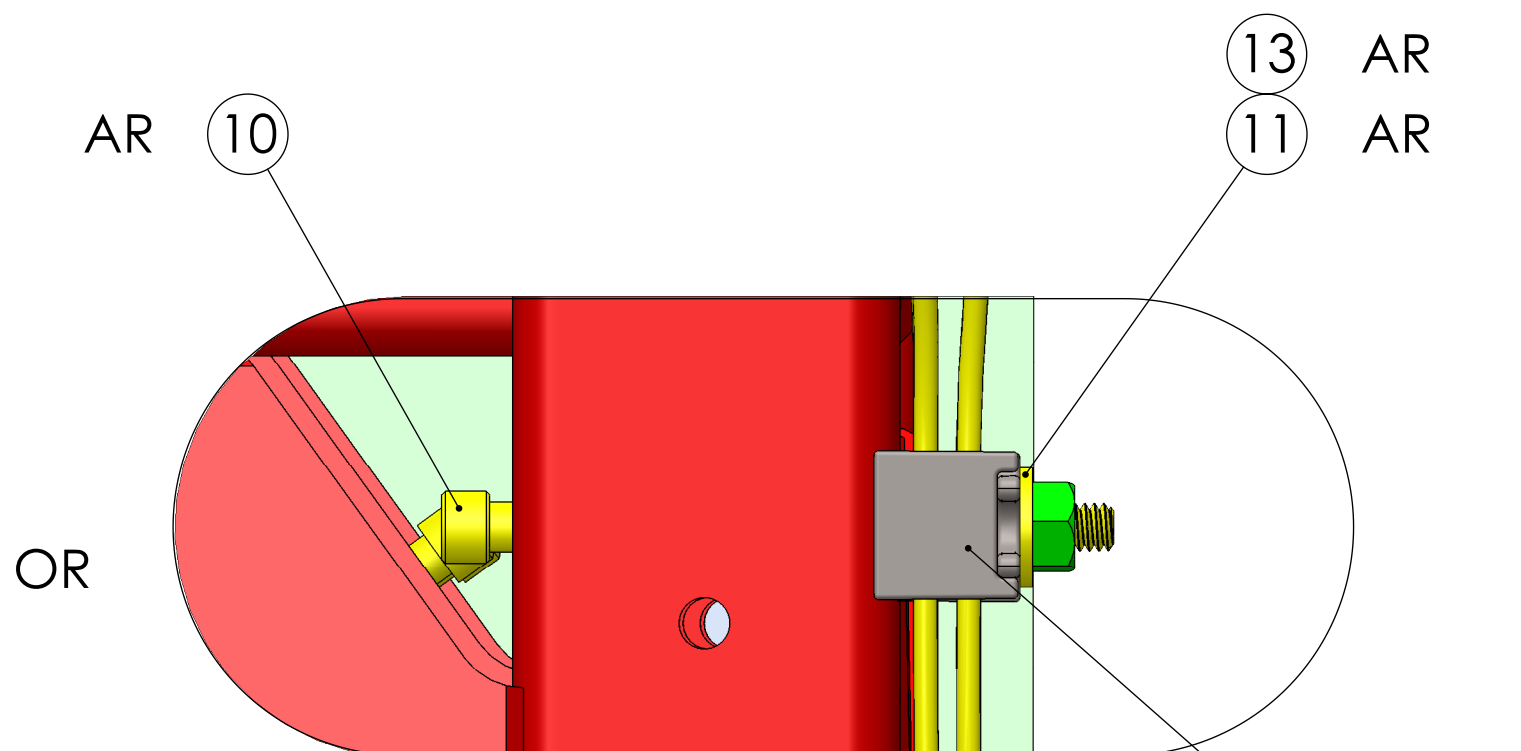
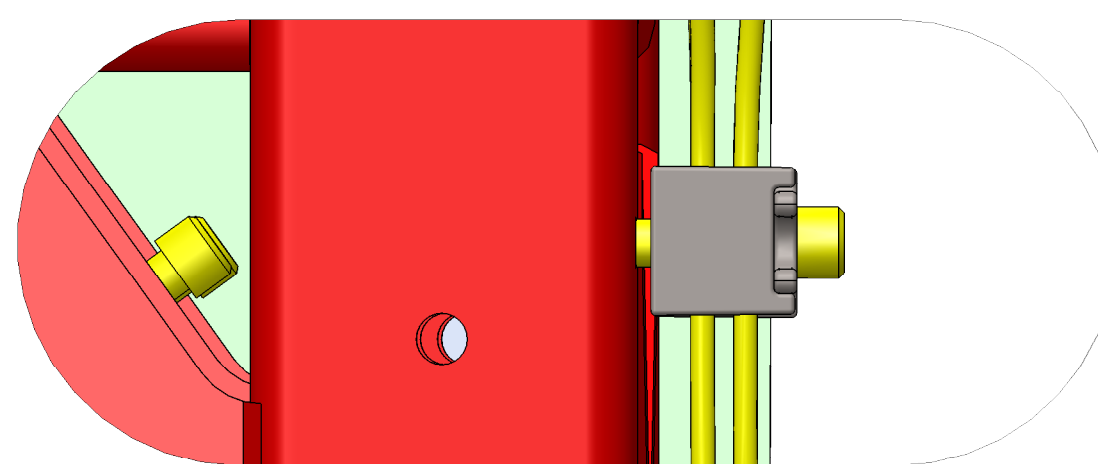
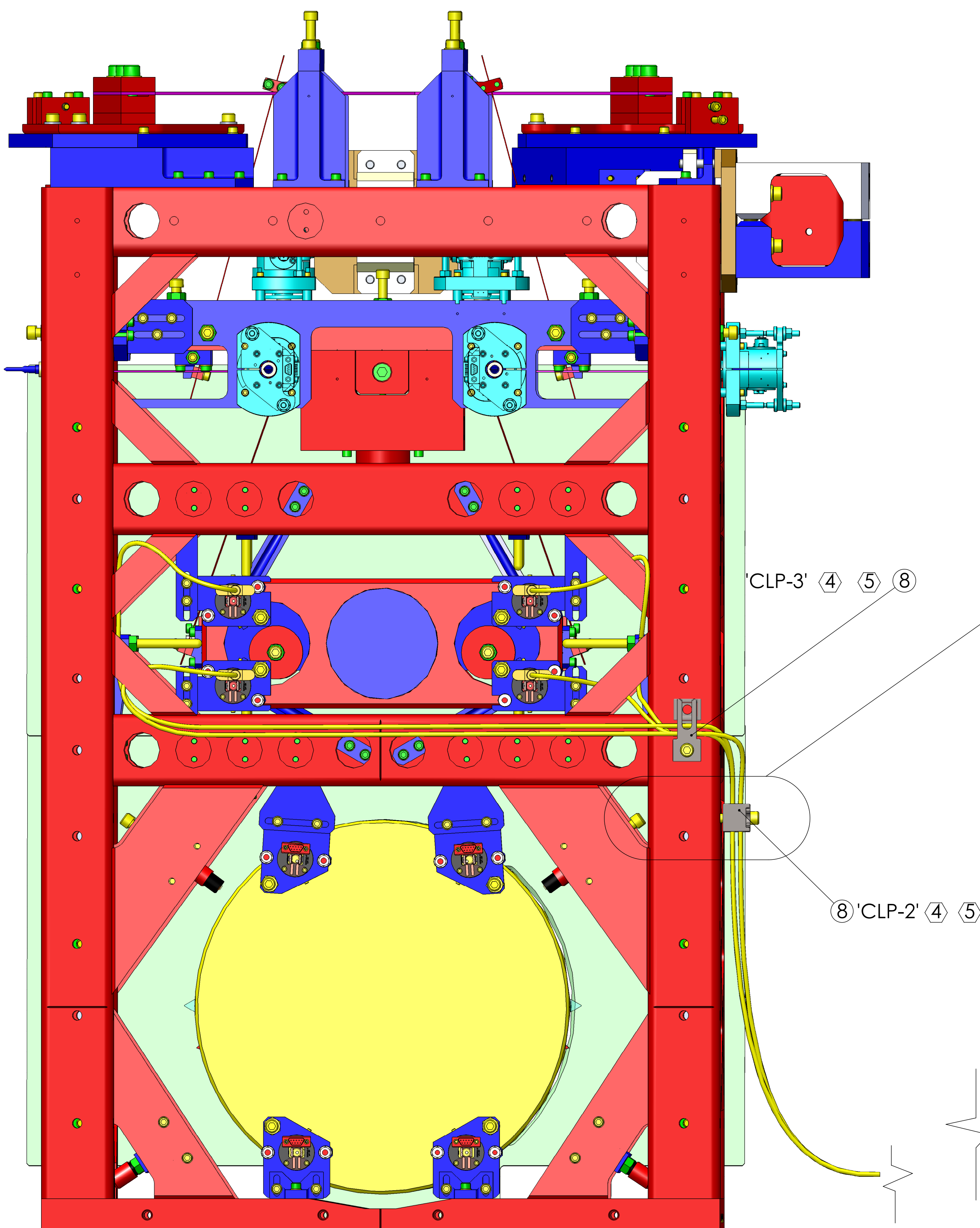
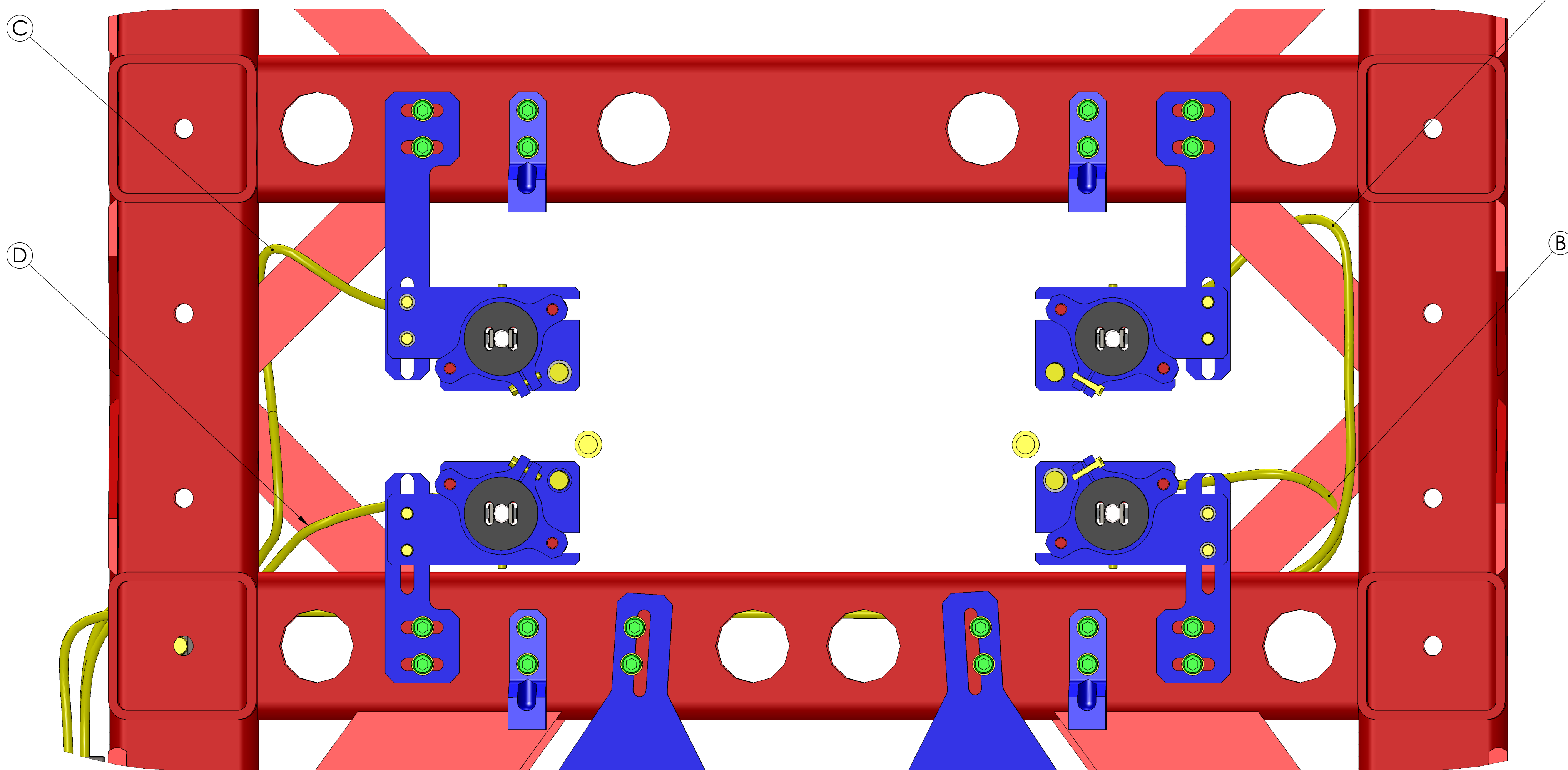
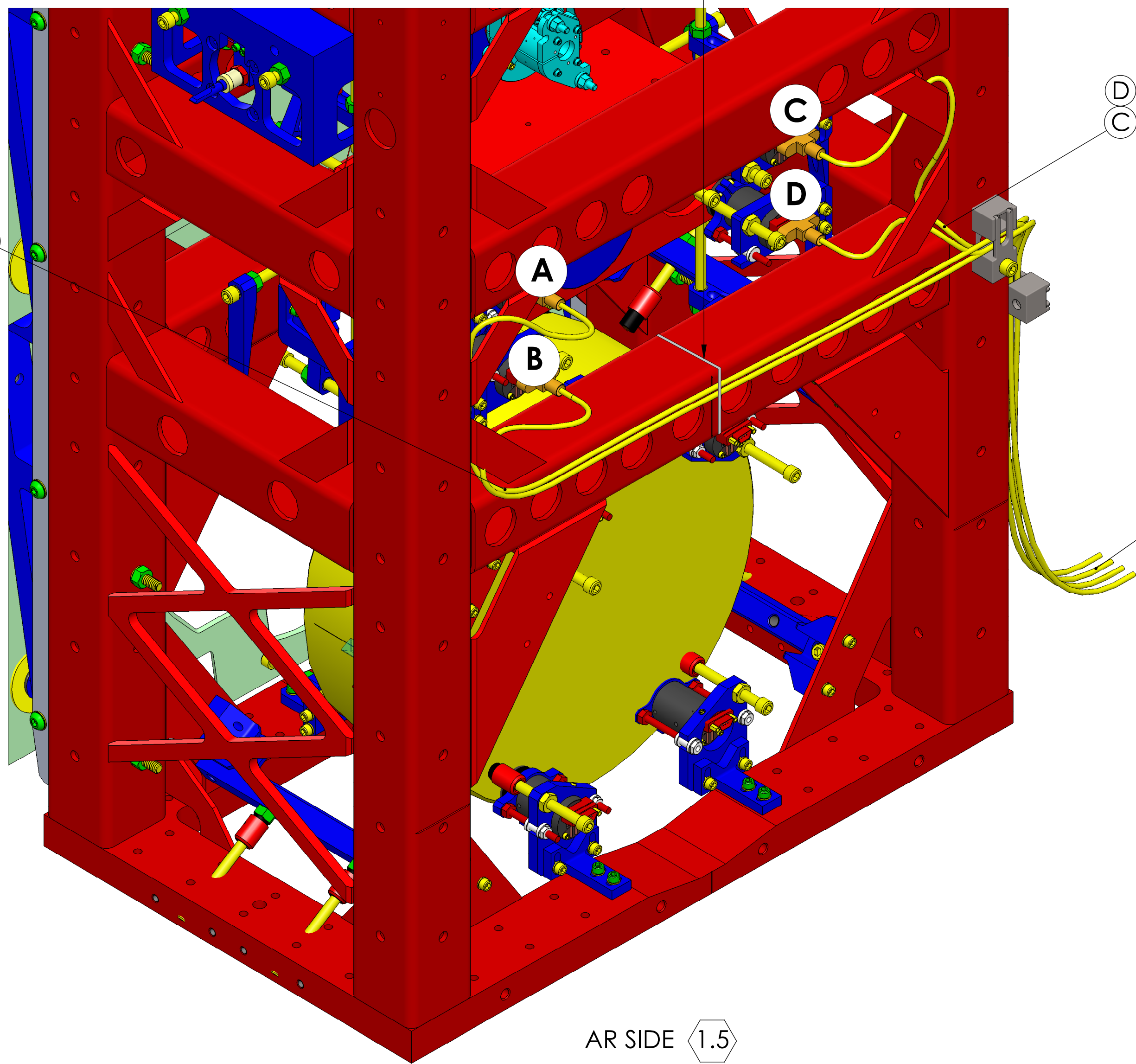
ROUTE NO. 1
SEE DCC FILE CARD D0900368
FOR STEP BY STEP CABLING GUIDE

SEE SHEET 1, TABLE 1; FOR CABLING SPECIFICATIONS.

IF REQUIRED, SECURE CABLES
USING PEEK CABLE TIES OR EQ.

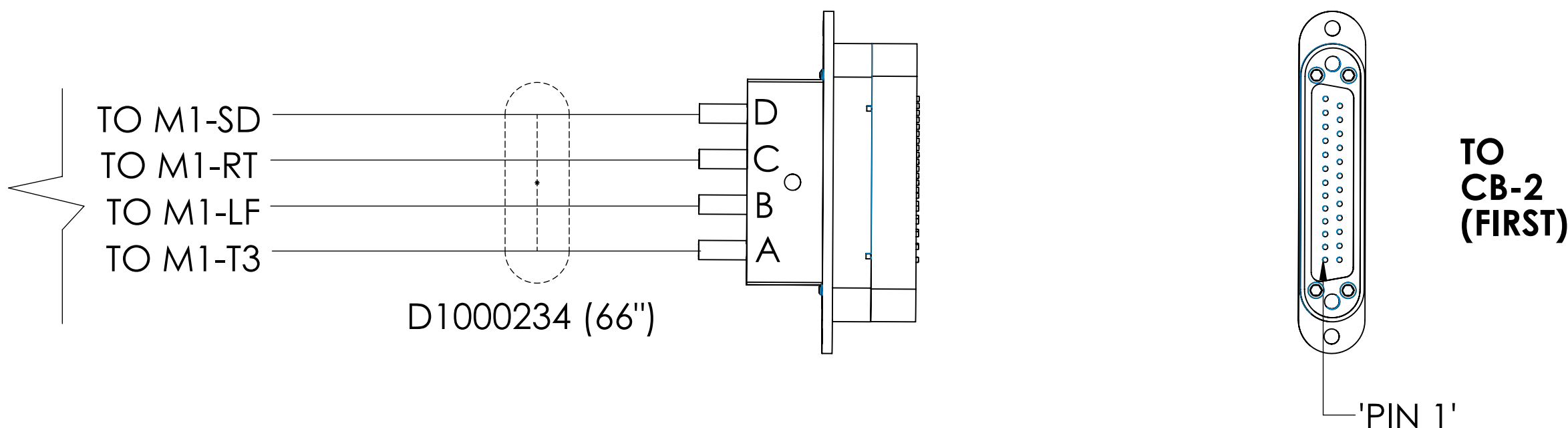
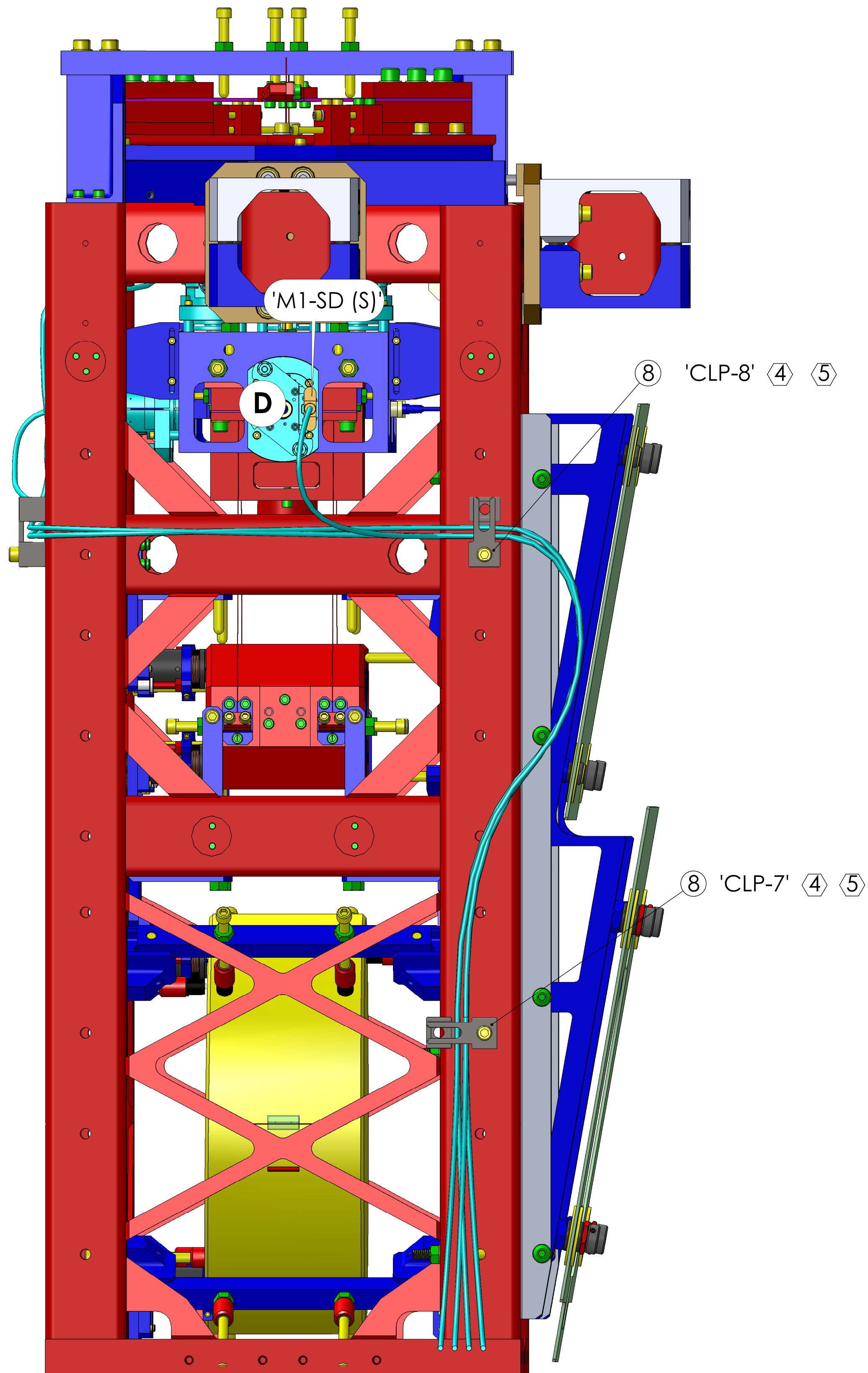
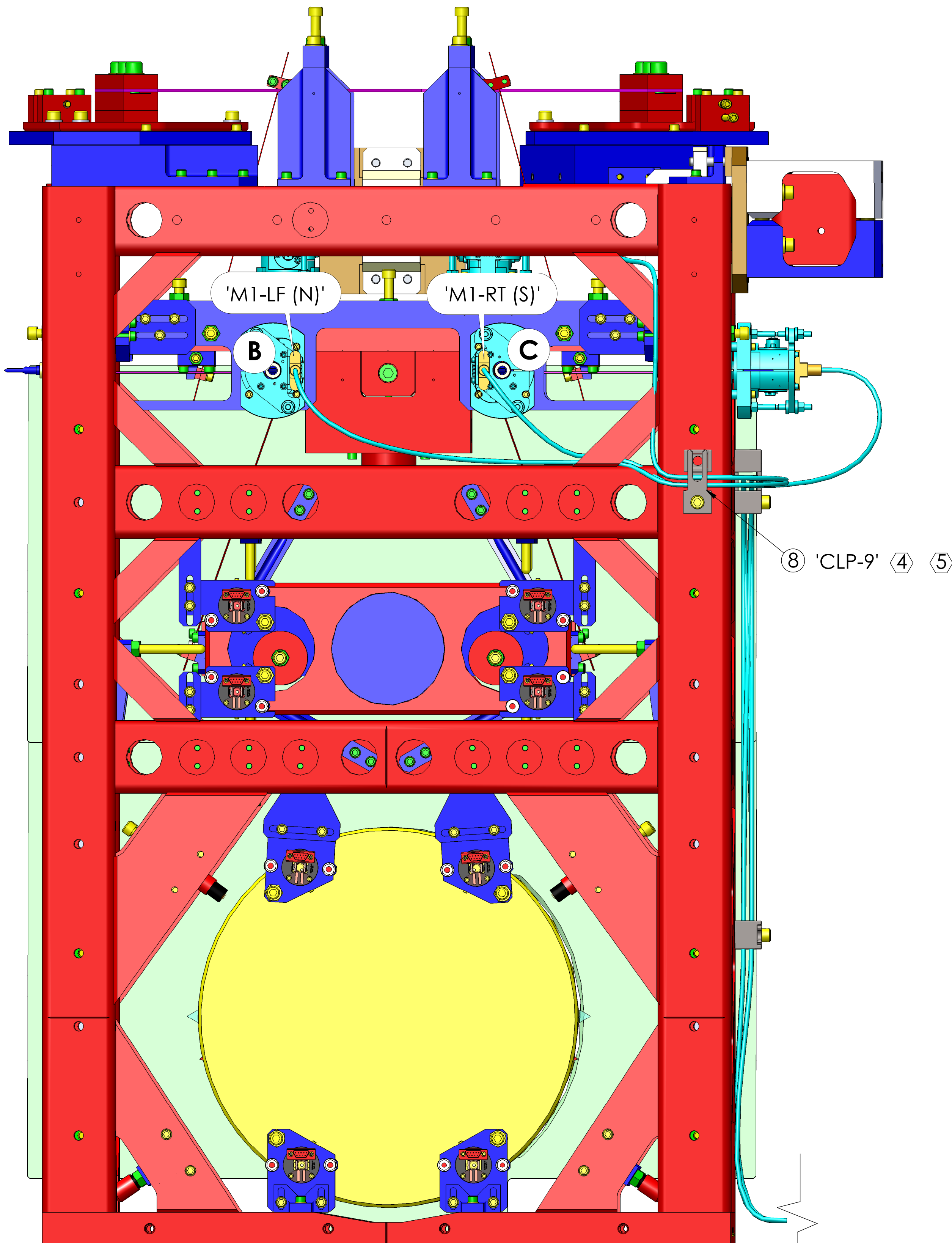
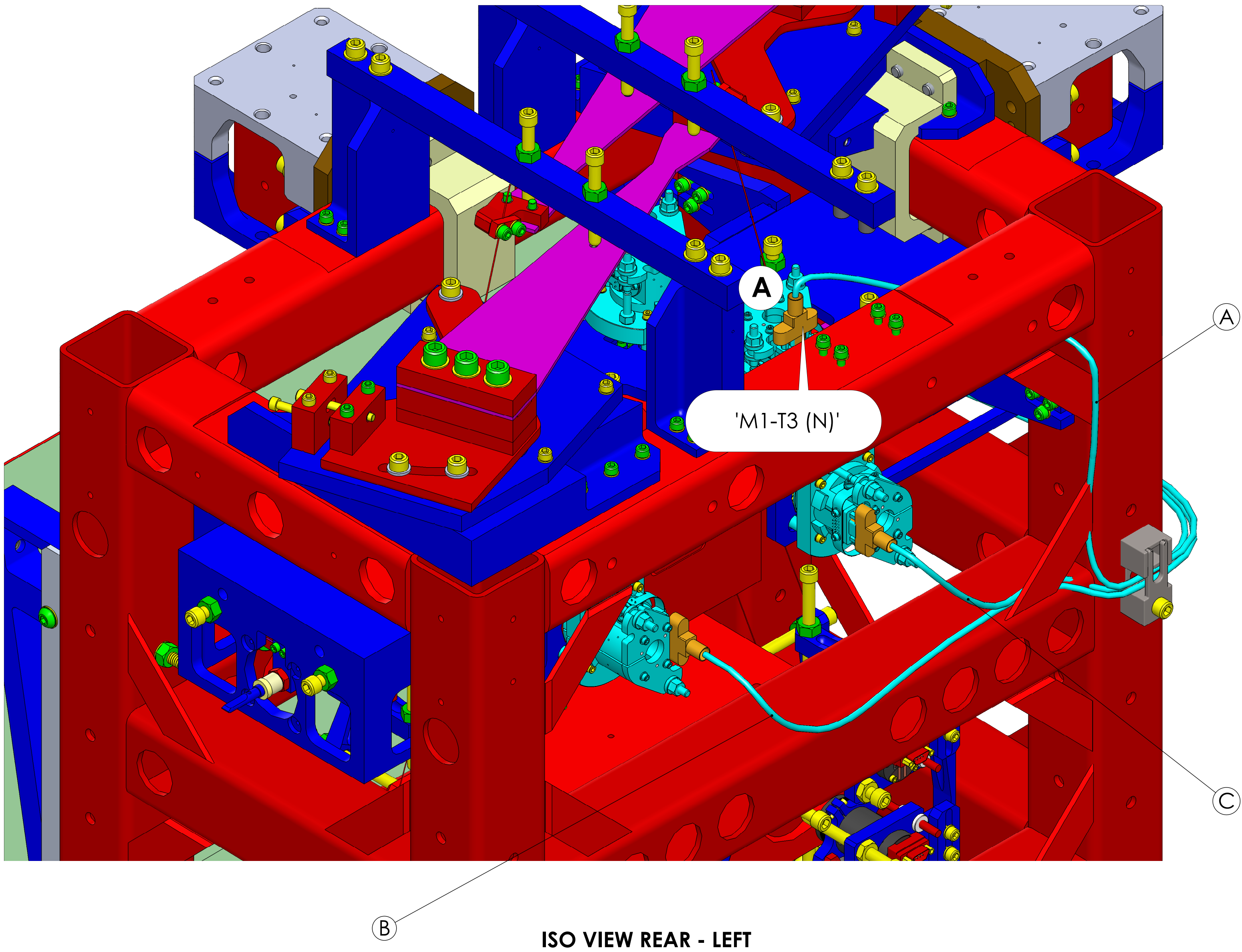
FOR SYSTEM CABLING DIAGRAM, CABLE BRACKET LOCATION/ORIENTATION WRT CHAMBER, & ROUTING LAYOUT SEE D1000581.

PR3



ROUTE NO. 2
SEE DCC FILE CARD D0900368
FOR STEP BY STEP CABLING GUIDE

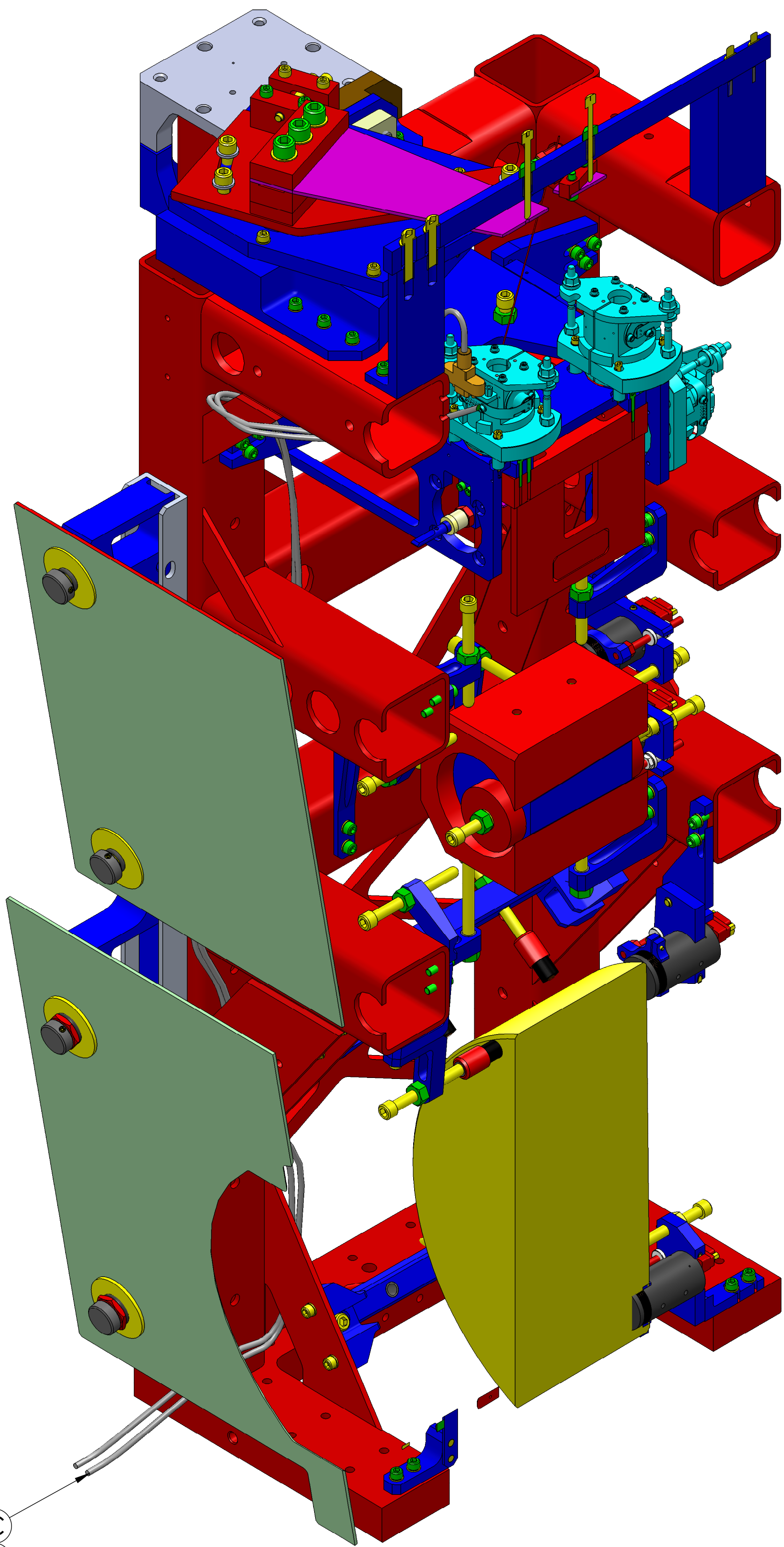
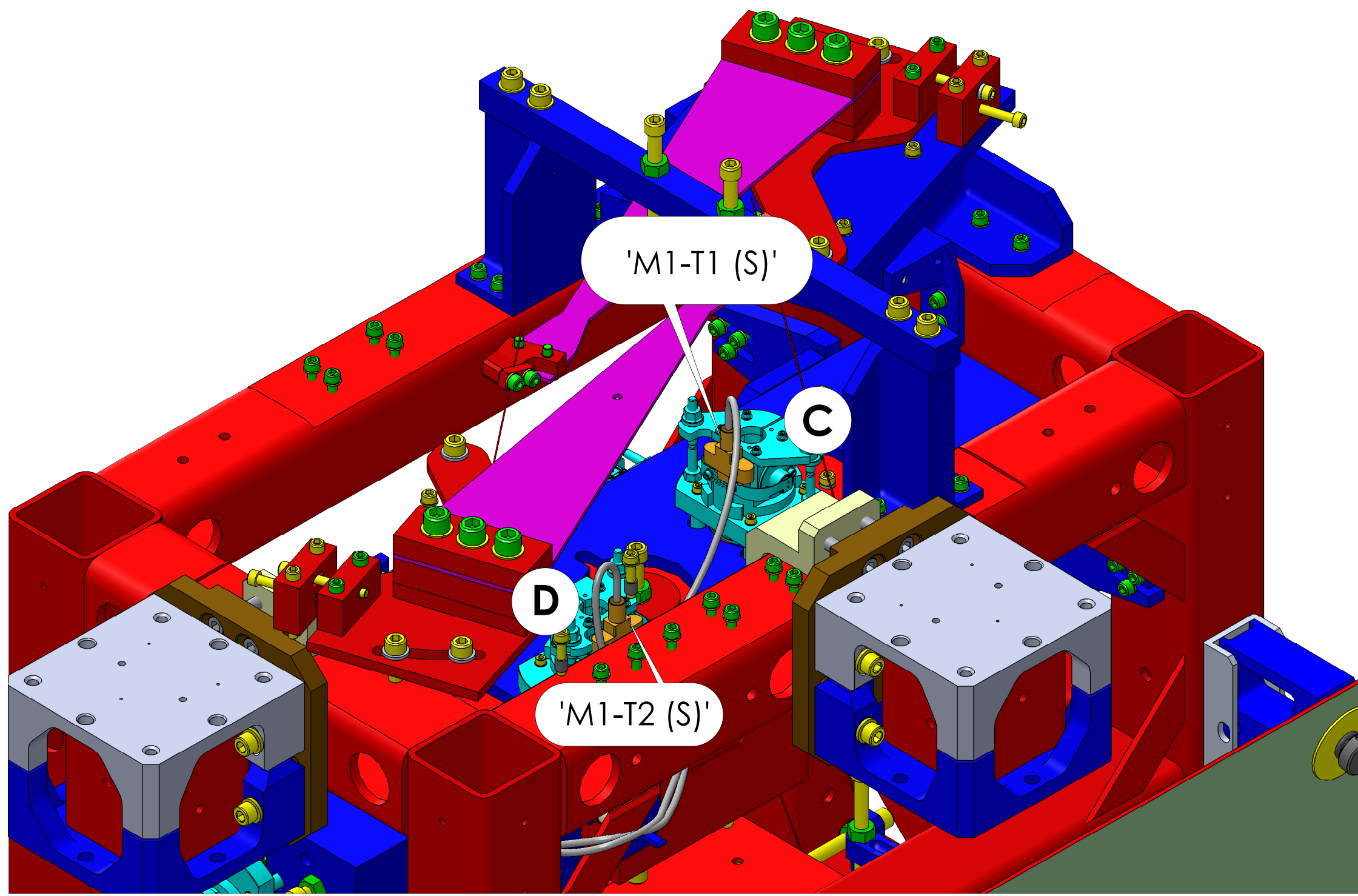
PR3



ROUTE NO. 3
SEE DCC FILE CARD D0900368
FOR STEP BY STEP CABLING GUIDE

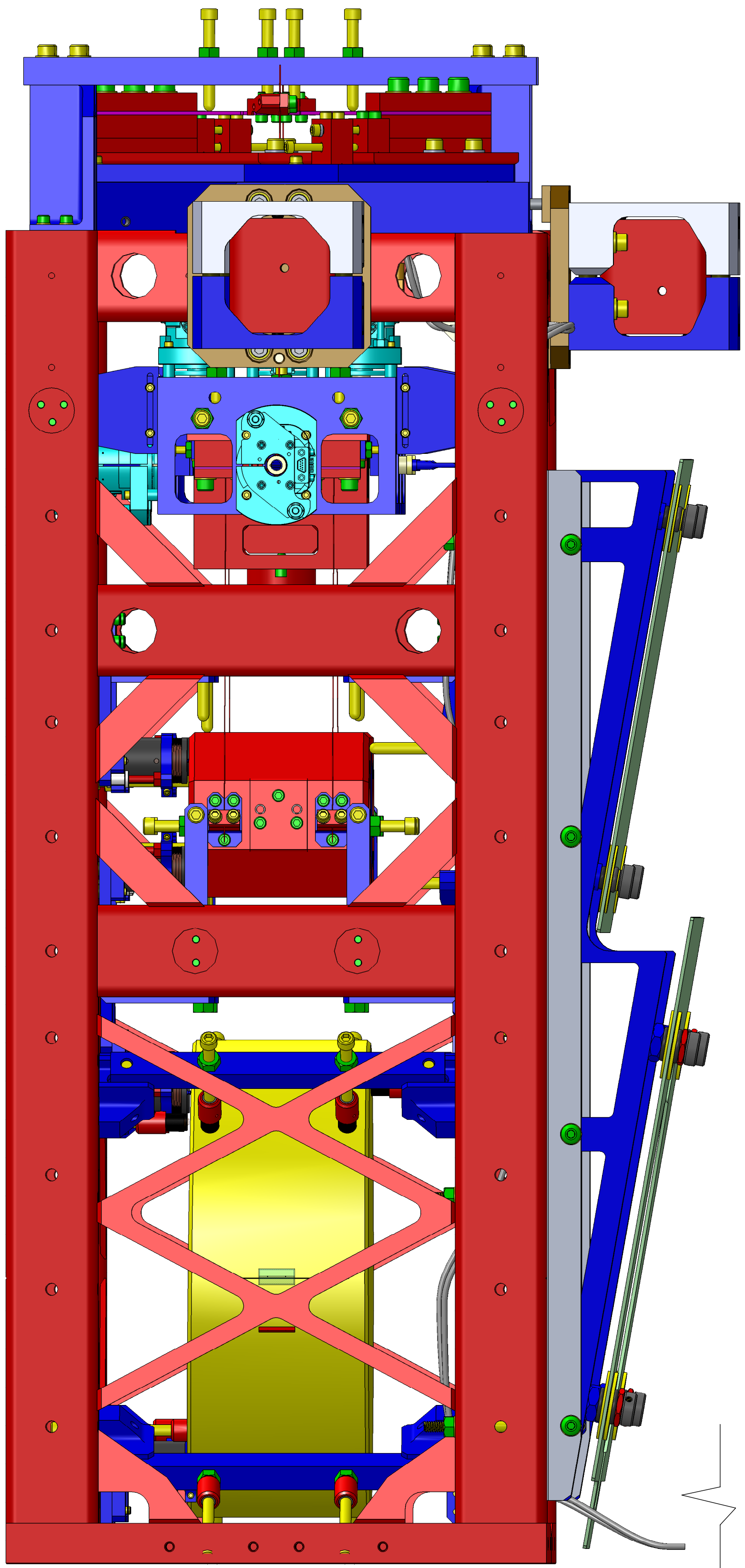
PR3

(SHARED)

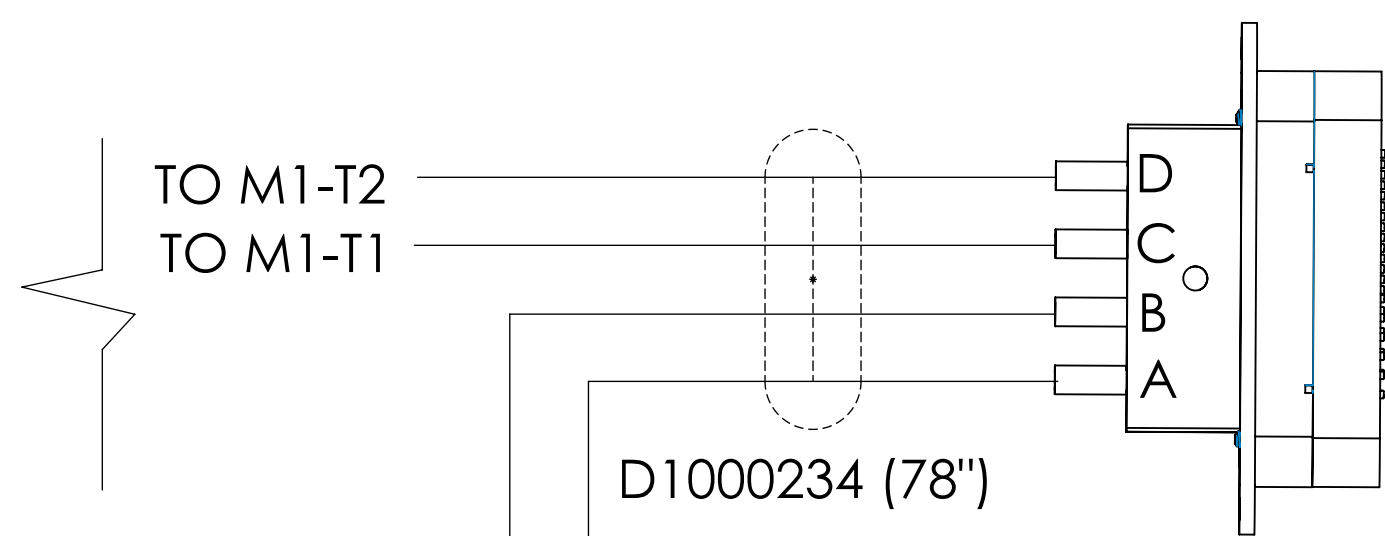


QP LEGS
LACED
THROUGH HR SIDE
BOTTOM LEFT GUSSET

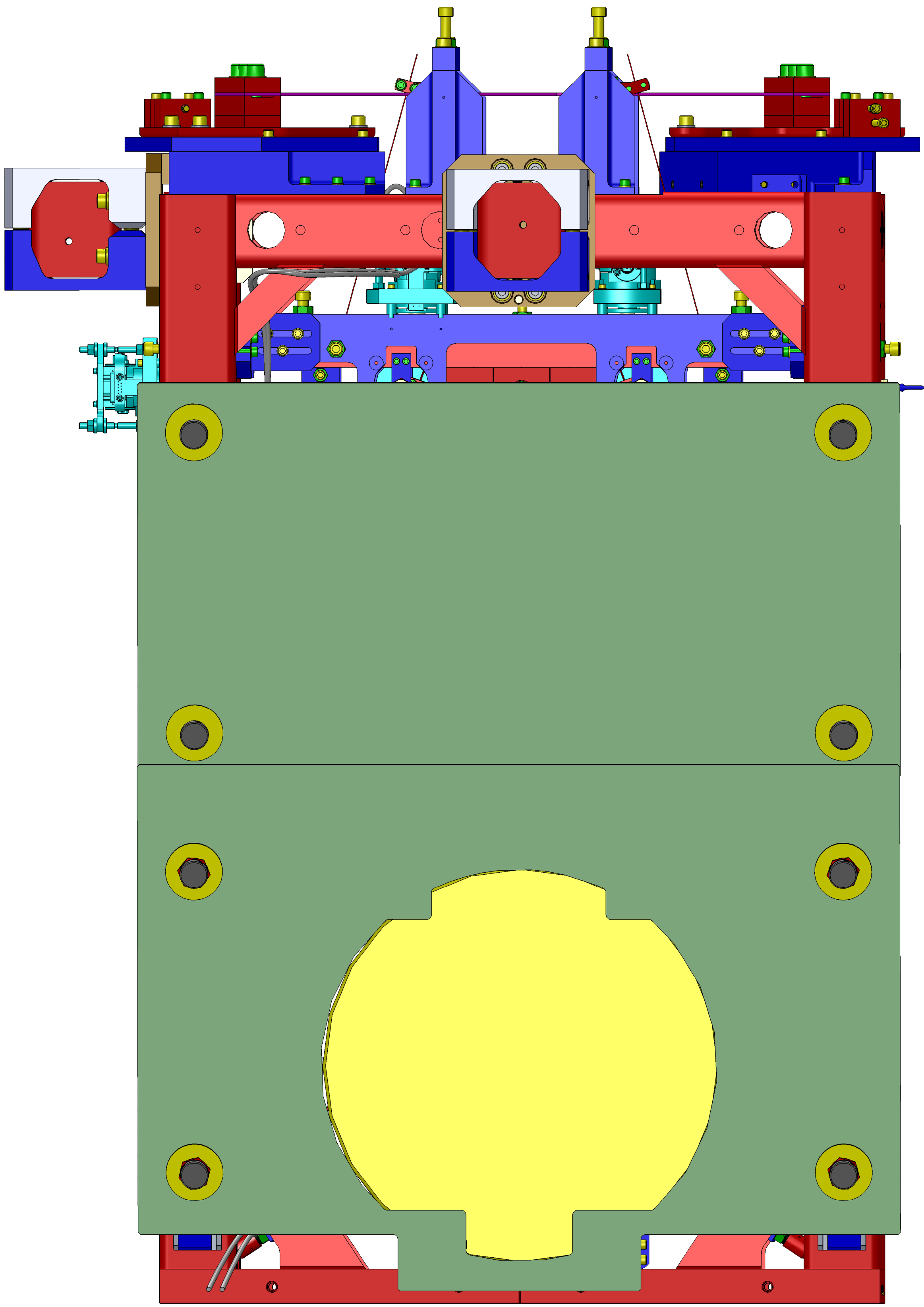
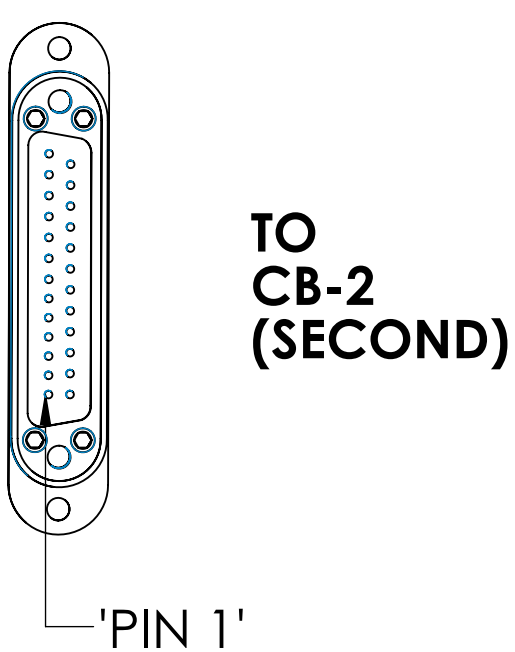
ISO VIEW FRONT - RIGHT
BROKEN OUT SECTION
(AS VIEWED FROM THE INSIDE)



RIGHT SIDE (-Y)



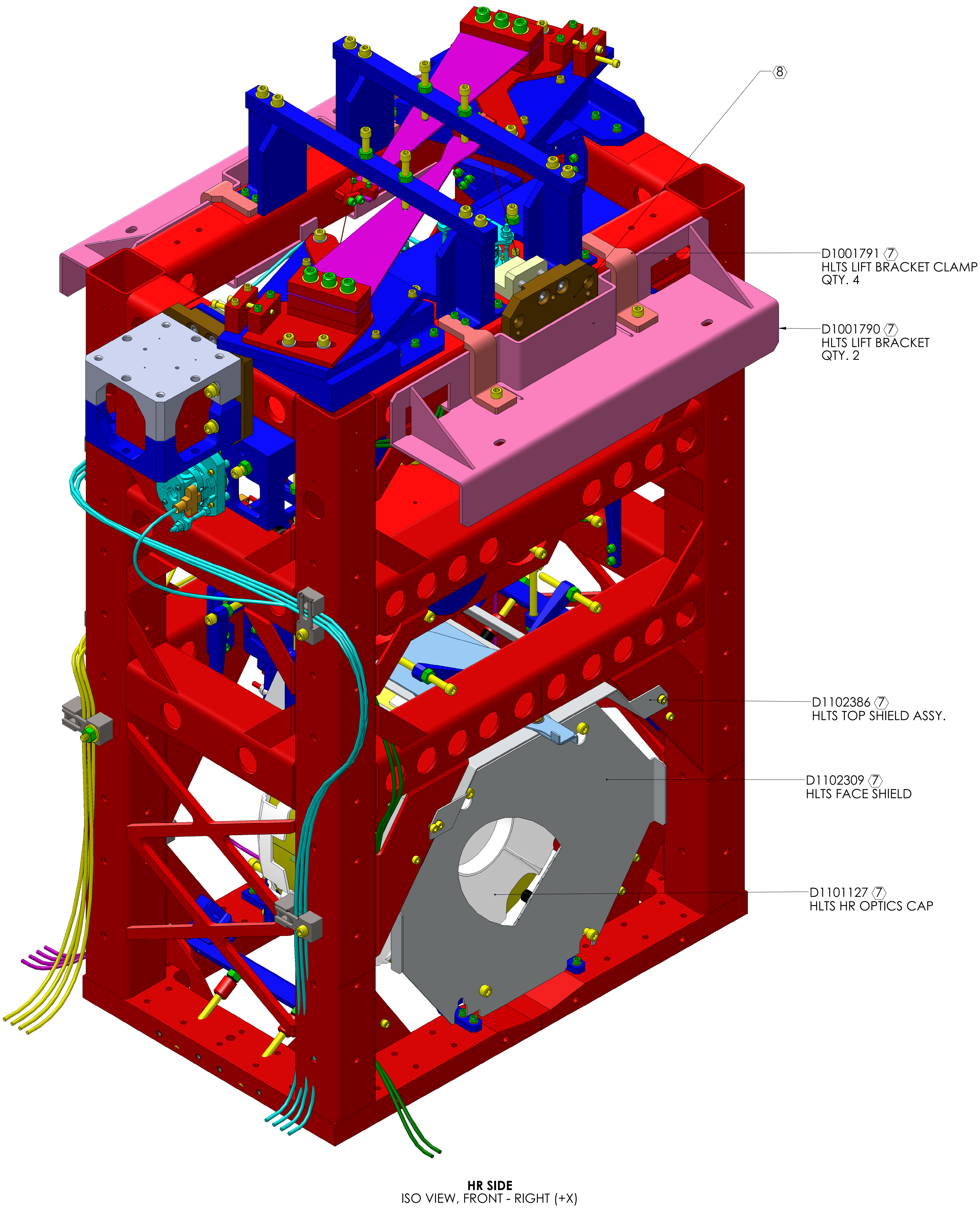
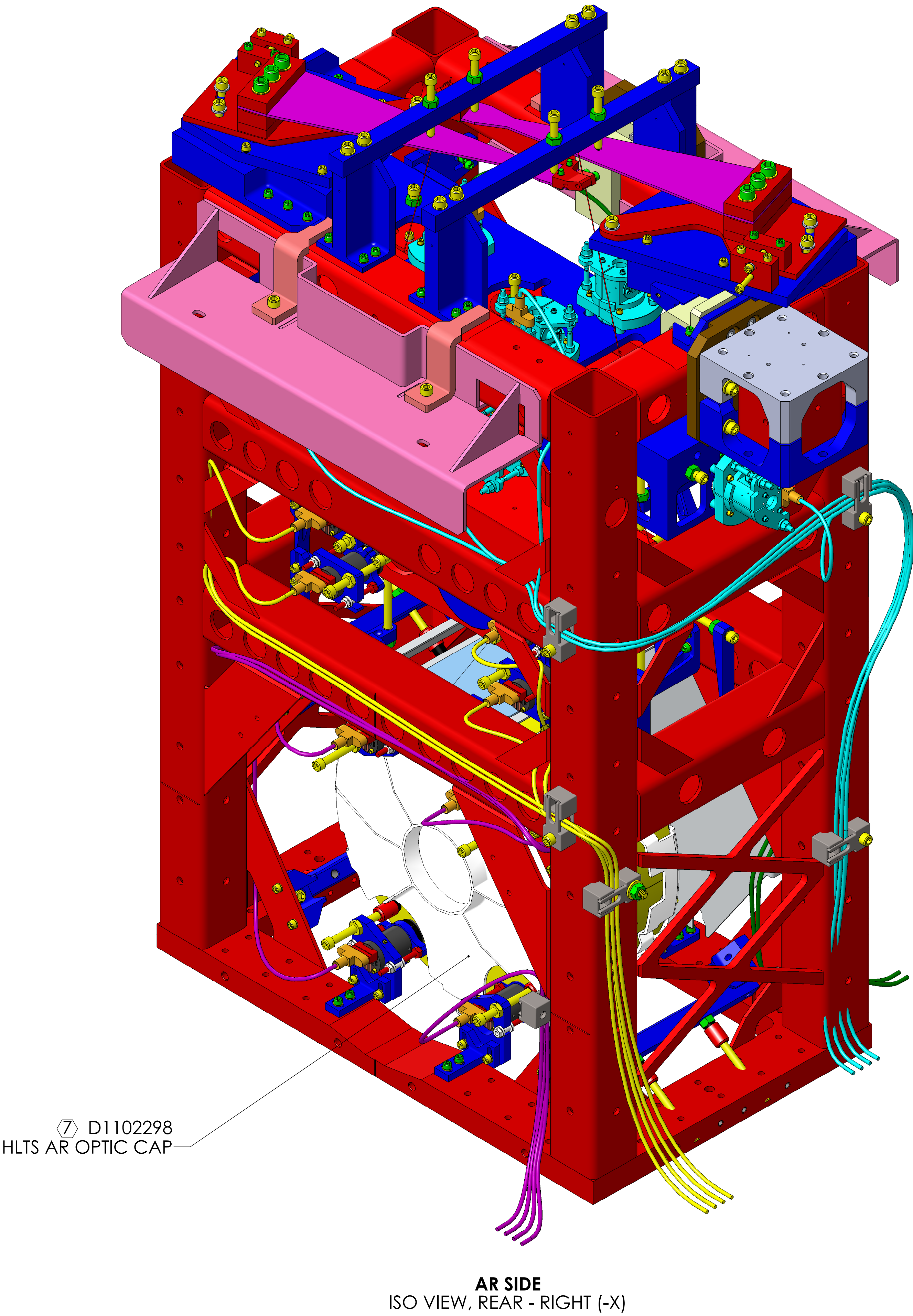
ROUTE NO. 4
SEE DCC FILE CARD D0900368
FOR STEP BY STEP CABLING GUIDE



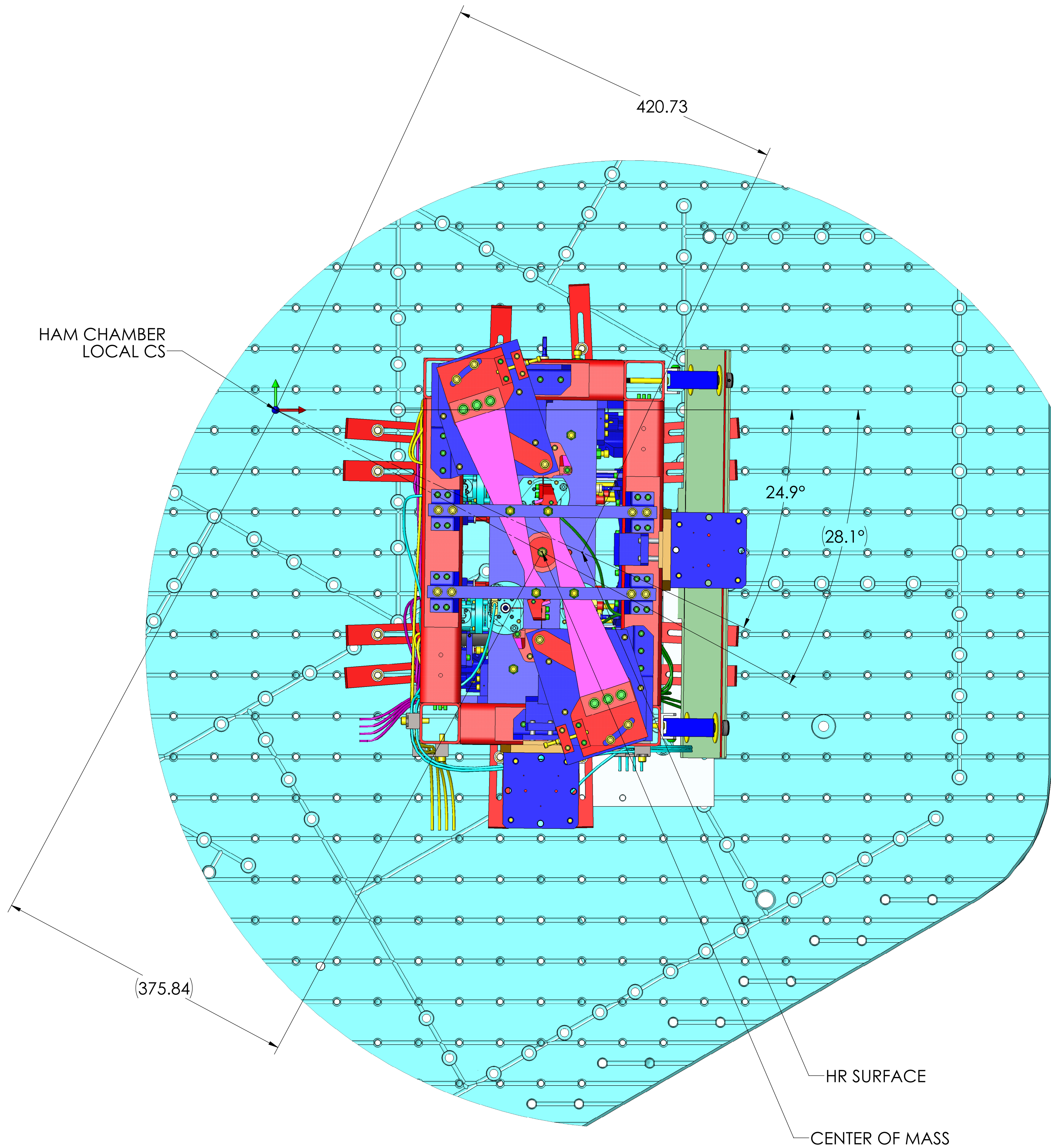
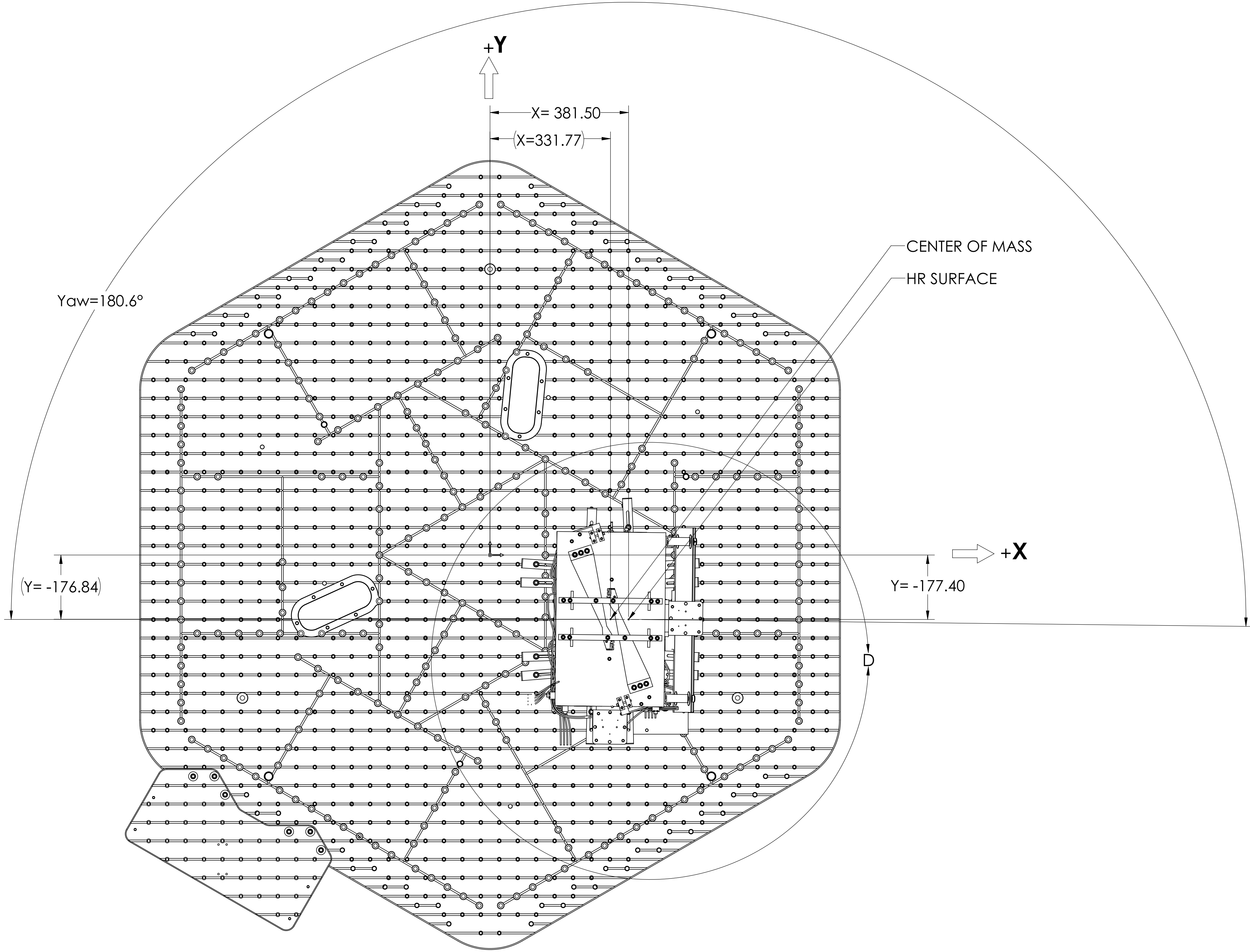
HR SIDE - FRONT (+X)
(END CONNECTORS, NOT SHOWN FOR CLARITY)

PR3

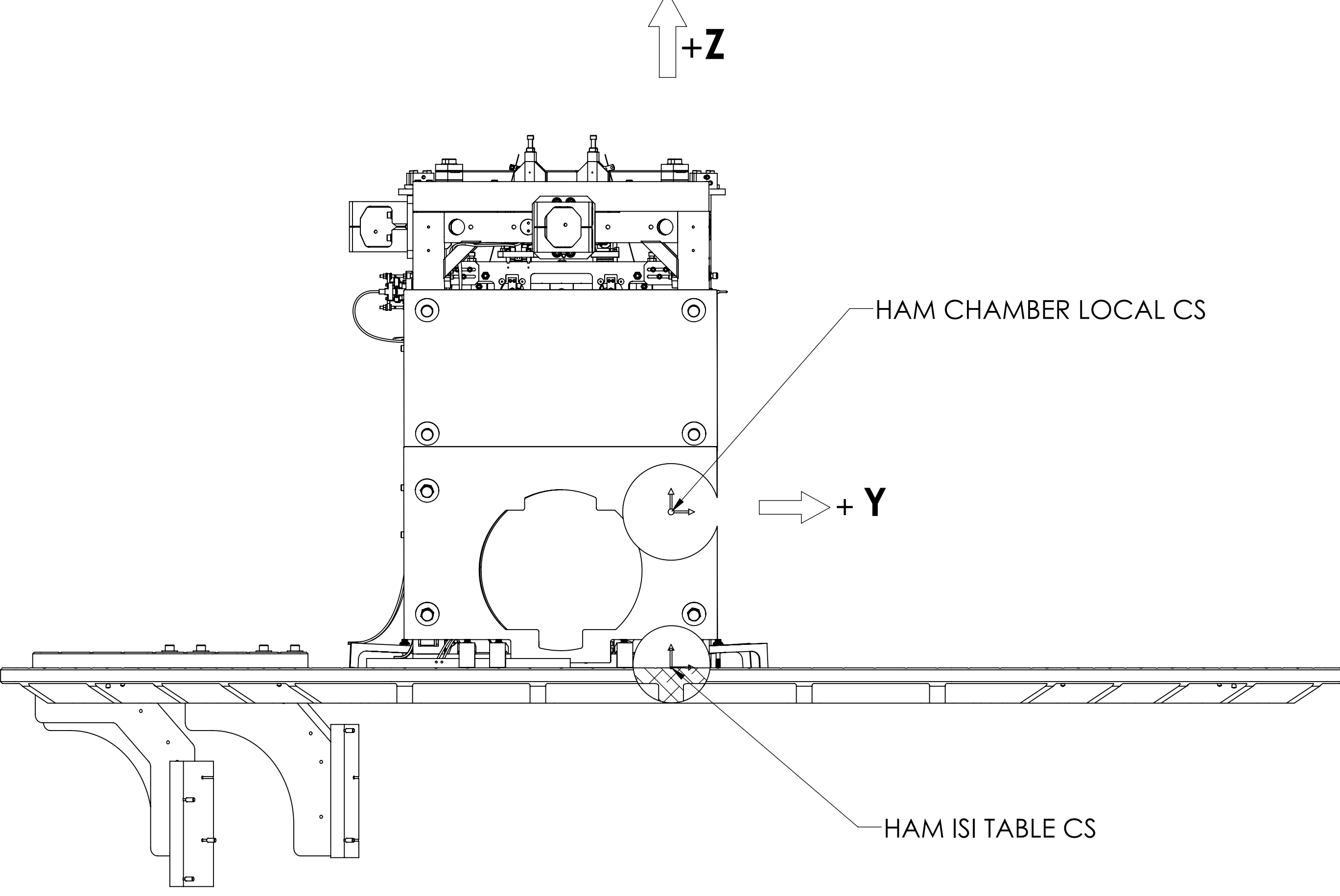
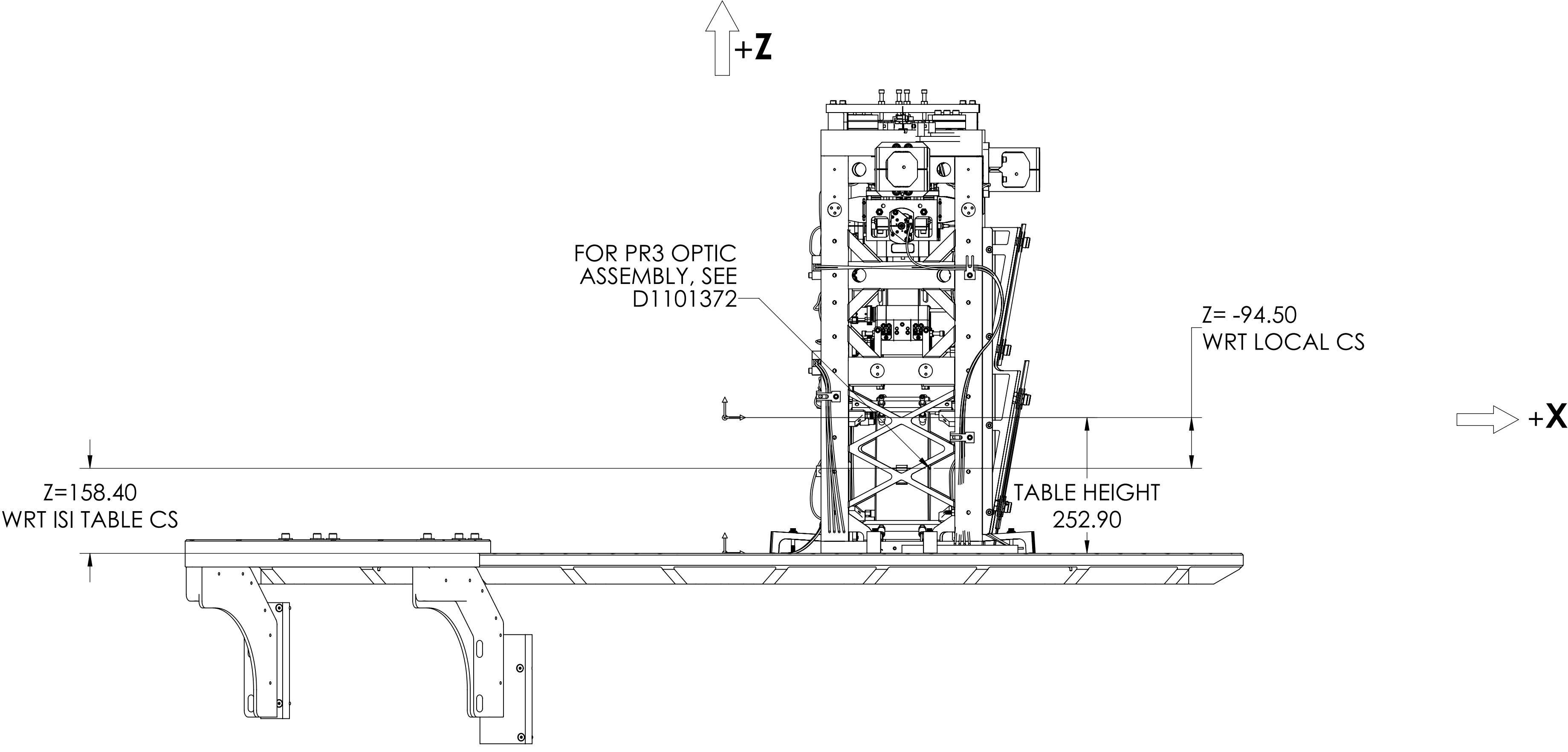
⑦ INDICATED ITEMS FOR TRANSPORTATION PURPOSES ONLY. AND ARE NOT PART OF FINISHED ASSEMBLY. SEE D1101674 FOR REFERENCE.
⑧ REMOVE VIBRATION ABSORBER FACE TO AVOID INTERFERENCE WITH LIFT BRACKET.



HLTS STRUCTURE TRANSP.
VIBRATION ABSORBERS FACE: NOT SHOWN
(REMOVED FOR TRANSP. PURPOSES)



DETAIL D
SCALE 1 : 3



LOCAL COORDINATES DEFINITIONS

NOTE: DIMENSION IN PARENTHESIS (REFERENCE DIMENSIONS), ARE FROM CENTER OF MASS.