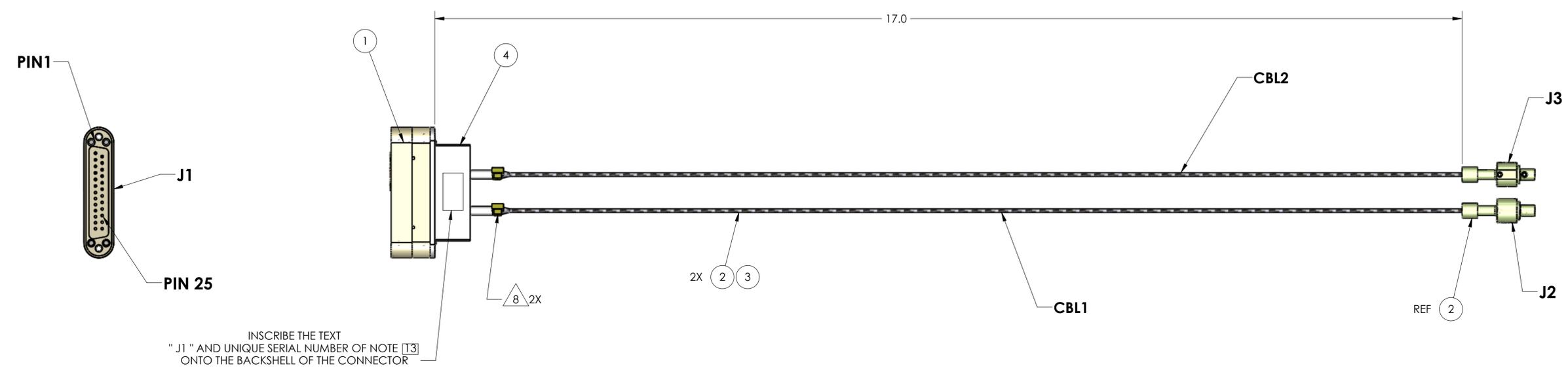
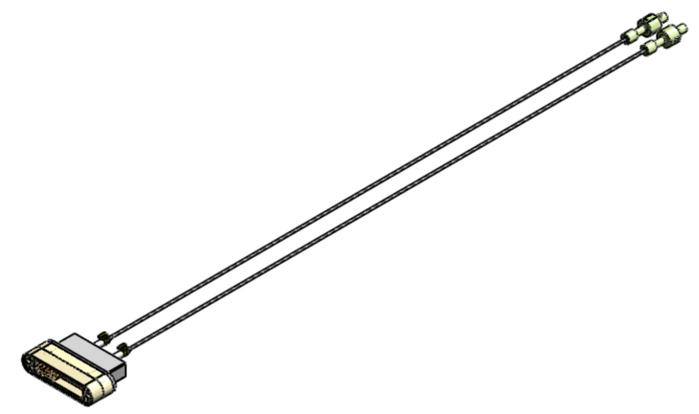


- NOTES CONTINUED:**
- BAG AND TAG WITH DRAWING PART NUMBER, REVISION FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS. UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: 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.
- LIGO HAS RESERVED A BLOCK OF FIFTEEN UNIQUE SERIAL NUMBERS FOR THIS CABLE HARNESS: S1106577 THRU S1106591

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
v7	31-OCT-2011	E1100950-v1	E1000699-v5



INSCRIBE THE TEXT " J1 " AND UNIQUE SERIAL NUMBER OF NOTE [13] ONTO THE BACKSHELL OF THE CONNECTOR

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-TP2	W2-CBL1-2		PIN 9
		W3-CBL1-3		PIN 10
	W4-CBL1-4	PIN 11		
CBL2	-	CBL2-SHIELD	SHELL (J3)	PIN 1 & SHELL
	CBL2-TP1	W1-CBL2-1	J3	PIN 20
	CBL2-TP2	W2-CBL2-2		PIN 21
		W3-CBL2-3		PIN 22
	W4-CBL2-4	PIN 23		

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	SPARE	TOTAL
4	LIGO CUSTOM	DB25 CONNECTOR 2 PORTS BACKSHELL, VENT HOLE, NO FLANGE	Alloy Steel (SS)	1		1
3	111167	PEEK BRAIDED SHIELDING, .187IN ID. ACCU-GLASS	PEEK	19 IN		19 IN
2	602258	CUSTOM CABLE ASSEMBLY. ACCU-GLASS	COPPER	19 IN		19 IN
1	LIGO CUSTOM	DB25 MALE CONNECTOR FOR UHV.	PEEK	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

PART NAME: Cable Assy, Upper Heater

DESIGNER: A. Cole 7/16/2010
 DRAFTER: A. COLE 7/26/2010
 CHECKER: S. O'CONNOR 26 SEPT 2011
 APPROVAL: A. BROOKS 26 SEPT 2011

SYSTEM: ADVANCED LIGO
 SUB-SYSTEM: AOS
 NEXT ASSY: D1001517

SIZE: D
 DWG. NO.: D1001518
 REV.: v7

SCALE: NONE PROJECTION: 1st Angle SHEET 1 OF 1

D1001518 Cable Assy, Upper Heater, PART PDM REV: X-025, DRAWING PDM REV: X-040