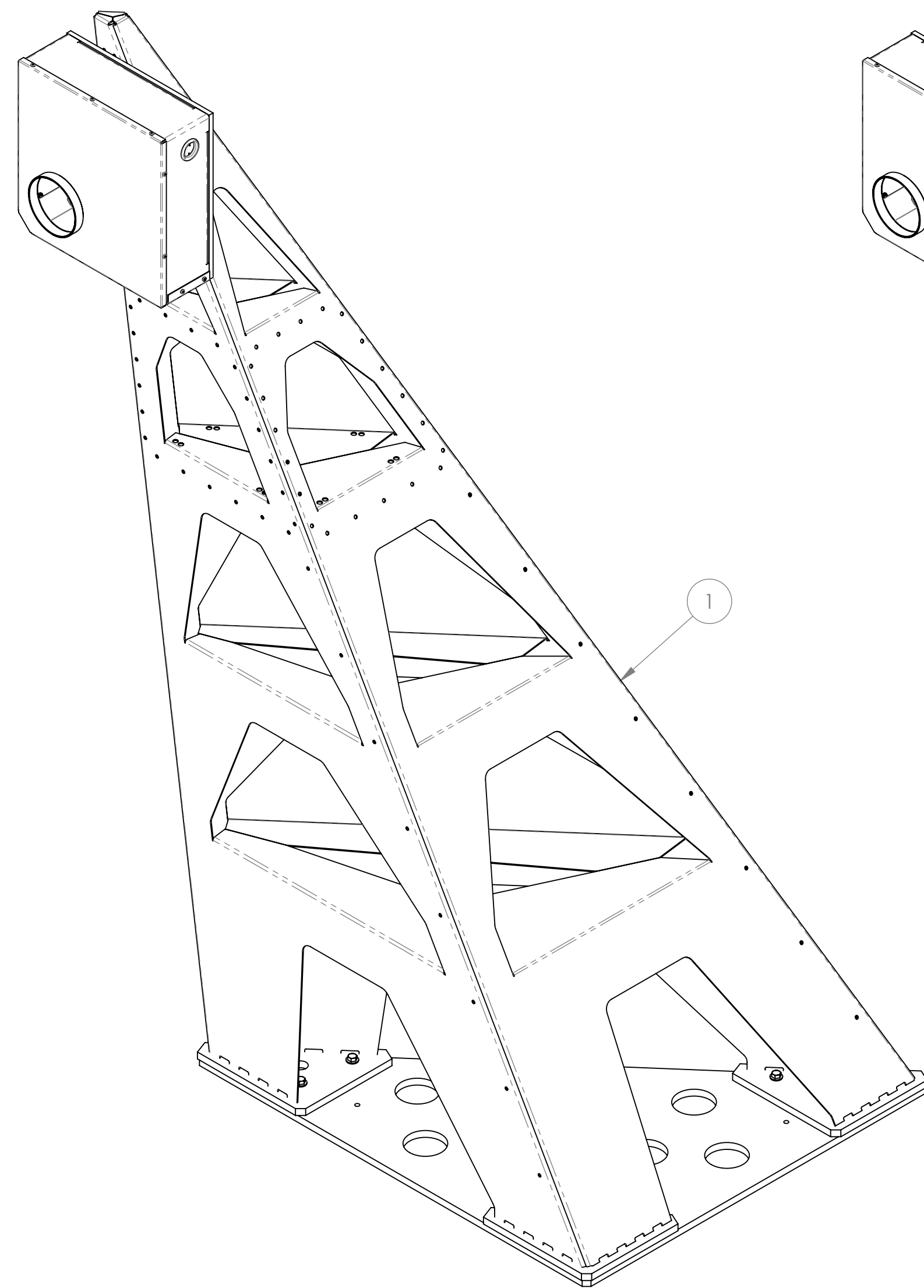
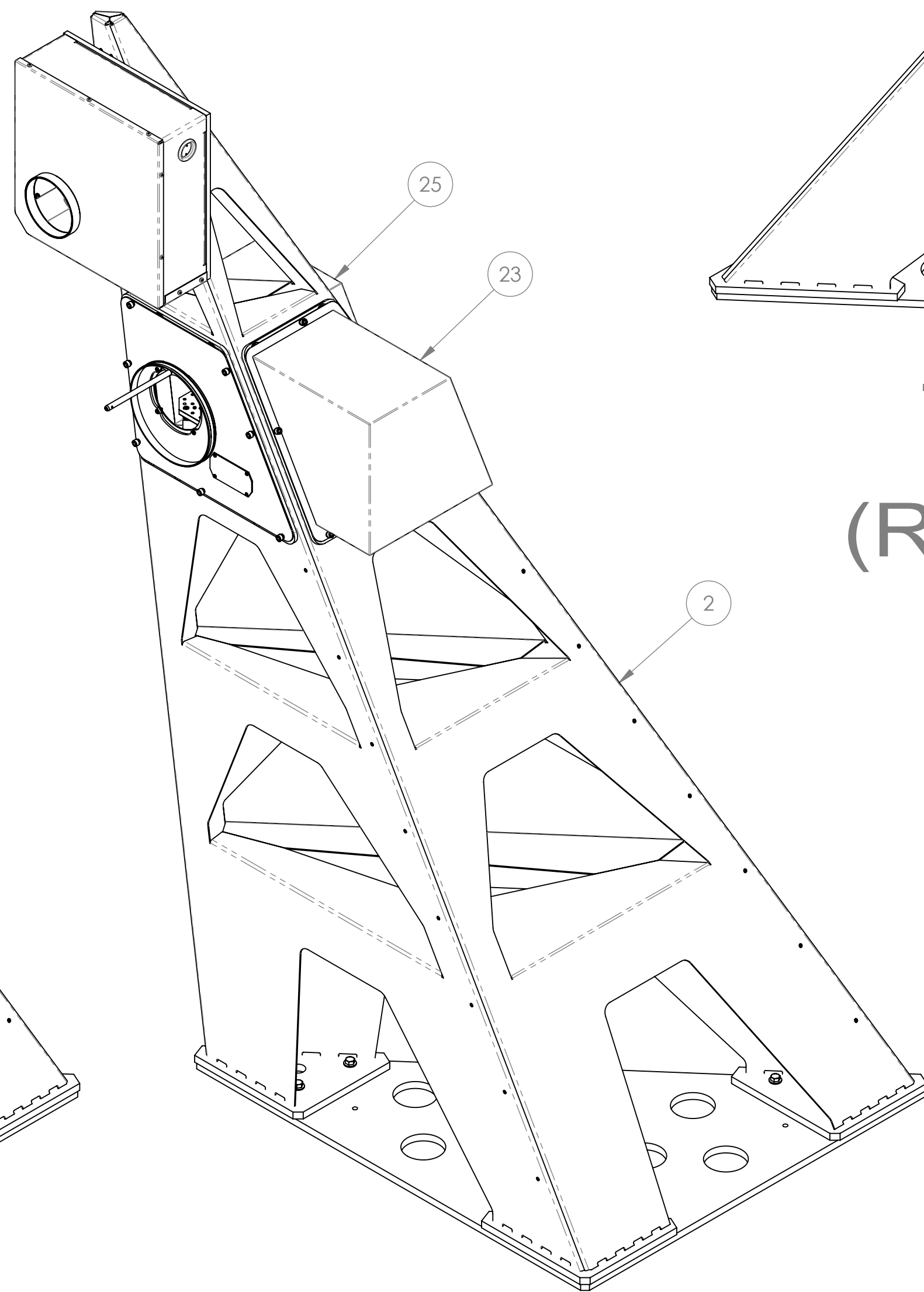


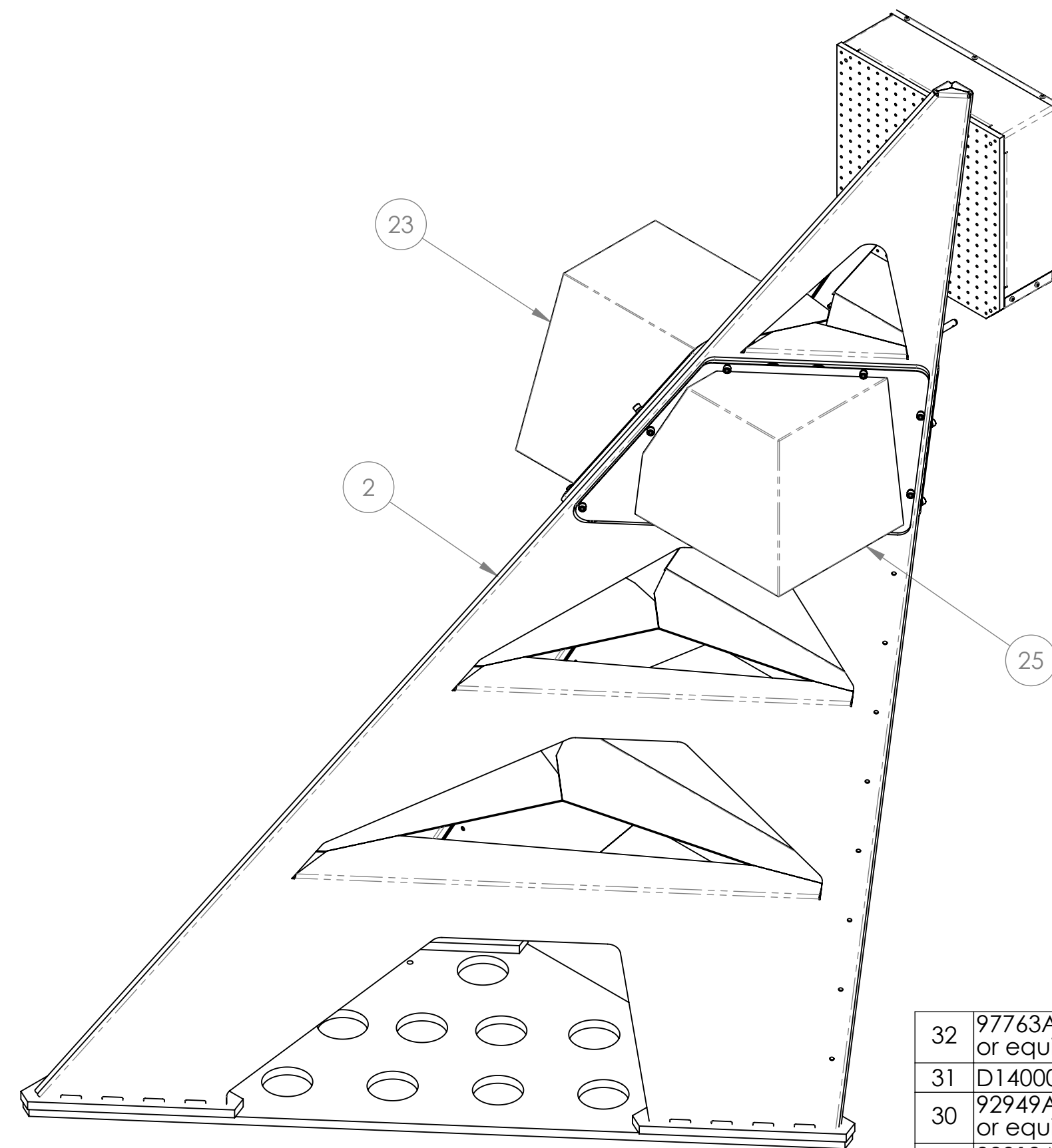
NOTES (CONTINUED):
 ③ REPLACE MANUFACTURERS INCLUDED HARDWARE WITH ITEMS ③ & ④.



**-01 (ITMX)
OPLEV ONLY**



**-02 (ETMY)
OPLEV/PCAL**



**-02 (ETMY)
OPLEV/PCAL
(REORIENTED)**

REV.	DATE	DCN #	DRAWING TREE #
v1	19 OCT 2010	E1000182	-
v2	27 JUN 2012	-	-
v3	14 OCT 2013	E1300649	-
v4	07 APR 2014	-	-
v5	11 APR 2014	-	-
v6	29 APR 2014	-	-

32	97763A504 (McM-Carr) or equiv	BUTTON HEAD SOCKET SCREW, 8-32 X 5/16L, BLACK OXIDE		18-8 SSSL	-	4
31	D1400081	PHOTON CALIBRATOR RECEIVER PANEL	v1	6061-T6 Al	-	1
30	92949A196 (McM-Carr) or equiv	BUTTON HEAD SOCKET SCREW, 8-32 x 5/8		18-8 SSSL	-	4
29	98019A325 (McM-Carr) or equiv PER MS15795-807	WASHER, FLAT, #8		300 SSSL	-	4
28	D1300731-02	ALIGO PCAL VIEWPORT BELLOWS ADAPTER ASSEMBLY, RECEIVER	v2	N/A	-	1
27	D1300246-02	ALIGO PCAL RECEIVER APERTURE, Y-ARM	v3	6061-T6 Al	-	1
26	D1300682-02	ALIGO PCAL RECEIVER ENCLOSURE ADAPTER, FRONT, Y-ARM	v3	6061-T6 Al	-	1
25	D1300207-02	ALIGO PCAL RECEIVER ENCLOSURE, Y-ARM	v3	6061-T6 Al	-	1
24	D1300684-02	ALIGO PCAL RECEIVER ENCLOSURE ADAPTER, INSIDE, Y-ARM	v3	6061-T6 Al	-	1
23	D1300182-02	ALIGO PCAL RECEIVER ENCLOSURE, Y-ARM	v3	6061-T6 Al	-	1
22	91255A539 (McM-Carr) or equiv	BUTTON HEAD SOCKET SCREW, 1/4-20 x 5/8		Alloy Steel	-	32
21	98019A360 (McM-Carr) or equiv PER MS15795-811	WASHER, FLAT, 1/4		300 SSSL	-	32
20	D1300683-02	ALIGO PCAL RECEIVER ENCLOSURE ADAPTER, OUTSIDE, Y-ARM	v3	6061-T6 Al	-	1
19	91847A029 (McM-Carr) or equiv	JAM NUT, 1/4-20		18-8 SSSL	-	3
18	92196A545 (McM-Carr) or equiv	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.375 LONG		18-8 SSSL	-	3
17	90945A761 (McM-Carr) or equiv PER NAS 620-C416	WASHER, FLAT, 1/4		300 SSSL	-	3
16	D1300800-02	ALIGO PCAL RECEIVER MODULE, Y-ARM	v1	N/A	-	1
15	D1100342	ALIGO, AOS, OPLEV, RCVR ENCLOSURE ASSY. (LEFT HAND)	v2	N/A	1	1
14	92196A113 (McM-Carr) or equiv	SCREW, SOCKET HEAD CAP, #4-40 UNC-2A X 0.75 LONG		18-8 SSSL	4	4
13	90945A710 (McM-Carr) or equiv PER NAS 620-C4L	WASHER, FLAT, #4		300 SSSL	4	4
12	D1100290	ALIGO OPTICAL LEVER QPD AMPLIFIER	v1		1	1
11	D1100617	ALIGO AOS OPLEV PCB CARRIER	v2	6061-T6 Al	1	1
10	91292A125 (McM-Carr) or equiv	SCREW, SOCKET HEAD CAP, M5-0.8 X 12 LONG		18-8 SSSL	4	4
9	511-3322-LH (OptoSigma)	LINEAR STEPPING MOTOR STAGE, XY AXES, LEFT HANDED		N/A	1	1
8	92196A537 (McM-Carr) or equiv	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 0.5 LONG		18-8 SSSL	19	19
7	D1001510	ALIGO AOS OPLEV RX STAGE ADAPTER	v2	6061-T6 Al	1	1
6	D1001509	ALIGO AOS OPLEV RX BREADBOARD	v2	6061-T6 Al	1	1
5	92196A540 (McM-Carr) or equiv	SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 0.75 LONG		18-8 SSSL	6	6
③ 4	91286A369 (McM-Carr) or equiv	HEX HEAD CAP SCREW, GRADE 8, 1/2-20 X 1.50L, ARMOR COAT		Alloy Steel	9	9
③ 3	95221A115 (McM-Carr) or equiv	BELLEVILLE WASHER, 13MM ID, 29MM OD, 3MM TH, 3.95MM HT, ZN PL		Alloy Steel	9	9
2	D1001292-02	ALIGO AOS OPLEV & PCAL RX PIER WELDMENT LH, ETMY	v2	N/A	-	1
1	D1001292-01	ALIGO AOS OPLEV & PCAL RX PIER WELDMENT LH, ITMX	v2	N/A	1	-

ITEM NO.	PART NUMBER	DESCRIPTION	REV.	MATERIAL	-01 (ITMX) /QTY.	-02 (ETMY) /QTY.
PARTS LIST						
DIMENSIONS ARE IN INCHES		TOLERANCES: .XX ± .XXX ±		ANGULAR ± °		
MATERIAL		FINISH		NEXT ASSY		
N/A		N/A μinch		D1000354 D1000416 D1000419		
LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME		ALIGO AOS OPLEV & PCAL RX PIER ASSEMBLY LH		
SYSTEM		SUB-SYSTEM		DESIGNER		
ADVANCED LIGO		AOS		C. CONLEY		
CHECKER		APPROVAL		DRAFTER		
SEE DCN		SEE DCN		C. CONLEY		
SCALE: NONE		PROJECTION:		SIZE		
D		D		DWG. NO.		
D1001325		D1001325		REV.		
SHEET 1 OF 6		SHEET 1 OF 6		v6		

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)
 1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. DO NOT SCALE FROM DRAWING.

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ±
 .XXX ±
 ANGULAR ± °

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
 SYSTEM: ADVANCED LIGO
 SUB-SYSTEM: AOS
 PART NAME: ALIGO AOS OPLEV & PCAL RX PIER ASSEMBLY LH
 DESIGNER: C. CONLEY
 DRAFTER: C. CONLEY
 CHECKER: SEE DCN
 APPROVAL: SEE DCN

PART NAME: ALIGO AOS OPLEV & PCAL RX PIER ASSEMBLY LH
 DWG. NO.: D1001325
 REV.: v6
 SCALE: NONE
 PROJECTION: [Symbol]
 SHEET 1 OF 6

D1001325 ALIGO AOS Oplev & Pcal Rx Pier Assembly LH PART PDM REV: X-144 DRAWING PDM REV: X-024

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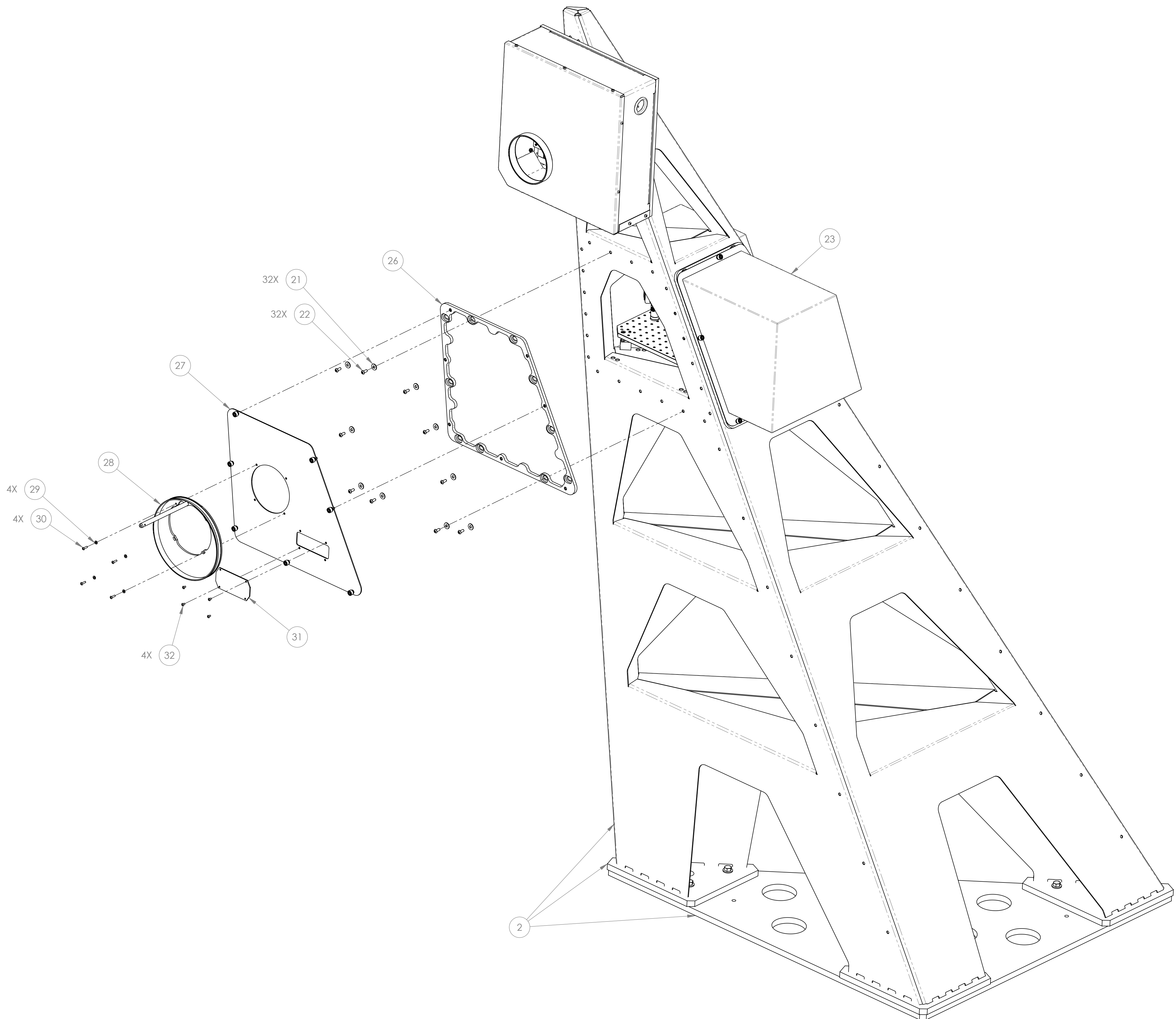
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-02 SHOWN

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE	DWG. NO.	REV.
D	D1001325	V6
SCALE: NONE	PROJECTION:	SHEET 2 OF 6

D:\001325-01\G0_A05_C01rev & P001RX\Fiber Assembly LH PART PDM REV: X-14, DRAWING PDM REV: X-024

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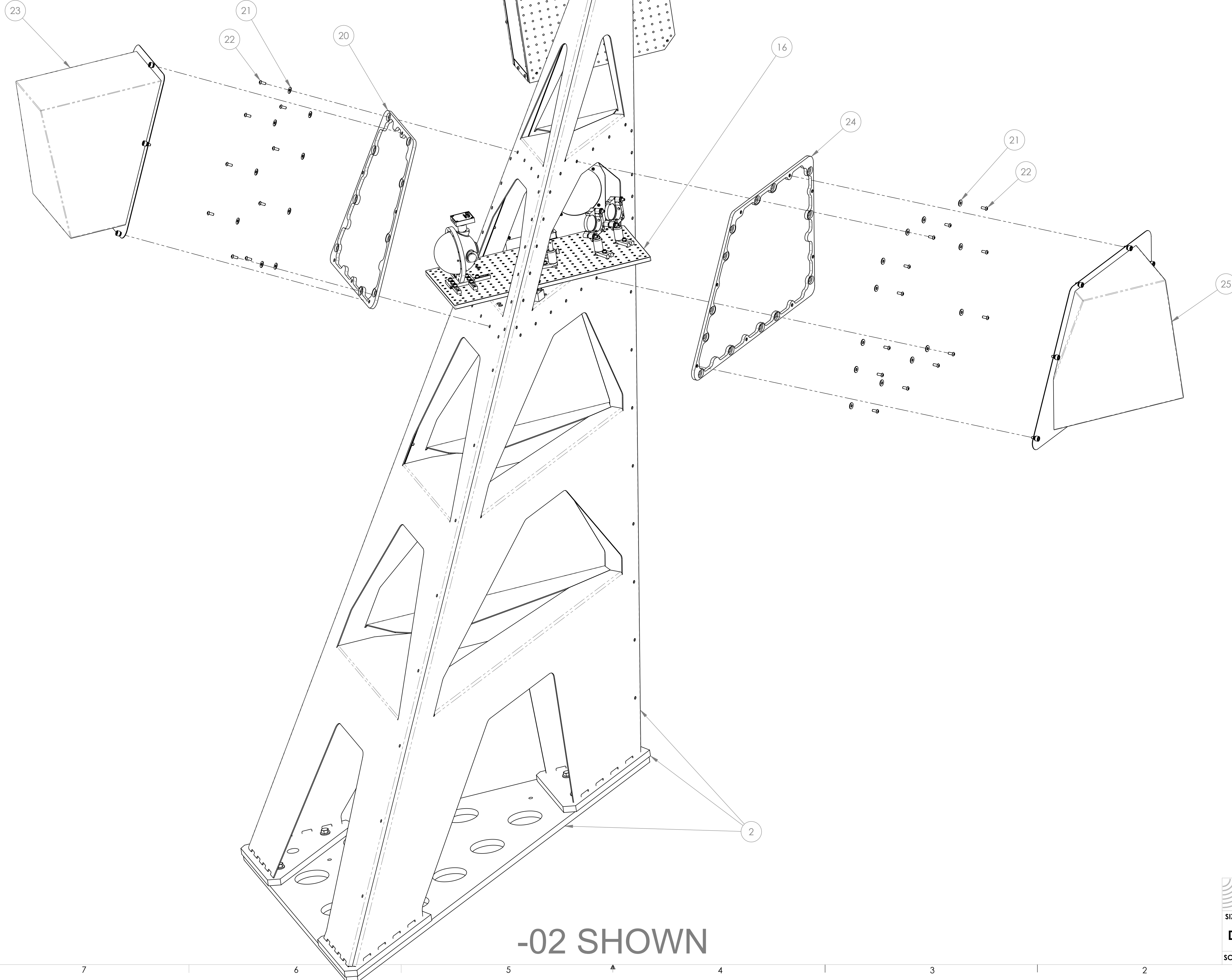
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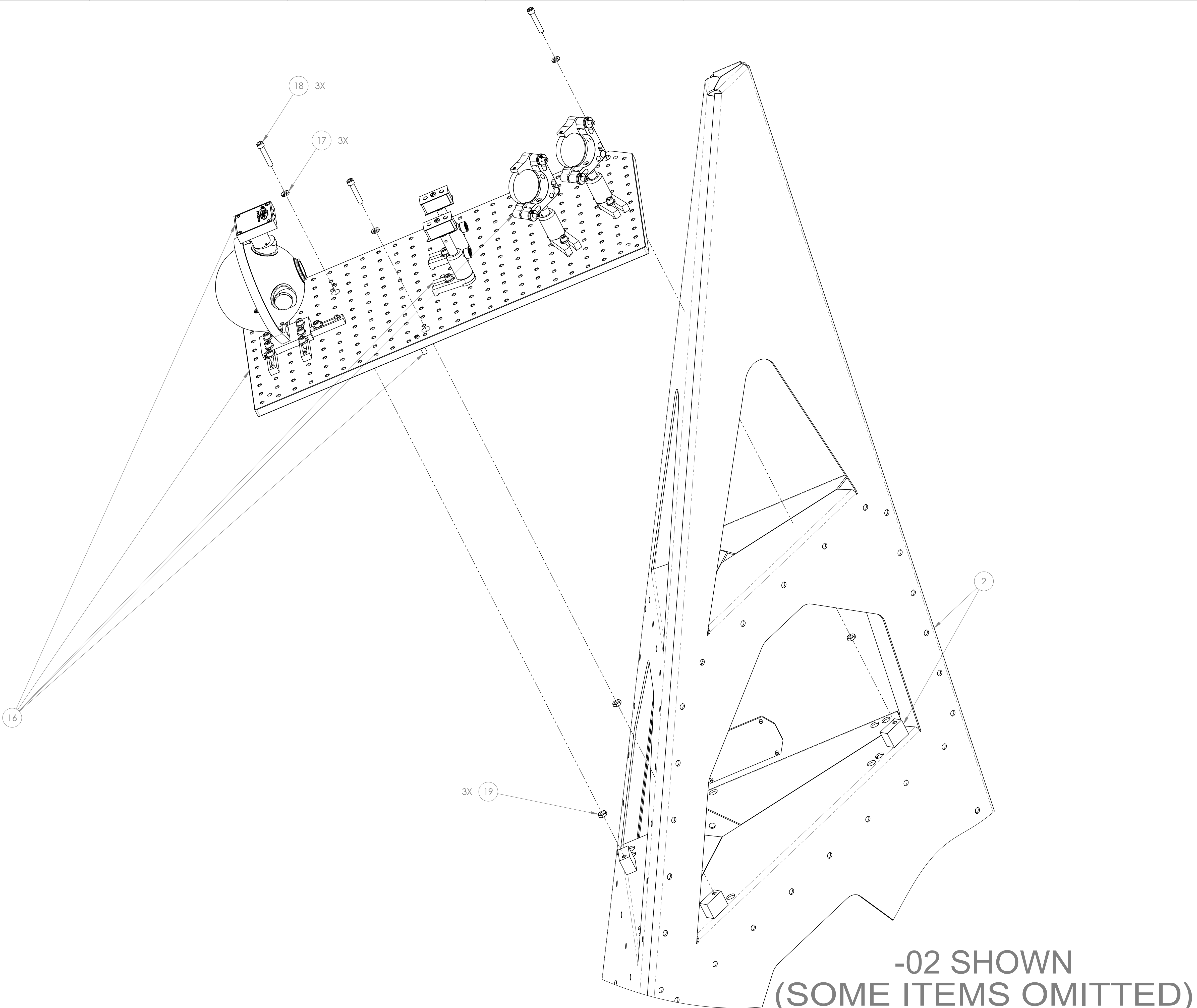
-02 SHOWN

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D1001325	V6
SCALE: NONE	PROJECTION: 
SHEET 3 OF 6	

D:\001325\ligo\ACS\Ocleve & Pocar\Fiber Assembly LH PART PDM REV. X-14, DRAWING PDM REV. X-024

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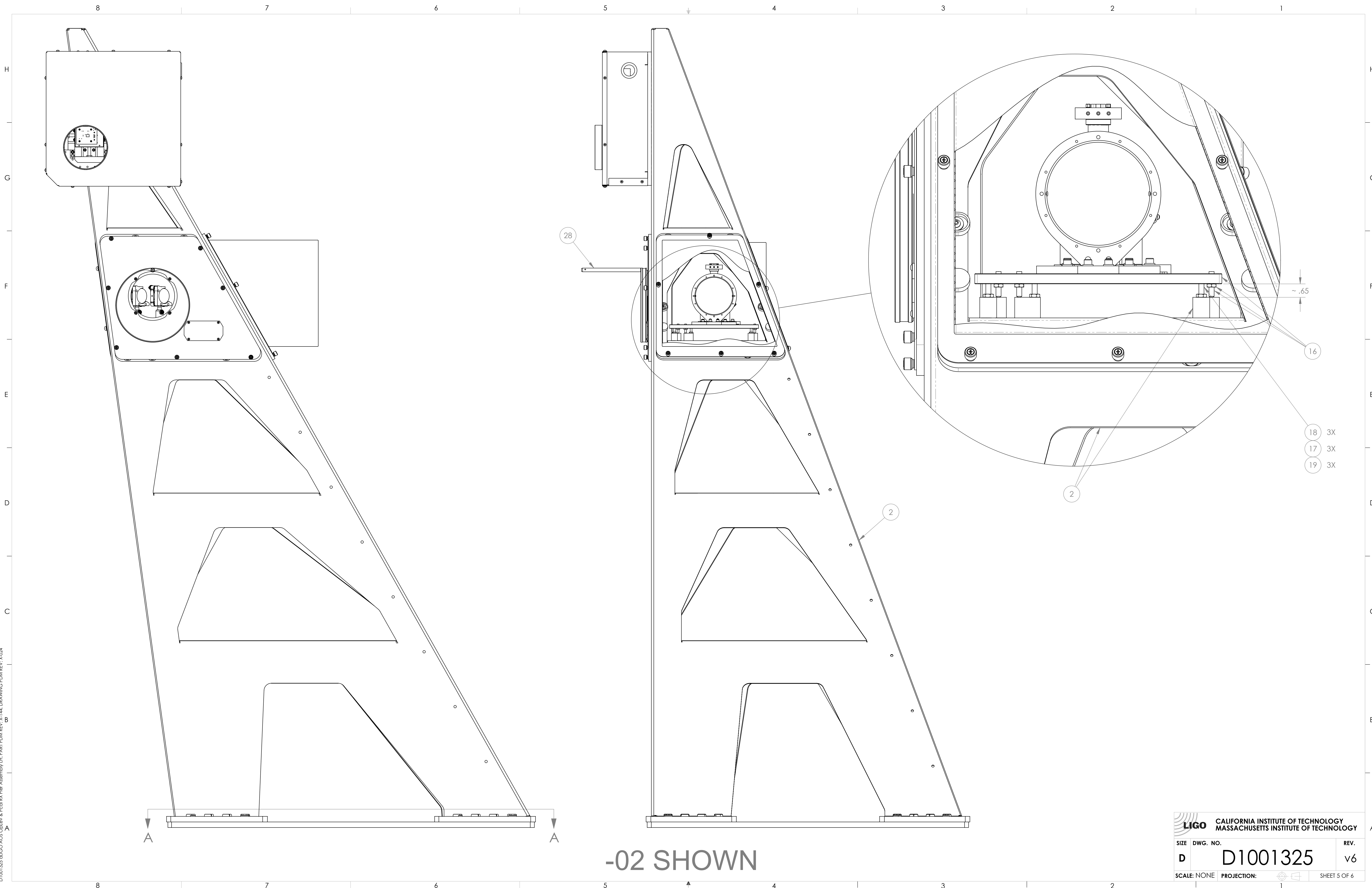


-02 SHOWN
(SOME ITEMS OMITTED)

		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE	DWG. NO.	REV.	
D	D1001325	v6	
SCALE: NONE	PROJECTION:		
			SHEET 4 OF 6

D:\001325.dwg ACS Orlin & Poirix Fiber Assembly LH PART PDM REV. X-14, DRAWING PDM REV. X-024

8 7 6 5 4 4 3 2 1



D1001325.dwg: ACS Optics & PicoPix Fiber Assembly LH Part PDM REV: X-14, DRAWING PDM REV: X-024

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
D	D1001325	V6
SCALE: NONE	PROJECTION:	SHEET 5 OF 6

-02 SHOWN

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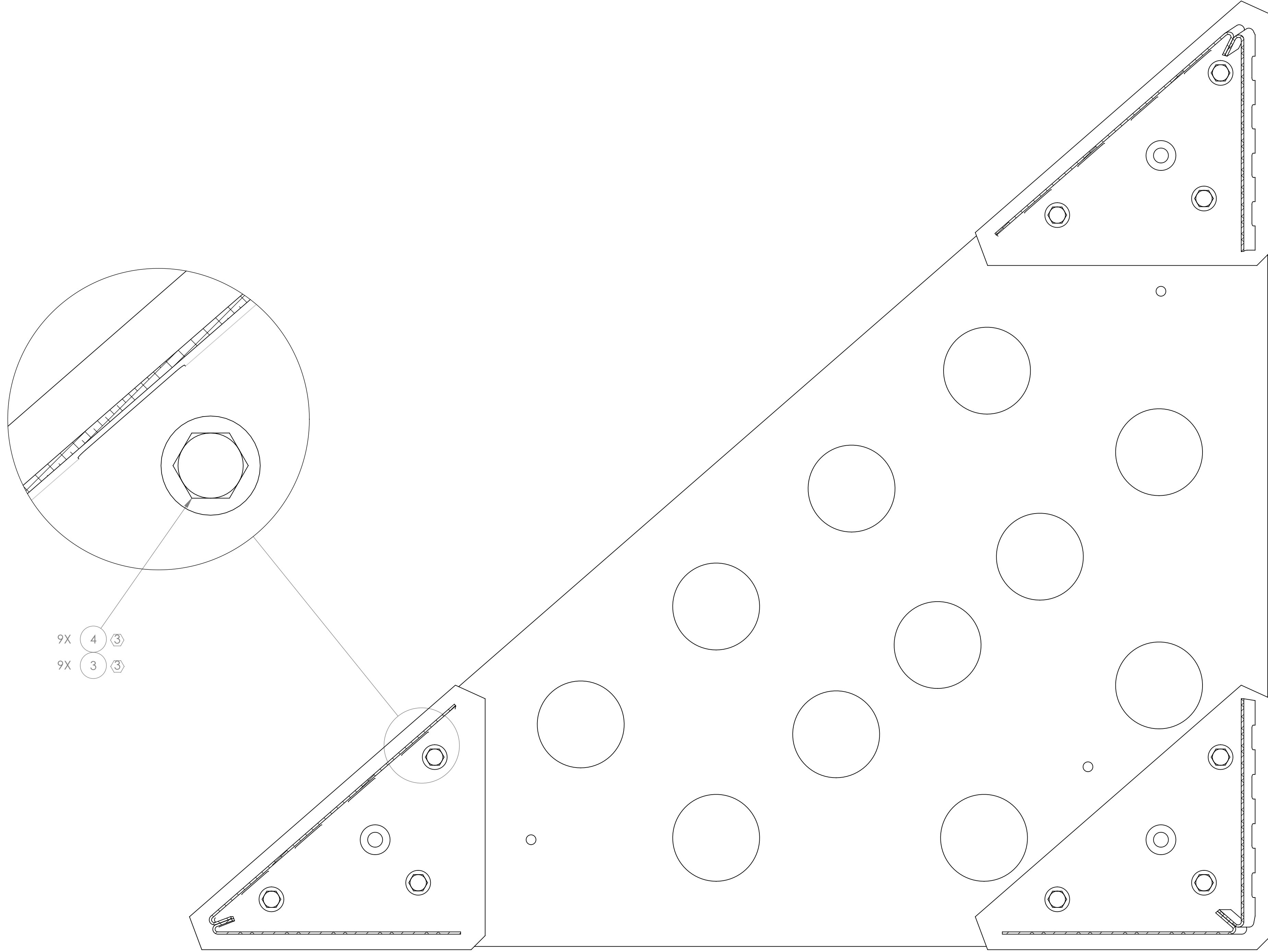
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9X 4
9X 3

SECTION A-A

 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV. v6
SIZE D	DWG. NO. D1001325	SHEET 6 OF 6
SCALE: NONE	PROJECTION:	

D1001325.dwg: ACS Optics & POC/IX Fiber Assembly LH PART PDM REV: X-14, DRAWING PDM REV: X-024