



**California Institute of Technology
Massachusetts Institute of Technology**

DCN No. E030398-00

Document Change Notice (DCN)

Sheet 1 of 5

DOCUMENT No. (DOC-REV-GP.ID)	TITLE	NEW REV
see list below	Reflection/Transmission Scanner (RTS) Drawings	see below

CHANGE DESCRIPTION (FROM/TO):

Initial release of drawings (should have been archived at time of fabrication in 1997/1998).

Drawings without dates were assigned 1/1/1998, though all were probably completed earlier in 1997.

N.B.: There is no assurance that these are the drawings from which the parts were made; there might be (hopefully minor) changes for the as-built versions; Due care should be taken in the use of these drawings.

CC Design #	LIGO Dwg #	Revision	Title
3201	D970625	A	Plug, Piezo Lift (RTS)
3202	D980698	A	Base Plate, Main (RTS)
3203	D970624	A	Block, Riser, Nest Plug (RTS)
3204	D970626	A	Clamp, Mirror, Bottom (RTS)
3205	D970627	A	Plug, Mirror Clamp (RTS)
3206	D970628	A	Locating Plug, "V" Groove (RTS)
3207	D970629	A	Locating Plug, Conical (RTS)
3208	D970630	A	Stop Block, Mirror (RTS)

continued

REASON FOR CHANGE: Initial release. This drawing package is for the reflection/transmission scanner (RTS) system used to measure the initial LIGO optics. It is a one-of-a-kind instrument.

ACTION: Incorporate Change Attach DCN to Drawings Other Action (specify):

DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS)	DCN DISTRIBUTION																		
<input checked="" type="checkbox"/> No hardware was affected (record change only): initial release	<table> <tr> <td>Barish</td> <td>Zucker</td> <td>Coyne</td> </tr> <tr> <td>Lazarini</td> <td>Lindquist</td> <td>Sanders</td> </tr> <tr> <td>Shoemaker</td> <td>Sibley</td> <td>Tyler</td> </tr> <tr> <td>Weiss</td> <td>Whitcomb</td> <td>Matherny</td> </tr> <tr> <td>Raab</td> <td></td> <td></td> </tr> <tr> <td>Cardenas</td> <td>Billingsley</td> <td>Zhang</td> </tr> </table>	Barish	Zucker	Coyne	Lazarini	Lindquist	Sanders	Shoemaker	Sibley	Tyler	Weiss	Whitcomb	Matherny	Raab			Cardenas	Billingsley	Zhang
Barish		Zucker	Coyne																
Lazarini		Lindquist	Sanders																
Shoemaker		Sibley	Tyler																
Weiss		Whitcomb	Matherny																
Raab																			
Cardenas	Billingsley	Zhang																	
<input type="checkbox"/> List S/Ns which comply already:																			
<input type="checkbox"/> List S/Ns to be reworked/scrapped:																			
<input type="checkbox"/> List S/N's to be built with this change:																			
<input type="checkbox"/> List S/Ns to be retested per this change:																			
<input type="checkbox"/>																			

SAFETY, COST, SCHEDULE, REQUIREMENTS IMPACT? NO YES (If YES, enter CR (CCB) or TCP (TRB) #)

APPROVALS:	DATE	OTHER APPROVALS (SPECIFY)	DATE
ORIGINATOR: Dennis Coyne	8/9/03		
TASK LEADER: GariLynn Billingsley	8/9/03		
GROUP LEADER: Dennis Coyne	8/9/03		

DCC RELEASE:



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CHANGE DESCRIPTION (FROM/TO):

CC Design #	LIGO Dwg #	Revision	Title
3209	D970631	A	Post, Mirror Stop (RTS)
3210	D970632	A	Holder, Locating Plug (RTS)
3211	D970633	A	Bracket, Lift, Round Plug (RTS)
3212	D970634	A	Bracket, Lift, "V" Plug (RTS)
3213	D970635	A	Assy, Ring, Mirror Support (RTS)
3214	D970636	A	Baseplate, Nest (RTS)
3215	D970637	A	Post, Ball #1 (RTS)
3216	D980699	A	Base Plate, X-Carriage (RTS)
3217	D970638	A	Lever Arm, C'Balance (RTS)
3218	D970639	A	Pivot Block, C'Balance (RTS)
3219	D980700	A	Base Plate, Y-Carriage (RTS)
3220	D970640	A	Screw, C'Balance, Spring (RTS)
3221	D970641	A	Holder, Micrometer Head (RTS)
3222	D980701	A	Block, Encoder Attaching, Encoder (RTS)
3223	D970642	A	Block, Bearing, Drive Screw (RTS)
3224	D970643	A	Mount, Stepper Motor (RTS)
3225	D970644	A	Strip, Encoder Attaching, Short (RTS)
3226	D970645	A	Strip, Encoder Attaching, Long (RTS)
3227	D970646	A	Bracket, Encoder Electronics (RTS)
3228	D970647	A	Block, Beamsplitter Mounting, Base (RTS)
3229	D970648	A	Plate, Opt101/Beamsplitter Block (RTS)
3230	D970649	A	Pressure Plate, Beamsplitter (RTS)
3231	D970650	A	Brkt., Retaining, Beamsplitter (RTS)
3232	D970651	A	Bracket, Camera Mounting, Base (RTS)
3233	NA		NA
3234	D970652	A	Bracket, Lens, Lower (RTS)
3235	D980702	A	Ring, Lower Lens Retaining (RTS)
3236	NA		NA
3237	D970653	A	Filter Wheel (RTS)
3238	NA		NA
3239	D980703	A	Block, Filter Retaining (RTS)
3240	D970654	A	Shaft, Filter Wheel Mounting (RTS)
3241	D980704	A	Bracket, Opt. Encoder (RTS)
3242	D970655	A	Coupling, Motor/Gear (RTS)
3243	D980705	A	Motor Mount, Filter Wheel (RTS)
3244	D970656	A	Clamp, Mirror, Top (RTS)
3245	D970657	A	Rear Plate, Enclosure (RTS)
3246	D970658	A	Side Plate, Enclosure (RTS)
3247	D970659	A	Plate, Optic Support, Enclosure (RTS)
3248	D970660	A	Support, Optic Support Plate (RTS)
3249	D970661	A	Plate, YAG Mounting (RTS)
3250	D970662	A	Plate, Lees Mtg, Lower (RTS)

continued



CHANGE DESCRIPTION (FROM/TO):

CC Design #	LIGO Dwg #	Revision	Title
3251	D970663	A	Plate, Lees Mtg, Upper (RTS)
3252	D970664	A	Angle, Front Cover Retaining (RTS)
3253	N/A		N/A
3254	D970665	A	Angle, Cover Support, Top (RTS)
3255	D970666	A	Angle, Cover Support, Vert., Rear (RTS)
3256	D970667	A	Angle, Cover Support, Vert., Front (RTS)
3257	D970668	A	Angle, Cover Support, Horiz. (RTS)
3258	D970669	A	Top Plate, Enclosure (RTS)
3259	D970670	A	Cover, Front (RTS)
3260	D970671	A	Block, Cover Retaining, Single (RTS)
3261	D970672	A	Block, Cover Retaining, Double (RTS)
3262	D970673	A	Block, Angle Frame Retaining (RTS)
3263	D980706	A	Base Plate, Main (RTS)
3264	D970674	A	Sideplate, Access Cover (RTS)
3265	D970675	A	Front/Rear Plate, Access Cover (RTS)
3266	D970676	A	Top Plate, Access Cover (RTS)
3267	D970677	A	Rod, Optic Support Plate Retaining (RTS)
3268	D970678	A	Block, Fan Mount (RTS)
3269	D970679	A	Stand-off, YAG Plate (RTS)
3270	D970680	A	Block, HeNe Laser Mount (RTS)
3271	D970681	A	Brkt., Mtg., Shutter (RTS)
3272	D970682	A	Block, Mtg., Gland Laser Polariser (RTS)
3273	D970683	A	Block, Mtg., YAG Front Lens (RTS)
3274	D970684	A	Block, Mtg., Polariser Assembly (RTS)
3275	D970685	A	Bracket, Bragg Cell Mounting (RTS)
3276	D970686	A	Bracket, Mounting, Marshal Camera (RTS)
3277	D970687	A	Block, Beam Expander, Base (RTS)
3278	D970688	A	Block, Beam Expander, Upper (RTS)
3279	D970689	A	Block, Mounting New Focus 8812/8809 (RTS)
3280	D970690	A	Block, Hexoptic Mounting (RTS)
3281	D970691	A	Bracket, Camera Mounting (RTS)
3282	N/A		N/A
3283	D970692	A	Plate, Filter Wheel Mounting (RTS)
3284	D970693	A	Plate, Lower Lens Mounting (RTS)
3285	D970694	A	Plate, Lower Mirror Mounting (RTS)
3286	D970695	A	Block, Lower Lees Stage Mtg. (RTS)
3287	D970696	A	Brkt., E-Chain Ret., X-Carriage (RTS)
3288	D970697	A	Brkt., E-Chain Ret., Y-Carriage (RTS)
3289	D970698	A	Holder, Conical Locating Plug (RTS)
3290	D970699	A	Post, Nest Support (RTS)
3291	D980707	A	Hexoptic, Housing (RTS)

continued



CHANGE DESCRIPTION (FROM/TO):

CC Design #	LIGO Dwg #	Revision	Title
3292 - 93	N/A		N/A
3294	D970700	A	Block, LPT101/BMSPLTR Mounting (RTS)
3295	D970701	A	Block, Pol./BMSPLTR Mounting (RTS)
3296	N/A		N/A
3297	D970702	A	Holder, Gimbal Mount, New Focus 8812 (RTS)
3298	D970703	A	Block, Filter Retaining (RTS)
3299	D970704	A	Ring, Lens Retaining (RTS)
3300	D970705	A	Cover Plate, LPT101 (RTS)
3301	D970706	A	PCB, LPT101 (RTS)
3302	D970707	A	Positioning Block, Quad-Cell (RTS)
3303	D970708	A	Holder, Quad-Cell (RTS)
3304	D970709	A	Plate, Quad-Cell Retaining (RTS)
3305 - 14	N/A		N/A
3315	D970710	A	Heat Sink, Motor, Upper Half (RTS)
3316	D970711	A	Heat Sink, Motor, Lower Half (RTS)
3317 - 19	N/A		N/A
3320	D970712	A	Assy., Nest (RTS)
3321 - 23	N/A		N/A
3324	D970713	A	Assy., Y-Stage (RTS)
3325	D970714	A	Assy., X-Stage (RTS)
3326 - 27	N/A		N/A
3328	D970715	A	Pin, Pivot, Mass Compensator (RTS)
3329	D970716	A	Block, Drive Nut Retaining (RTS)
3330	D970717	A	Drive Screw, X-Stage, (Long) (RTS)
3331	D970718	A	Assy., Base (RTS)
3332 - 34	N/A		N/A
3335	D970719	A	Spacer, Marshal Camera (RTS)
3336 - 44	N/A		N/A
3345	D970720	A	Assy., Cabinet (RTS)
3346 - 49	N/A		N/A
3350	D980708	A	Assy., Optics, Rear Plate (RTS)
3351	D970721	A	Assy., Optics, Side Plate (RTS)
3352	N/A		N/A
3353	D970722	A	Drive Screw, Y-Stage, (Short) (RTS)
3354	N/A		N/A
3355	D980709	A	Assy., Optics, Inside (RTS)
3356 - 78	N/A		N/A
3379	D970723	A	Assy., Stages & Outer Panels (RTS)
3380 - 83	N/A	A	N/A
3384	D970724	A	Spacer, Encoder, PCB Mounting, Short (RTS)

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CHANGE DESCRIPTION (FROM/TO):

CC Design #	LIGO Dwg #	Revision	Title
3385	D970725	A	Spacer, Encoder, PCB Mounting (RTS)
L610	D980710	A	Assembly, Upper (3D) (RTS)
L620	D980711	A	Assembly, Lower (3D) (RTS)