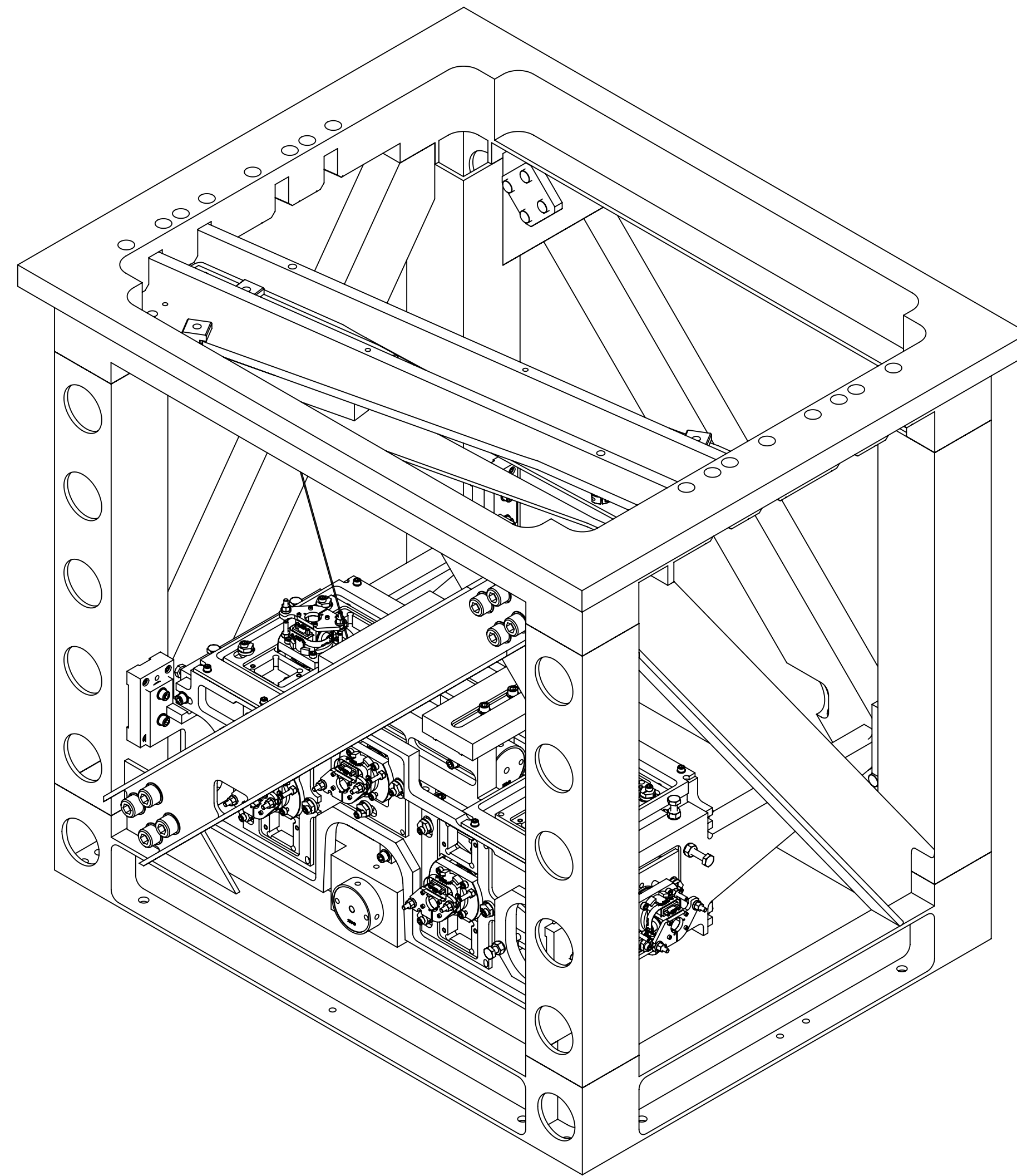


NOTES CONTINUED:

1. BAG OR WRAP AND TAG ASSEMBLY WITH DRAWING NUMBER, REVISION, TYPE, AND SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY.
EXAMPLE (TAG): DXXXXXX-VY, TYPE -02, S/N 001
2. INSTALL ITEMS (16) IN THE TWO SLOTS OF ITEM (17) WHICH ARE NEAREST TO THE OUT SIDE OF ITEM (17) AS SHOWN.
3. MASS/WEIGHT: 100.5 Kg.
4. ITEM (16) (BLADE CARTRIDGE) INCLUDES CLAMP ASSEMBLY LIGO-D060332, WHICH IS ALSO INCLUDED IN ITEM (13) (SUSPENSION WIRE ASSEMBLY). REMOVE D060332 FROM ITEMS (16) AND ATTACH ITEMS (13) AS NOTED. DO NOT DISASSEMBLE ITEMS (13).
5. THIS ASSEMBLY HAS TWO CONFIGURATIONS, DESIGNATED -01 & -02. -02 IS FIRST ARTICLE, -01 IS ALL OTHERS.
6. SEE LIGO D1000549-v3 FOR -02 DETAILS
7. INSTALL HELICOILS PRIOR TO ASSEMBLY. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL.

REV.	DATE	DCN #	DRAWING TREE #
v1	20 FEB 2012	E1100351	E1100546-v1
v6	19 JUL 2013	E1300609-x0	-
-	-	-	-

APPLICATION BLOCK	
PART NUMBER	'USED ON'
D1000549-01	LBSC4, LBSC5, WBSC9, WBSC10
6 D1000549-02	FIRST ARTICLE ONLY



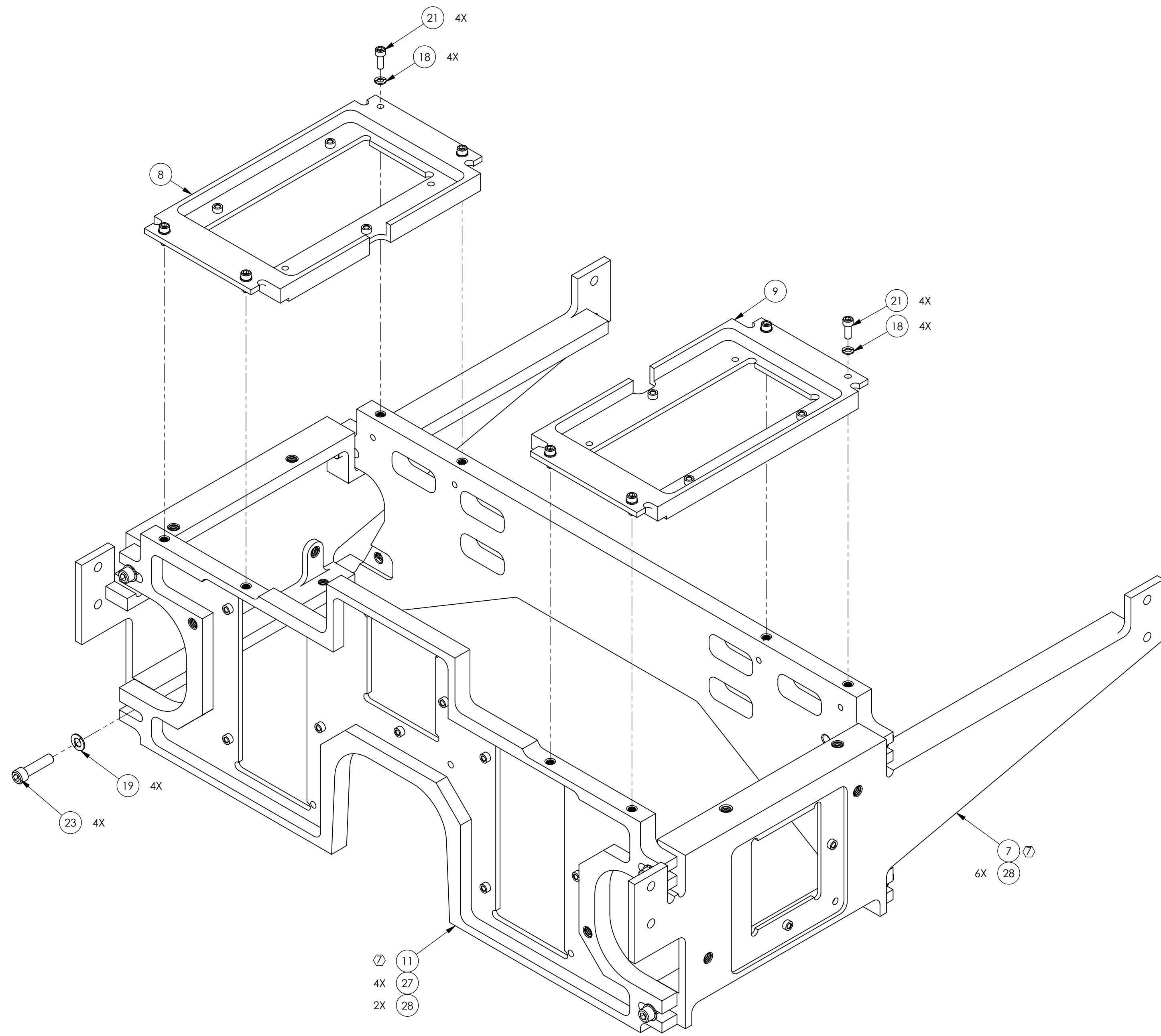
ISOMETRIC VIEW, FRONT-RIGHT

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	-01 QTY.	SPARE	TOTAL
29	D070247	αLIGO, SUS, TABLECLOTH PADS	-	4	1	5
28	1185-4EN375 EMHART OR EQ.	HELICOIL, 1/4-20 X .375 LG.	NITRONIC 60	24	16	40
27	1185-2EN164 EMHART OR EQ.	HELICOIL, 8-32 X .164 LG.	NITRONIC 60	8	12	20
26	90810A029 McMASTER-CARR OR EQ.	HEX NUT, 1/4-20	NICKEL-COPPER ALLOY 400	16	6	22
25	C-2028-N UC COMPONENTS OR EQ.	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.75 LONG	300 SSSL	8	4	12
24	C-2020-N UC COMPONENTS OR EQ.	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.25 LONG	300 SSSL	4	3	7
23	C-2016-N UC COMPONENTS OR EQ.	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1 LONG	300 SSSL	8	4	12
22	C-2014-N UC COMPONENTS OR EQ.	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 0.875 LONG	300 SSSL	8	4	12
21	C-807-N UC COMPONENTS OR EQ.	SCREW, SOCKET HEAD CAP, #8-32 UNC-2A X 0.4375 LONG	300 SSSL	8	4	12
20	WV-50 UC COMPONENTS OR EQ.	WASHER, FLAT, .515 ID, .875 OD, .032 THK (VENTED)	18-8 SSSL	16	5	21
19	WV-25 UC COMPONENTS OR EQ.	WASHER, FLAT, .255 ID, .468 OD, .032 THK (VENTED)	18-8 SSSL	40	11	51
18	WV-08 UC COMPONENTS OR EQ.	WASHER, FLAT, .169 ID, .304 OD, .032 THK (VENTED)	18-8 SSSL	8	3	11
17	D1200453	αLIGO TMS UPPER STRUCTURE WELDMENT	N/A	1	-	1
16	D1200120	αLIGO TMS UPPER STAGE BLADE CARTRIDGE	N/A	2	1	3
15	D1101526	αLIGO TMS MASS BALANCED ASSEMBLY	N/A	1	-	1
14	D1101186	αLIGO SUS, 500-13 X 1 SHCS MODIFIED	316 SSSL	16	5	21
13	D1101166	αLIGO TMS UPPER SUSPENSION WIRE ASSEMBLY	N/A	2	1	3
12	D1100712-02	TMS EARTHQUAKE STOP SCREW, 1.5"	316 SSSL	16	8	24
11	D1100421	TMS SUSPENSION TABLECLOTH PLATE, FRONT	6061-T6 Al	1	1	2
10	D1000411	TMS INTERMEDIATE OSUM SUPPORT PLATE, REAR	6061-T6 Al	1	1	2
9	D1000410	αLIGO OSUMS INTERMEDIATE SUPPORT LEFT SIDE TRAY	6061-T6 Al	1	1	2
8	D1000409	αLIGO OSUMS INTERMEDIATE SUPPORT RIGHT SIDE TRAY	6061-T6 Al	1	1	2
7	D1000408	αLIGO OSUMS INTERMEDIATE SUPPORT LEFT SIDE BRACKET	6061-T6 Al	1	1	2
6	D1000407	αLIGO OSUMS INTERMEDIATE SUPPORT RIGHT SIDE BRACKET	6061-T6 Al	1	1	2
5	D060499	αLIGO SUS, QUAD ITM/ETM, REM. CROSS MEMBER, (UP STR)	6061-T6 Al	2	1	3
4	D060322	αLIGO SUS QUAD TRANSVERSE OSEM ADJUSTER	N/A	1	1	2
3	D060320	PLATE, OSEM ADJUSTMENT	N/A	1	1	2
2	D060316	αLIGO SUS, QUAD N-PTYPE TABLECLOTH, OSEM AND ECD ADJUSTER	N/A	4	2	6
1	D060315	αLIGO, SUS, QUAD N-PTYPE TABLECLOTH, TABLECLOTH PINCH PLATE, UPPER STRUCTURE	6061-T6 Al	4	1	5

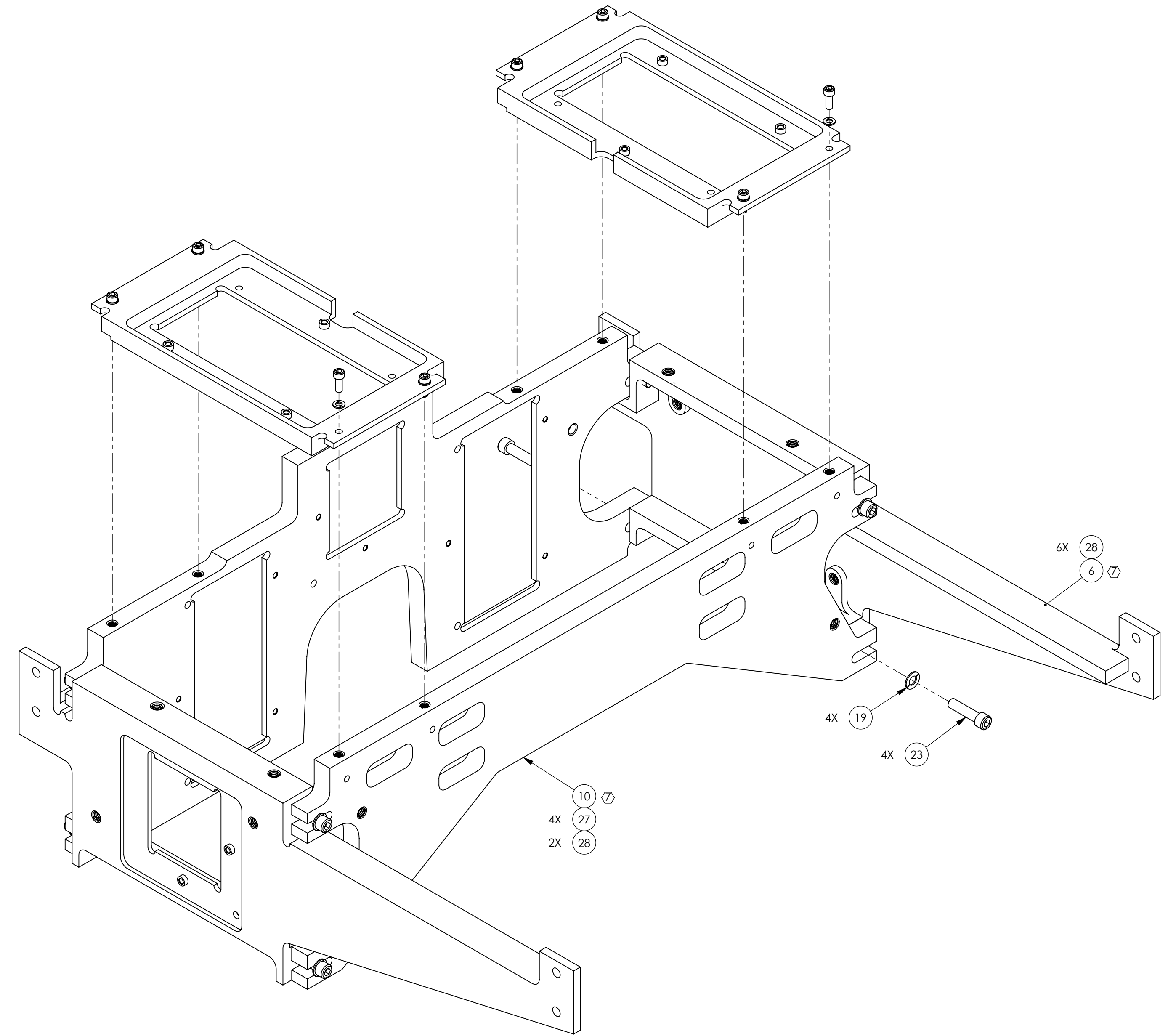
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME αLIGO UPPER INTERMEDIATE MASS TOP ASSEMBLY	
MATERIAL N/A		FINISH N/A μinch		SYSTEM ADVANCED LIGO	
NEXT ASSY D0901880		SUB-SYSTEM AOS		DESIGNER K. MAILAND 11 MAR 2010	
				DRAFTER C. CONLEY 14 SEP 2011	
				CHECKER SEE DCC SEE DCC	
				APPROVAL SEE DCC SEE DCC	
				SIZE DWG. NO. D D1000549	
				SCALE: NTS PROJECTION:	
				REV. v6	
				SHEET 1 OF 7	

D1000549 αLIGO UPPER INTERMEDIATE MASS TOP ASSEMBLY, PART FROM REV. X-540, DRAWING FROM REV. X-060



TABLE CLOTH ASSY.



**ISOMETRIC VIEW, FRONT-RIGHT
TABLE CLOTH ASSY.**

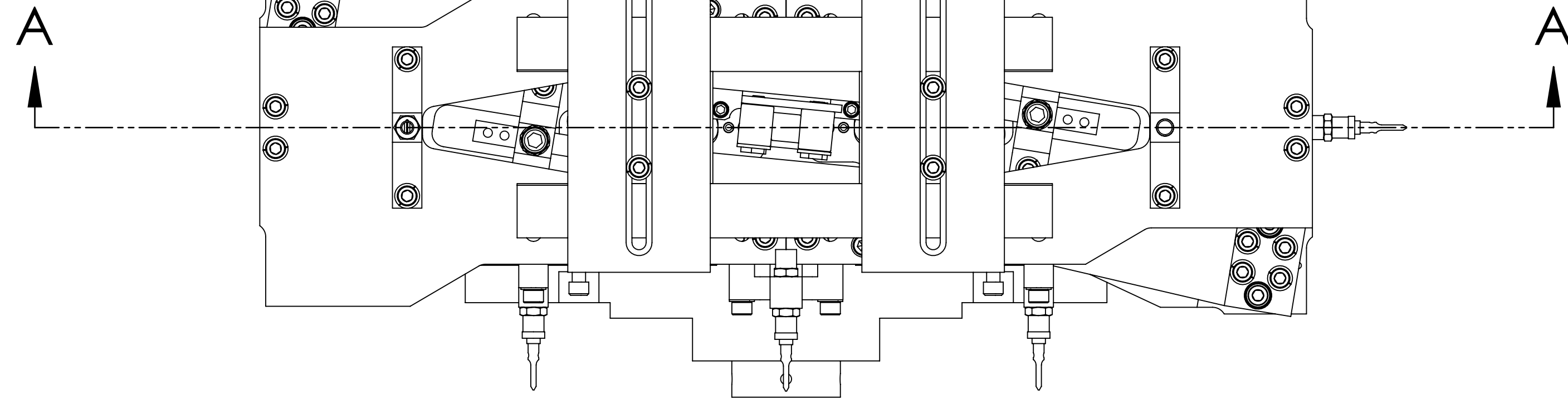


**ISOMETRIC VIEW, REAR -LEFT
TABLE CLOTH ASSY.**

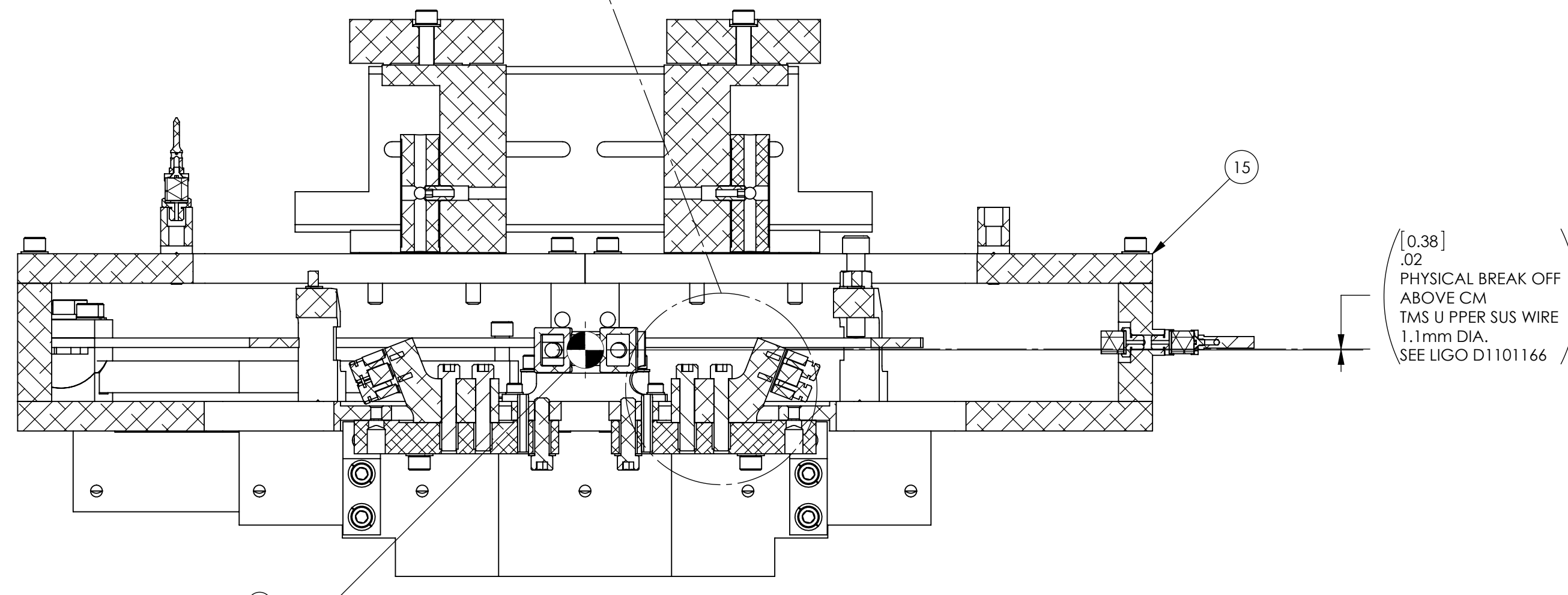
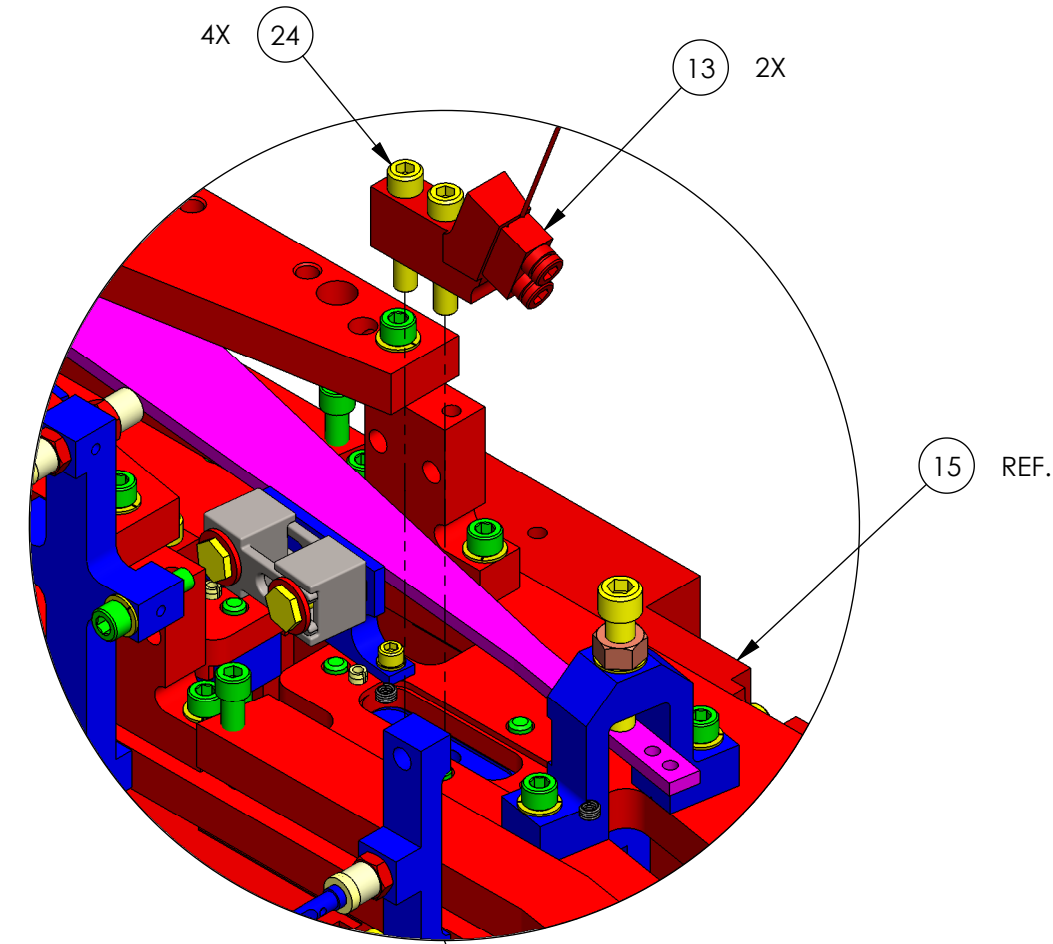
 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV. V6
SIZE D	DWG. NO. D1000549	SHEET 2 OF 7
SCALE: NTS	PROJECTION: 	SHEET 2 OF 7

D1000549-LIGO UPPER INTERMEDIATE MASS TOP ASSEMBLY, PART FDM REV. X-540, DRAWING FDM REV. X-060

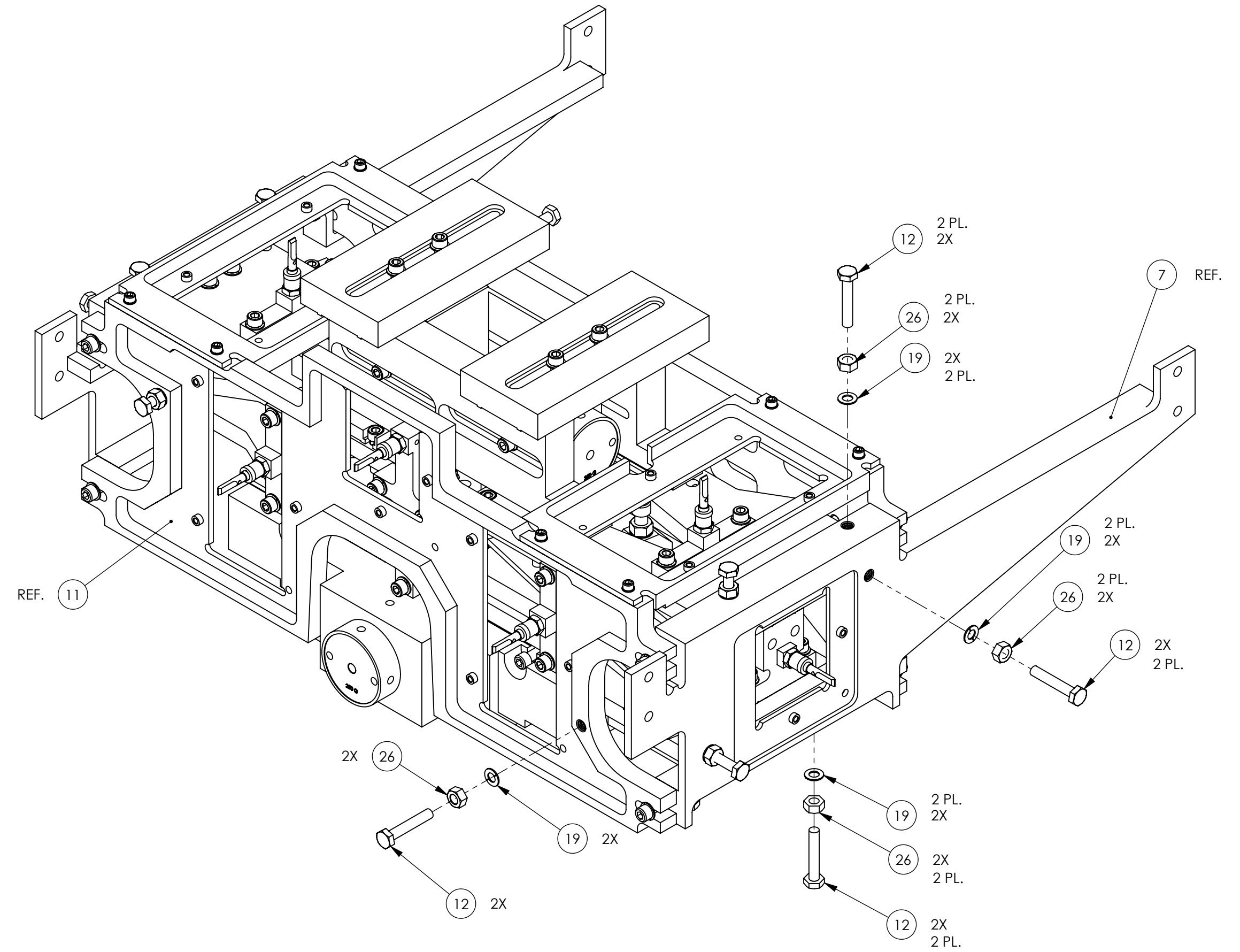
TOP MASS / TABLE CLOTH ASSY.



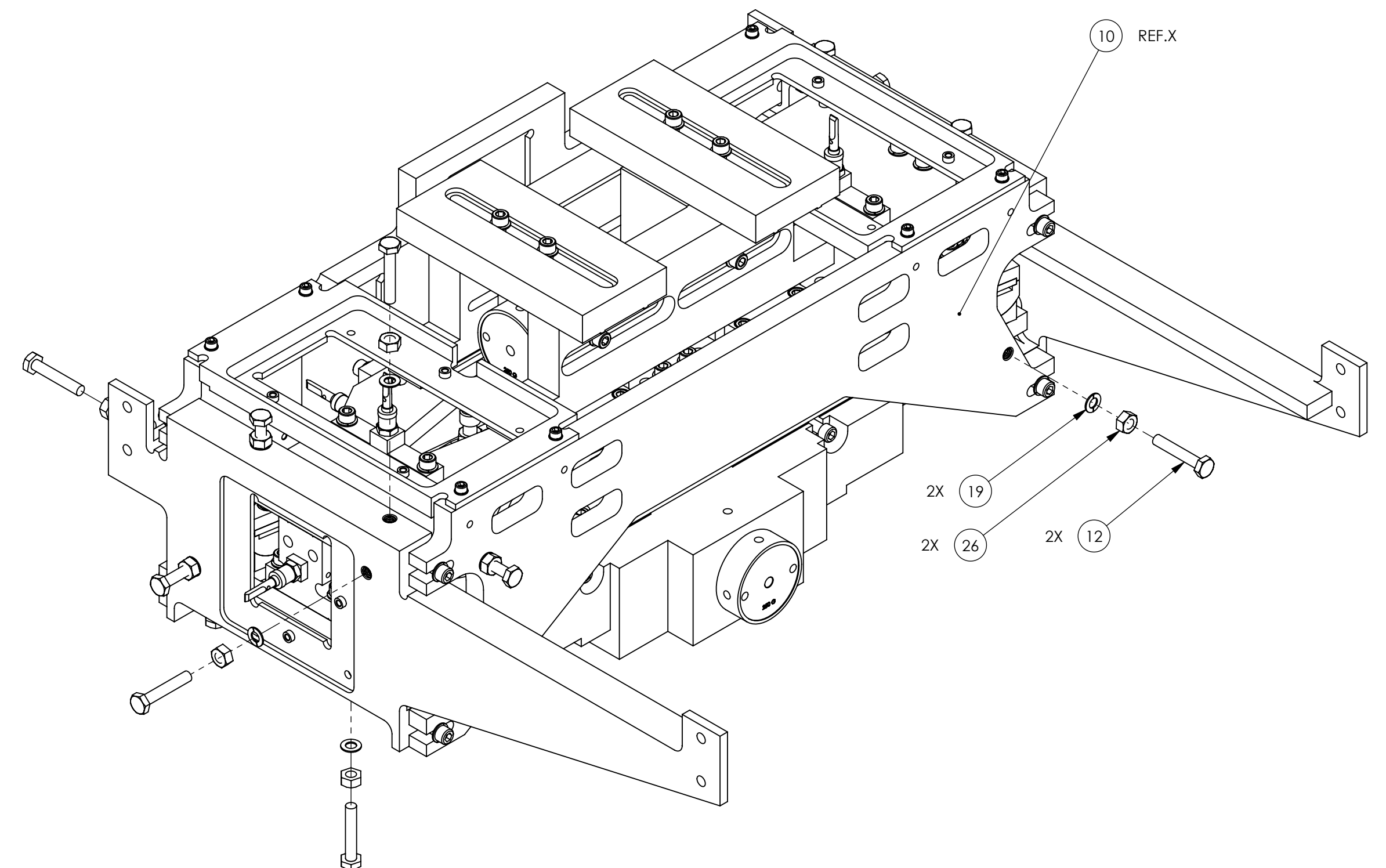
**TOP VIEW
TOP MASS / CABLE CLAMP ASSY.
(IRRELEVANT ITEMS NOT SHOWN FOR CLARITY)**



SECTION A-A



**ISOMETRIC VIEW, FRONT-RIGHT
TOP MASS / TABLE CLOTH ASSY.
(UPPER SUS WIRE ASSY., NOT SHOWN)**

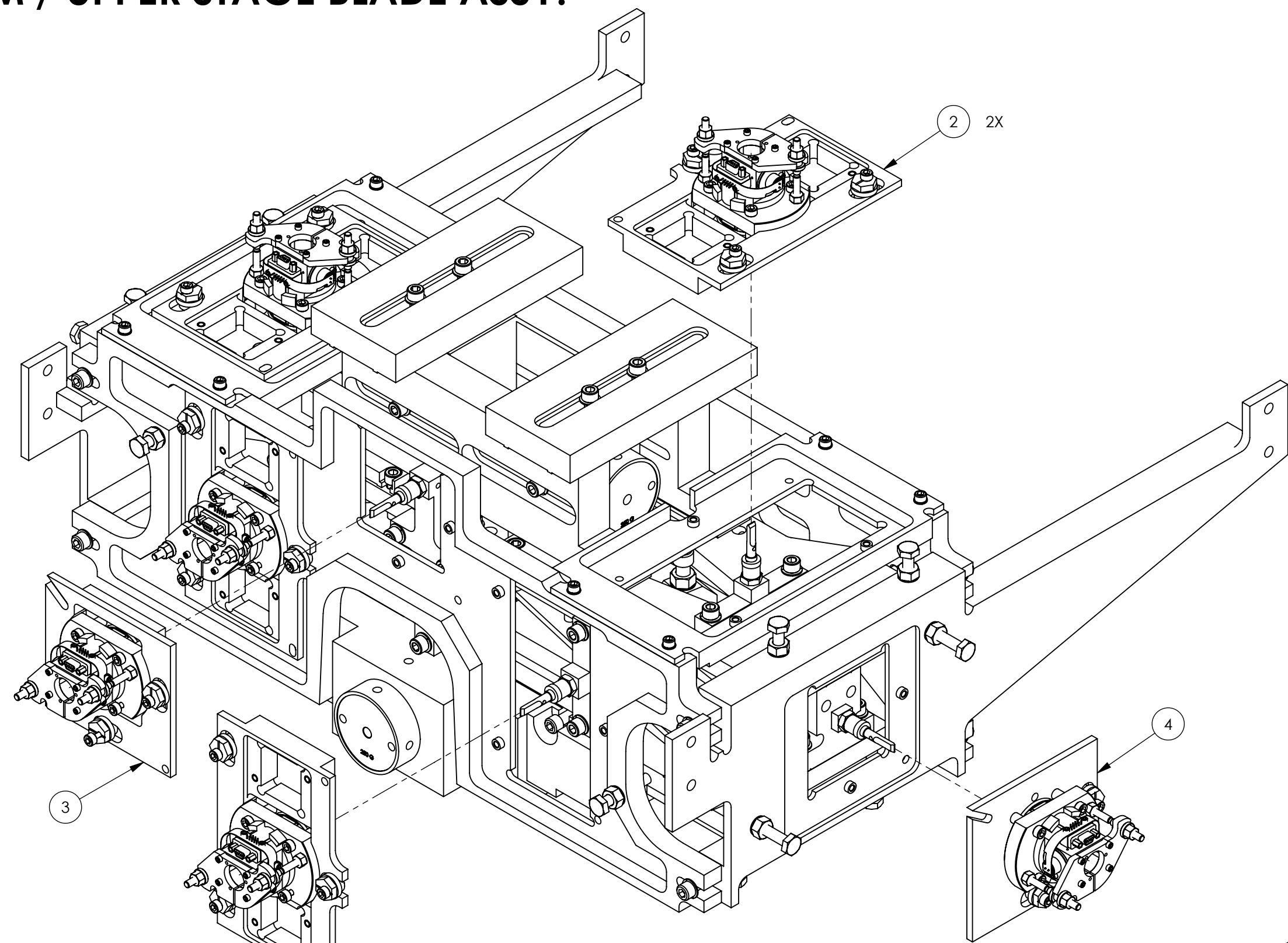


**ISOMETRIC VIEW, REAR-LEFT
TOP MASS / TABLE CLOTH ASSY.
(UPPER SUS WIRE ASSY., NOT SHOWN)**

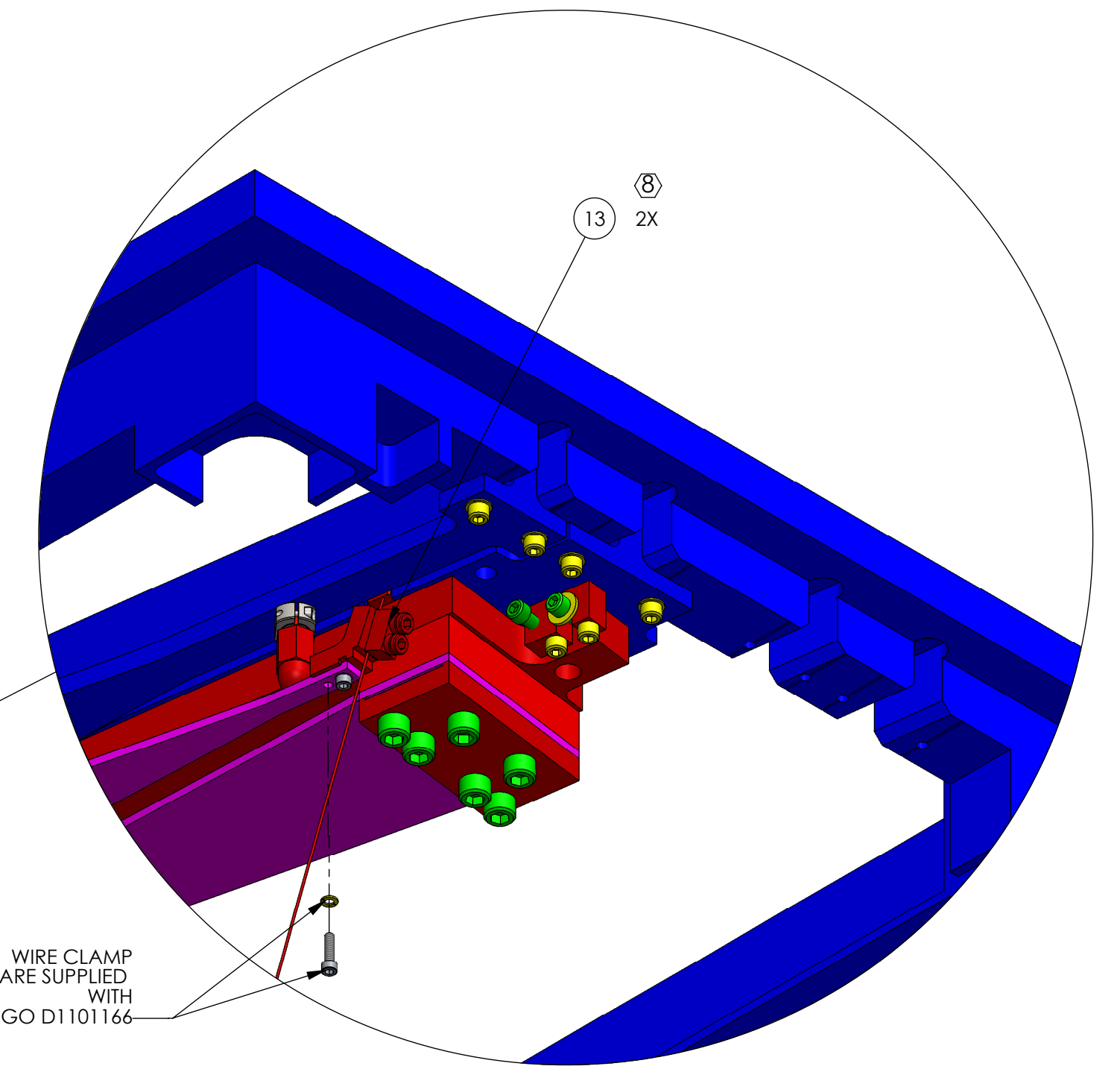
LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE DWG. NO.	D	D1000549
SCALE: NTS	PROJECTION:	SHEET 3 OF 7
		REV. V6

D1000549 LIGO UPPER INTERMEDIATE MASS TOP ASSEMBLY PART FDM REV. X-540 DRAWING FDM REV. X-060

OSEM / UPPER STAGE BLADE ASSY.

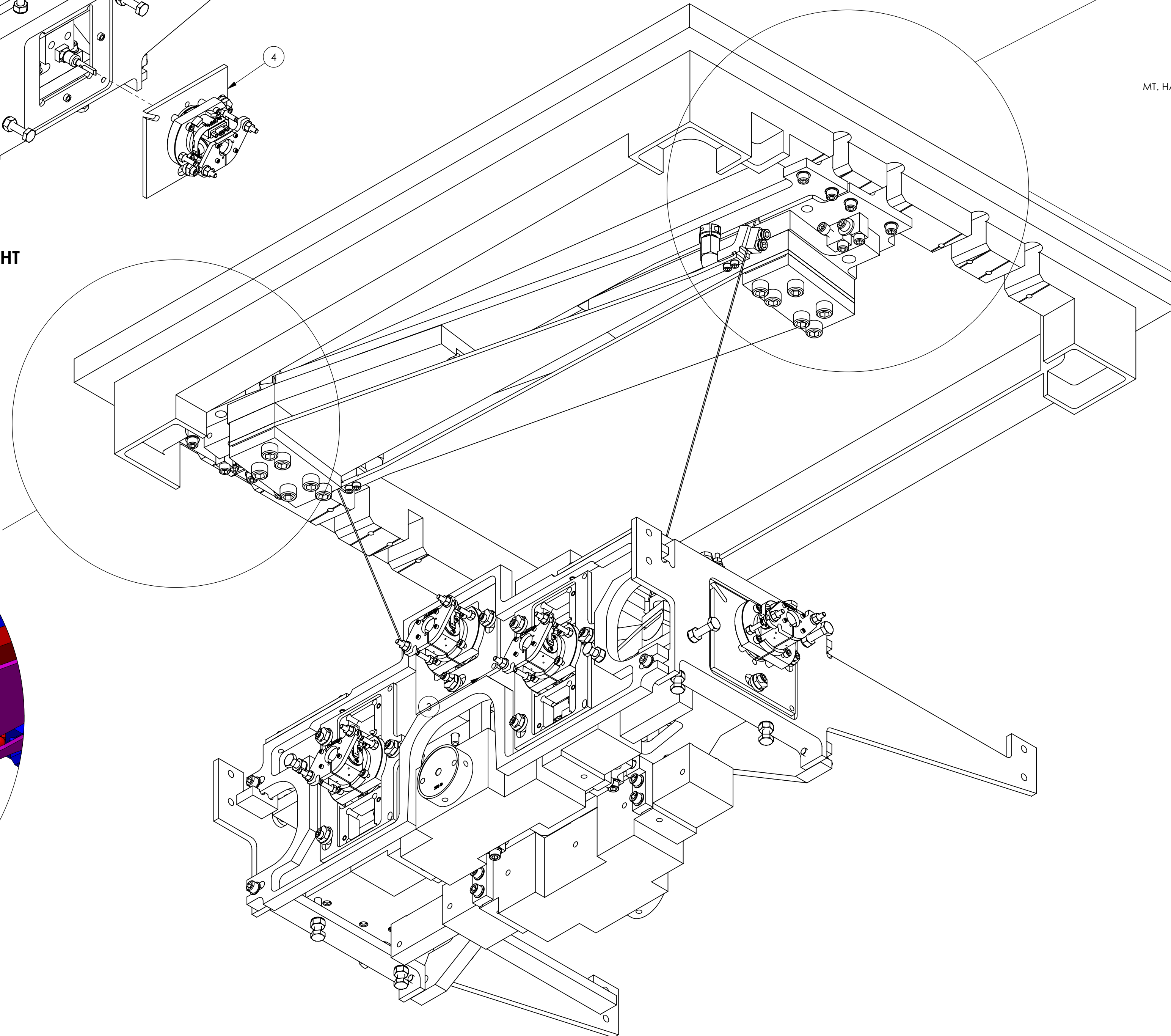


**ISOMETRIC VIEW, FRONT-RIGHT
TABLE CLOTH ASSY.**

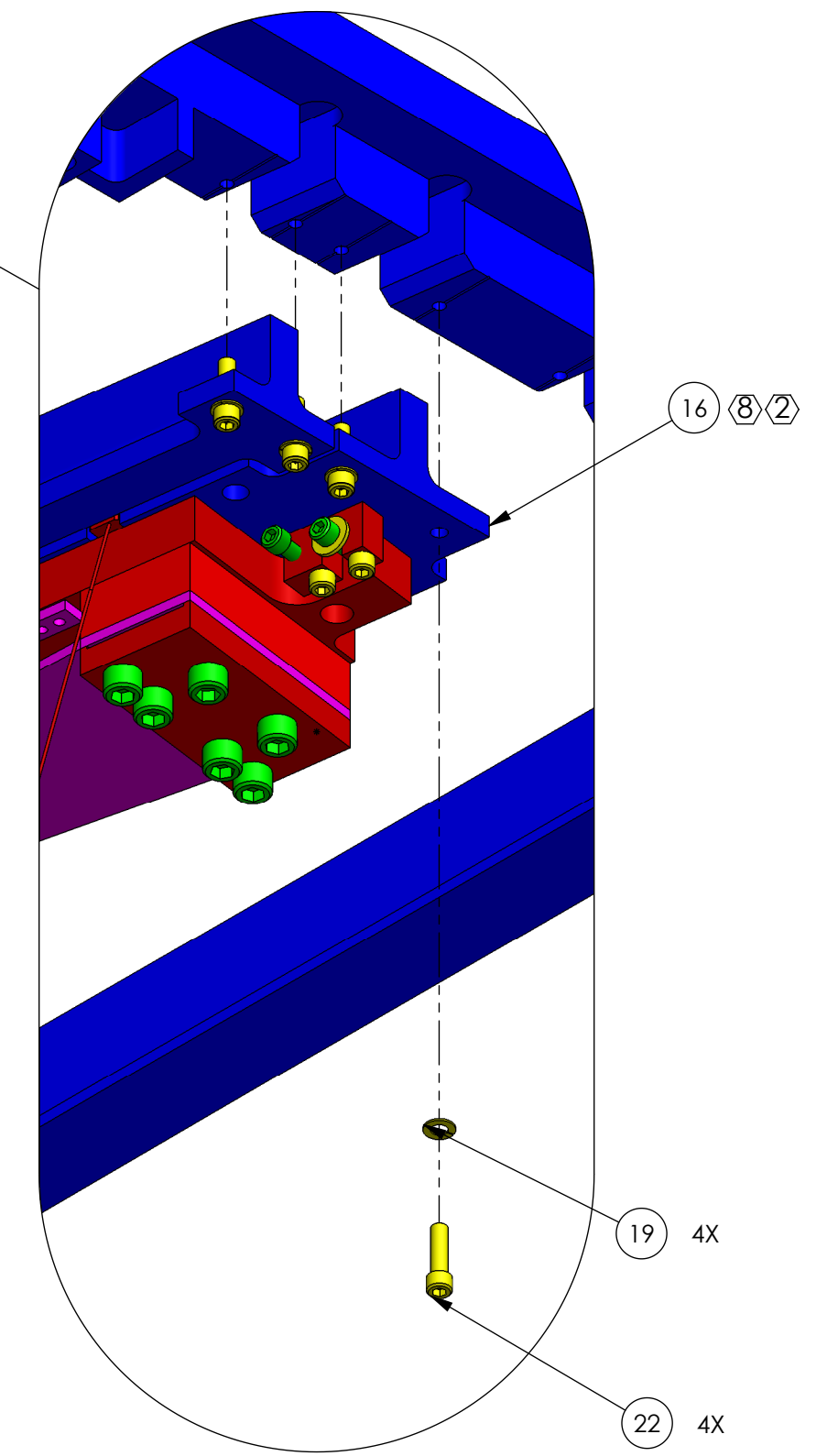
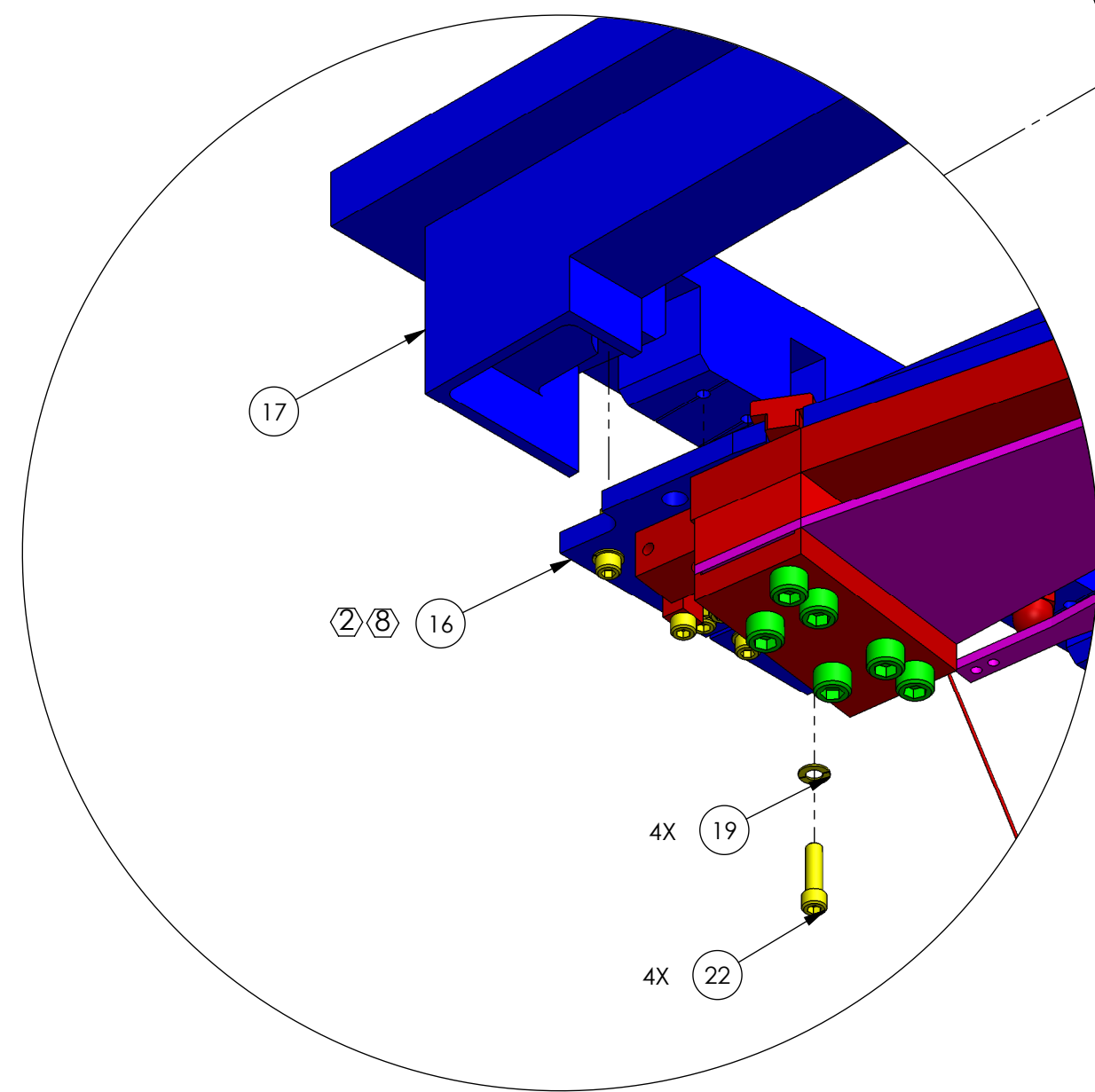


WIRE CLAMP
MT. HARDWARE SUPPLIED
WITH
LIGO D1101166

ISOMETRIC VIEW, FRONT-RIGHT (UNDERSIDE)

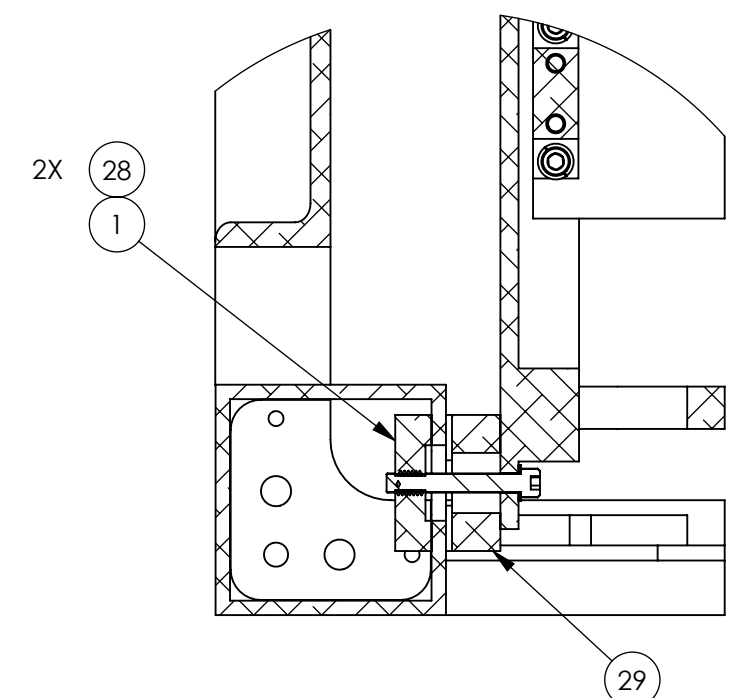
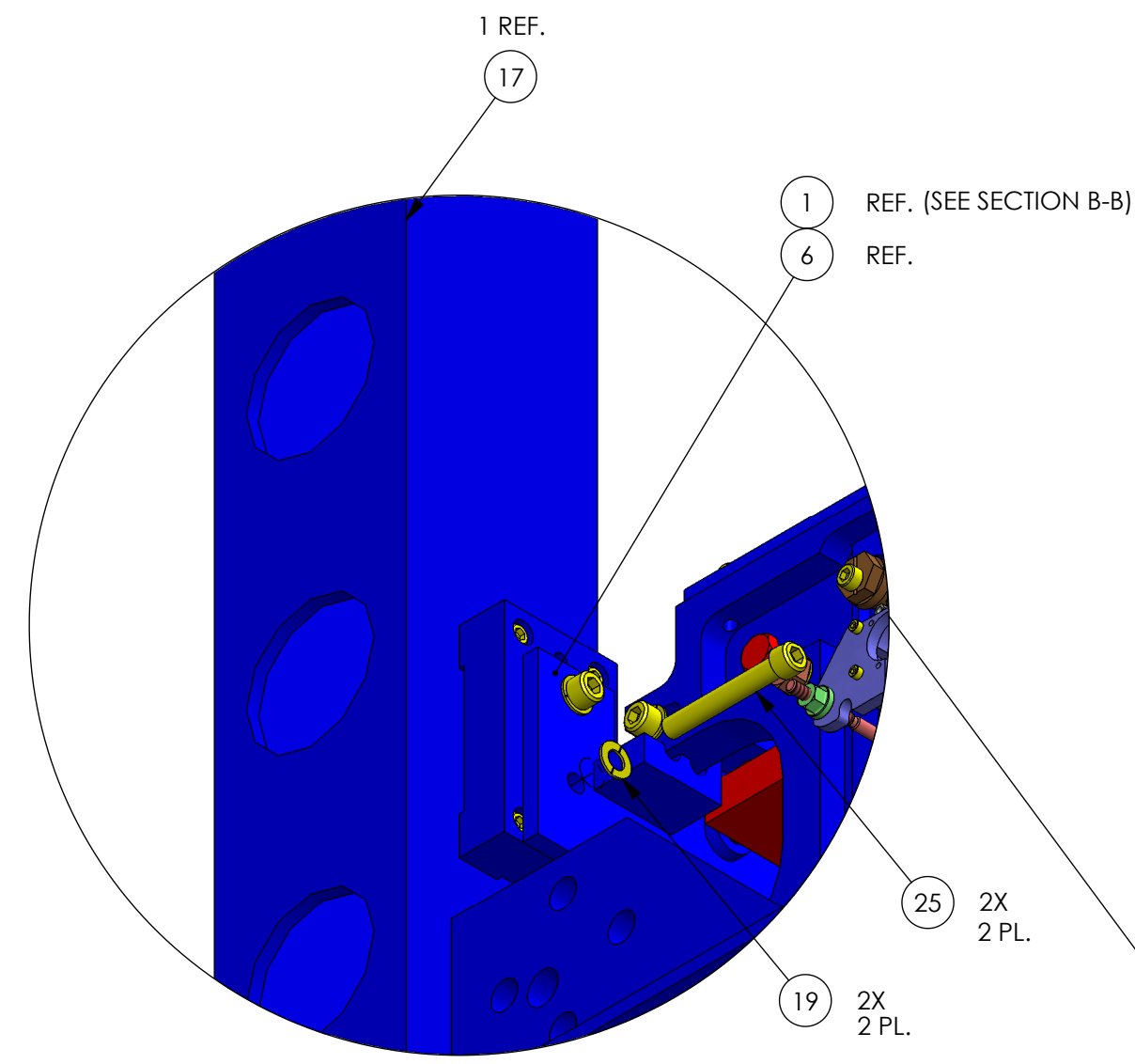


ISOMETRIC VIEW, FRONT-RIGHT (UNDERSIDE)

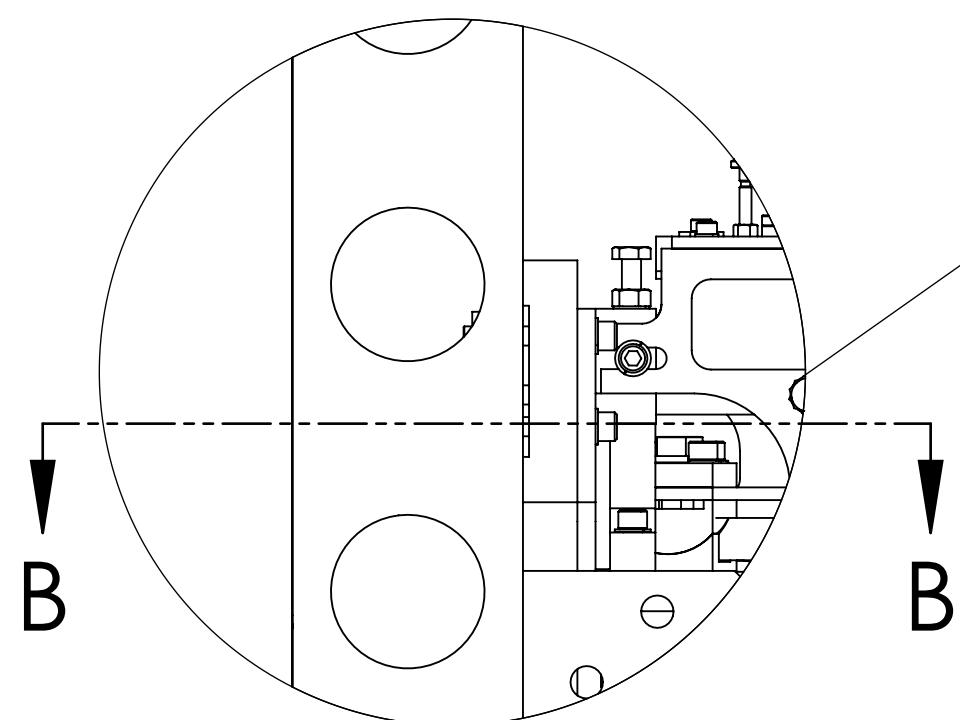


D1000549 OSEM UPPER INTERMEDIATE MASS TOP ASSEMBLY PART FDM REV. X-540 DRAWING FDM REV. X-060

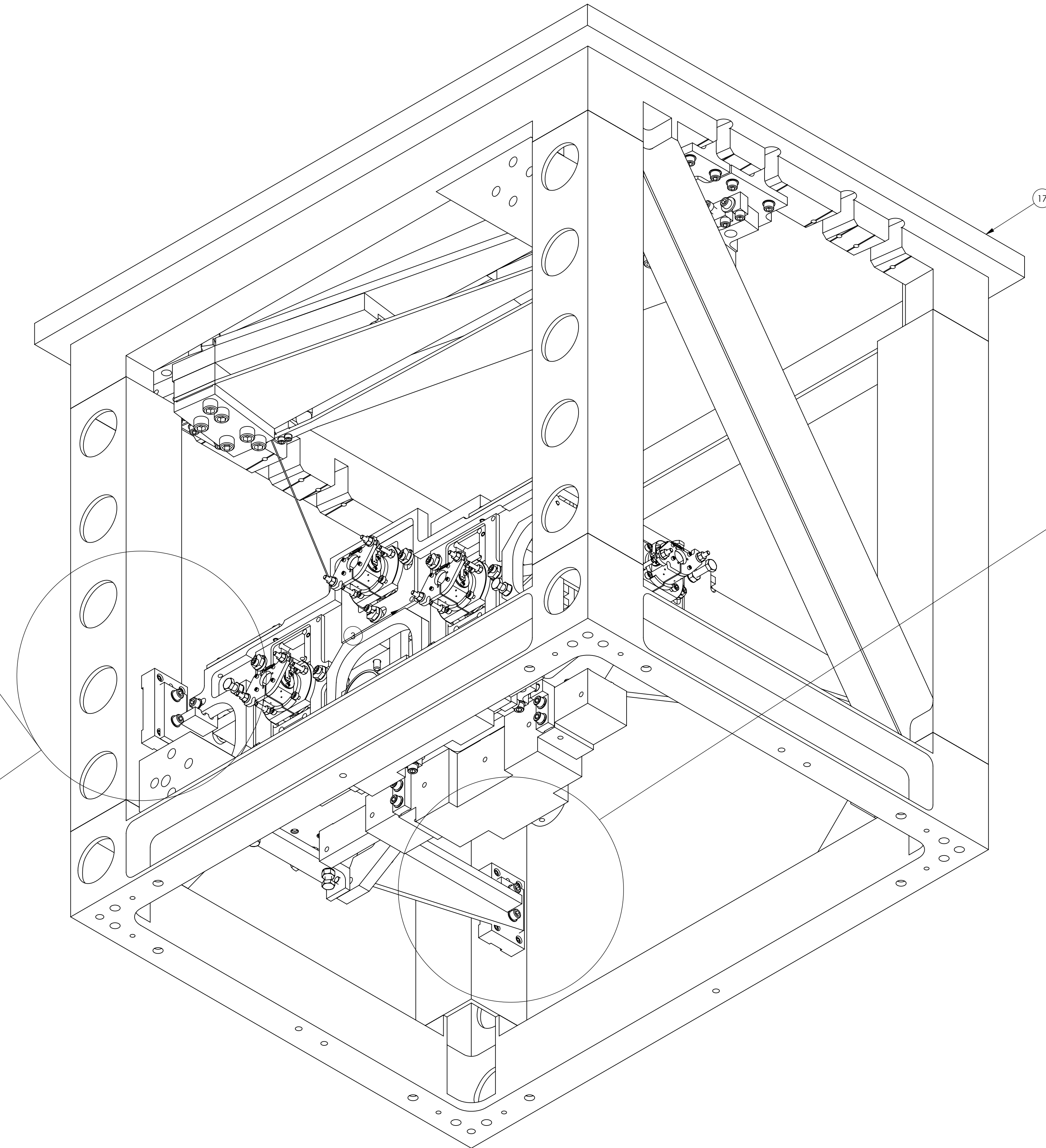
TABLE CLOTH/ UPPER WELDMENT ASSY.



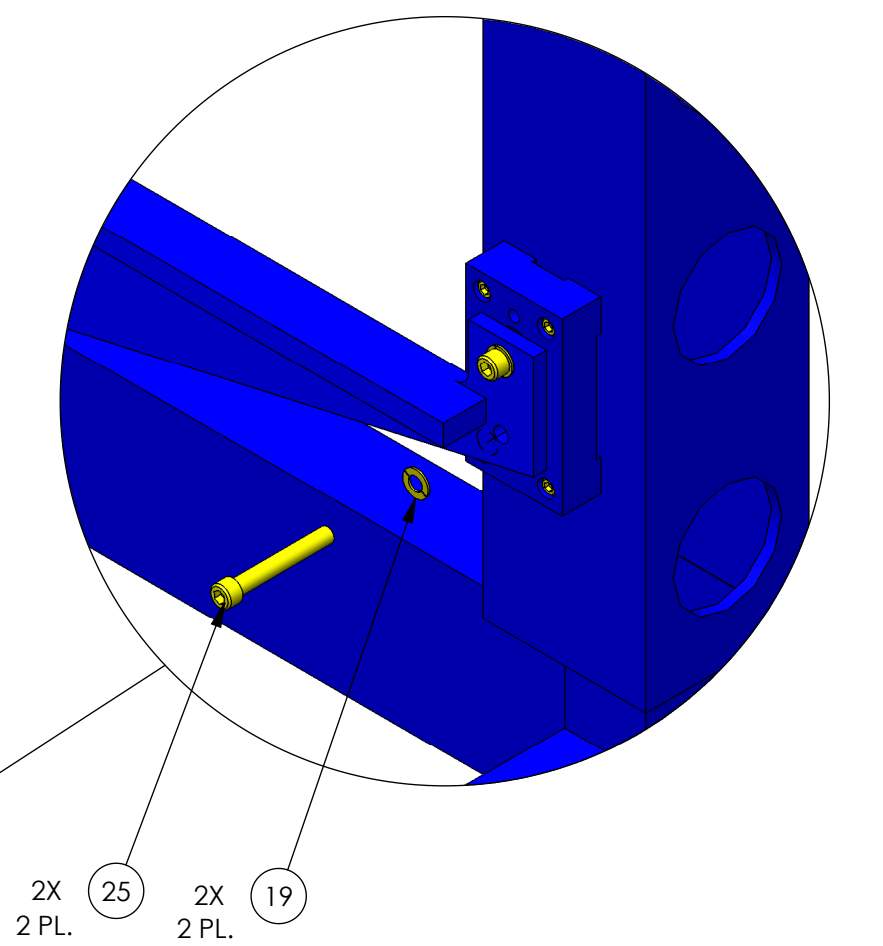
**SECTION B-B
4 PL.**



FRONT VIEW (PARTIAL VIEW)



ISOMETRIC VIEW, FRONT-RIGHT (UNDERSIDE)

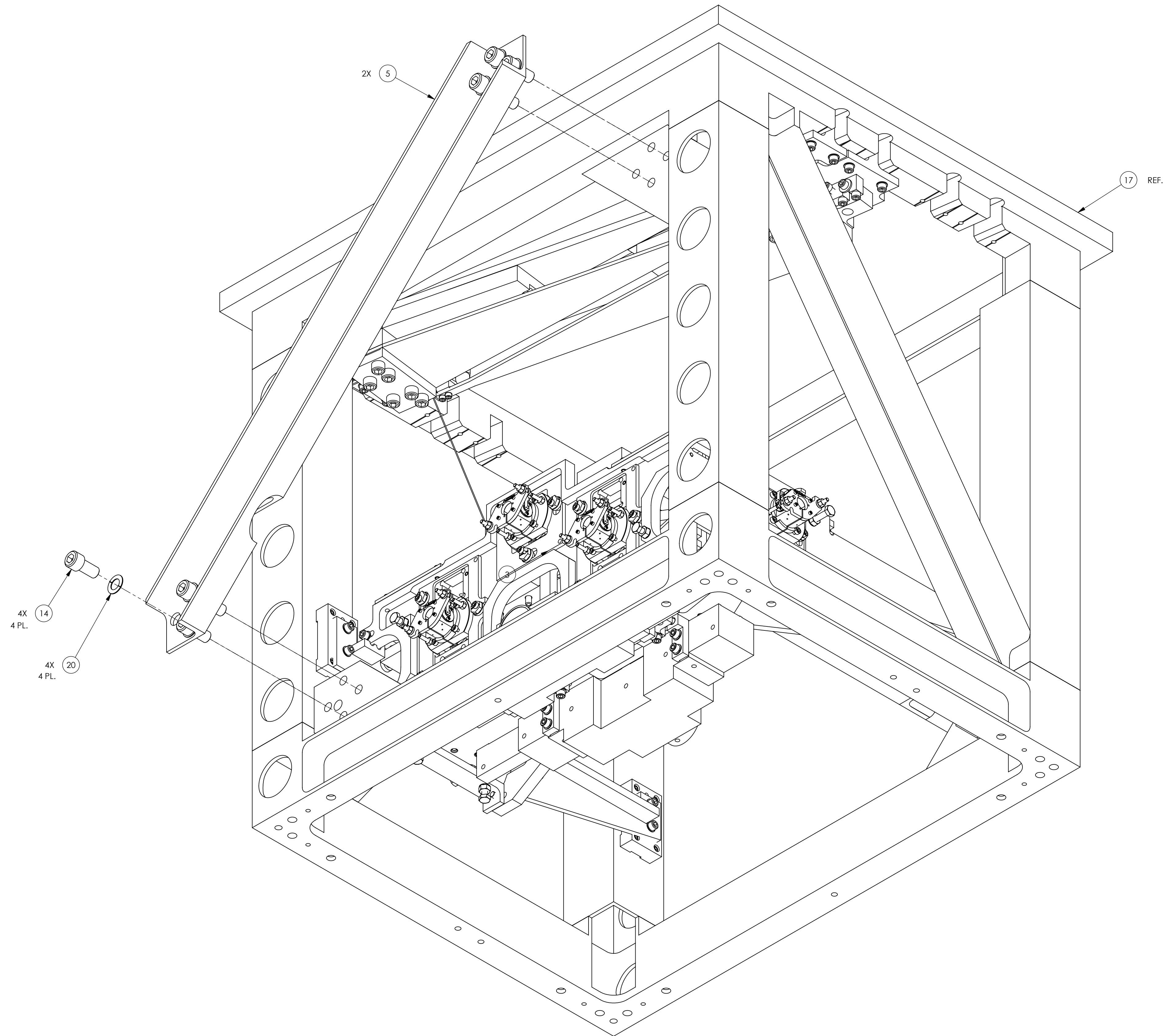


**AS VIEWED FROM
REAR-LEFT**


LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE DWG. NO.	D D1000549	V6
SCALE: NTS	PROJECTION:	SHEET 5 OF 7

D1000549-01 UGCO UPPER INTERMEDIATE MASS TOP ASSEMBLY, PART FDM REV. X-540, DRAWING FDM REV. X-060

UPPER WELDMENT CROSS MEMBER ASSY.

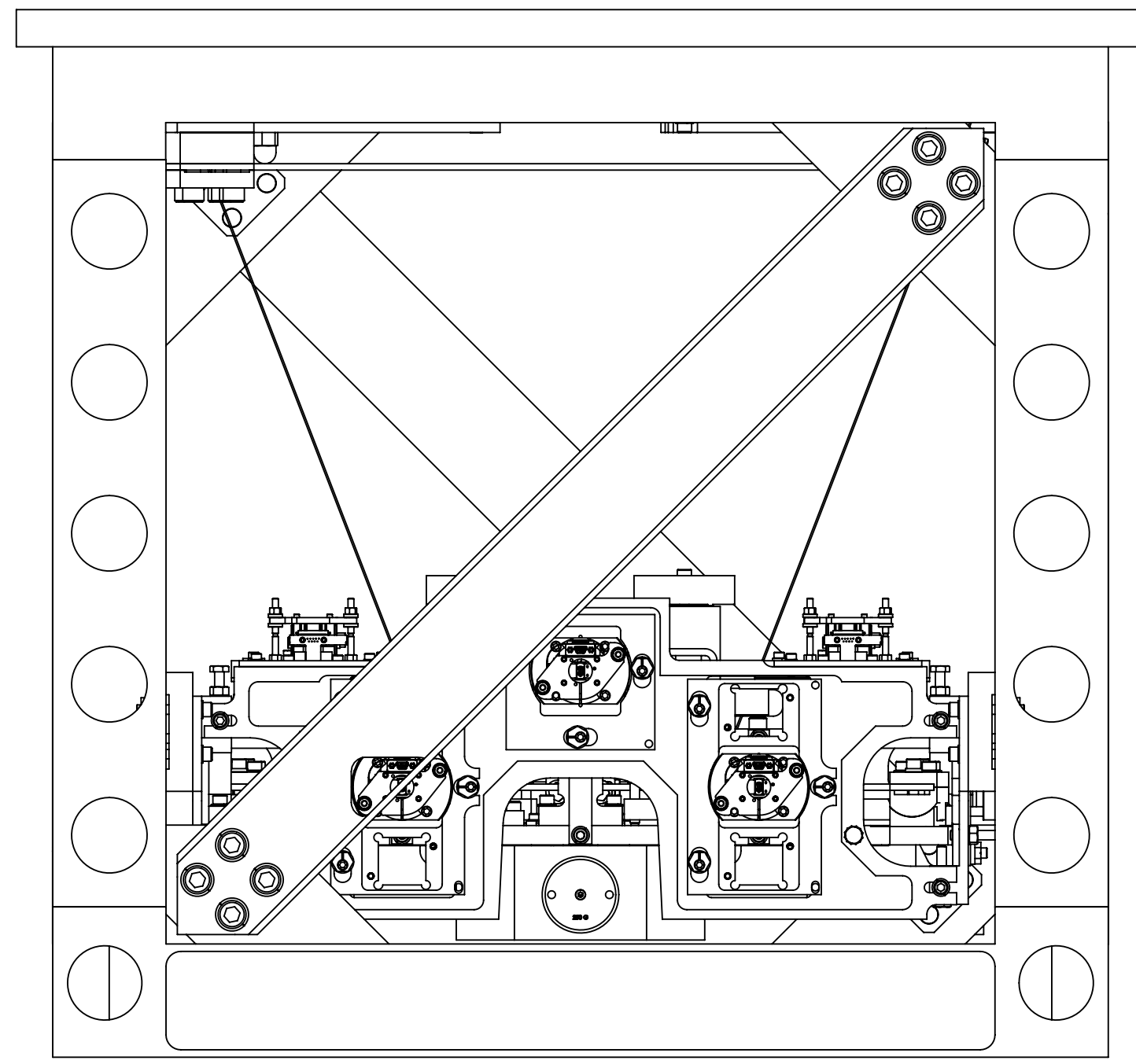


ISOMETRIC VIEW, FRONT-RIGHT (UNDERSIDE)

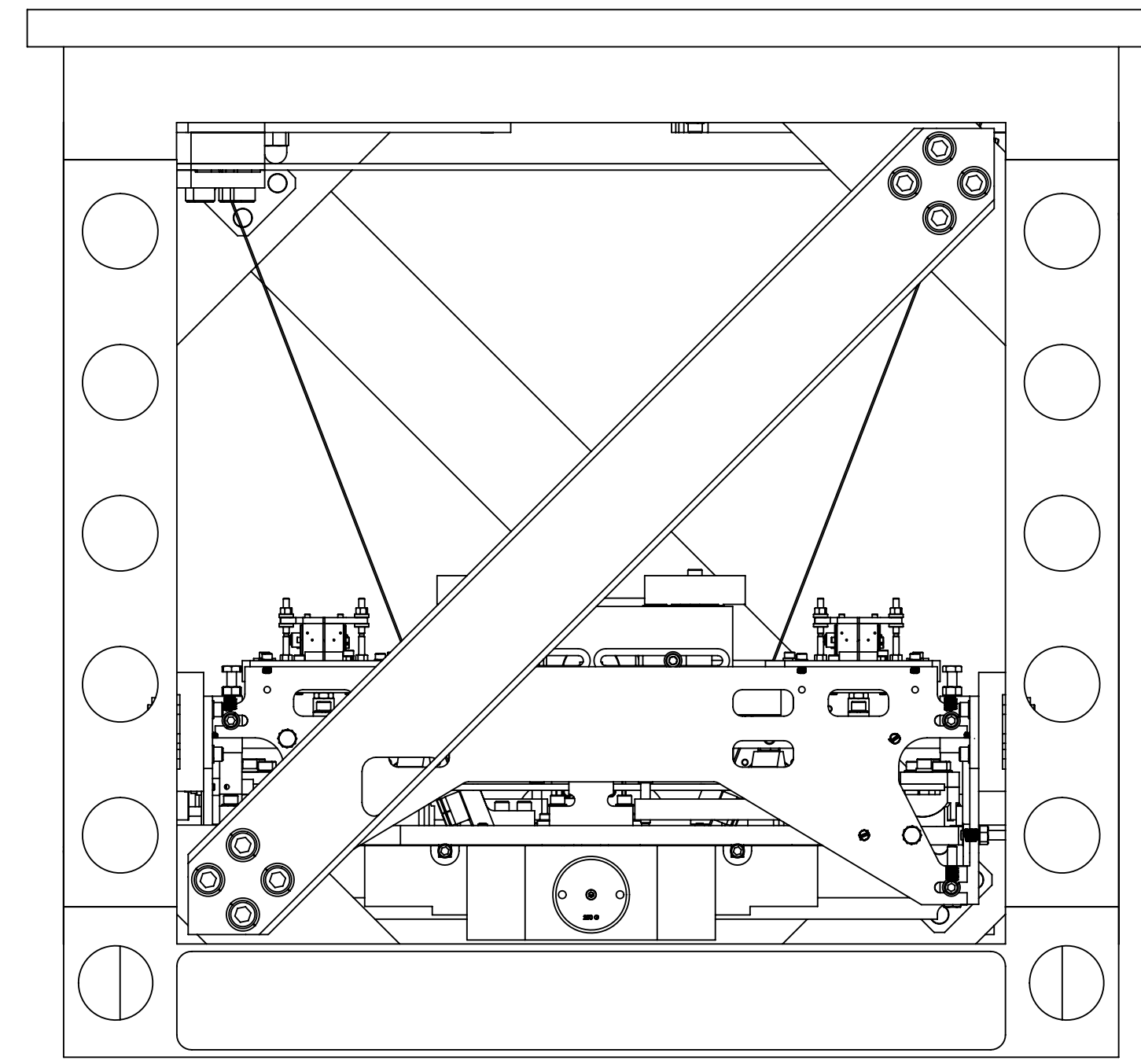
 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
D	D1000549	V6
SCALE: NTS	PROJECTION:	SHEET 6 OF 7

D:\000549\01UGO UPPER INTERMEDIATE MASS TOP ASSEMBLY PART FDM REV. X-540 DRAWING FDM REV. X-060

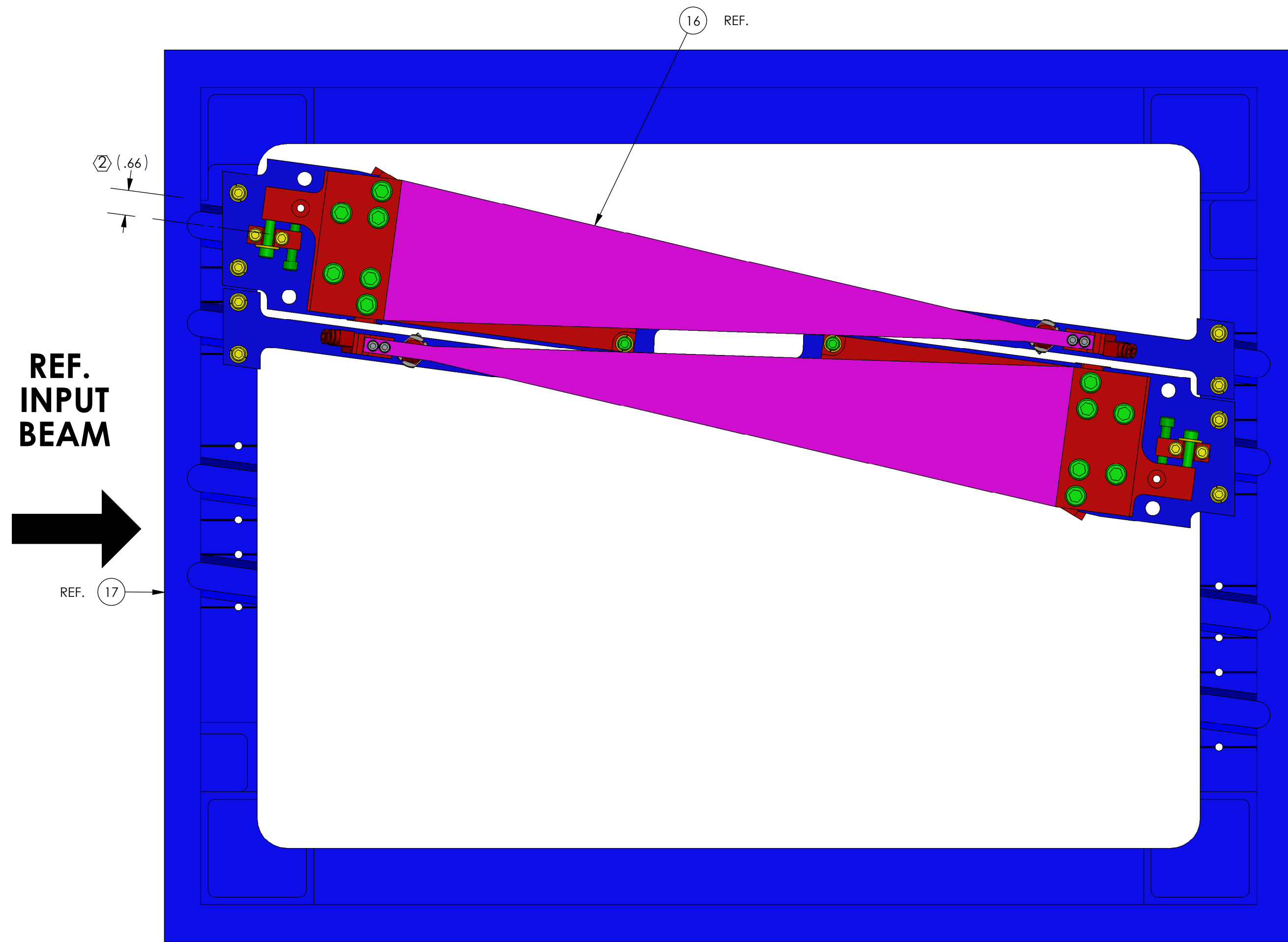
LEFT HAND VS. RIGHT HAND CONFIGS.



FRONT VIEW

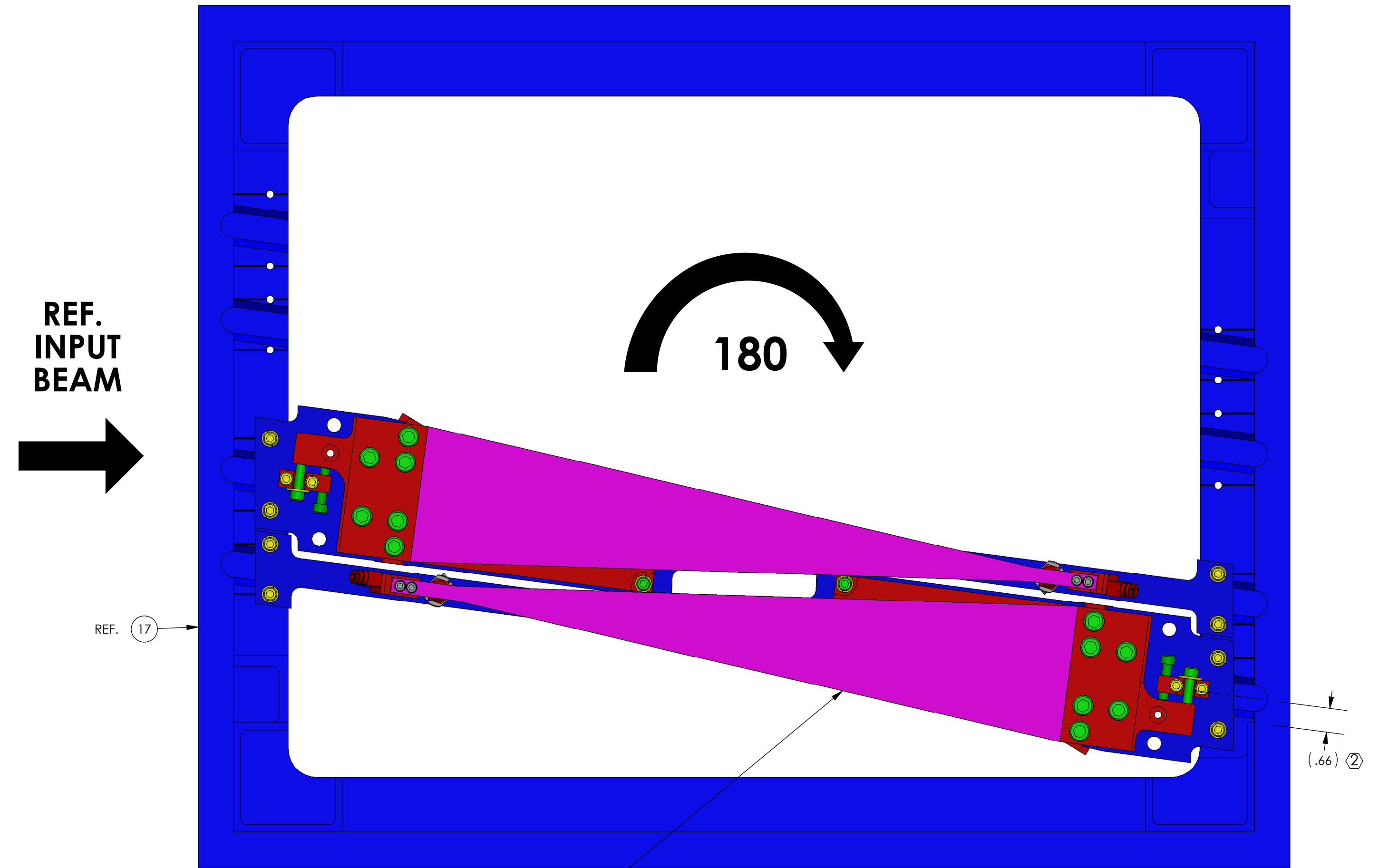


REAR VIEW



**RIGHT HAND
(WBSC9, LBSC4)**

LEFT AND RIGHT HAND CONFIGURATIONS SHOWN FOR REFERENCE ONLY.
BOTH CONFIGURATIONS ARE IDENTICAL AND DIFFER ONLY IN ORIENTATION.
PLEASE REFER TO NEXT ASSY. FOR COMPLETE DETAILS & UPPER MASS ORIENTATION
WRT TELESCOPE & IFO



**LEFT HAND
(WBSC10, LSBC5)**

LEFT AND RIGHT HAND CONFIGURATIONS SHOWN FOR REFERENCE ONLY.
BOTH CONFIGURATIONS ARE IDENTICAL AND DIFFER ONLY IN ORIENTATION.
PLEASE REFER TO NEXT ASSY. FOR COMPLETE DETAILS & UPPER MASS ORIENTATION
WRT TELESCOPE & IFO

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE DWG. NO.	D D1000549	v6
SCALE: NTS	PROJECTION:	SHEET 7 OF 7

D1000549-0100 UPPER INTERMEDIATE MASS TOP ASSEMBLY PART FDM REV. X-540 DRAWING FDM REV. X-060