

FORMAL DRAWING TREE & BILL OF MATERIALS REFERENCE DOCUMENT

TITLE: **aLIGO TCS Ring Heater Parent UHV Cable Assembly**
for Production

DOCUMENT CONTROL NO.: **E1000699 -v6**
RELATED DOC. CHANGE NO.: E1200893 -v1

CONTAINING the ASSEMBLY: D1001517 -v6

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PURPOSE: This document is the formal reference for necessary revisions of each child of the stated assemblies, and the total necessary quantities for all items.

DCN	NOTES	Level	INDENTURE CHART	QUANTITY				DWG TREE REF. NO.	MATERIAL	DCC No.	NAME	TYPE	SOURCE	REV.
				REQ'd	SPARE	TOT.	UNITS							
No.														
E1100950		0			12	3	15	EA	D1000699	D1001517	aLIGO TCS RH IN-VAC CABLE ASSY	ASSY	MTS	V6
	WTG Group (PN is for qty 100)	1			10	90	100	EA		SS	PN A31189	STAINLESS STEEL CABLE TIE, 1/8 IN	ASSY	OTS
	Caltech Provided	1			1	0	1	EA		Al 6061	D1002420	CUSTOM BRACKET ADAPTER	PRT	MTS V1
	UC COMPONENTS	1			2	0	2	EA		SS	C810-N	SSHC, 8-32 UNC-2A x 5/8 LONG	HW	OTS
	UC COMPONENTS	1			2	0	2	EA		SS	WF-25-A	WASHER, FLAT, #8, .169 ID x .304 OD, .032 THK	HW	OTS
E1100950	AccuGlass PN 6-100000	1			1		1	EA		D1001518		CABLE ASSY, UPPER HEATER	ASSY	MTS V7
	WTG Group (PN is for qty 100)	2			2		2	EA		SS	PN A31189	STAINLESS STEEL CABLE TIE, 1/8 IN	PRT	OTS
	Caltech Provided	2			19		19	IN		Peek	PN 111167	BRAID, PEEK DRAWN MONOFILAMENT SHIELDING	PRT	OTS
		2			2		2	EA			PN 602258	CUSTOM SHIELDED, TWISTED WIRE HARNESS	ASSY	OTS
		3			19		19	IN		Cu/Kapton/SS	PN 112734	SHIELDED 2-TWISTED PAIR WIRE, ACCUGLASS	PRT	OTS
		3			1		1	EA		Cu/SS/Peek	PN 602257	USER END 400 CONNECTOR ASSY	PRT	OTS
		2			1		1	EA		Peek		UHV MALE DB25 CONNECTOR	PRT	MTS B
		2			1		1	EA		SS		DB25 3-PORT CONNECTOR BACKSHELL W/ VENTHOLE	PRT	MTS B
E1100950	AccuGlass PN 6-100001	1			1		1	EA		D1001519		CABLE ASSY, LOWER HEATER	ASSY	MTS V6
	OMEGA	2			27		27	IN		Cu/Fiberglass	PN EXGG-4CU-26S	Wire PN EXGG-4CU-26S, 4 CONDUCTORS	PRT	OTS
	OMEGA	3			1		1	EA		Pt / Ceramic	1PT100KN1515CLA	CERAMIC Pt RTD	PRT	OTS
		3			trc		1	IN		see MSDS	PN 110796	UHV SOLDER	PRT	OTS
		3			trc		0.5	OZ		see MSDS	PN 110797	SOLDER FLUX	PRT	OTS
	WTG Group (PN is for qty 100)	2			2		2	EA		SS	PN A31189	STAINLESS STEEL CABLE TIE, 1/8 IN	PRT	OTS
	Caltech Provided	2			30		30	IN		Peek	PN 111167	BRAID, PEEK DRAWN MONOFILAMENT SHIELDING	PRT	OTS
		2			2		2	EA			PN 602258	CUSTOM SHIELDED, TWISTED WIRE HARNESS	ASSY	OTS
		3			30		30	IN		Cu/Kapton/SS	PN 112734	SHIELDED 2-TWISTED PAIR WIRE, ACCUGLASS	PRT	OTS
		3			1		1	EA		Cu/SS/Peek	PN 602257	USER END 400 CONNECTOR ASSY	PRT	OTS
		2			1		1	EA		Peek		UHV MALE DB25 CONNECTOR	PRT	MTS B
		2			1		1	EA		SS		DB25 3-PORT CONNECTOR BACKSHELL W/ VENTHOLE	PRT	MTS B
E1100950	AccuGlass PN 6-100002	1			1		1	EA		D1001520		LOWER QUAD TERM BLOCK TO UPPER QUAD TERM BLOCK	ASSY	MTS V5
	Caltech Provided	2			1		1	EA		Al 6061	D1001755	CUSTOM BRKT, 25D CONNECTOR INTERFACE	PRT	MTS v1
	UC COMPONENTS	3			2		2	EA		SS	C810-N	SSHC, 8-32 UNC-2A x 5/8 LONG	HW	OTS
	UC COMPONENTS	3			2		2	EA		SS, Ag Plated	WF-08-A	FLAT WASHER, #8 x .169 ID x .304 OD, .032 THICK, Ag PLATED S	HW	OTS
	UC COMPONENTS	2			4		4	EA		SS	C416-N	SSHC, #4-40 UNC-2A X 1 LONG, STAINLESS	HW	OTS
	UC COMPONENTS	2			4		4	EA		SS	C414-N	SSHC, #4-40 UNC-2A X 7/8 LONG, STAINLESS	HW	OTS
		2			2		2	EA		Peek		UHV FEMALE 25D CONNECTOR	PRT	MTS B
		2			2		2	EA		SS		UHV DB25 BACKSHELL, SINGLE PORT W/ VENT	PRT	MTS B
		2			120		120	IN		Cu/Kapton/SS	PN 112738	SHIELDED 6-TWISTED PAIR WIRE, ACCUGLASS	PRT	OTS
		2			120		120	IN		Peek	111167	BRAID, PEEK DRAWN MONOFILAMENT SHIELDING	PRT	OTS
	Caltech Provided	2			8		8	EA		Ceramic	D1002345	ELECTRICAL CONNECTOR BUSHING	PRT	MTS V2
	AccuGlass PN 6-100003-A	2			4		4	EA		Peek	D1002346	ELECTRICAL CONNECTOR NUT PLATE	PRT	MTS V1
		2			1		1	EA		Peek		UHV MALE 25D CONNECTOR	PRT	MTS B
		2			1		1	EA		SS		UHV DB25 BACKSHELL, TWO PORTS W/ VENT	PRT	MTS B
E1100950	AccuGlass PN 6-100004	1			1		1	EA		D1001521		TERM BLOCK TO UPPER QUAD	ASSY	MTS V6
	Caltech Provided	2			1		1	EA		Al 6061	D1001756	CUSTOM BRKT, 25D CONNECTOR INTERFACE	PRT	MTS V2
	UC COMPONENTS	3			2		2	EA		SS	C2012	SSHC, 1/4-20 UNC-2A X 3/4 LONG	HW	OTS
E1200893-v1	UC COMPONENTS	3			4		4	EA		Al 6061	D1102074	NUT PLATE, UPPER UHV RING HEATER CABLE CONN BRKT	PRT	MTS V2
		4			2	2	4	EA		Nitronic 60	1185-4EN250	HELICOIL INSERT, 1/4-20 x .25 LONG	HW	OTS
E1200893-v1	UC COMPONENTS	3			2		2	EA		SS	D1102077	WASHER PLATE	PRT	MTS V2
		2			1		1	EA		Peek		UHV FEMALE 25D CONNECTOR	PRT	MTS B
		2			1		1	EA		SS		UHV DB25 BACKSHELL, SINGLE PORT, W/ VENT AND FLANGE	PRT	MTS B
		2			1		1	EA		Peek		UHV MALE 25D CONNECTOR	PRT	MTS B
		2			1		1	EA		SS		UHV DB25 BACKSHELL, SINGLE PORT, W/ VENT AND FLANGE	PRT	MTS B
		2			114		114	IN		Cu/Kapton/SS	PN 112143	SHIELDED 12-TWISTED PAIR WIRE, ACCUGLASS PN 112143	PRT	OTS
	Caltech Provided	2			114		114	IN		Peek	111167	BRAID, PEEK DRAWN MONOFILAMENT SHIELDING	PRT	OTS
	Caltech Provided	2			4		4	EA		Ceramic	D1002345	ELECTRICAL CONNECTOR BUSHING	PRT	MTS V2
	AccuGlass PN 6-100003-A	2			2		2	EA		Peek	D1002346	ELECTRICAL CONNECTOR NUT PLATE	PRT	MTS V1
	UC COMPONENTS	2			4		4	EA		SS	C-414-N	SSHC, #4-40 UNC-2A X 7/8 LONG	HW	OTS