



FORMAL DRAWING TREE REFERENCE DOCUMENT

TITLE: **aLIGO TCS Ring Heater Assemblies**
for Formal Design Review

DOCUMENT CONTROL NO.: **E1000295 -v5**
RELATED DOC. CHANGE NO.: E1000291 -v4

CONTAINING ASSEMBLIES: D1001838 -v3
D1001895 -v3

AUTHOR: M. JACOBSON
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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.															
E1000291		1			1	0	1	EA	E1000295	D1001838	aLIGO [TCS] UPPER SEGMENT RING HEATER ASSY	ASSY	MTS	V3	
		2			1	0	1	EA		Al, Au-coated	D1001679	ALIGO TCS UPPER MONOLITH RH SHIELD	PRT	MTS	V4
		2			1	1	2	EA		glass	D1002538	SIMPLIFIED GLASS FORMER	PRT	MTS	V2
	Caltech provided	2			19.8	19.8	39.6	FT		NiCr		NICHROME WIRE, 24 BNC [DIA .5 MM]	PRT	OTS	
		2			1	0	1	EA		Macor	D1002543	RH ELEMENT CONNECTOR, SIMPLIFIED LEFT	PRT	MTS	V3
		2			1	0	1	EA		Macor	D1002544	RH ELEMENT CONNECTOR, SIMPLIFIED RIGHT	PRT	MTS	V3
	Caltech provides raw material	2			1	1	2	EA		Altima KVS	D1002986	RH ELEMENT SPACER	PRT	MTS	V1
		2			1	1	2	EA		Macor	D1003009	RH ELEMENT SPACER WHEEL	PRT	MTS	V1
	Caltech provided	2			1	1	2	EA		Stainless Steel	T-402	SS Set Screw #4-40 x .125, vented	HW	OTS	
		2			2	2	4	EA		Cu 110 Alloy	D1001849	UPPER COPPER PLATE	PRT	MTS	V2
		2			2	2	4	EA		Cu 110 Alloy	D1001850	LOWER COPPER PLATE	PRT	MTS	V2
	Caltech provided	2			2	2	4	EA		18-8	C-210-N	SS SHCS #2-56 UNC 2A X .625 LONG	HW	OTS	
		2			2	2	4	EA		18-8, Ag Plated	N-256-A	SS HEX NUT #2-56 UNC 2B	HW	OTS	
		2			4	2	6	EA		18-8	FA-404	SS FSHCS-V #4-40 UNC 2A X .25 LONG	HW	OTS	
		2			12	6	18	IN		PFA coated Cu	CZ1105	PFA COATED 28 AWG Cu WIRE, 2x 6 IN LENGTH	PRT	OTS	
		3			2	2	4	EA		Cu, Au-coated	PN 100170	PIN CONTACT, MALE TYPE T-1, .045 ID, CRIMPED, ACCUGLASS	PRT	OTS	
E1000291		1			1	0	1	EA	E1000295	D1001895	aLIGO [TCS] LOWER SEGMENT RING HEATER ASSY	ASSY	MTS	V3	
		2			1	0	1	EA		Al, Au-coated	D1001680	ALIGO TCS UPPER MONOLITH RH SHIELD	PRT	MTS	V4
		2			1	1	2	EA		glass	D1002538	SIMPLIFIED GLASS FORMER	PRT	MTS	V2
	Caltech provided	2			19.8	19.8	39.6	FT		NiCr		NICHROME WIRE, 24 BNC [DIA .5 MM]	PRT	OTS	
		2			1	0	1	EA		Macor	D1002543	RH ELEMENT CONNECTOR, SIMPLIFIED LEFT	PRT	MTS	V3
		2			1	0	1	EA		Macor	D1002544	RH ELEMENT CONNECTOR, SIMPLIFIED RIGHT	PRT	MTS	V3
	Caltech provides raw material	2			1	0	1	EA		Altima KVS	D1002986	RH ELEMENT SPACER	PRT	MTS	V1
		2			1	1	2	EA		Macor	D1003009	RH ELEMENT SPACER WHEEL	PRT	MTS	V1
	Caltech provided	2			1	1	2	EA		Stainless Steel	T-402	SS Set Screw #4-40 x .125, vented	HW	OTS	
		2			2	2	4	EA		Cu 110 Alloy	D1001849	UPPER COPPER PLATE	PRT	MTS	V2
		2			2	2	4	EA		Cu 110 Alloy	D1001850	LOWER COPPER PLATE	PRT	MTS	V2
	Caltech provided	2			2	2	4	EA		18-8	C-210-N	SS SHCS #2-56 UNC 2A X .625 LONG	HW	OTS	
		2			2	2	4	EA		18-8, Ag Plated	N-256-A	SS HEX NUT #2-56 UNC 2B	HW	OTS	
		2			4	2	6	EA		18-8	FA-404	SS FSHCS-V #4-40 UNC 2A X .25 LONG	HW	OTS	
		2			12	6	18	IN		PFA coated Cu	CZ1105	PFA COATED 28 AWG Cu WIRE, 2x 6 IN LENGTH	PRT	OTS	
		3			2	2	4	EA		Cu, Au-coated	PN 100170	PIN CONTACT, MALE TYPE T-1, .045 ID, CRIMPED, ACCUGLASS	PRT	OTS	