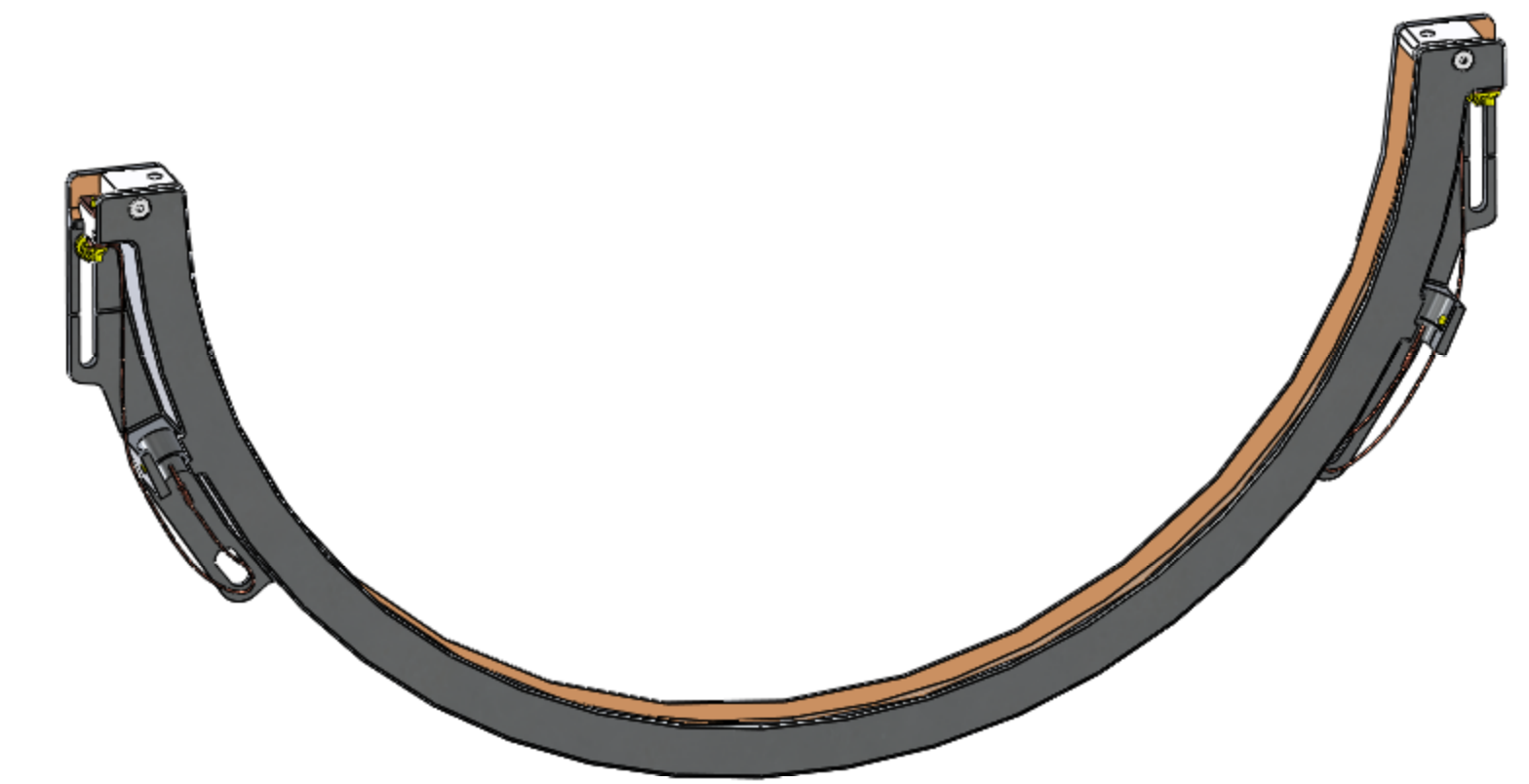
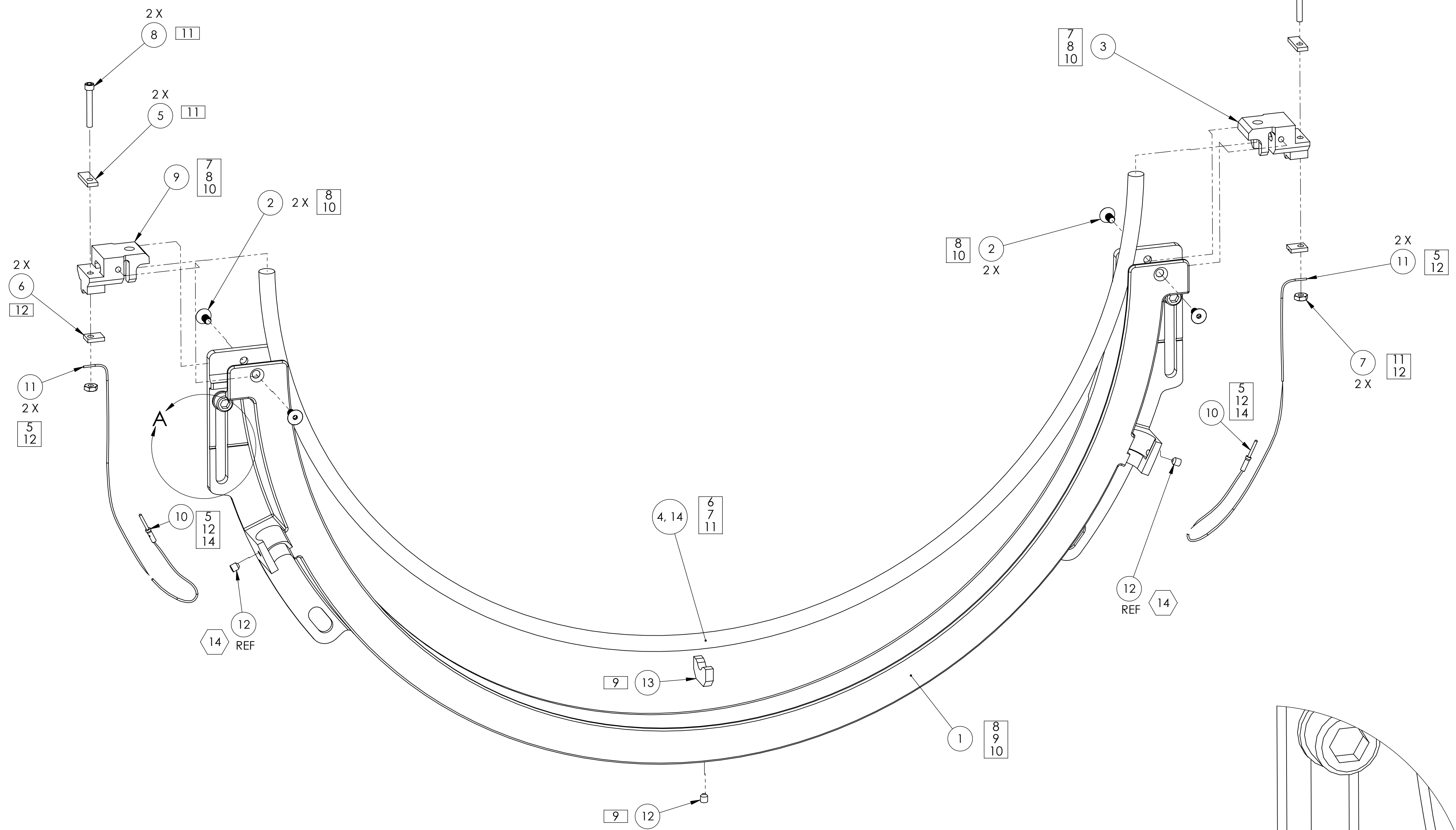


REV.	DATE	DCN #	DRAWING TREE #
v1	04-AUG-2010	E1000291	E1000295-v1
v2	17-NOV-2010	E1000291-v3	E1000295-v4
v3	03-DEC-2010	E1000291-v4	E1000295-v5
v4	06-JAN-2011	E1000291-v5	E1000295-v6
v5	28-FEB-2011	E1000291-v6	E1000295-v7



- NOTES CONTINUED:**
- 5 TWO PIECES OF ITEM 11 ARE PRE-STRIPPED AND CRIMPED INTO ITEM 10. SEE LIGO-T110123
  - 6 ITEM 14 IS NOT DEPECTED; IT IS PRE-FORMED AND SLEEVED ONTO ITEM 4 PRIOR TO ASSEMBLY. SEE LIGO-T1100123
  - 7 ITEMS 4 AND 14 ARE SET INTO ITEMS 3 AND 9
  - 8 ITEM 1 IS BROUGHT INTO PLACE AND 2X ITEM 2 ARE SECURED INTO -EITHER- ITEM 3 -OR- INTO ITEM 9
  - 9 ITEM 1 IS PIVOTED ABOUT THE NEWLY SECURED JOINT SO THAT ITEM 13 CAN BE INSERTED BETWEEN ITEMS 4 AND 1 AT THE MIDSPAN. ITEM 12 CAN BE USED TO SECURE ITEM 13, AS NECESSARY.
  - 10 ITEM 1 IS PIVOTED BACK SO THAT THE OPPOSITE UNSECURED ITEM 3 OR 9 CAN BE SECURED USING 2X ITEM 2
  - 11 ITEM 14 IS WOUND ABOUT THE SHANK OF ITEM 8 AND SECURED AGAINST ITEM 5 BY TIGHTENING ITEM 7
  - 12 ITEM 7 IS USED TO SECURE THE COMBINED ITEMS 10 AND 11 AGAINST ITEM 6
  - 13 SUBSYSTEM INTEGRATION STEP 1:  
TWO #8-32 SHCS AND FLAT WASHERS ARE 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 D1001519  
ITEM 12 IS USED TO SECURE JOINTS J5 AND J6 TO THE SHIELD (ITEM 1)

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	SPARE	TOTAL
14	MM 8880K52	24AWG NICHROME WIRE, PRE-CUT	CHROMEL-C	20 FT	20 FT	40 FT
13	D1002545	SIMPLIFIED RH ELEMENT STANDOFF	MACOR CERAMIC	1	1	2
12	T-402	SCREW, SOCKET SET, #4-40 UNC-2A X 0.125 LONG	18-8 SS	3	0	3
11	CZ1105	28 AWG PFA COATED COPPER WIRE, 2X 2X 8 IN. PRE-STRIPPED	Cu, PFA COATED	16 IN	8 IN	24 IN
10	100170	Pin Contact, 10-24 AWG, AccuGlass	Au PLATED Cu	2	2	4
9	D1002544	RH ELEMENT CONNECTOR, SIMPLIFIED RIGHT	MACOR CERAMIC	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	Cu, ALLOY 110	2	2	4
5	D1001850	LOWER COPPER PLATE	Cu, ALLOY 110	2	2	4
4	D1002538	SIMPLIFIED GLASS FORMER	GLASS, ANNEALED	1	1	2
3	D1002543	RH ELEMENT CONNECTOR, SIMPLIFIED LEFT	MACOR CERAMIC	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	aLIGO TCS LOWER MONOLITHIC RH SHIELD	6061 Alloy	1	0	1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .XXX ± ANGULAR ± °		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.		<b>aLIGO TCS RING HEATER LOWER SEGMENT ASSY</b>	
MATERIAL N/A		FINISH N/A μinch		SYSTEM ADVANCED LIGO SUB-SYSTEM AOS NEXT ASSY D1002027	
		DESIGNER M. JACOBSON 26 JUL 2010 DRAFTER A. COLE 30 JUL 2010 CHECKER CALUM TORRIE 06 JAN 2011 APPROVAL P. WILLEMS 25 FEB 2011		SIZE DWG. NO. D1001895 SCALE: 1:2 PROJECTION: SHEET 1 OF 1	

D1001895\_aLIGO TCS RING HEATER LOWER SEGMENT ASSY PART PDM REV: X-107 DRAWING PDM REV: X-016