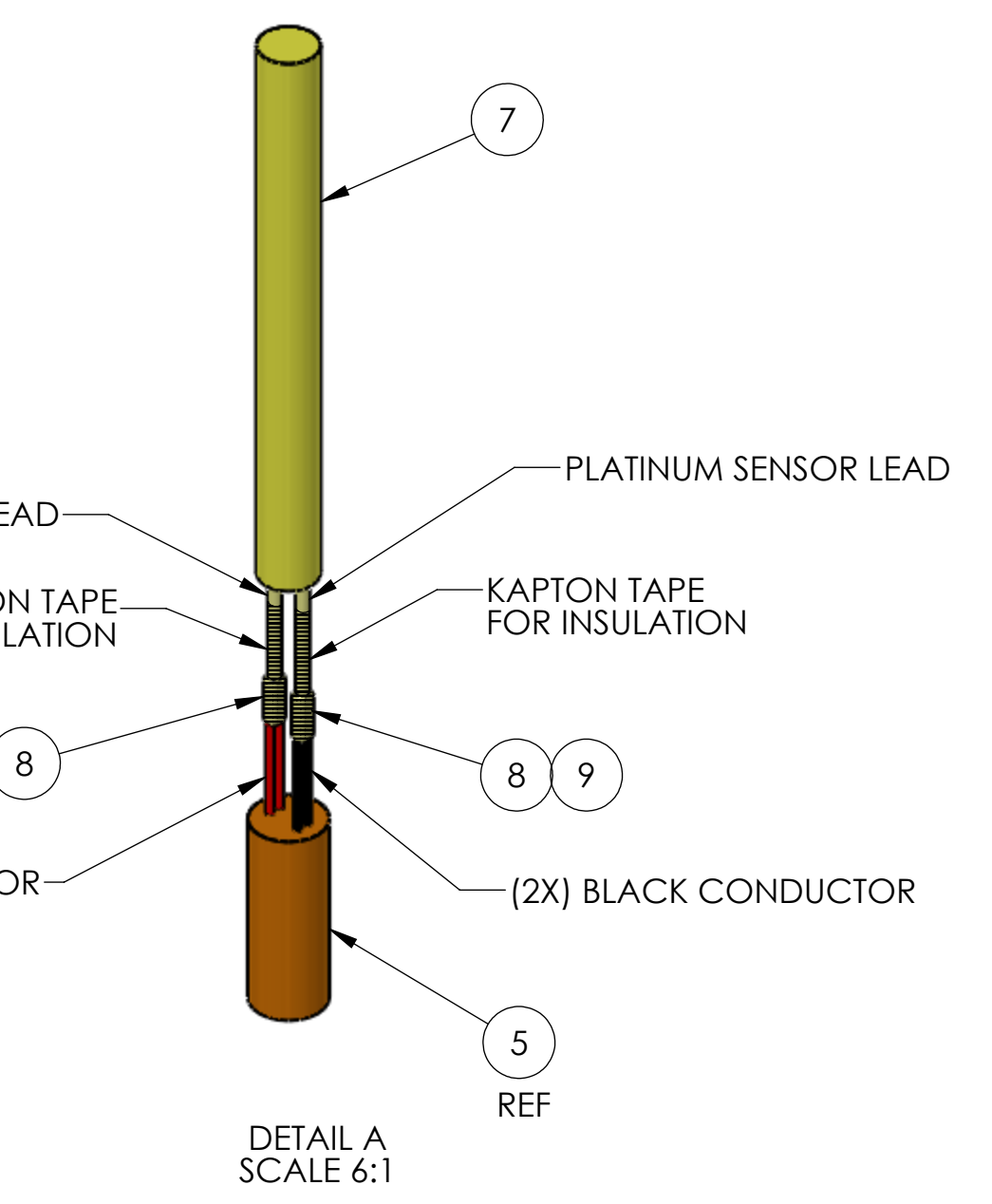
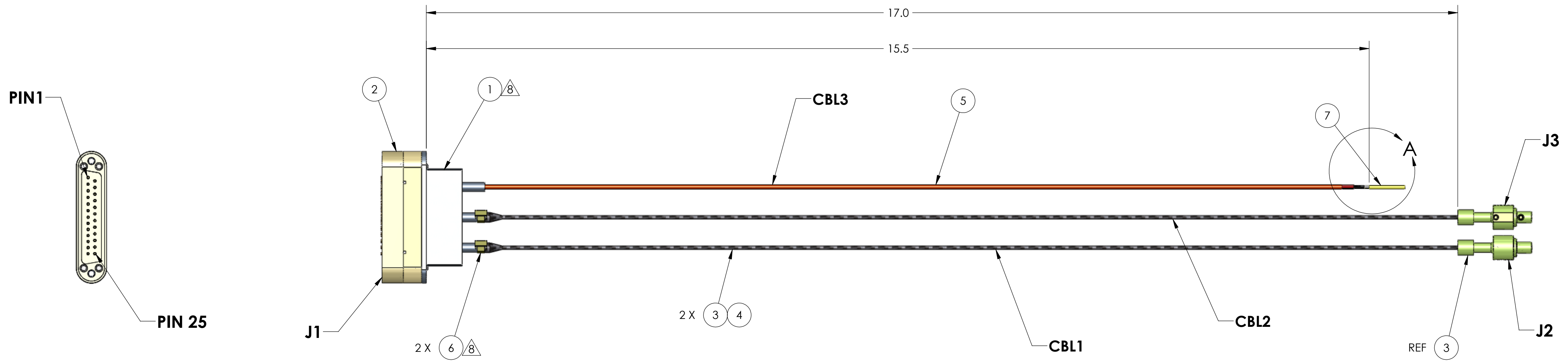


- NOTES CONTINUED:
- BAG AND TAG WITH DRAWING PART NUMBER, REVISION FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS. UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: 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.
 - BRAID OF ITEM 3 MUST BE CONNECTED TO PIN 1 AND BACK SHELL OF CONNECTOR J1 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.

REV.	DATE	DCN #	DRAWING TREE #
v1	4-AUG-2010	-	-
v2	24 AUG-2010	-	-
v3	26-AUG-2010	-	-
v4	29-SEPT-2010	-	-
v5	07-OCT-2010	-	-
v6	8-NOV-2010	E1000700	E1000699



UPPER RING HEATER CABLE CIRCUIT SUMMARY				
CABLE	TWISTED PAIR	CON. WIRE ID	FROM	TO (J1)
CBL1	-	CBL1-SHIELD	SHELL (J2)	PIN1 & SHELL
	CBL1-TP1	W1-CBL1-1	J2	PIN 8
	CBL1-TP1	W2-CBL1-2		PIN 9
	CBL1-TP2	W3-CBL1-3		PIN 10
CBL1-TP2	W4-CBL1-4	PIN 11		
CBL2	-	CBL2-SHIELD	SHELL (J3)	PIN 1 & SHELL
	CBL2-TP1	W1-CBL2-1	J3	PIN 20
	CBL2-TP1	W2-CBL2-2		PIN 21
	CBL2-TP2	W3-CBL2-3		PIN 22
CBL2-TP2	W4-CBL2-4	PIN 23		
CBL3	-	W1-RED-1	ITEM 7	PIN 12
	-	W2-RED-2		PIN 13
	-	W3-BLK-1		PIN 24
	-	W4-BLK-2		PIN 25

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	SPARE	TOTAL
9	110797	SOLDER FLUX. ACCU-GLASS	SEE MSDS	TRACE		1/2 Oz BOTTLE
8	110796	UHV SOLDER. ACCU-GLASS	SEE MSDS	TRACE		1 IN
7	1PT100KN1515CLA	CERAMIC WIRE-WOUND PLATINUM RTD ELEMENT	N/A	1		1
6	A31189	1/8IN TIE DEX MICRO BAND. WTG GROUP	STAINLESS STEEL	2		2
5	EXGG-4CU-26S	EXXGG SERIES 4 CONDUCTOR, RTD WIRE. OMEGA	COPPER	17 IN		17 IN
4	111167	PEEK BRAIDED SHIELDING, .187IN ID. ACCU-GLASS	PEEK	19 IN		19 IN
3	602258	CUSTOM CABLE ASSEMBLY. ACCU-GLASS	COPPER	19 IN		19 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 ± .10
 .XXX ±

ANGULAR ± °

MATERIAL: N/A
 FINISH: N/A μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO SUB-SYSTEM: AOS

PART NAME: Cable Assy, Upper Heater

DESIGNER: A.COLE 7/16/2010 SIZE: D DWG. NO.: D1001518 REV.: v6

DRAFTER: A.COLE 7/26/2010

CHECKER: S.O'CONNOR 07/26/2010

APPROVAL: M.JACOBSON 7/26/2010

SCALE: NONE PROJECTION:

SHEET 1 OF 1

D1001518_Cable Assy_Upper Heater_PART PDM REV: X018_DRAWING PDM REV: X037