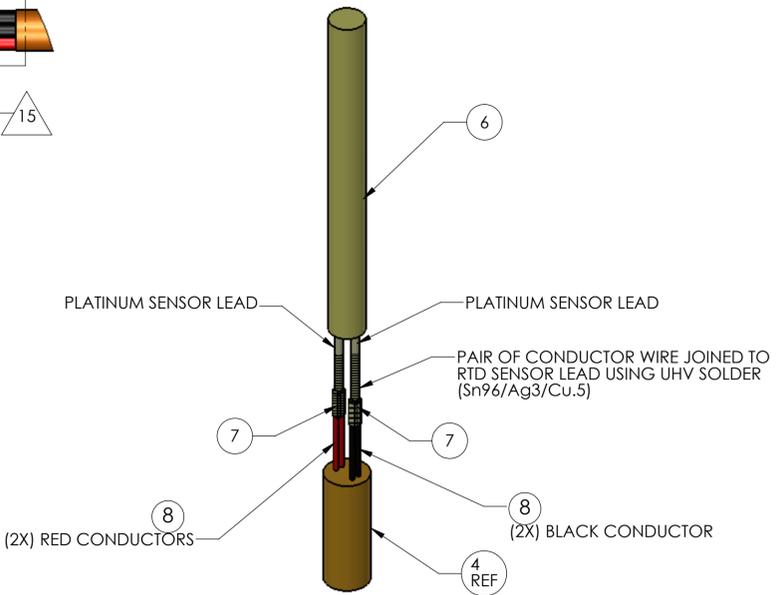
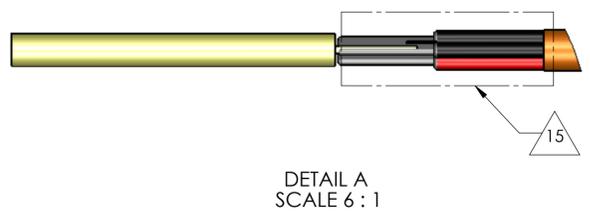
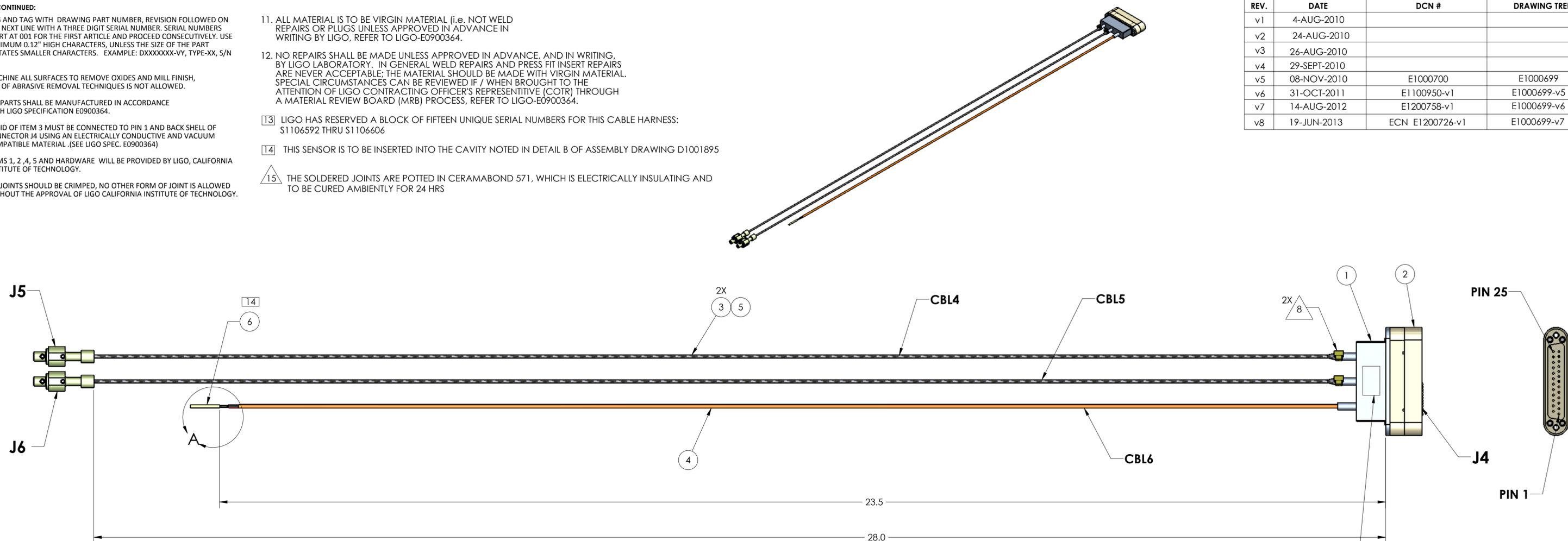


- NOTES CONTINUED:
- BAG AND TAG WITH DRAWING PART NUMBER, REVISION FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
  - MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
  - ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
  - BRAD OF ITEM 3 MUST BE CONNECTED TO PIN 1 AND BACK SHELL OF CONNECTOR J4 USING AN ELECTRICALLY CONDUCTIVE AND VACUUM COMPATIBLE MATERIAL. (SEE LIGO SPEC. E0900364)
  - ITEMS 1, 2, 4, 5 AND HARDWARE WILL BE PROVIDED BY LIGO, CALIFORNIA INSTITUTE OF TECHNOLOGY.
  - ALL JOINTS SHOULD BE CRIMPED, NO OTHER FORM OF JOINT IS ALLOWED WITHOUT THE APPROVAL OF LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY.

- ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
- NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
- LIGO HAS RESERVED A BLOCK OF FIFTEEN UNIQUE SERIAL NUMBERS FOR THIS CABLE HARNESS: S1106592 THRU S1106606
- THIS SENSOR IS TO BE INSERTED INTO THE CAVITY NOTED IN DETAIL B OF ASSEMBLY DRAWING D1001895
- THE SOLDERED JOINTS ARE POTTED IN CERAMABOND 571, WHICH IS ELECTRICALLY INSULATING AND TO BE CURED AMBIENTLY FOR 24 HRS

REV.	DATE	DCN #	DRAWING TREE #
v1	4-AUG-2010		
v2	24-AUG-2010		
v3	26-AUG-2010		
v4	29-SEPT-2010		
v5	08-NOV-2010	E1000700	E1000699
v6	31-OCT-2011	E1100950-v1	E1000699-v5
v7	14-AUG-2012	E1200758-v1	E1000699-v6
v8	19-JUN-2013	ECN E1200726-v1	E1000699-v7



INSCRIBE THE TEXT "J4" AND UNIQUE SERIAL NUMBER OF NOTE [13] ONTO THE BACKSHELL OF THIS CONNECTOR

LOWER RING HEATER CABLE CIRCUIT SUMMARY				
CABLE	TWISTED PAIR	CON. WIRE ID	FROM	TO (J4)
CBL-4	-	CBL-SHIELD	SHELL (J5)	PIN1, SHELL
	CBL1-TP1	W1-CBL-4	J5	PIN 2
	CBL1-TP2	W2-CBL-4		PIN 3
		W3-CBL-4		PIN 4
CBL-5	-	CBL-SHIELD	SHELL (J6)	PIN 1 & SHELL
	CBL2-TP1	W1-CBL-5	J6	PIN 14
	CBL2-TP2	W2-CBL-5		PIN 15
		W3-CBL-5		PIN 16
CBL-6	-	W1-RED-1	ITEM 7	PIN 6
	-	W2-RED-2		PIN 7
		W3-BLK-1		PIN 18
		W4-BLK-2		PIN 19

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	SPARE	TOTAL
8	110797	SOLDER FLUX, ACCU-GLASS	SEE MSDS	TRACE		1/2 OZ BOTTLE
7	110796	UHV SOLDER, ACCU-GLASS	SEE MSDS	TRACE		1"
6	1PT100KN1515CLA	CERAMIC WIRE-WOUND PLATINUM RTD ELEMENT	N/A	1		1
5	111167	PEEK BRAIDED SHIELDING, .187IN ID. ACCU-GLASS	PEEK	30 IN		30 IN
4	EXGG-4CU-26S	EXGG SERIES 4 CONDUCTOR, RTD WIRE. OMEGA	COPPER	25.5 IN		25.5 IN
3	6022258	CUSTOM CABLE ASSEMBLY	COPPER	30 IN		30 IN
2	LIGO, CUSTOM	DB25 MALE CONNECTOR FOR UHV.	PEEK	1		1
1	LIGO CUSTOM	DB25 CONNECTOR BACKSHELL ,VENT HOLE, NO FLANGE	STAINLESS STEEL	1		1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, R.02 MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 .XX ± .01  
 .XXX ± .005  
 ANGULAR ± 0.1°

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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

**Part Name:** Cable Assy, Lower Heater

DESIGNER	A.COLE	7/26/2010	SIZE	DWG. NO.	REV.
DRAFTER	A.COLE	26-JUL-2010	D	<b>D1001519</b>	v8
CHECKER	D.COYNE	20-JUN-13	SCALE: NONE	PROJECTION:	SHEET 1 OF 1
APPROVAL	M.JACOBSON	19-JUN-13			

D1001519\_Cable Assy,Lower Heater, PART PDM REV: X-019, DRAWING PDM REV: X-035