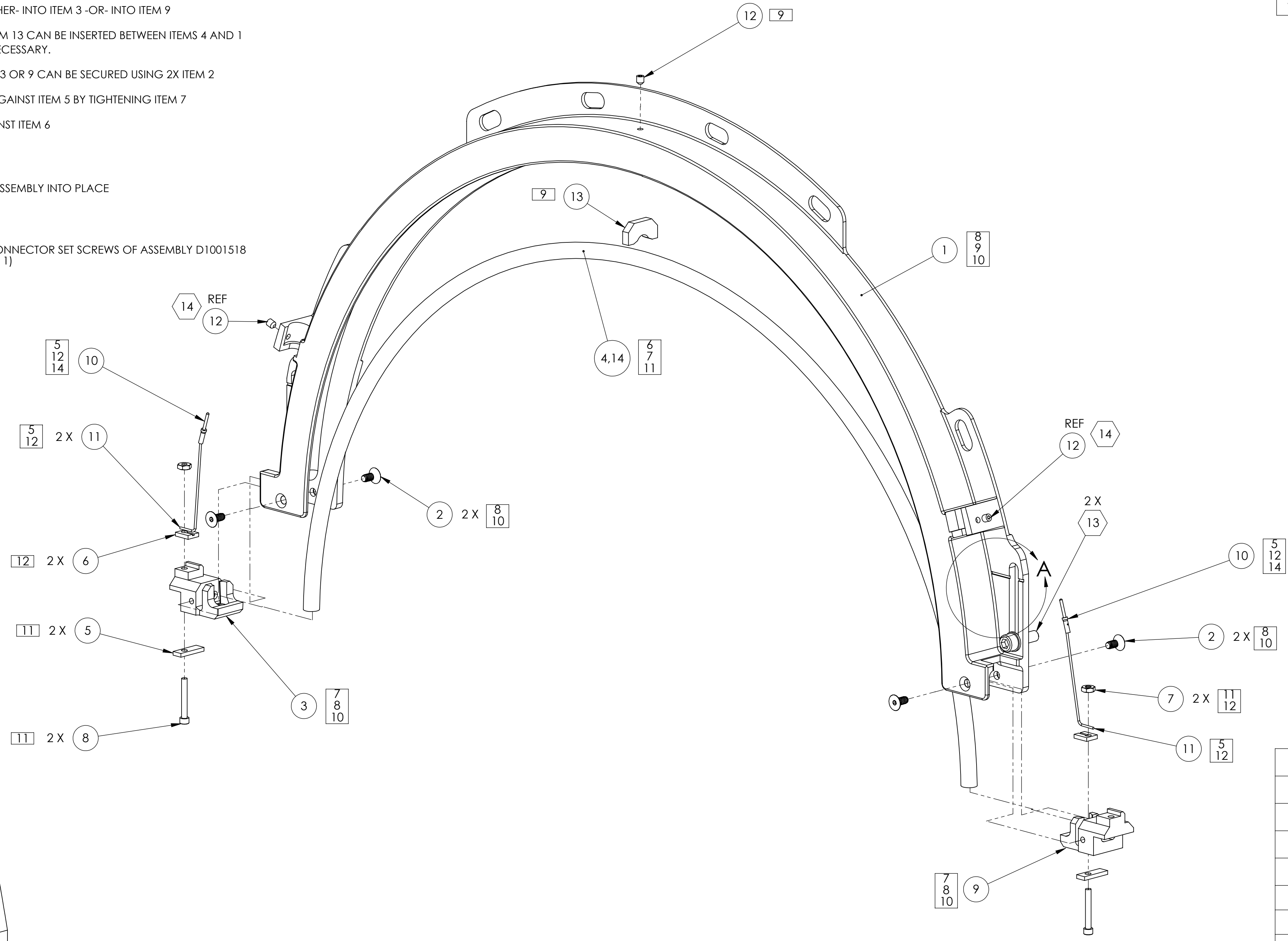
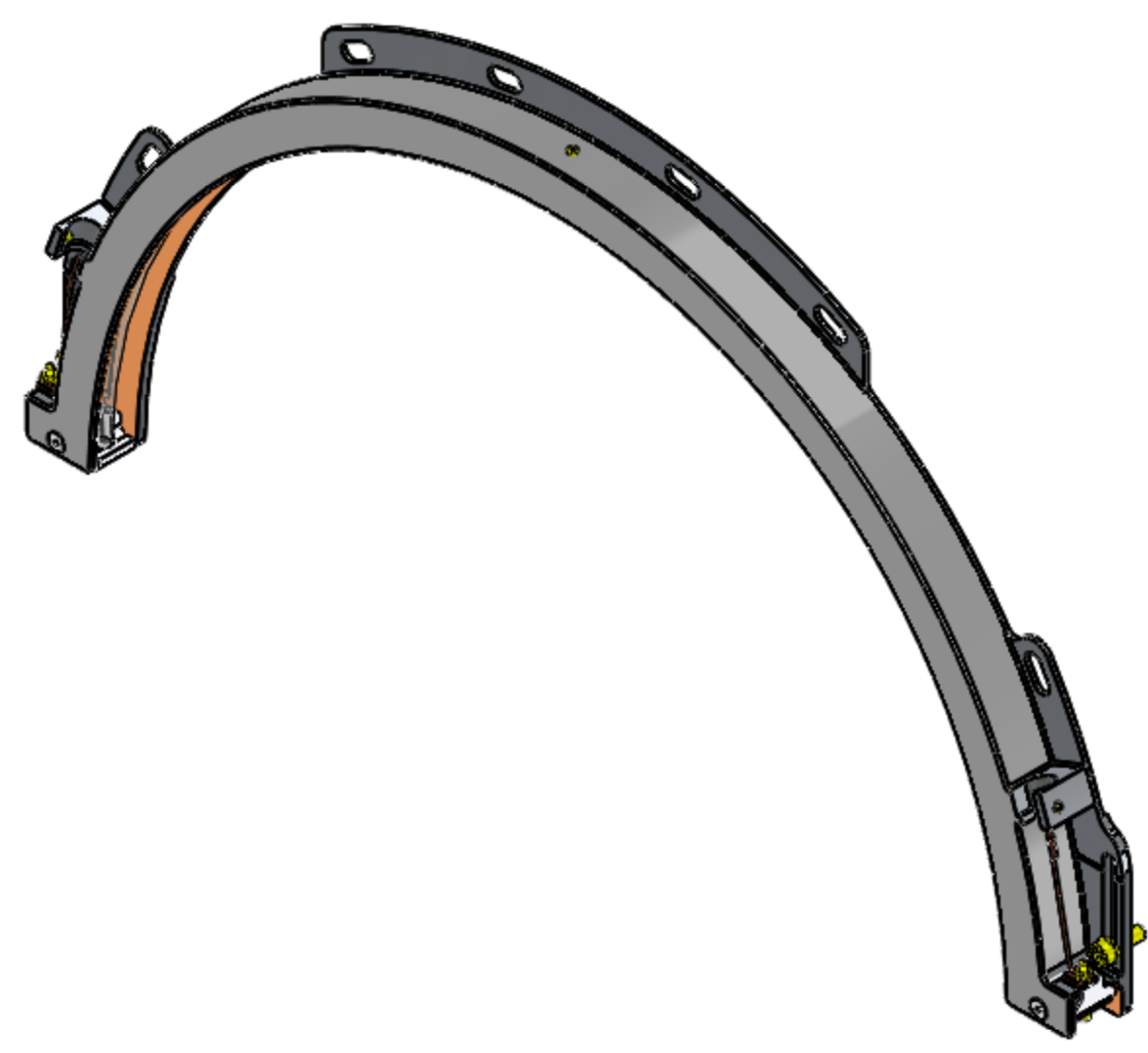


NOTES CONTINUED:

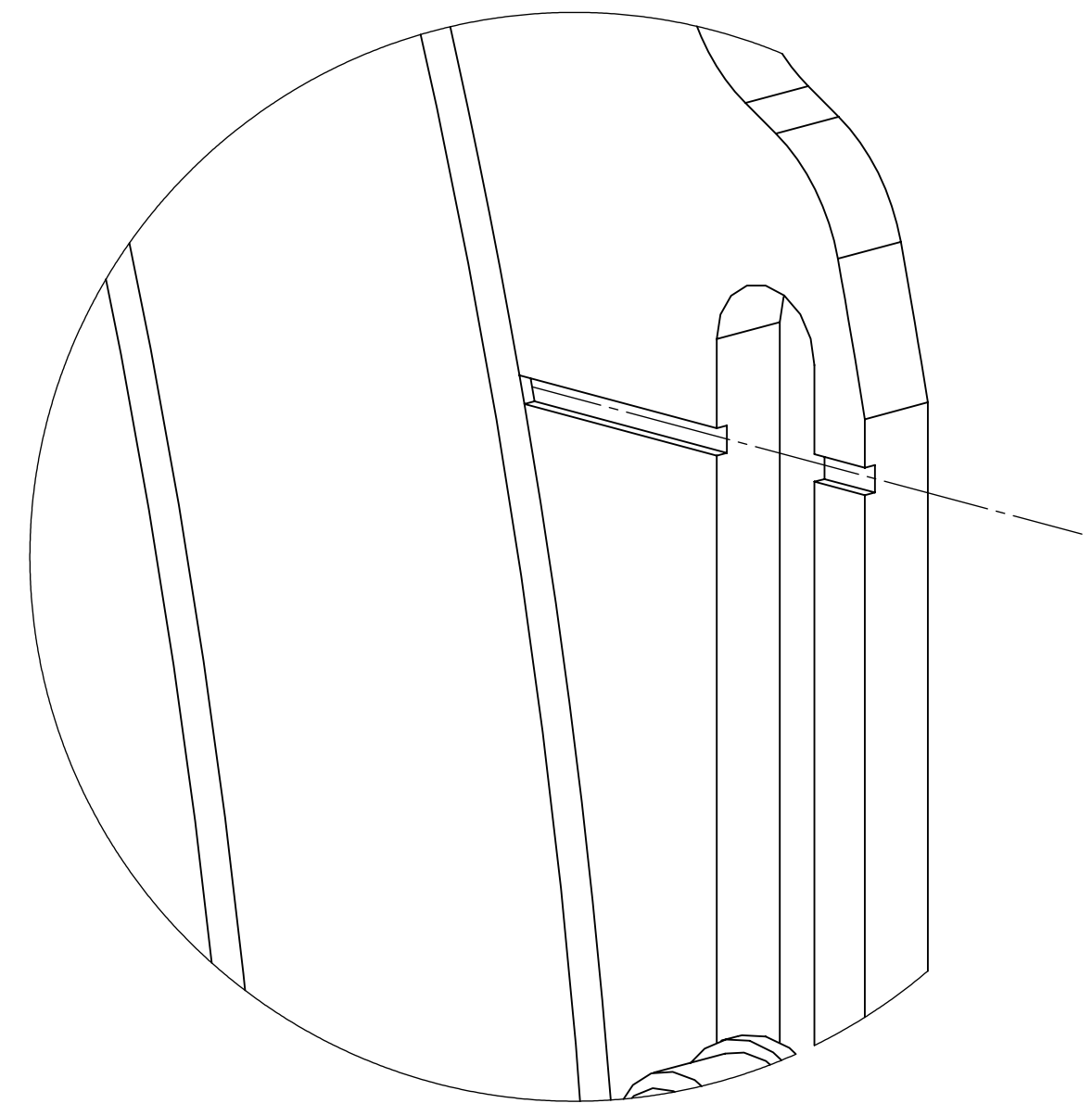
- 5 TWO PIECES OF ITEM 11 ARE PRE-STRIPPED AND CRIMPED INTO ITEM 10. SEE LIGO-T1100123.
- 6 ITEM 14 IS NOT DEPECTED; IT IS PRE-FORMED AND SLEEVED ONTO ITEM 4 PRIOR TO ASSEMBLY. SEE LIGO-T1100123.
- 7 ITEMS 4 AND 14 ARE SET INTO ITEMS 3 AND 9
- 8 ITEM 1 IS BROUGHT INTO PLACE AND 2X ITEM 2 ARE SECURED -EITHER- INTO ITEM 3 -OR- INTO ITEM 9
- 9 ITEM 1 IS PIVOTED ABOUT THIS 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 J2 AND J3 USING ONNECTOR SET SCREWS OF ASSEMBLY D1001518
ITEM 12 IS USED TO SECURE JOINTS J2 AND J3 TO THE SHIELD (ITEM 1)



REV.	DATE	DCN #	DRAWING TREE #
v1	04-AUG-2010	E1000291-v1	E1000295-v1
v2	16-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



D1001838_01 LIGO TCS UPPER SEGMENT RING HEATER ASSY, PART PDM REV. X-119, DRAWING PDM REV. X-033



DETAIL A
SCALE 4 : 1

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

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 5 IN. PRE-STRIPPED	Cu, PFA COATED	10 IN	5 IN	15 IN
10	100170	10-24 AWG ACCUGLASS PIN CONTACT	AU-PLATED CU	2	2	4
9	D1002544	RH ELEMENT RETAINER, SIMPLIFIED RIGHT	MACOR CERAMIC	1	0	1
8	C-210-N	SHCS #2-56 UNC-2A X .625 LG. UC COMPONENTS	18-8 SS	2	2	4
7	N-256-A	#2-56 UNC 2B, HEX NUT, 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	0	1
3	D1002543	RH ELEMENT CONNECTOR, SIMPLIFIED LEFT	MACOR CERAMIC	1	0	1
2	FA-404	VENTED SS 18-8 FSHCS #4-40 UNC-2A x .25 LG. UC COMPONENTS	18-8 SS	4	2	6
1	D1001679	αLIGO TCS UPPER MONOLITHIC RH SHIELD	6061 Alloy	1	0	1

PARTS LIST

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
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.	
DIMENSIONS ARE IN	
TOLERANCES:	
.XX ±	
.XXX ±	
ANGULAR ± °	
MATERIAL	N/A
FINISH	N/A μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: **ADVANCED LIGO** SUB-SYSTEM: **AOS**

NEXT ASSY: **D1002027**

PART NAME: **αLIGO TCS RING HEATER ASSY, UPPER SEGMENT**

DESIGNER	M. JACOBSON	29 JUL 2010	SIZE	DWG. NO.	REV.
DRAFTER	A. COLE	29 JUL 2010	D	D1001838	v5
CHECKER	C. TORRIE	06 JAN 2011	SCALE: 1:2	PROJECTION:	SHEET 1 OF 1
APPROVAL	P. WILLEMS	25 FEB 2011			