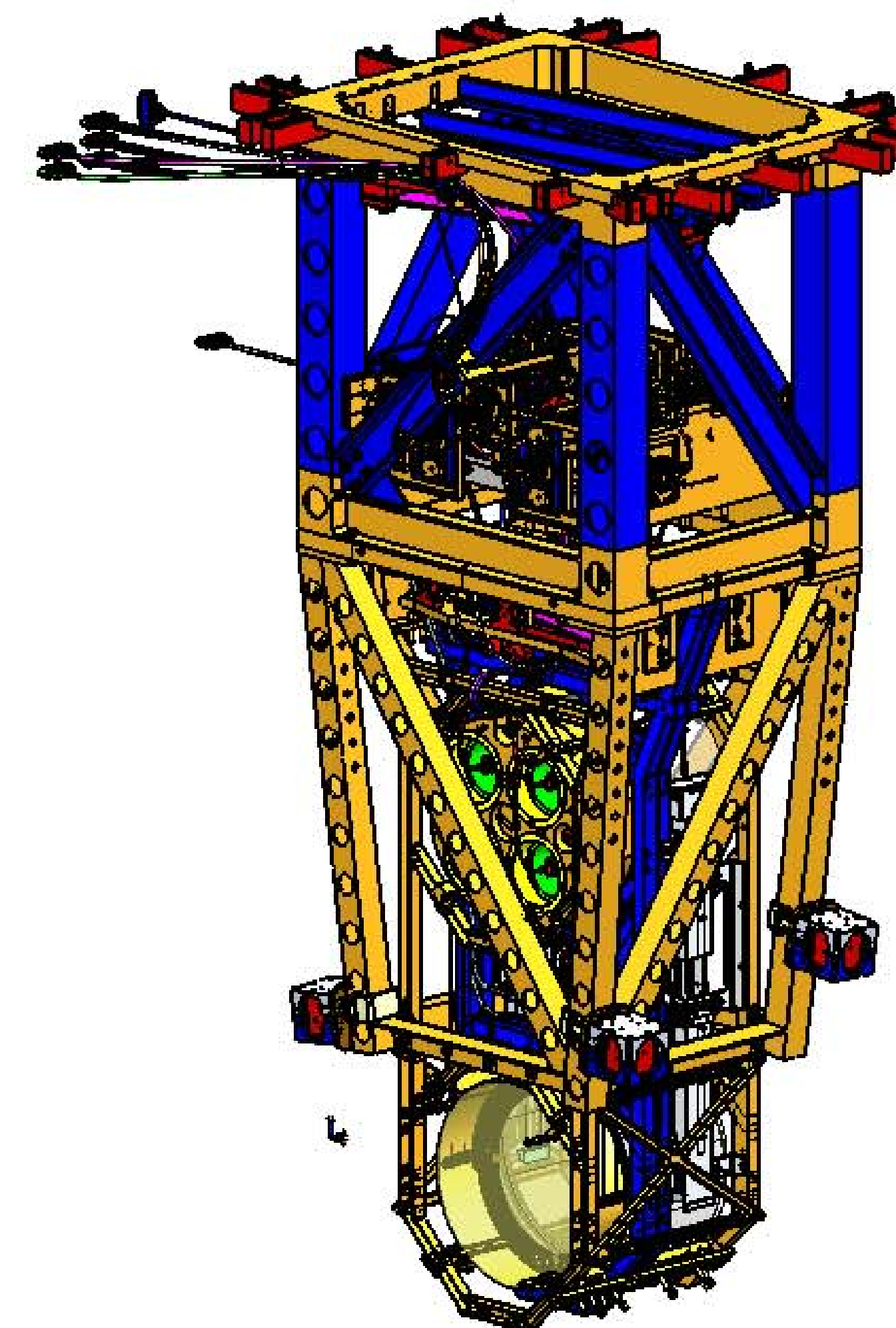
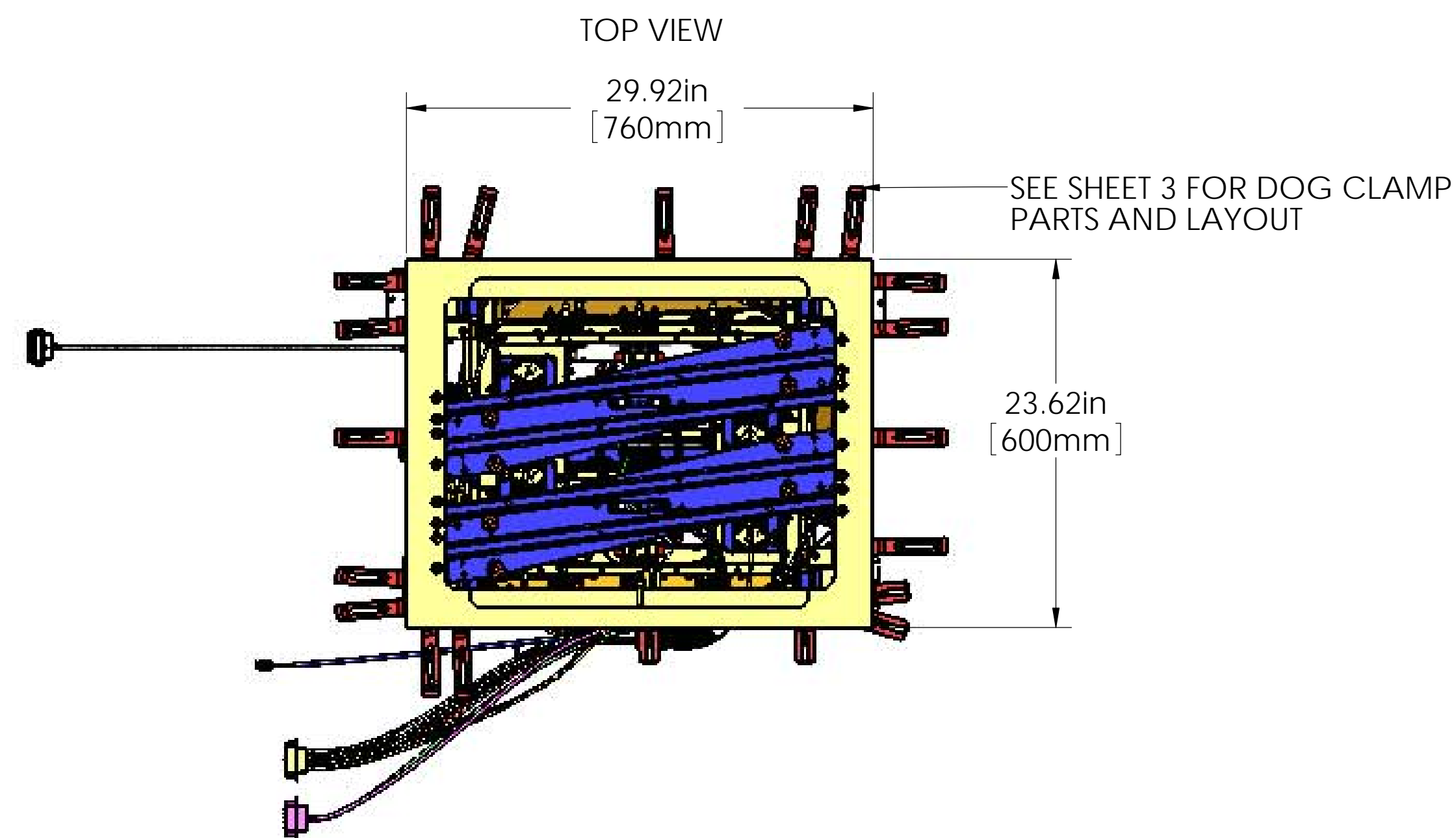
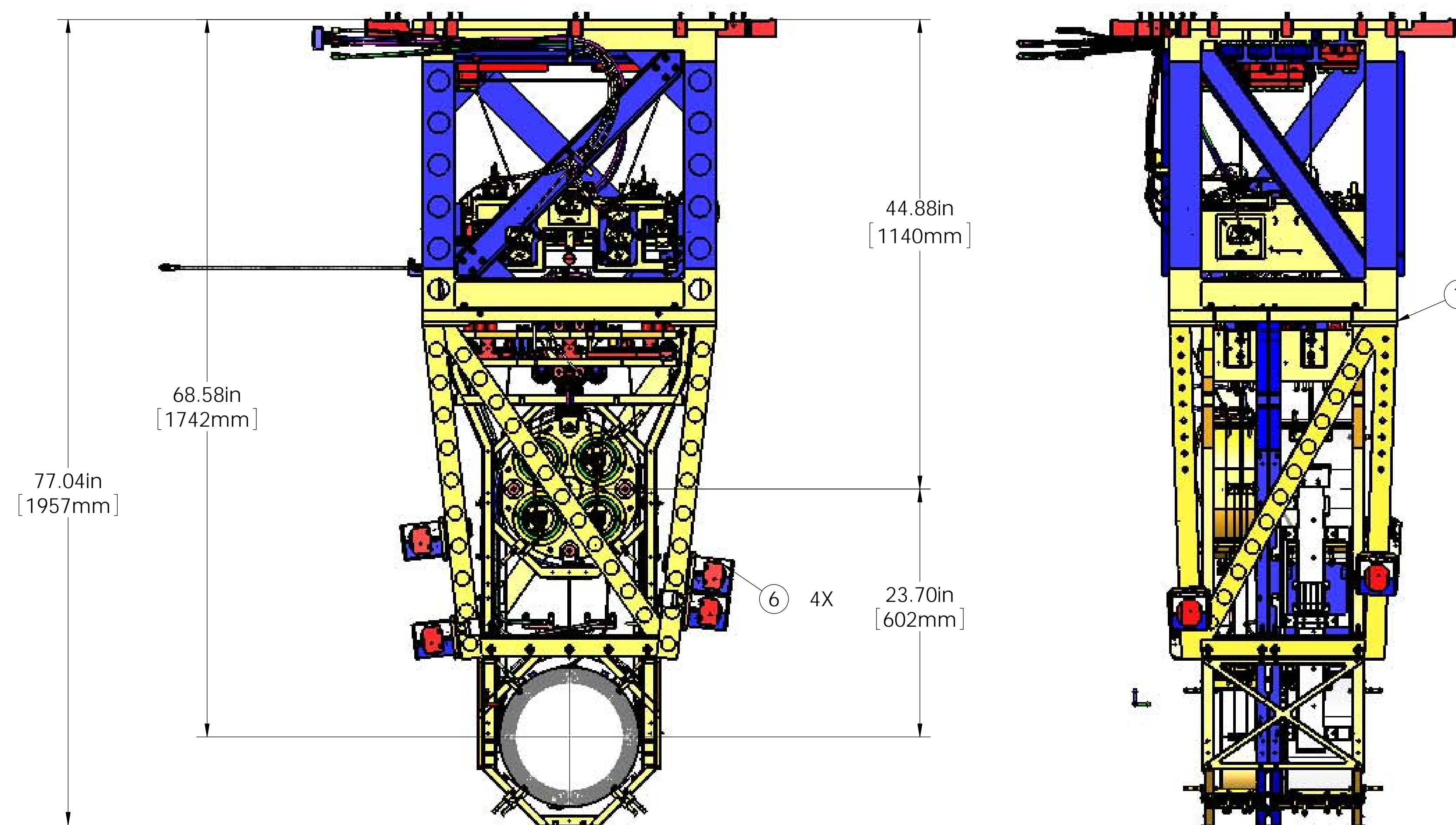


REV.	DATE	DCN #	DRAWING TREE #
v2	25 July 2011	E1100696	-
v3	26 Aug. 2011	E1100696	-
v4	12 DEC 2011	-	-



ISO VIEW



LOCAL COORDINATES - REFERENCE

Xmm	Ymm	Zmm	YAW °
200.0	528.7	-80.0	0.0 °

SEE PAGE 4 FOR CS DEFINITION

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES [MM]	
TOLERANCES: .XX ± .03 .XXX ± .010	
ANGULAR ± 5 °	
MATERIAL	FINISH
SEE BOM	N/A μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO SUB-SYSTEM: SUS

NEXT ASSY: D0900360

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	Optical Table/QTY.
7			Material <not specified>	1
6	D1002424	VIBRATION ABSORBER ASSEMBLY	N/A	4
5	D1100785-620	ALIGO, SUS, QUAD, NITRONIC WASHER, FLAT	NITRONIC 60	20
4	3AJ1.500-12CL	3/8-16 X 1.50 12PT BOLT	450 SSSL	20
3	D1003190	aLIGO QUAD SHORTER DOG CLAMP	304 SSSL	4
2	D070056	aLIGO, SUS, QUAD N-PTYPE, QUAD DOG CLAMP	304 SSSL	16
1	D0901346	aLIGO SUS QUAD ASSEMBLY TOP LEVEL TD-1084-090		1

PART NAME: AdvLIGO SUS BSC8-H2, XYZ Local CS for ITMY

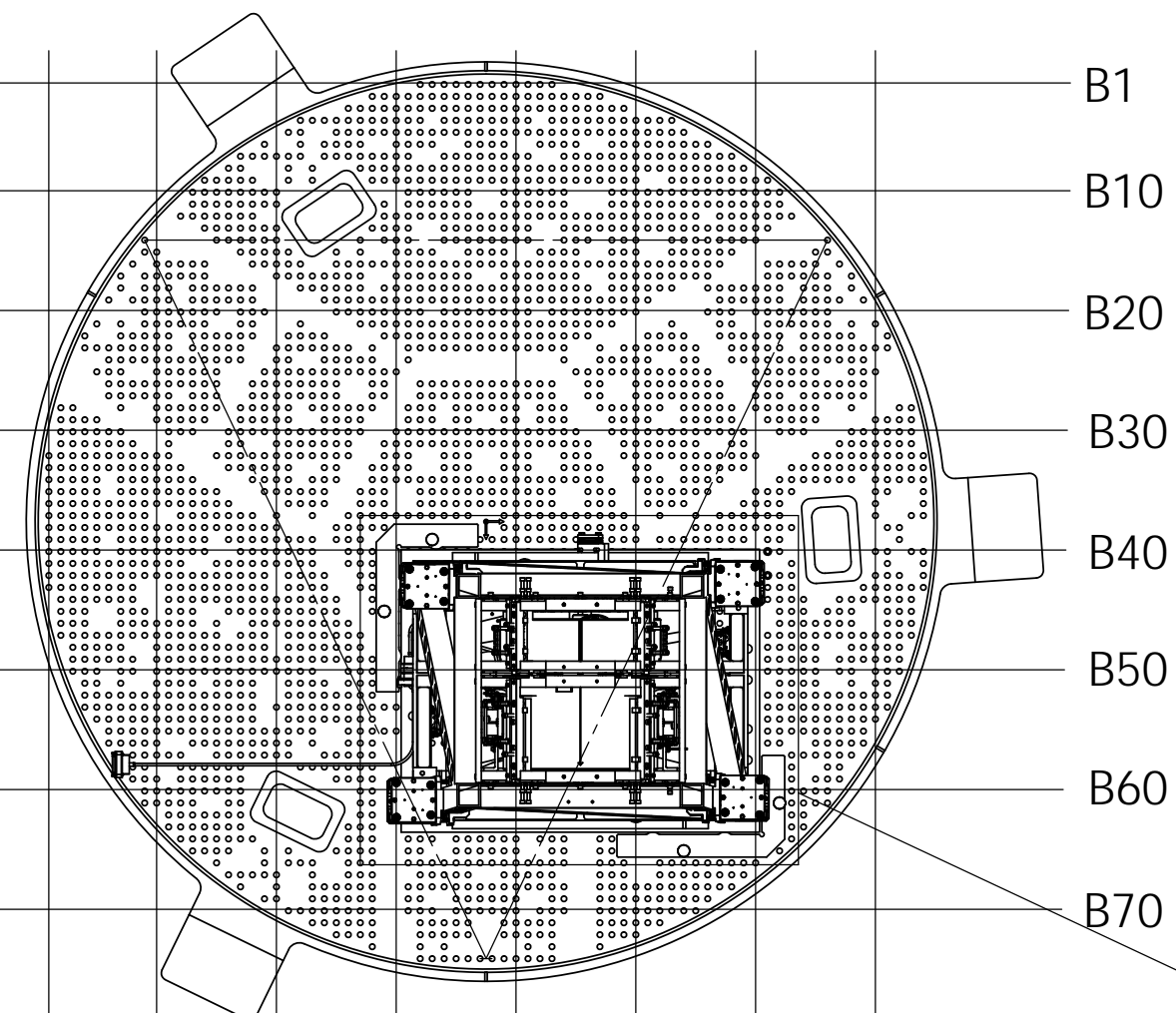
DESIGNER: J.ODELL 9 Aug 2009 SIZE: D DWG. NO.: D0900363 REV.: v4

DRAFTER: M.HILLARD 1 July 2011

CHECKER: E.CHAVEZ 1 July 2011

APPROVAL: C.TORRE 1 July 2011 SCALE: 1:8 PROJECTION: SHEET 1 OF 9

D0900363 AdvLIGO SUS BSC8-H2, XYZ Local CS for ITMY PART PDM REV: X.087 DRAWING PDM REV: X.015

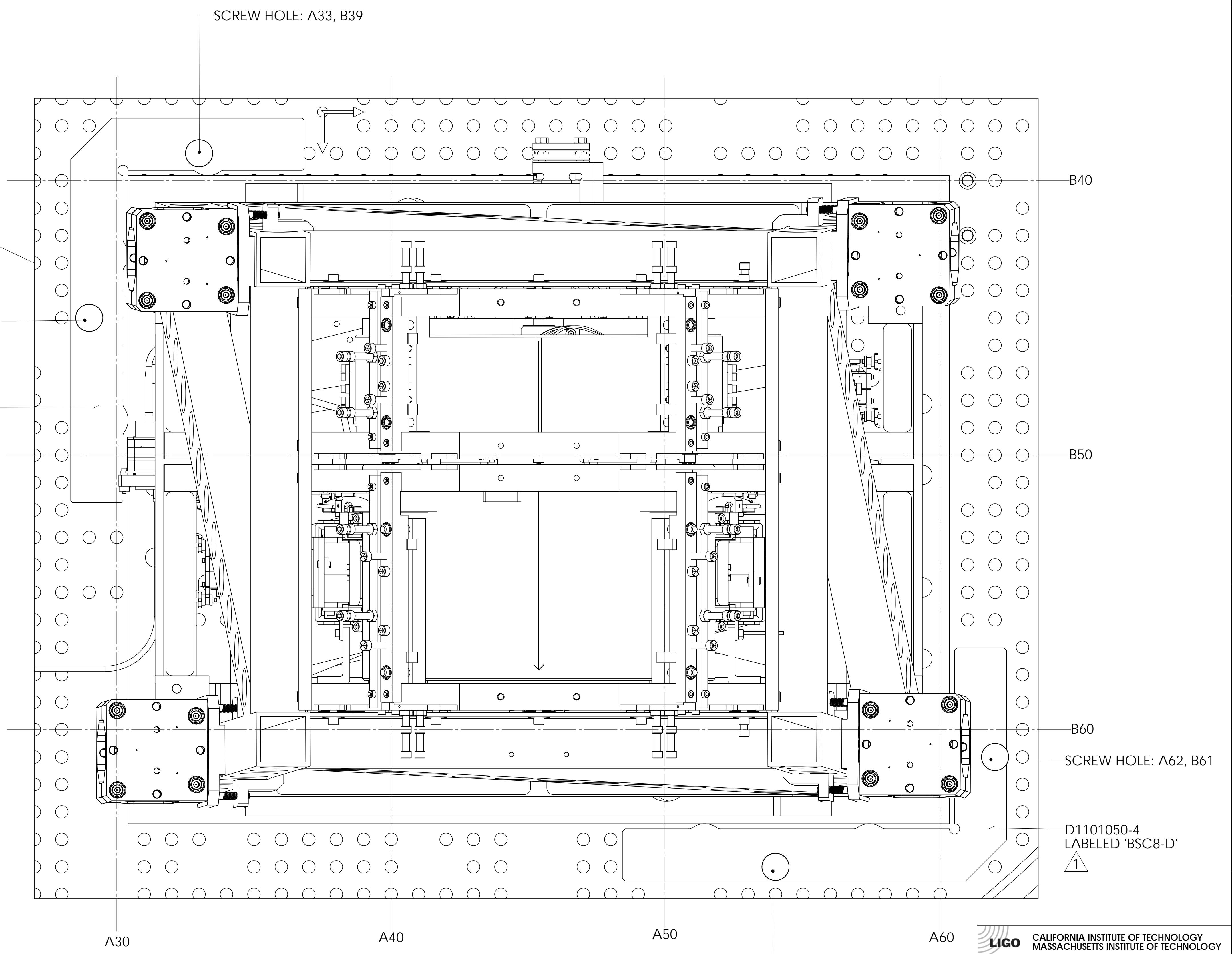


A1 A10 A20 A30 A40 A50 A60 A70

B1
B10
B20
B30
B40
B50
B60
B70

BSC 4
+X

Y+
ISI TABLE
UNDERSIDE VIEW
(LOOKING UP)

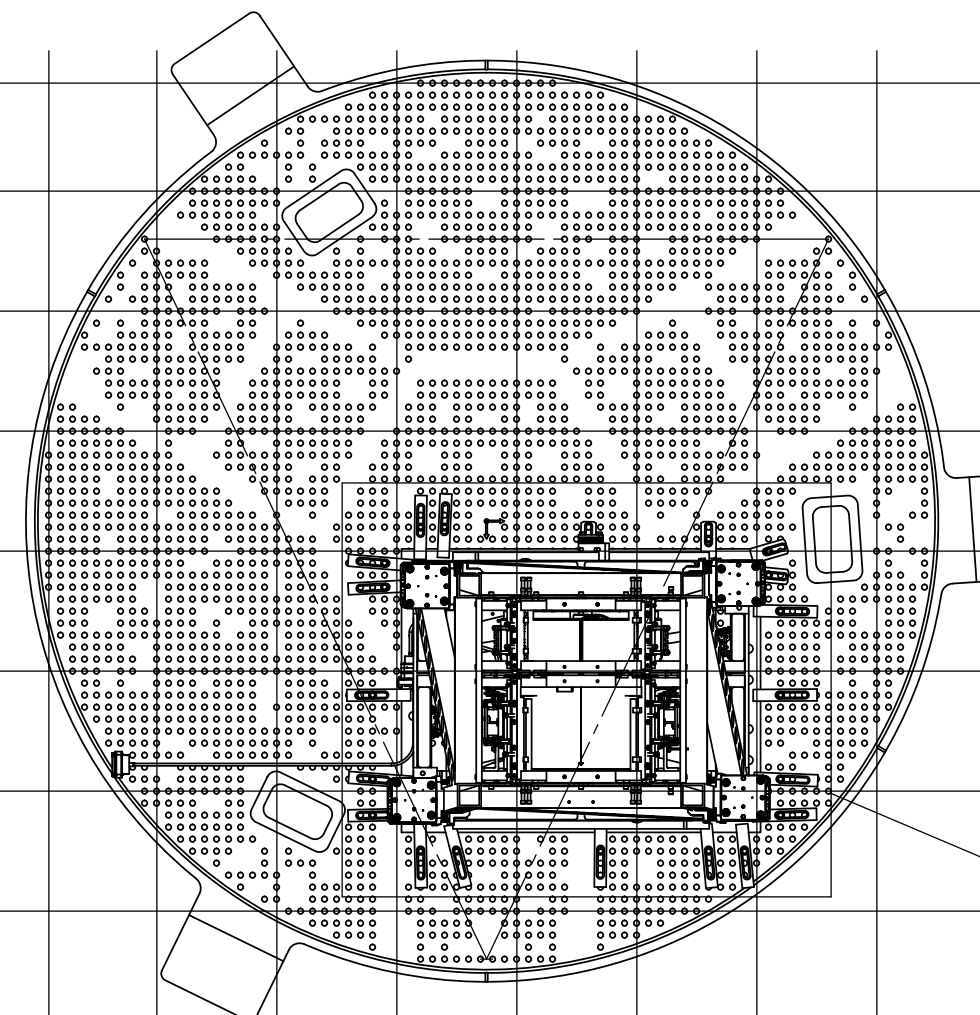


3. REFER TO D1101271 FOR OPTICAL TABLE HOLE TABULATION CONVENTION.
2. REFER TO G1000125 FOR ISI NAMING CONVENTION AND ORIENTATION CONVENTION.
- 1 USE ONLY ONE (1) ALIGNMENT TOOL. REMOVE AFTER ETMY IS CLAMPED TO ISI TABLE.

DETAIL A
SCALE 1 : 2

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
D	D0900363	v4
SCALE: 1:2	PROJECTION:	SHEET 2 OF 9

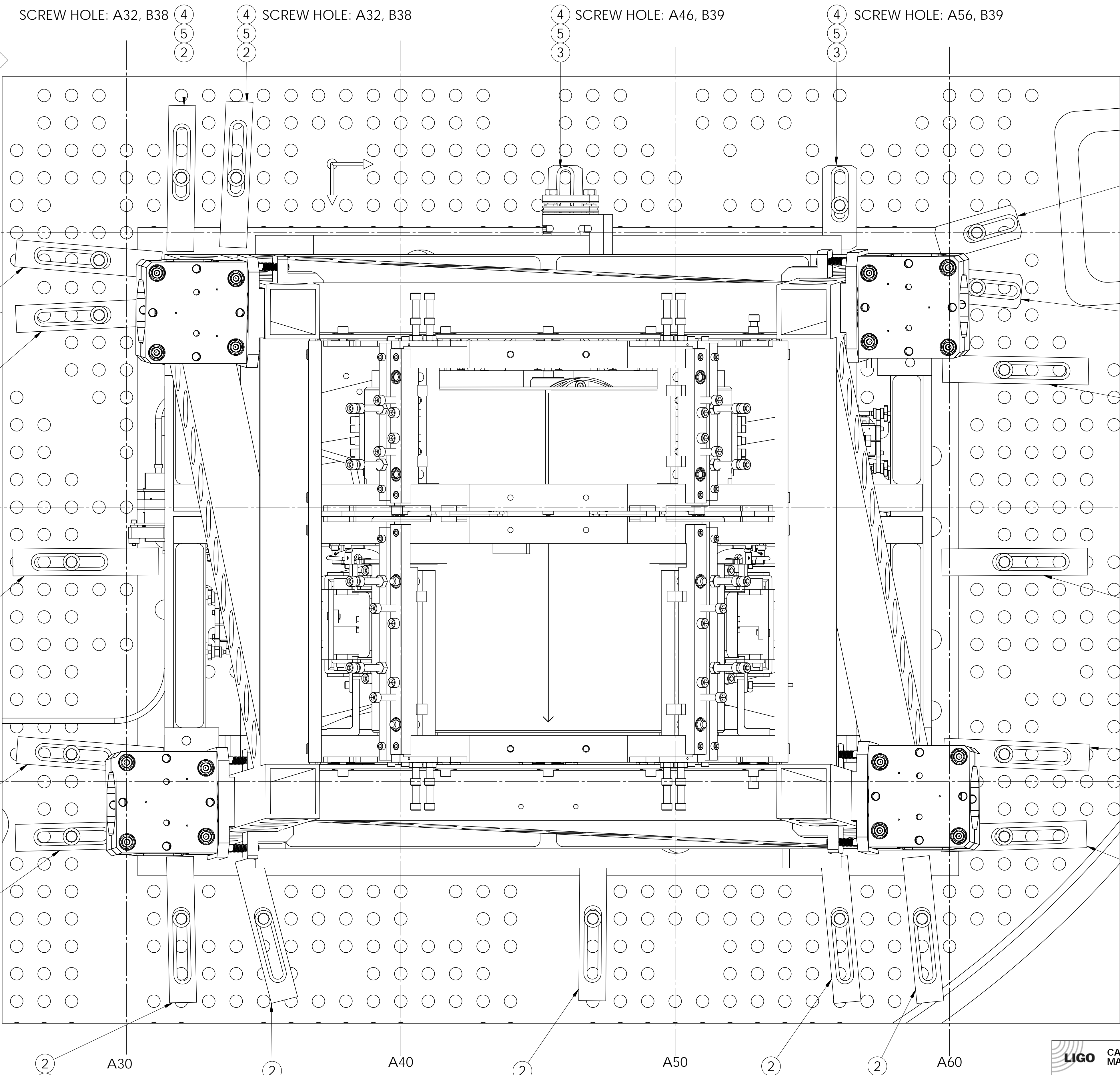
D0900363_A01/LIGO_SLS_BSC8-HZ_XYZ_Local_CS_for_ETMY_PART_PDM_REV-X.087_DRAWING_PDM_REV_X.015



ISI TABLE
UNDERSIDE VIEW
(LOOKING UP)

BSC 4

+X



SCREW HOLE: A32, B38 (4) (5) (2) SCREW HOLE: A32, B38 (4) (5) (2) SCREW HOLE: A46, B39 (4) (5) (3) SCREW HOLE: A56, B39 (4) (5) (3)

SCREW HOLE: A61, B40 (4) (5) (3)

SCREW HOLE: A61, B42 (4) (5) (2)

SCREW HOLE: A62, B45 (4) (5) (2)

SCREW HOLE: A62, B52 (4) (5) (2)

SCREW HOLE: A62, B59 (4) (5) (2)

SCREW HOLE: A62, B62 (4) (5) (2)

SCREW HOLE: A29, B41 (2) (5) (4)

SCREW HOLE: A29, B43 (2) (5) (4)

SCREW HOLE: A28, B52 (2) (5) (4)

SCREW HOLE: A28, B59 (2) (5) (4)

SCREW HOLE: A28, B62 (2) (5) (4)

SCREW HOLE: A32, B65 (2) (5) (4)

SCREW HOLE: A35, B65 (2) (5) (4)

SCREW HOLE: A47, B65 (2) (5) (4)

SCREW HOLE: A56, B65 (2) (5) (4)

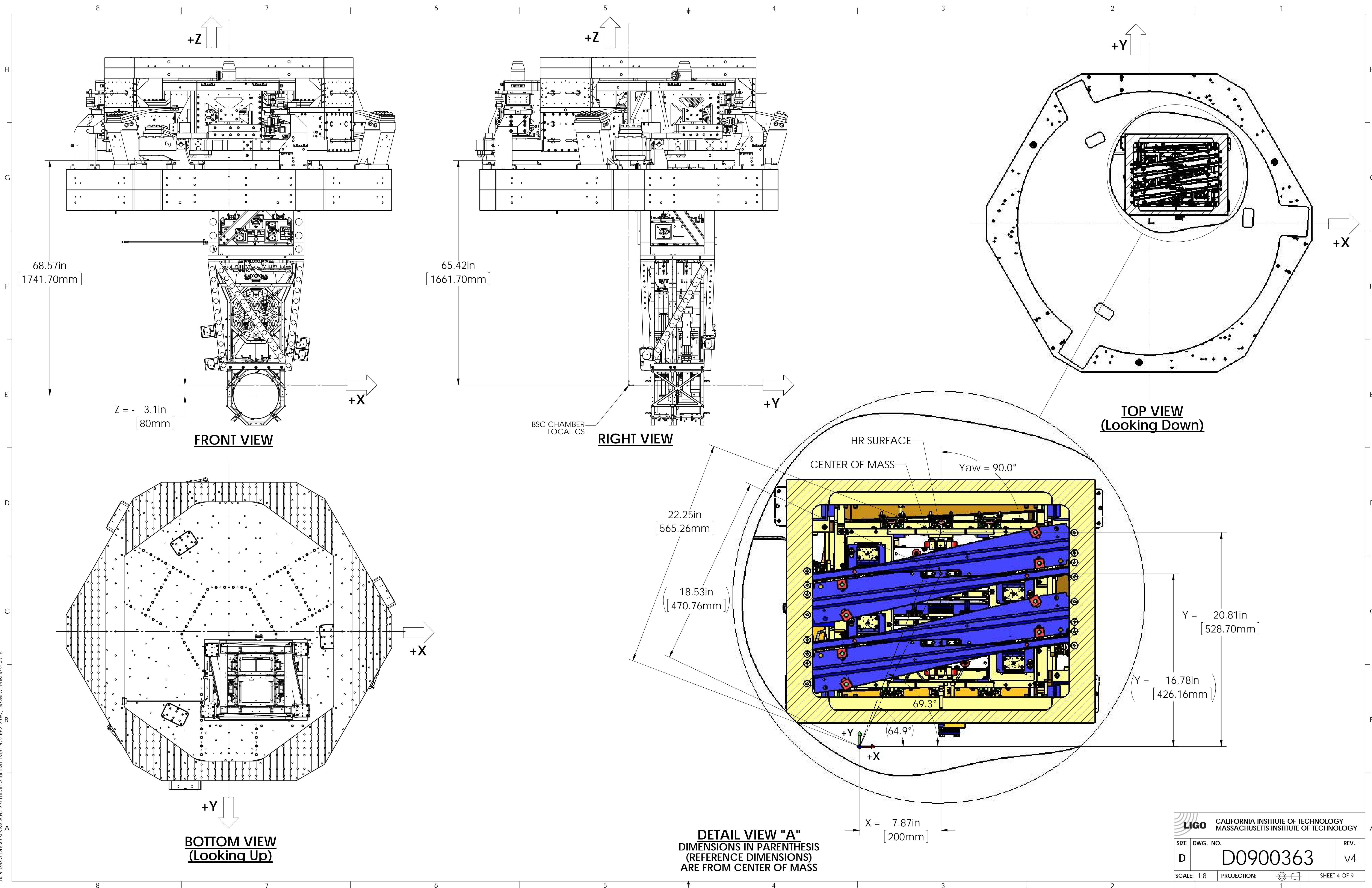
SCREW HOLE: A59, B65 (2) (5) (4)

DETAIL B

TIGHTEN ALL SCREWS TO
A TORQUE OF 300 IN/LB

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE	DWG. NO.	v4
D	D0900363	
SCALE: 1:2	PROJECTION:	SHEET 3 OF 9

D0900363 ADU/LGO SLS/BCH/HZ, XYZ Local CS for ITMY: PART PDM REV: X.087, DRAWING PDM REV: X.015



D0900363_A01.LGO_SLS_BSCCH2.XYZ Local CS for ITM1 PART PDM REV.X.087 DRAWING PDM REV.X.015

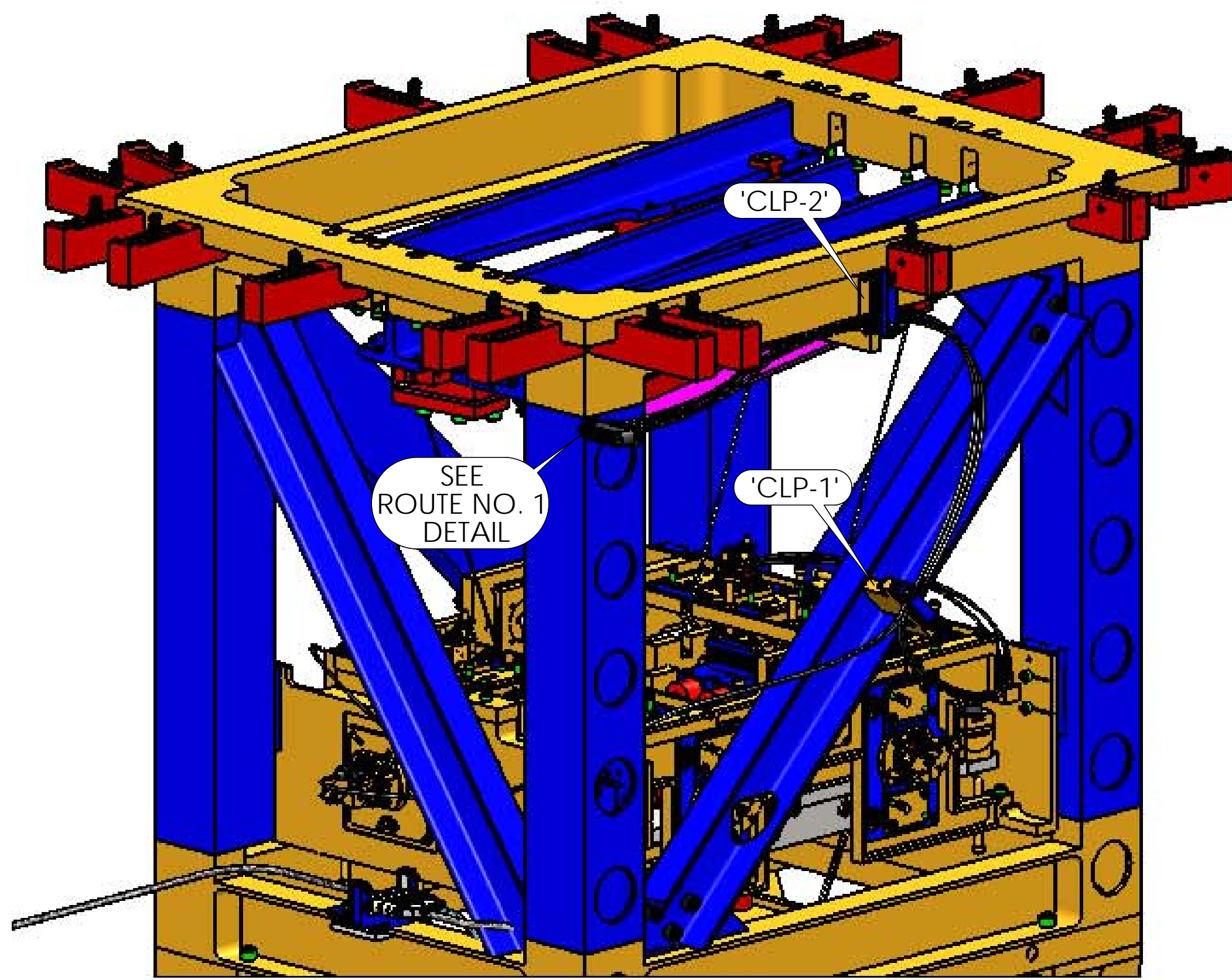
DETAIL VIEW "A"
 DIMENSIONS IN PARENTHESIS
 (REFERENCE DIMENSIONS)
 ARE FROM CENTER OF MASS

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D0900363	v4
SCALE: 1:8	PROJECTION: SHEET 4 OF 9

CABLE ROUTING SPECS.: TOP STAGE BOSEM

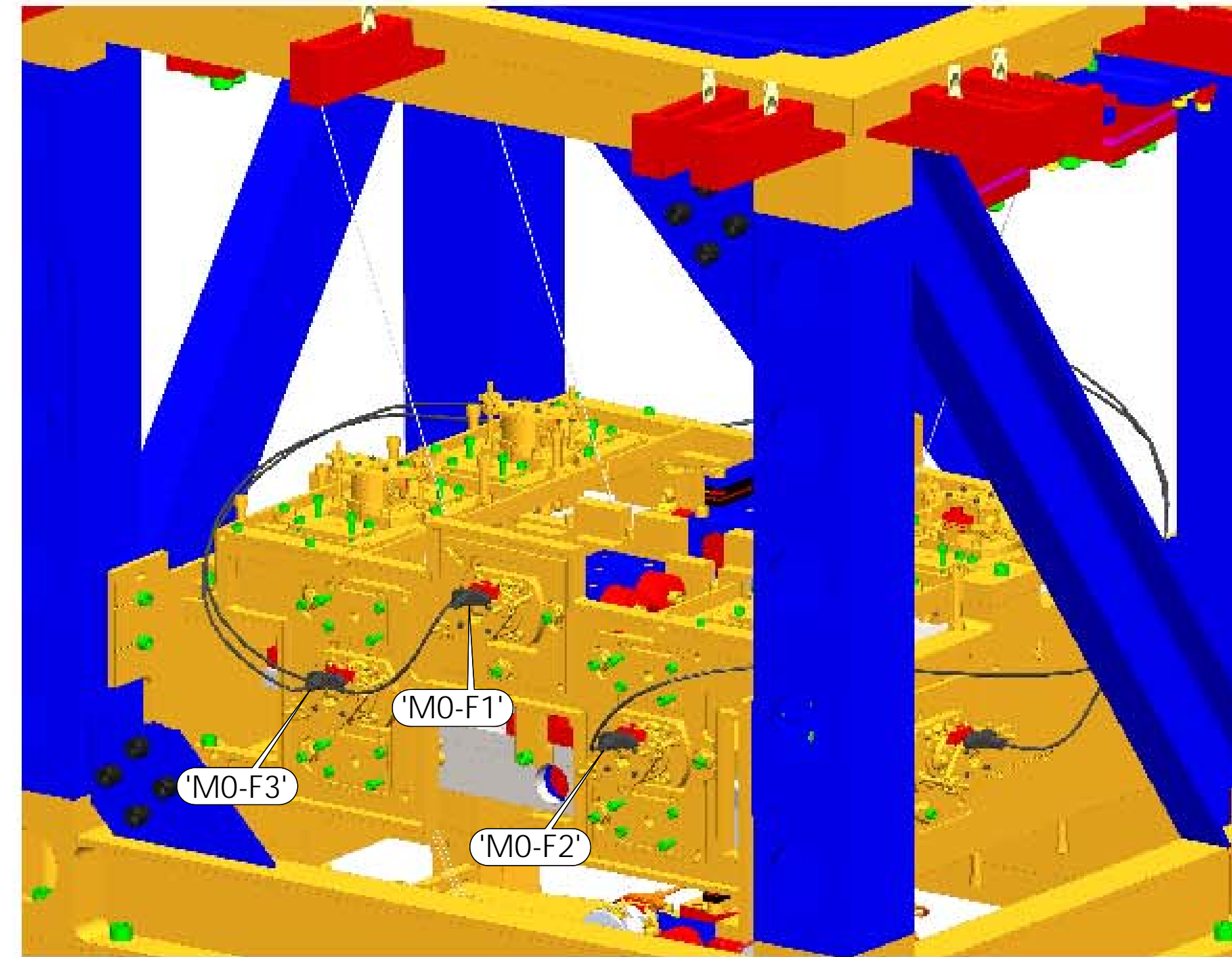
SEE T1100327 FOR QUAD CABLING PICASSO

FOR SYSTEM CABLING DIAGRAM, CABLE BRACKET LOCATION/ORIENTATION WRT CHAMBER, SEE D1101477

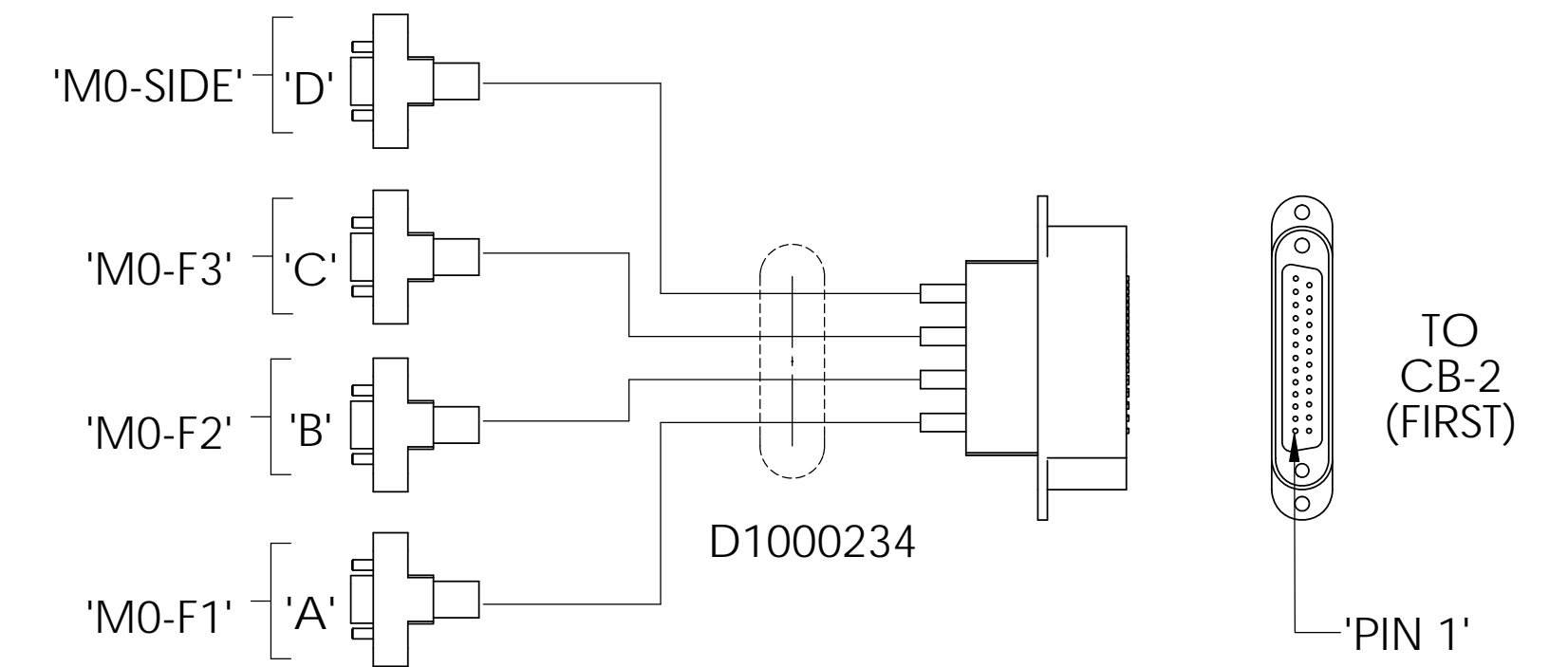


ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS

TOP STAGE-M0 CABLE
(SECURED TO M0 & R0 CAGE)

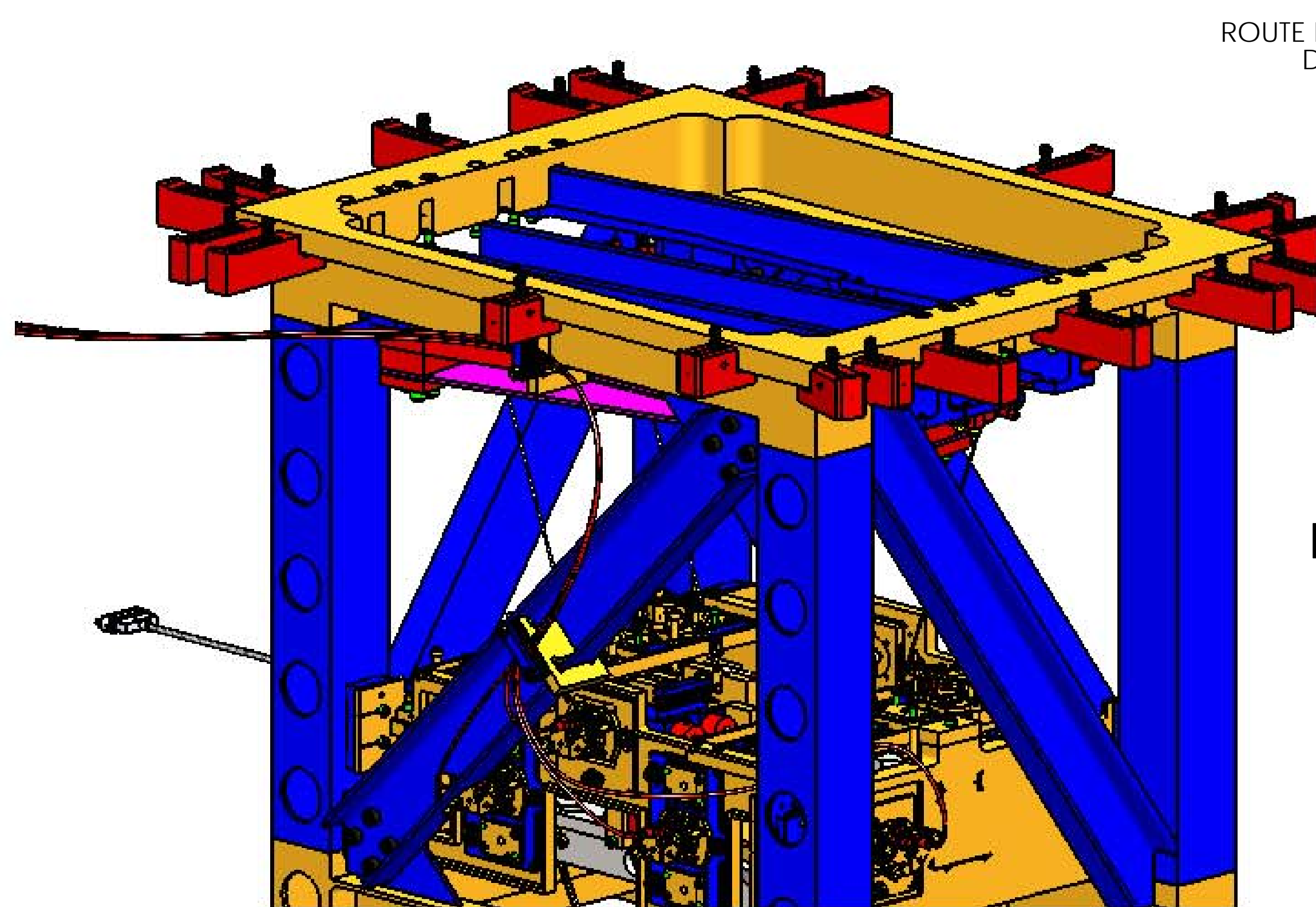


ISO VIEW-REAR



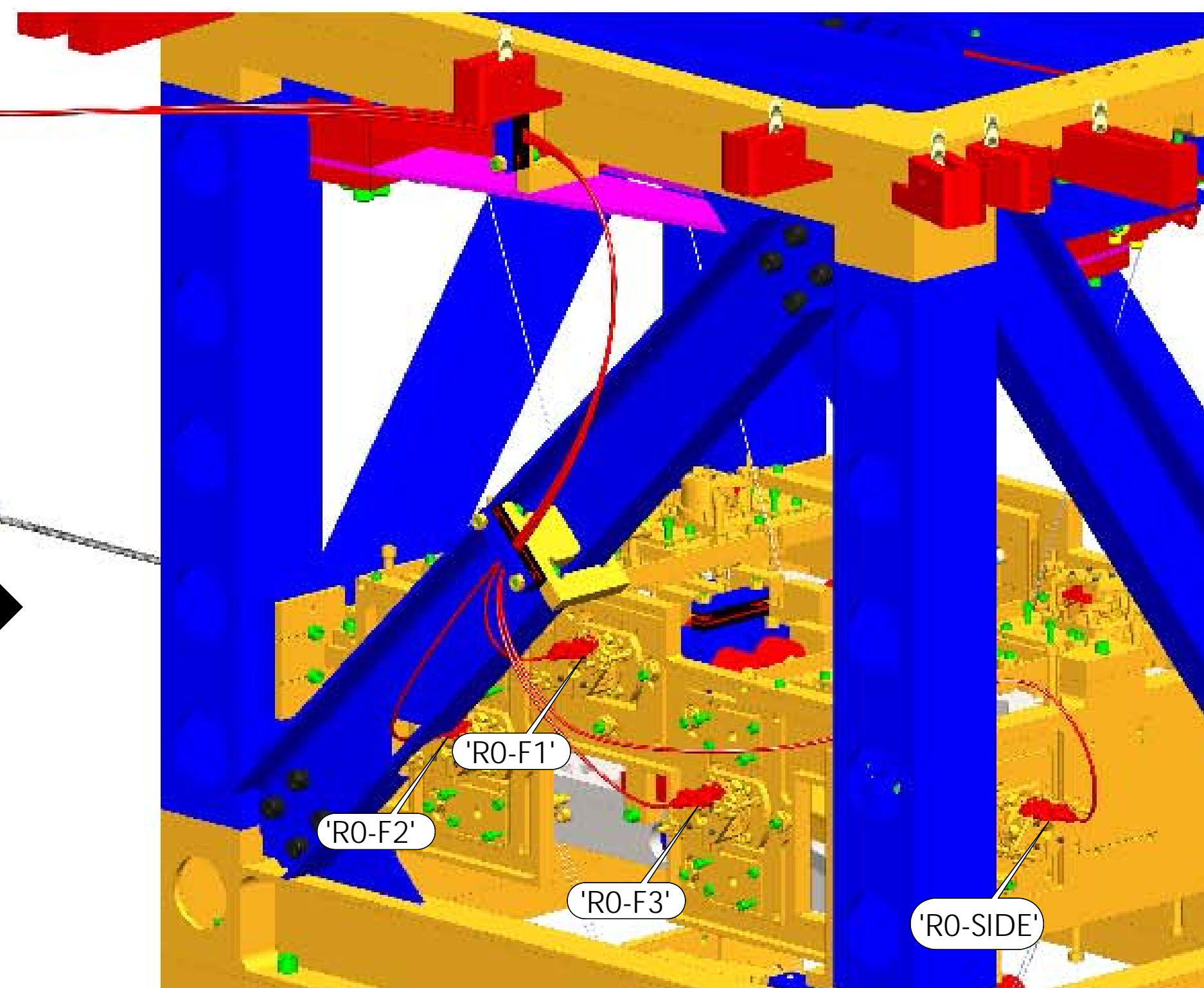
ROUTE NO. 1
(PARTIAL ROUTE-SEE D1101477, FOR COMPLETE ROUTE)

TOP STAGE-R0 CABLE FANOUT
(SECURED TO M0 & R0 CAGE)

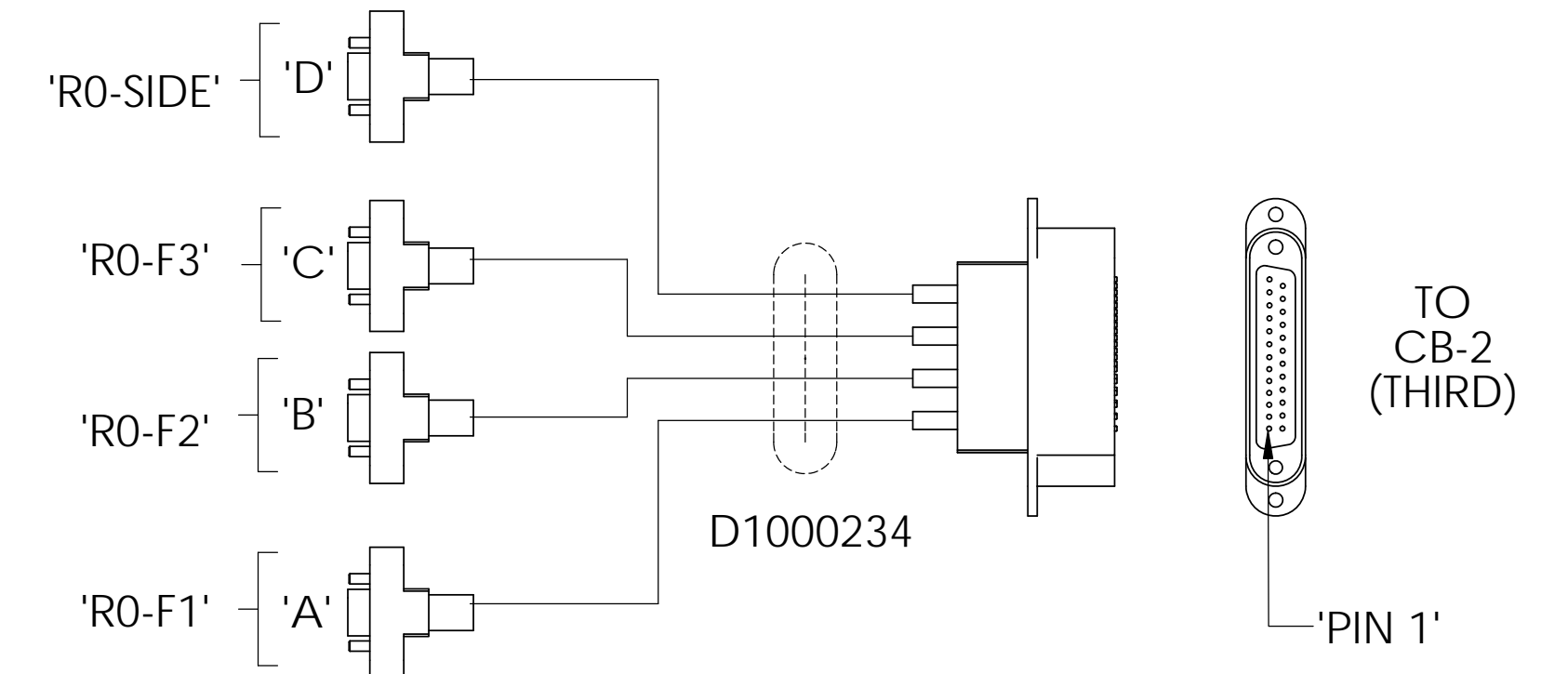


ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS

SEE ROUTE NO. 2 DETAIL



ISO VIEW-FRONT



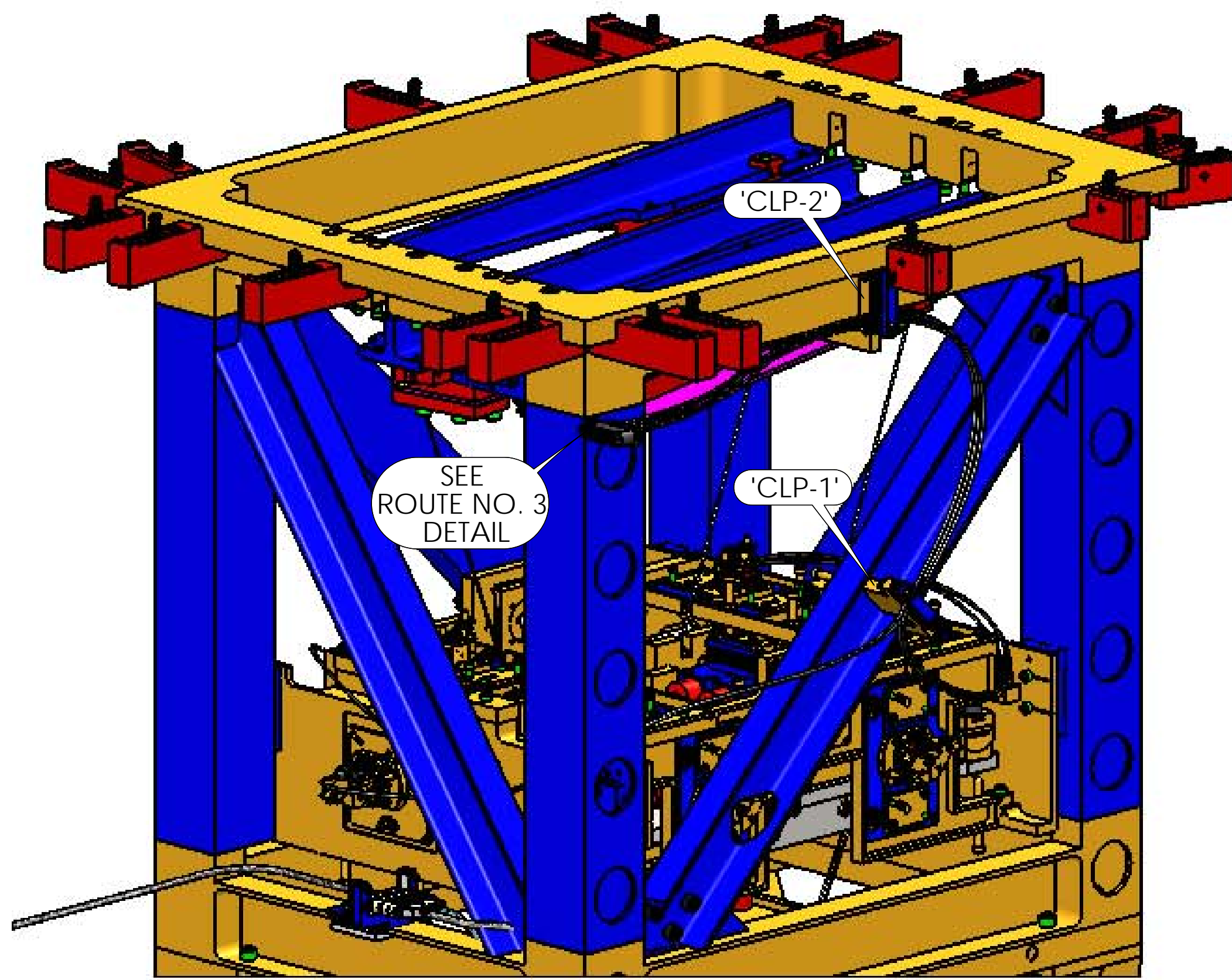
ROUTE NO. 2
(PARTIAL ROUTE-SEE D1101477, FOR COMPLETE ROUTE)

D0900363 ADM LIGO SLS RSC-HJL XYZ Local CS for ITM1 PART PDM REV-X.087 DRAWING PDM REV. X.015

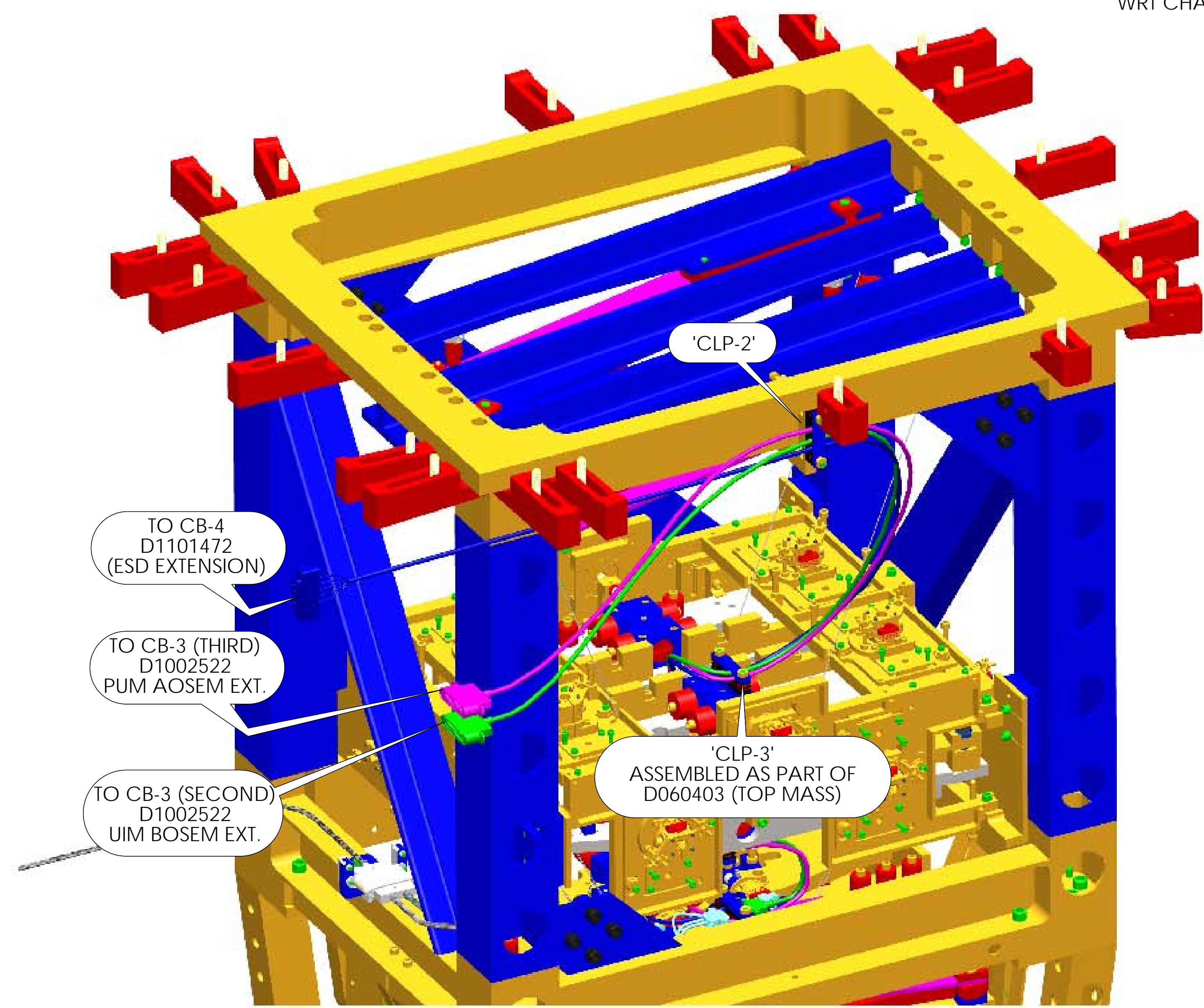
CABLE ROUTING SPECS.: TOP STAGE BOSEM

SEE T1100327 FOR QUAD CABLING PICASSO

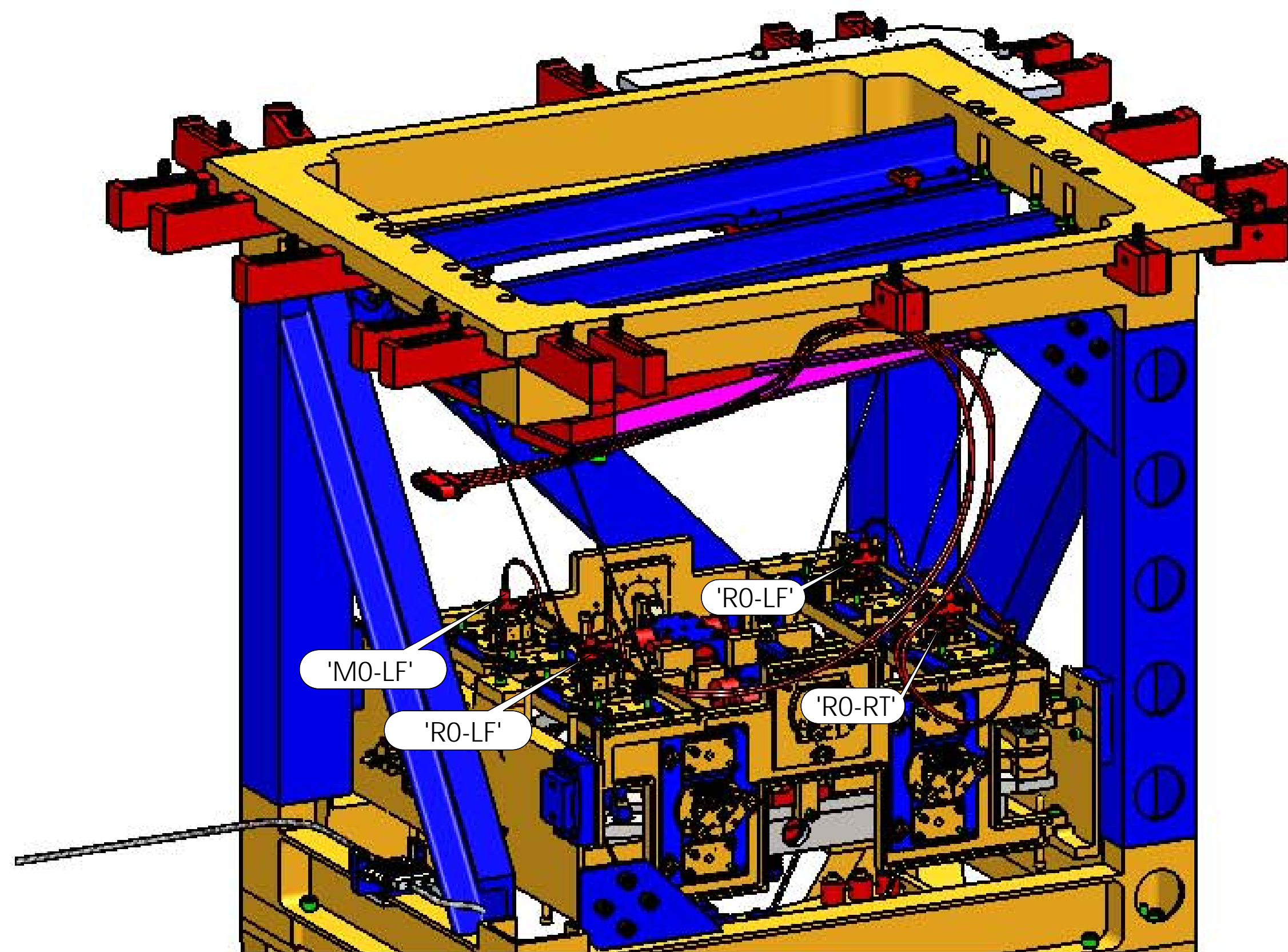
FOR SYSTEM CABLING DIAGRAM, CABLE BRACKET LOCATION/ORIENTATION WRT CHAMBER, SEE D1101477



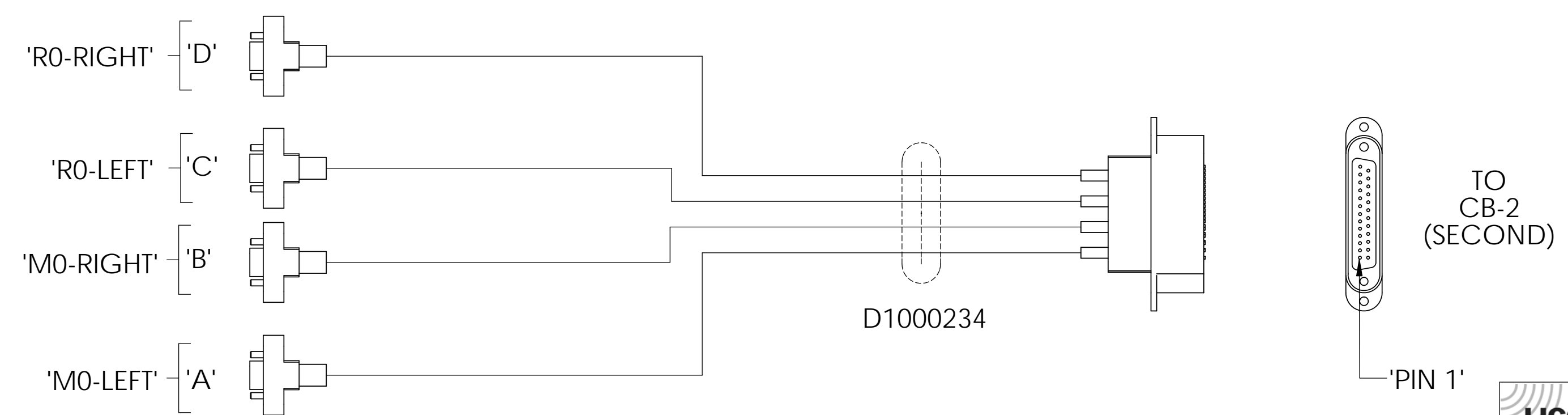
ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS



SEGMENT 'A': ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS



TOP STAGE, M0 / R0 CABLE

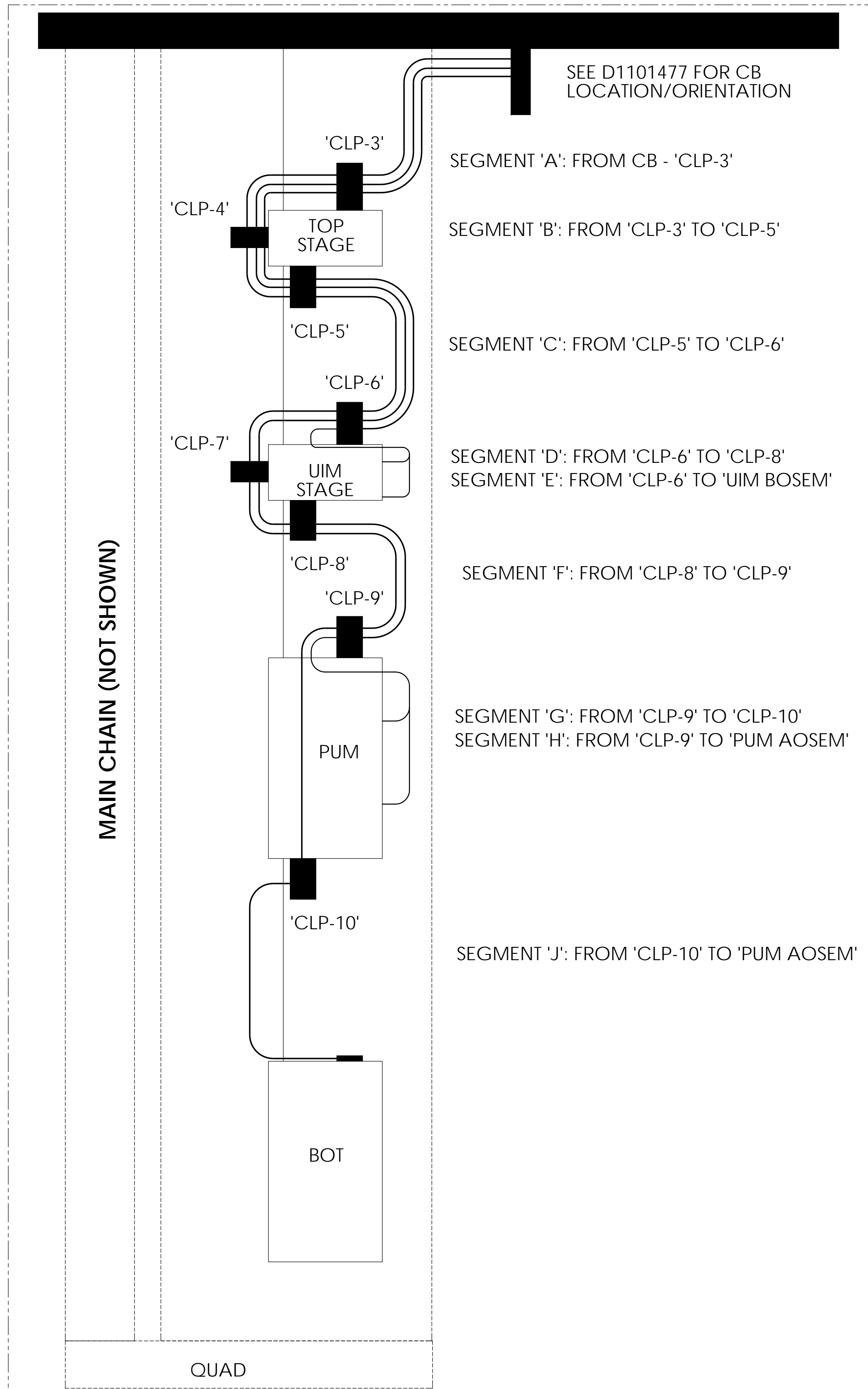


ROUTE NO. 3
(PARTIAL ROUTE-SEE D1101477, FOR COMPLETE ROUTE)

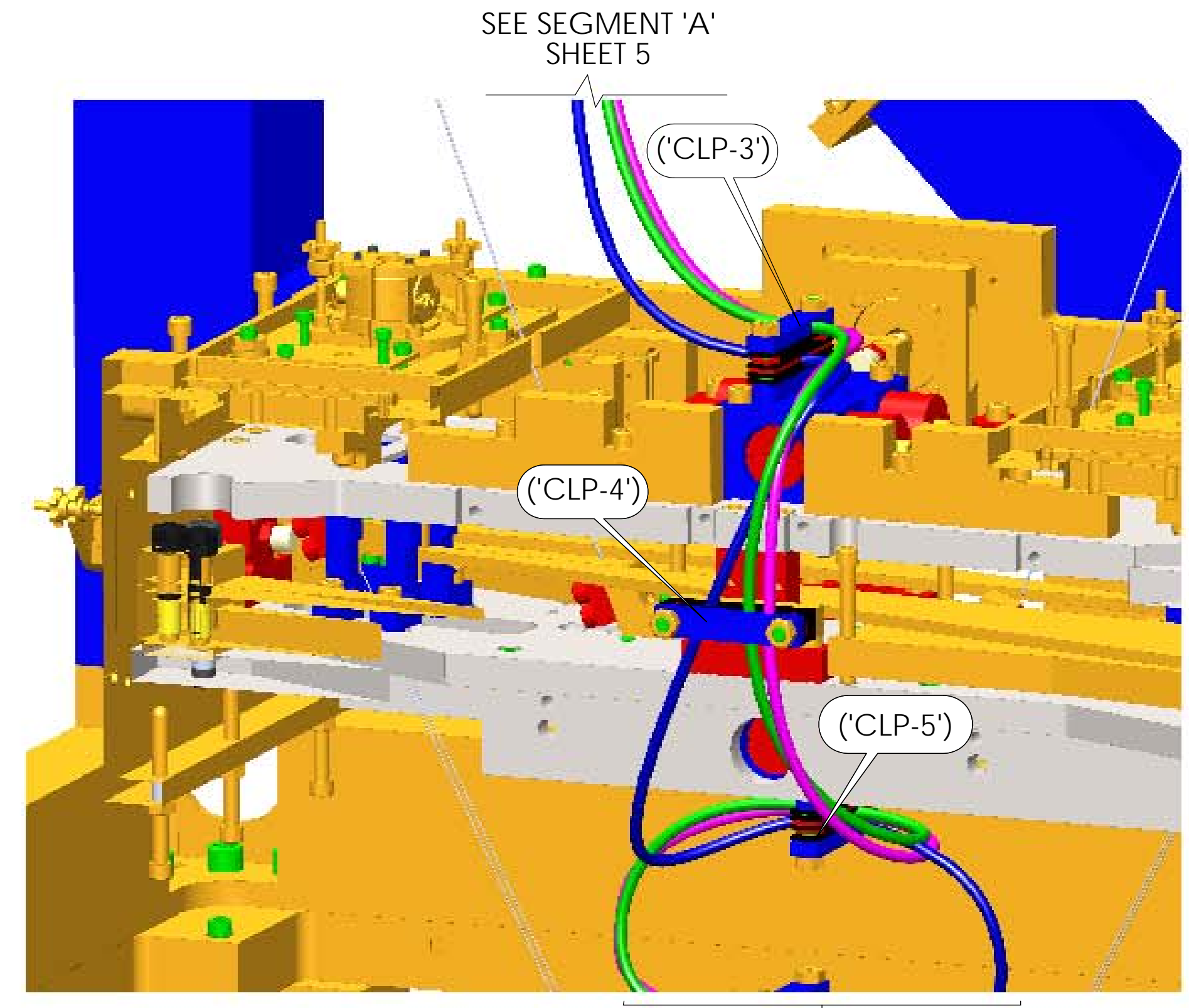
LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D0900363	v4
SCALE: 1:16	PROJECTION:
SHEET 6 OF 9	

D:\0900363_ADM\LIGO_SLS_BSC\HLS_XYZ\Local_CS_for_ITM\PART_PDM_REV_X.087_DRAWING_PDM_REV_X.015

CABLE ROUTING SPECS.: CABLING (UP REACTION CHAIN)

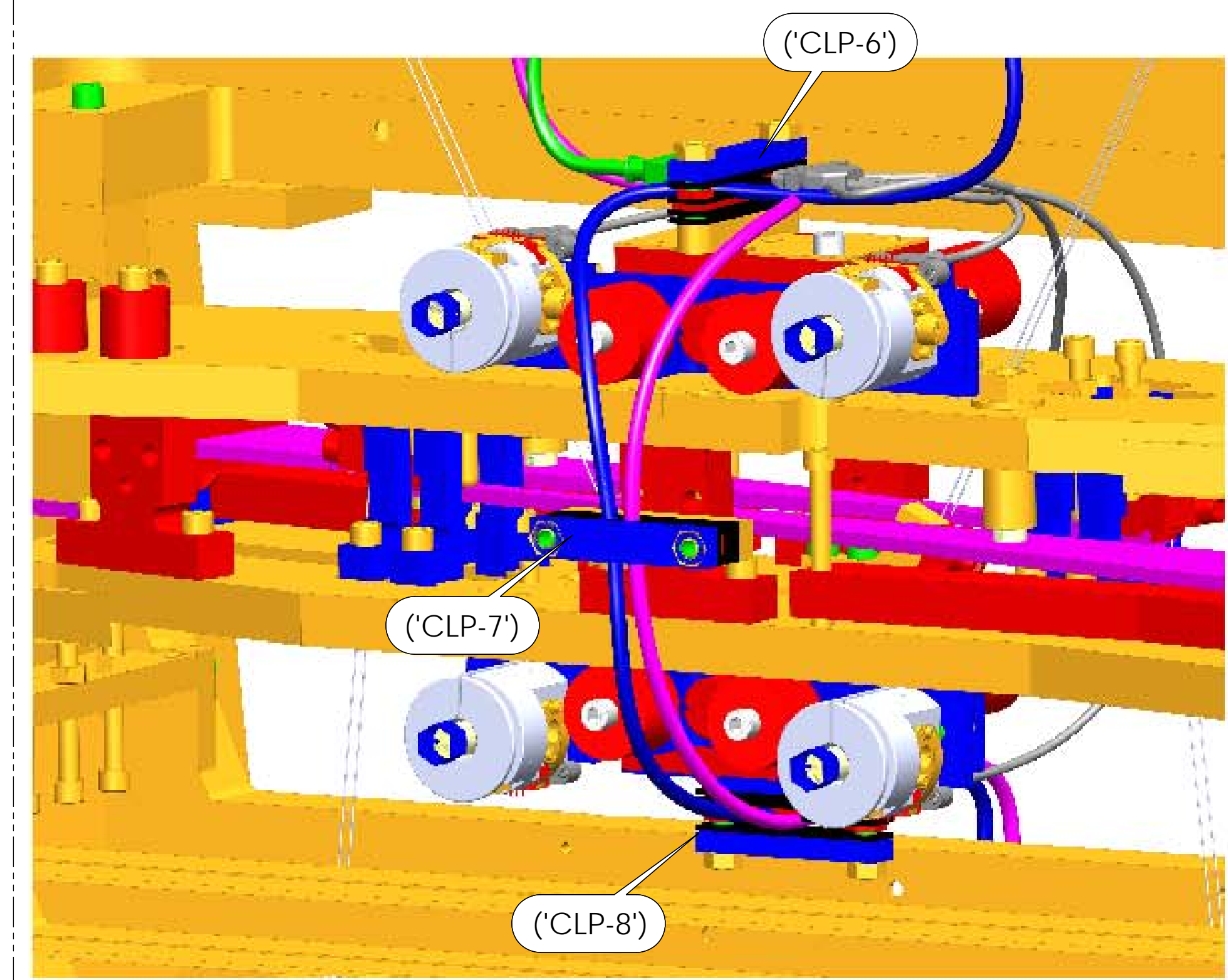


ESD CABLE EXTENSION
 PUM AOSEM EXTENSION
 UIM BOSEM EXTENSION
 ESD CABLE
 PUM AOSEM
 UIM BOSEM
 SEE T1100327 FOR QUAD CABLING PICASSO.

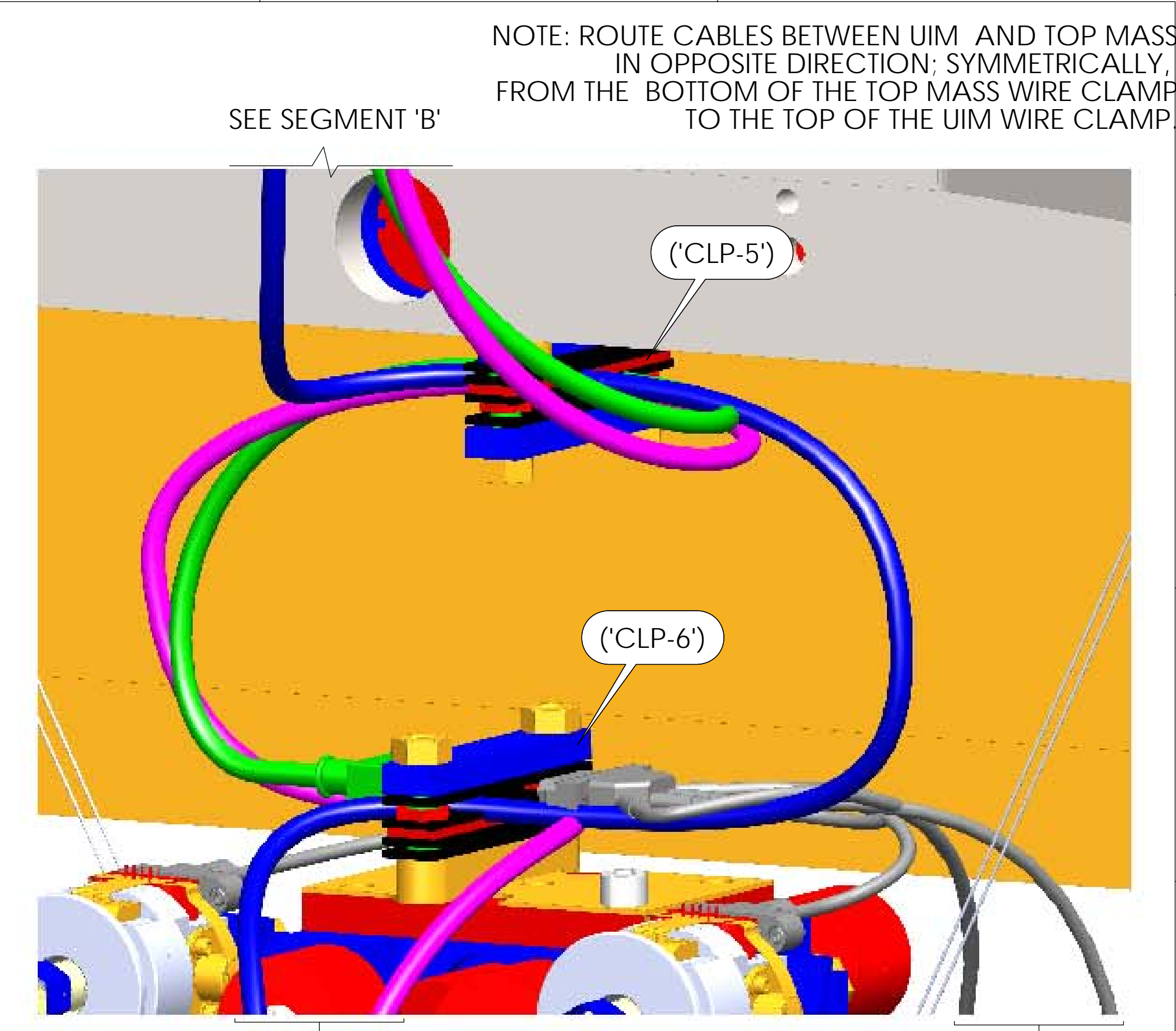


SEE SEGMENT 'C'

SEGMENT 'B': FROM 'CLP-3' TO 'CLP-5'
 AS VIEW BEHIND RE CHAIN
 CLP-3, CLP-4 AND CLP-5 ARE PART OF D060403
 (ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS)

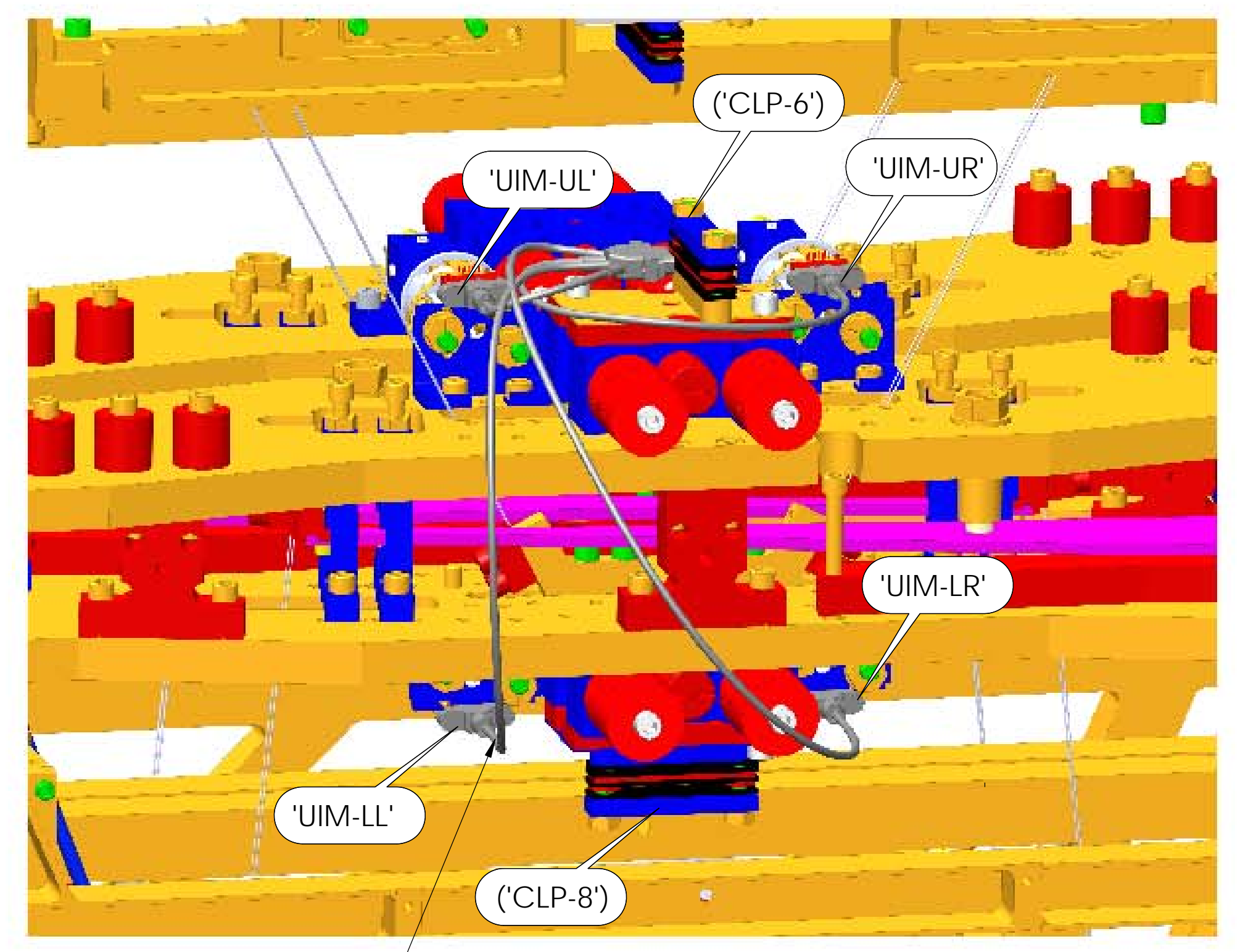


SEGMENT 'D': FROM 'CLP-5' TO 'CLP-6'
 AS VIEW BEHIND RE CHAIN
 CLP-5 AND CLP-6 ARE PART OF D1101129
 (ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS)



SEE SEGMENT 'D'

SEGMENT 'C': FROM 'CLP-5' TO 'CLP-6'
 AS VIEW BEHIND RE CHAIN
 CLP-6 IS PART OF D1101129
 (ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS)



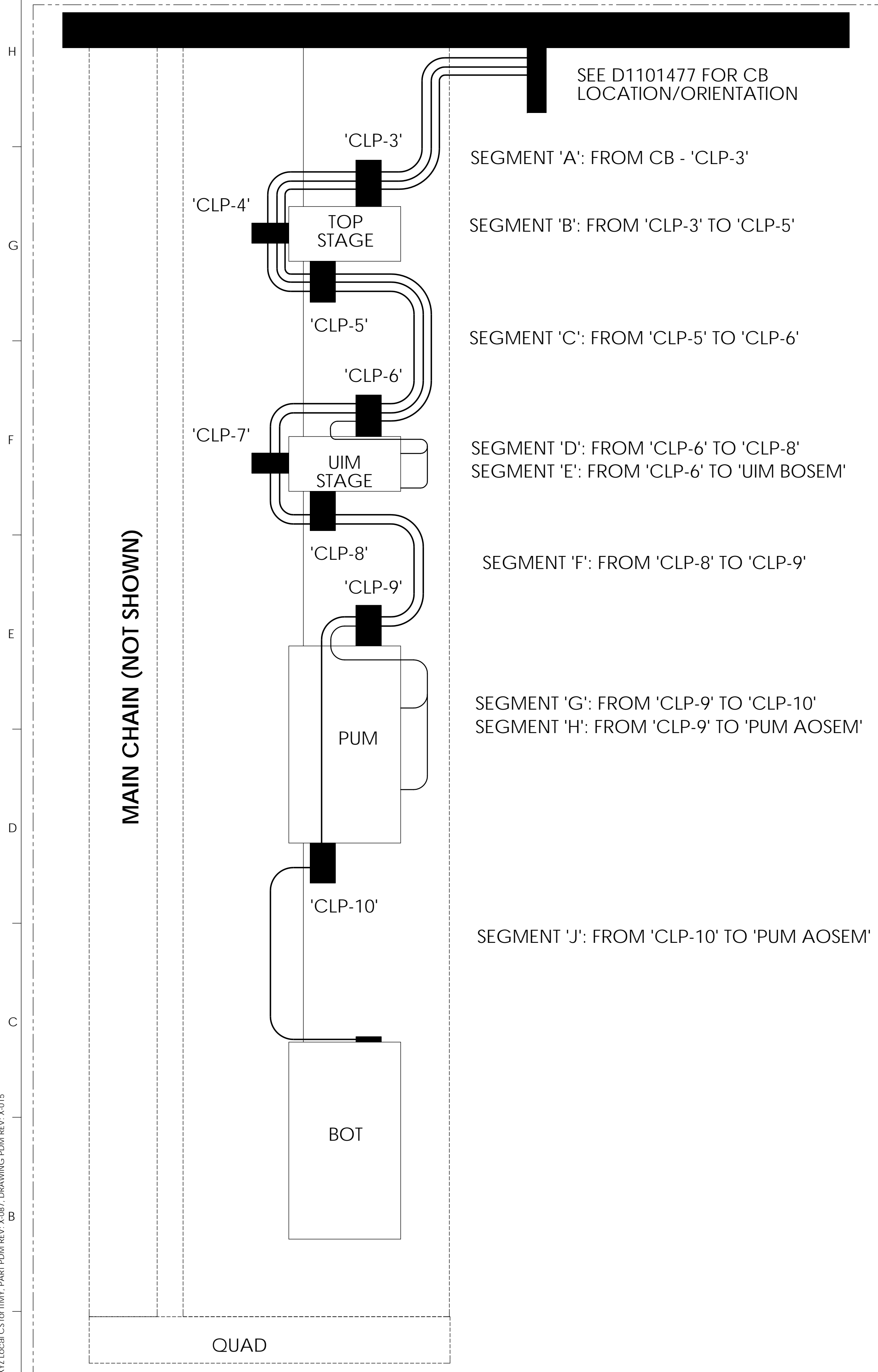
SEE SHEET 8, ROUTE NO. 4 UIM BOSEM-DETAIL

SEGMENT 'E': FROM 'CLP-6' TO UIM BOSEM

NOTE: ROUTE CABLES BETWEEN UIM AND TOP MASS IN OPPOSITE DIRECTION; SYMMETRICALLY, FROM THE BOTTOM OF THE TOP MASS WIRE CLAMP TO THE TOP OF THE UIM WIRE CLAMP.

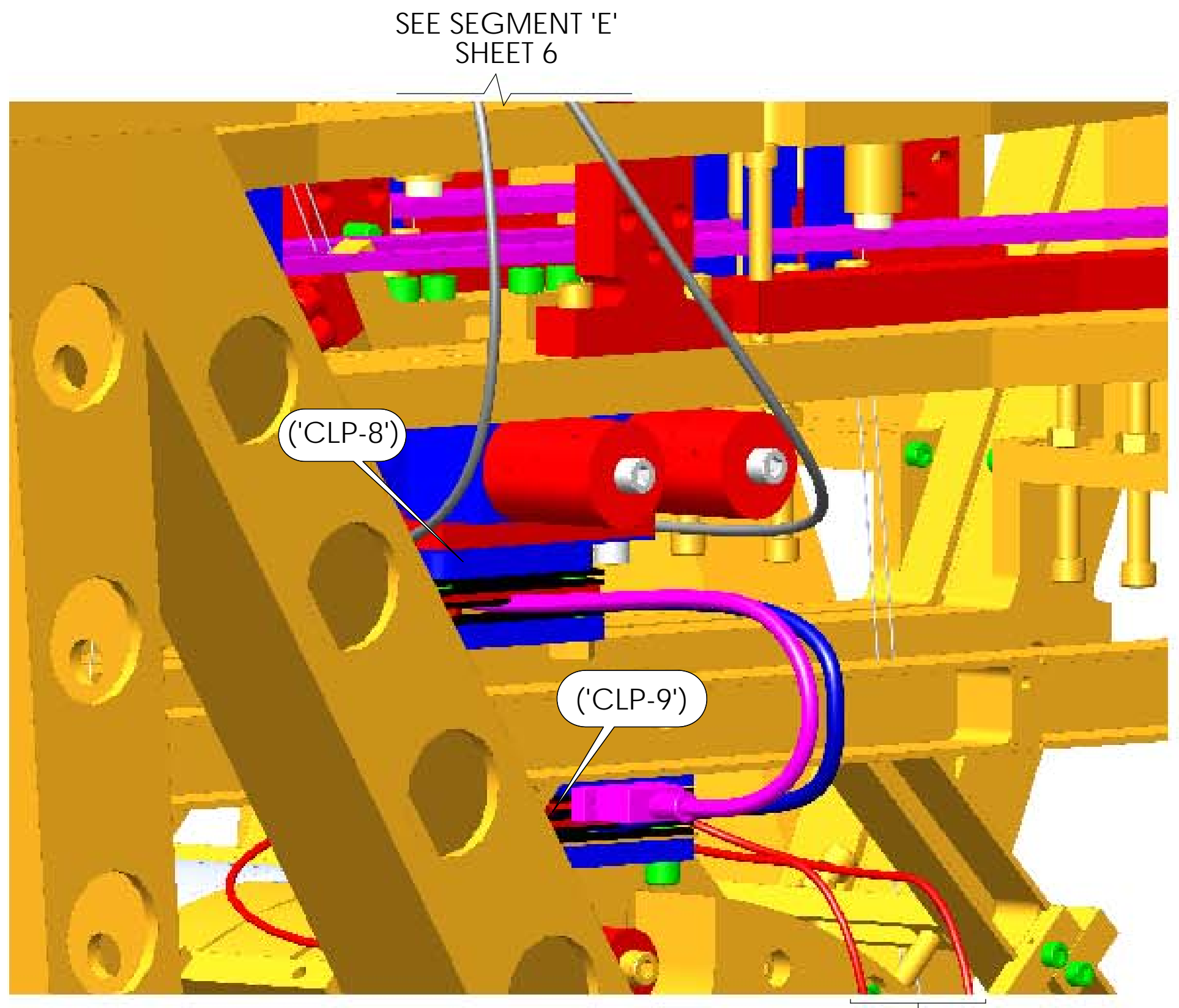
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE	DWG. NO.	v4
D	D0900363	
SCALE: 1:16	PROJECTION:	SHEET 7 OF 9

CABLE ROUTING SPECS.: CABLING (UP REACTION CHAIN)



ESD CABLE EXTENSION
 PUM AOSEM EXTENSION
 UIM BOSEM EXTENSION
 ESD CABLE
 PUM AOSEM
 UIM BOSEM

SEE T1100327 FOR QUAD CABLING PICASSO.

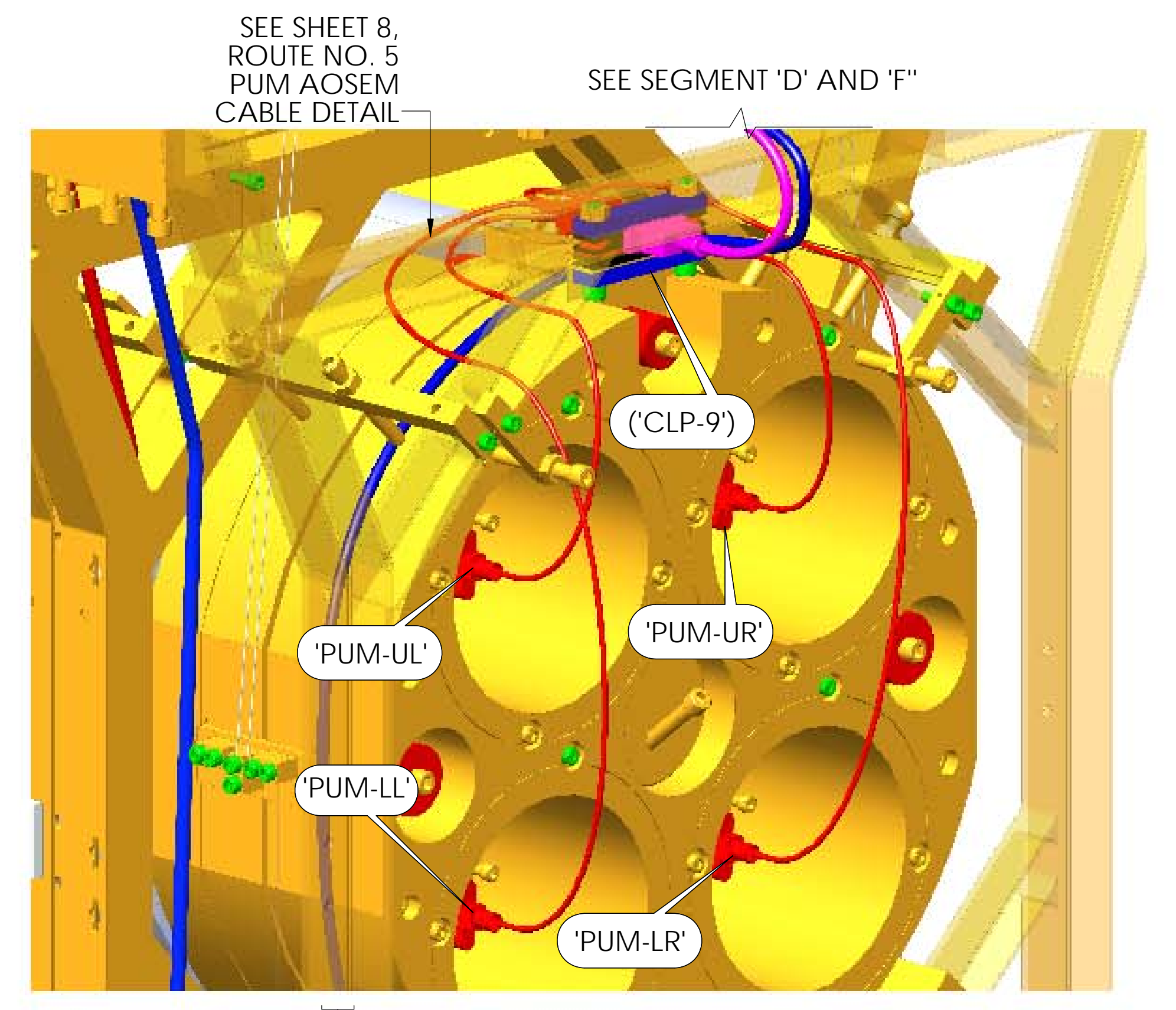


SEE SEGMENT 'H'

SEGMENT 'F': FROM 'CLP-8' TO 'CLP-9'

CLP-9 IS PART OF D060341

(ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS)

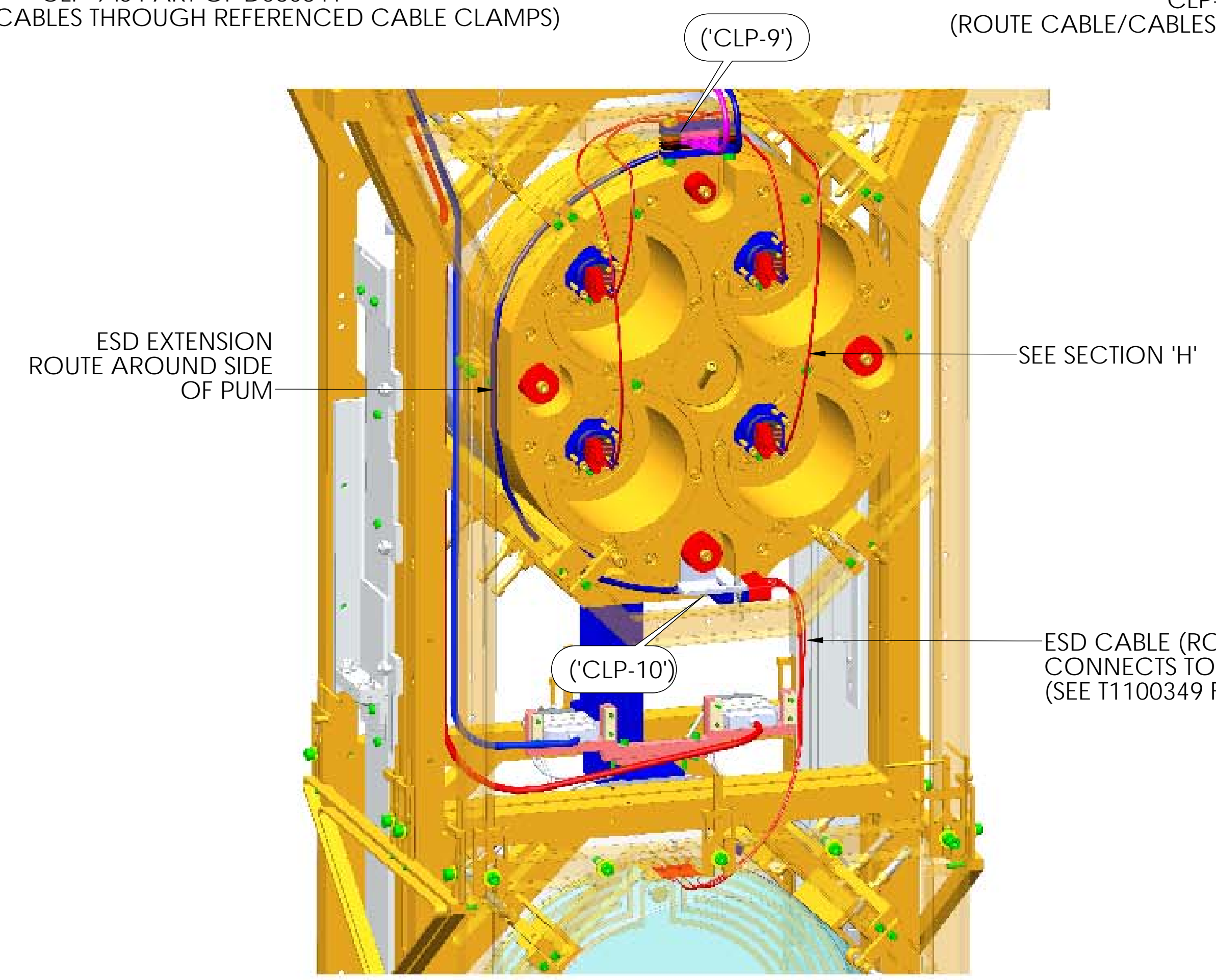


SEE SEGMENT 'J'

SEGMENT 'H': FROM 'CLP-9' TO 'PUM AOSEM'

CLP-9 IS PART OF D060341

(ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS)



SEGMENT 'J': FROM 'CLP-5' TO 'CLP-6'

CLP-9 AND CLP-10 ARE BOTH PART OF D060341

(ROUTE CABLE/CABLES THROUGH REFERENCED CABLE CLAMPS)

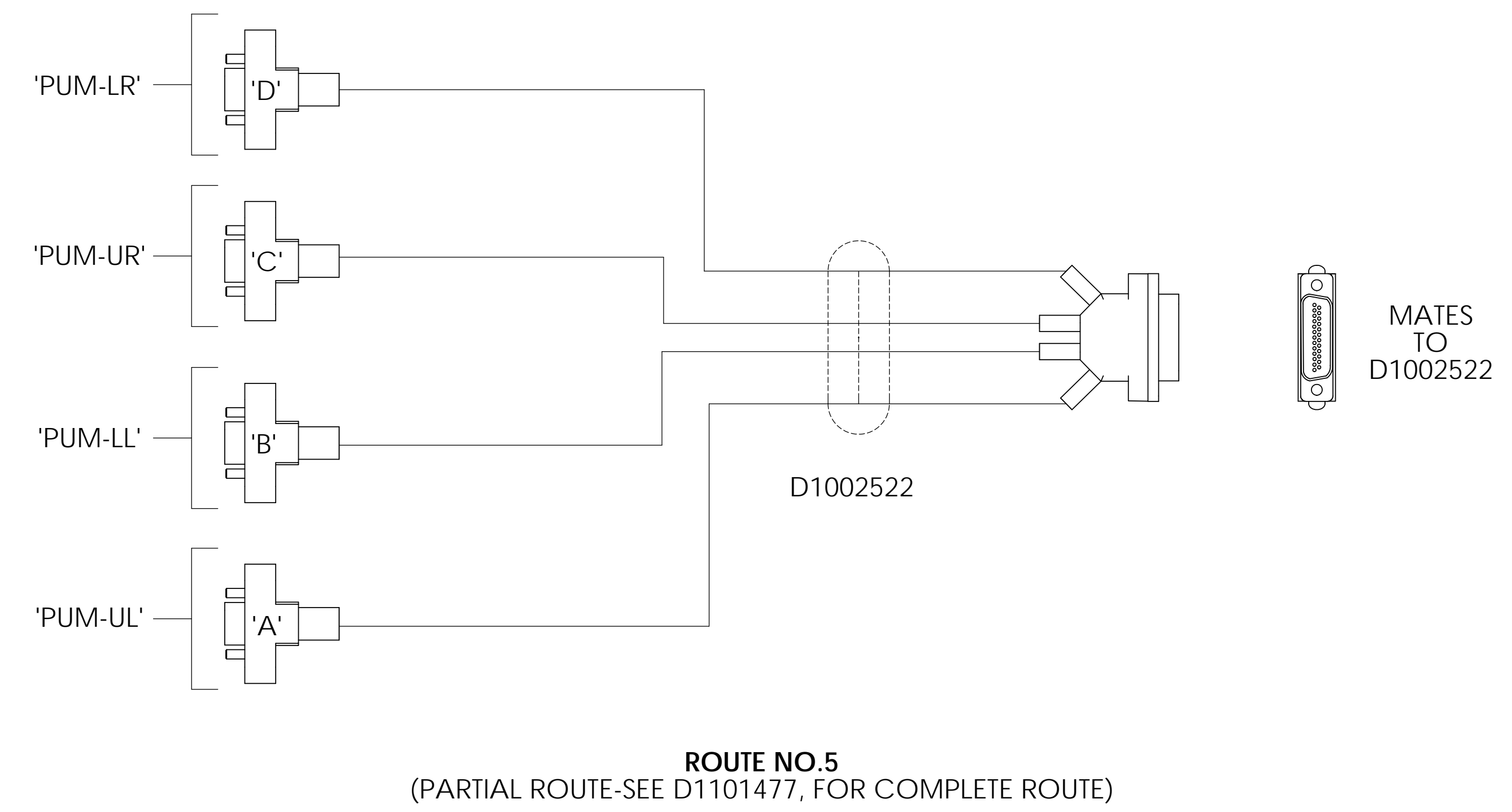
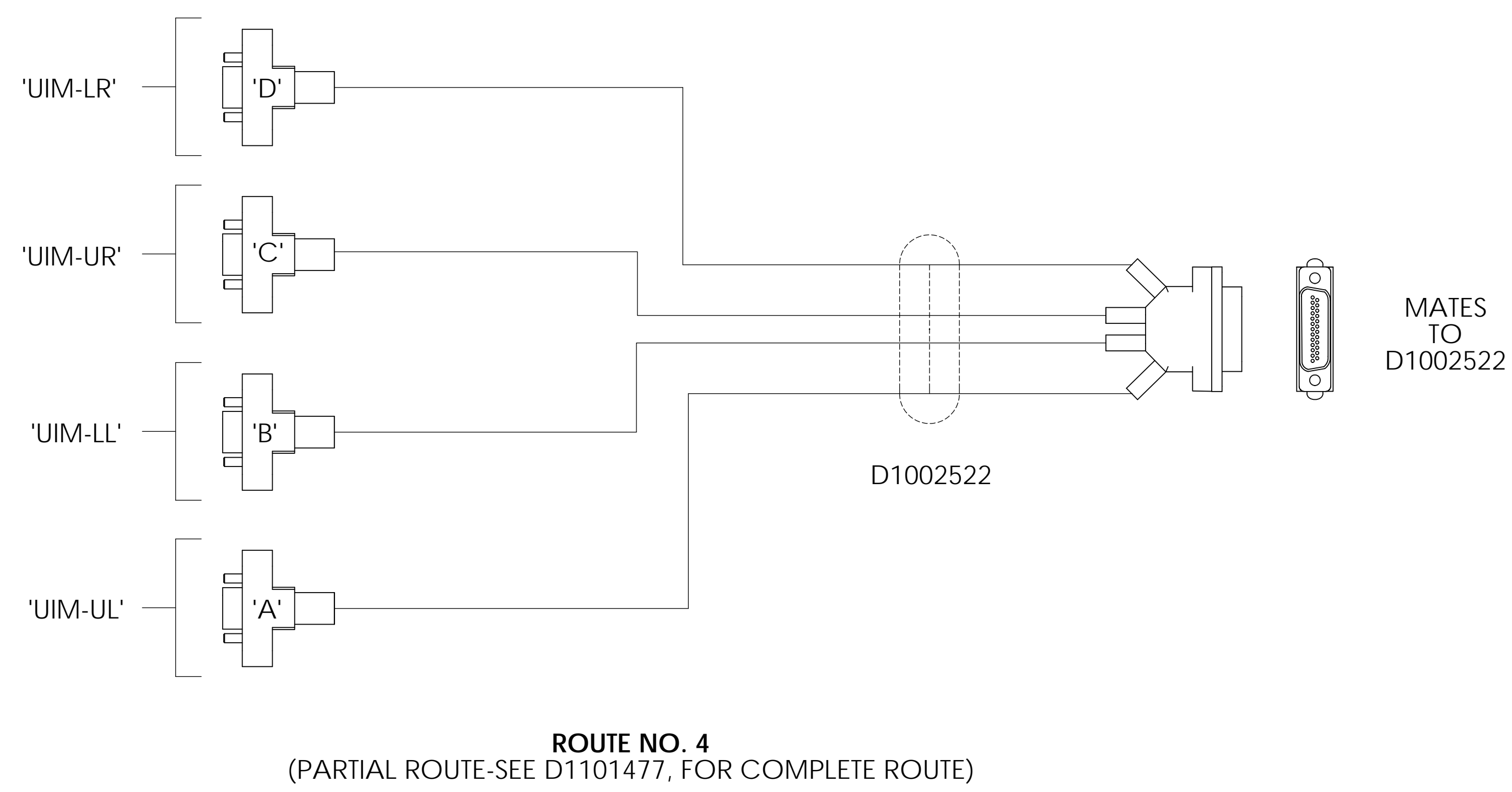


TABLE 1: WBSC8 ITMY CABLING SPECIFICATIONS, FROM/TO DES.

ROUTE NO.	FROM (OSEM POSITION)	TO CABLE EXTENSION	TO CB FLOOR DES.	OP LEG DES.	CABLE PART NO.	NOM. CABLE LENGTH (IN)	NOM. CABLE LENGTH (IN) (EXTENSION)
1	M0-F1	N/A	CB-2 (FIRST)	A	D1000234	88	N/A
	M0-F2			B			
	M0-F3			C			
	M0-SIDE			D			
2	R0-F1	N/A	CB-2 (THIRD)	A	D1000234	88	N/A
	R0-F2			B			
	R0-F3			C			
	R0-SIDE			D			
3	M0-LEFT	N/A	CB-2 (SECOND)	A	D1000234	88	N/A
	M0-RIGHT			B			
	R0-LEFT			C			
	R0-RIGHT			D			
4	UIM-UL	D1002522	CB-2 (FOURTH)	A	D1002523	12	121
	UIM-LL			B			
	UIM-UR			C			
	UIM-LR			D			
5	PUM-UL	D1002522	CB-3 (FIRST)	A	D1002524	17	156
	PUM-LL			B			
	PUM-UR			C			
	PUM-LL			D			
6	D1002225	D1101472	CB-4	N/A	N/A	N/A	175

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
D	D0900363	v4
SCALE: 1:16	PROJECTION:	SHEET 9 OF 9

D:\0900363\ADM\LIGO_SLS\BSC\H2_XYZ\Local\CS for ITMY\PART\PDM\REV\X\087_DRAWING_PDM_REV_X.015