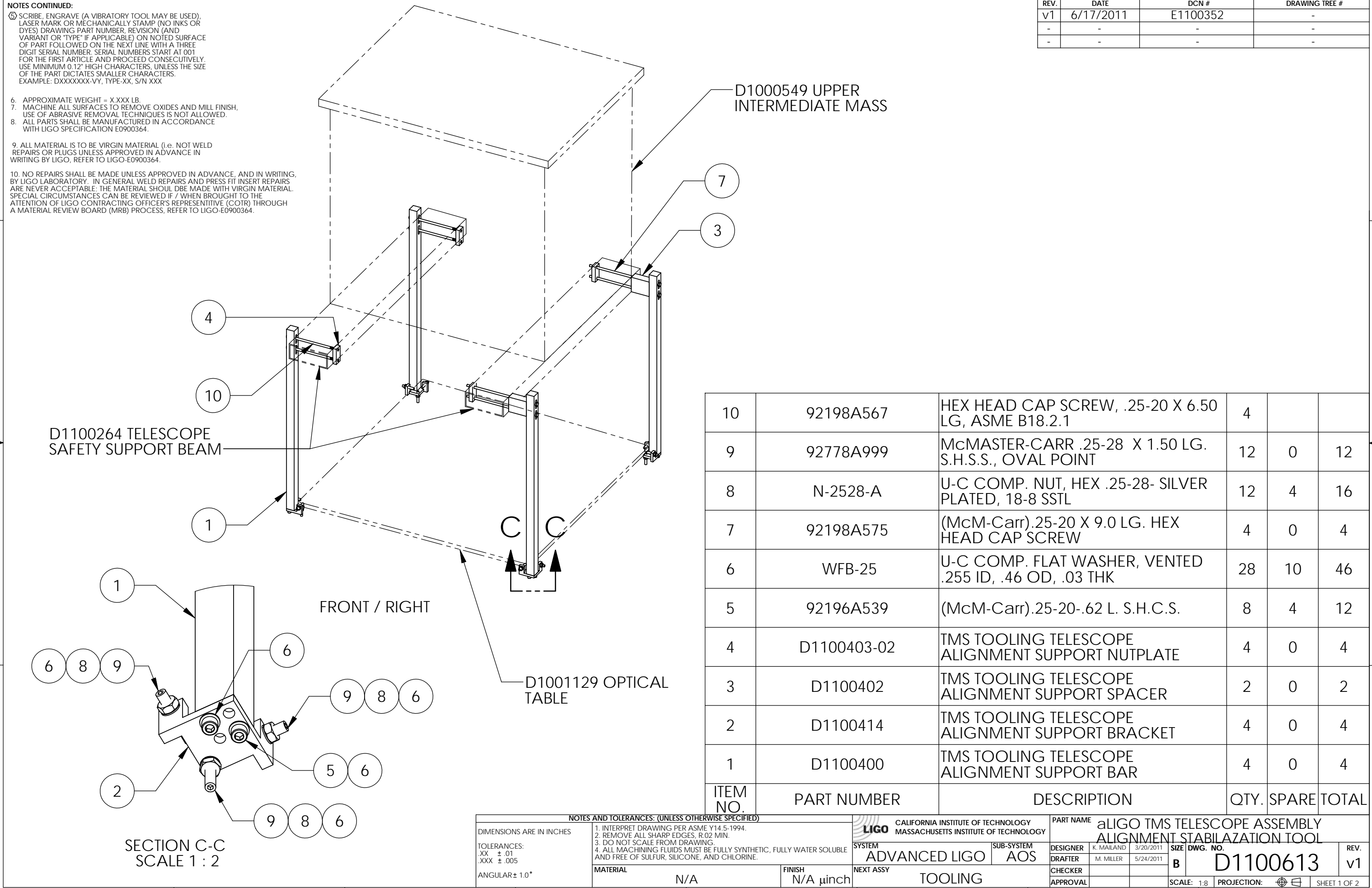


D1100613 TMS TELESCOPE ASSEMBLY ALIGNMENT SUPPORT TOOL, PART PDM REV: X-012, DRAWING PDM REV: X-013



NOTES CONTINUED:

5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART 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

6. APPROXIMATE WEIGHT = X.XXX LB.

7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

9. 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.

10. 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	6/17/2011	E1100352	-
-	-	-	-
-	-	-	-

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE	TOTAL
10	92198A567	HEX HEAD CAP SCREW, .25-20 X 6.50 LG, ASME B18.2.1	4		
9	92778A999	McMASTER-CARR .25-28 X 1.50 LG. S.H.S.S., OVAL POINT	12	0	12
8	N-2528-A	U-C COMP. NUT, HEX .25-28- SILVER PLATED, 18-8 SSTL	12	4	16
7	92198A575	(McM-Carr).25-20 X 9.0 LG. HEX HEAD CAP SCREW	4	0	4
6	WFB-25	U-C COMP. FLAT WASHER, VENTED .255 ID, .46 OD, .03 THK	28	10	46
5	92196A539	(McM-Carr).25-20-.62 L. S.H.C.S.	8	4	12
4	D1100403-02	TMS TOOLING TELESCOPE ALIGNMENT SUPPORT NUTPLATE	4	0	4
3	D1100402	TMS TOOLING TELESCOPE ALIGNMENT SUPPORT SPACER	2	0	2
2	D1100414	TMS TOOLING TELESCOPE ALIGNMENT SUPPORT BRACKET	4	0	4
1	D1100400	TMS TOOLING TELESCOPE ALIGNMENT SUPPORT BAR	4	0	4

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. 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 ± 1.0°

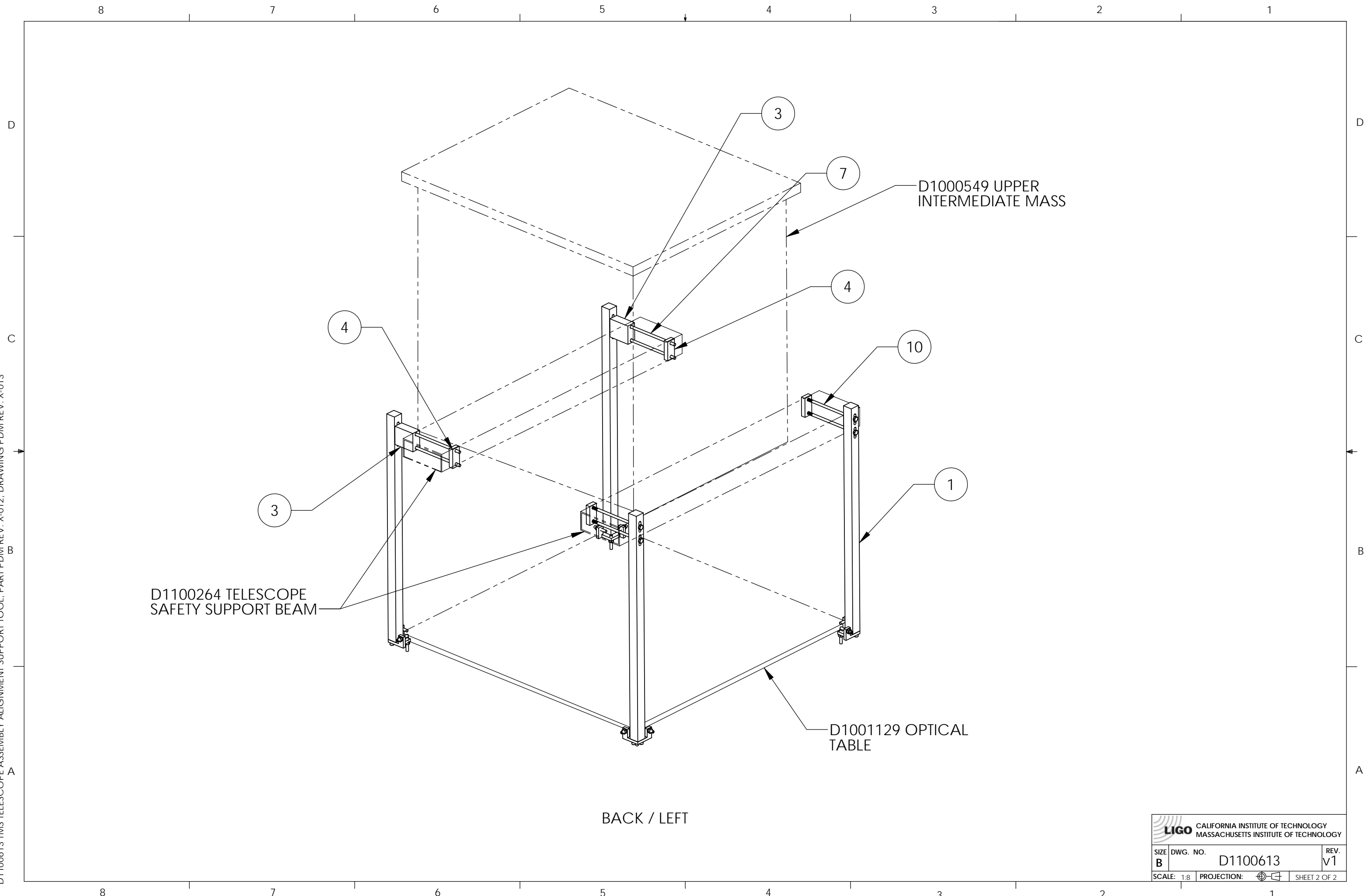
MATERIAL		FINISH		NEXT ASSY	
N/A		N/A μinch		TOOLING	

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: **aLIGO TMS TELESCOPE ASSEMBLY ALIGNMENT STABILAZATION TOOL**

DESIGNER	K. MAILAND	3/20/2011	SIZE	DWG. NO.	REV.
DRAFTER	M. MILLER	5/24/2011	B	D1100613	v1
CHECKER			SCALE: 1:8	PROJECTION:	SHEET 1 OF 2
APPROVAL					

D1100613 TMS TELESCOPE ASSEMBLY ALIGNMENT SUPPORT TOOL, PART PDM REV: X-012, DRAWING PDM REV: X-013





D1100264 TELESCOPE
SAFETY SUPPORT BEAM

D1000549 UPPER
INTERMEDIATE MASS

D1001129 OPTICAL
TABLE

BACK / LEFT

 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE B	DWG. NO. D1100613	REV. V1
SCALE: 1:8	PROJECTION: 	SHEET 2 OF 2