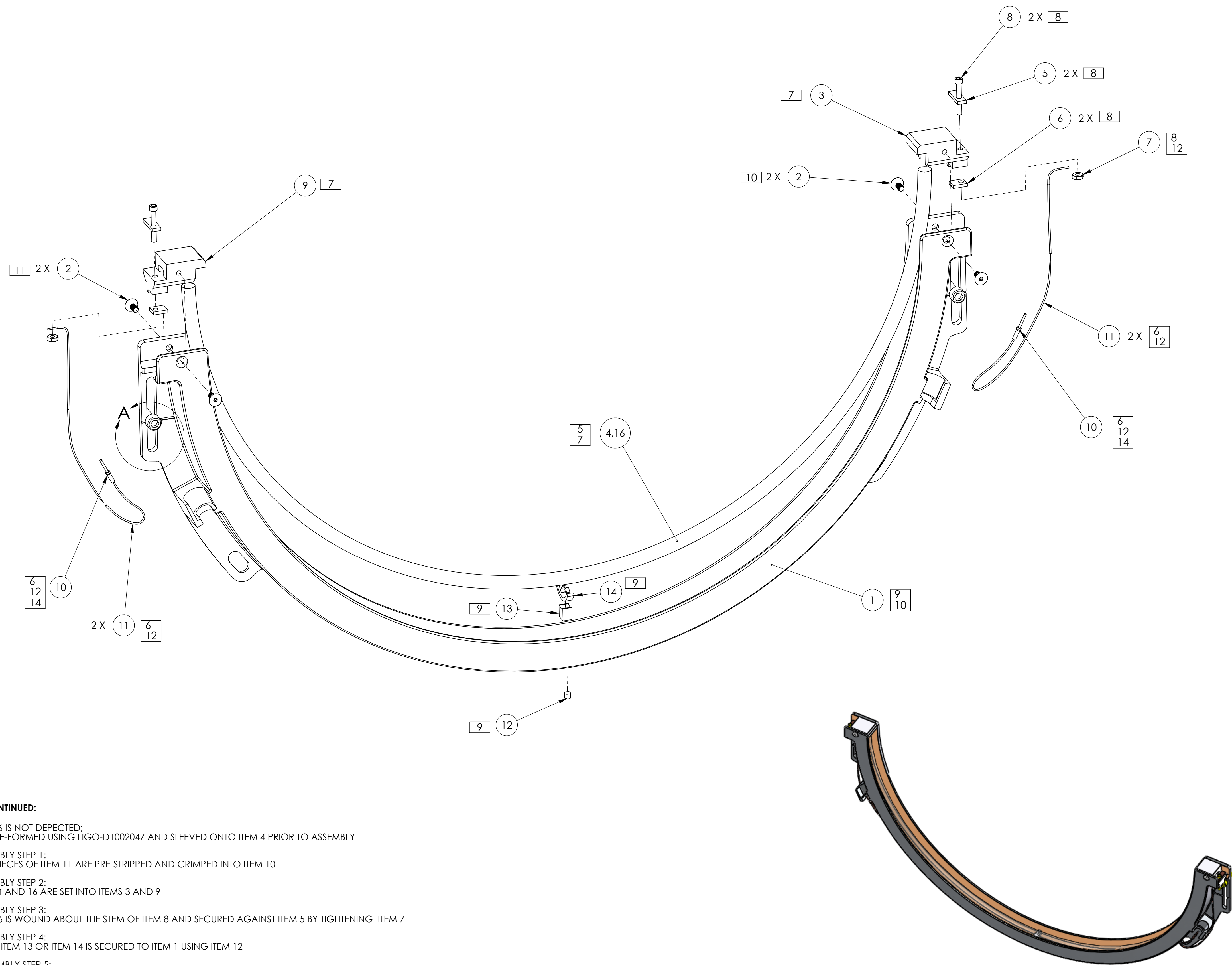


REV.	DATE	DCN #	REFERENCED DWG #
v1	04-AUG-2010	E1000291	E1000295-v1
v2	17-NOV-2010	E1000291-v3	E1000295-v4
v3	03-DEC-2010	E1000291-v4	E1000295-v5



ETCHED ALIGNMENT MARK FOR SETTING THE "OPEN" POSITION ABOUT THE SUSPENDED OPTIC

DETAIL A
SCALE 4 : 1

NOTES CONTINUED:

5. ITEM 16 IS NOT DEPECTED; IT IS PRE-FORMED USING LIGO-D1002047 AND SLEEVED ONTO ITEM 4 PRIOR TO ASSEMBLY
6. ASSEMBLY STEP 1: TWO PIECES OF ITEM 11 ARE PRE-STRIPPED AND CRIMPED INTO ITEM 10
7. ASSEMBLY STEP 2: ITEMS 4 AND 16 ARE SET INTO ITEMS 3 AND 9
8. ASSEMBLY STEP 3: ITEM 16 IS WOUND ABOUT THE STEM OF ITEM 8 AND SECURED AGAINST ITEM 5 BY TIGHTENING ITEM 7
9. ASSEMBLY STEP 4: EITHER ITEM 13 OR ITEM 14 IS SECURED TO ITEM 1 USING ITEM 12
10. ASSEMBLY STEP 5: ITEM 1 IS BROUGHT INTO PLACE AND 2X ITEM 2 ARE SECURED INTO ITEM 3
11. ASSEMBLY STEP 6: ITEM 1 IS PIVOTED INTO PLACE ABOUT ITEM 9 AND 2X ITEM 2 ARE SECURED INTO ITEM 9
12. ASSEMBLY STEP 7: ITEM 7 IS USED TO SECURE THE COMBINED ITEMS 10 AND 11 AGAINST ITEM 6
13. SUBSYSTEM INTEGRATION STEP 1: ITEM 15 IS USED TO SECURE THE ASSEMBLY INTO PLACE
14. SUBSYSTEM INTEGRATION STEP 2: ITEM 10 IS SECURED INTO EACH OF THE JOINTS J5 AND J6 OF ASSEMBLY D1001517

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	SPARE	TOTAL
16	MM 8880K52	24AWG NICHROME WIRE, PRE-CUT	CHROMEL-C	20 FT	20 FT	40 FT
15	C-808	SCREW, SOCKET HEAD CAP, #8-32 UNC-2A X 0.5 LONG	18-8 SS	2	1	3
14	D1003009	RH ELEMENT SPACER WHEEL	Ceramic Porcelain	1	0	1
13	D1002986	RH ELEMENT SPACER	Ceramic Porcelain	1	0	1
12	T-402	SCREW, SOCKET SET, #4-40 UNC-2A X 0.125 LONG	18-8 SS	1	0	1
11	CZ1105	28 AWG PFA COATED COPPER WIRE, 2X 2X 9-IN, PRE-STRIPPED	PFA Coated Cu	18 IN	9 IN	27 IN
10	100170	Pin Contact, 10-24 AWG, AccuGlass	Copper	1	2	3
9	D1002544	RH ELEMENT CONNECTOR, SIMPLIFIED RIGHT	Ceramic Porcelain	1	0	1
8	C-210-N	SCREW, SOCKET HEAD CAP, #2-56 UNC-2A X 0.625 LONG	18-8 SS	2	2	4
7	N-256-A	HEX NUT #2-56 UNC 2B, UC COMPONENTS	18-8 SS, Ag Plated	2	2	4
6	D1001849	UPPER COPPER PLATE	Copper	2	2	4
5	D1001850	LOWER COPPER PLATE	Copper	2	2	4
4	D1002538	SIMPLIFIED GLASS FORMER	Glass	1	1	2
3	D1002543	RH ELEMENT CONNECTOR, SIMPLIFIED LEFT	Ceramic Porcelain	1	0	1
2	FA-404	VENTED, FSHCS #4-40 UNC-2A x .25 LG, UC COMPONENTS	18-8 SS	4	2	6
1	D1001680	αLIGO TCS LOWER MONOLITHIC RH SHIELD	6061 Alloy	1	0	1

DIMENSIONS ARE IN		NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
TOLERANCES:		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM		SUB-SYSTEM	
ANGULAR ± °		MATERIAL		NEXT ASSY		ADVANCED LIGO	
		FINISH		D1002027		AOS	
		N/A		N/A μinch		DESIGNER	
						M. JACOBSON 26 JUL 2010	
						DRAFTER	
						A. COLE 7/30/2010	
						CHECKER	
						CALUM TORRIE 7/30/2010	
						APPROVAL	
						P. WILLEMS 7/30/2010	
						SIZE	
						D	
						DWG. NO.	
						D1001895	
						REV.	
						v3	
						SCALE: 1:2	
						PROJECTION:	
						SHEET 1 OF 1	

D1001895_αLIGO TCS RING HEATER LOWER SEGMENT ASSY - PART PDM REV: X-283, DRAWING PDM REV: X-013