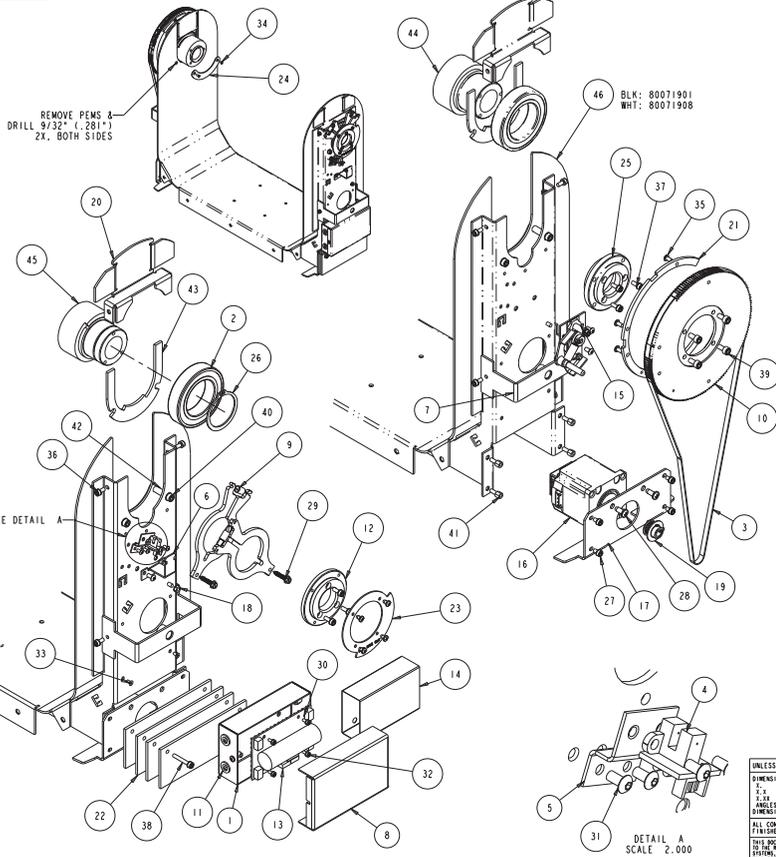


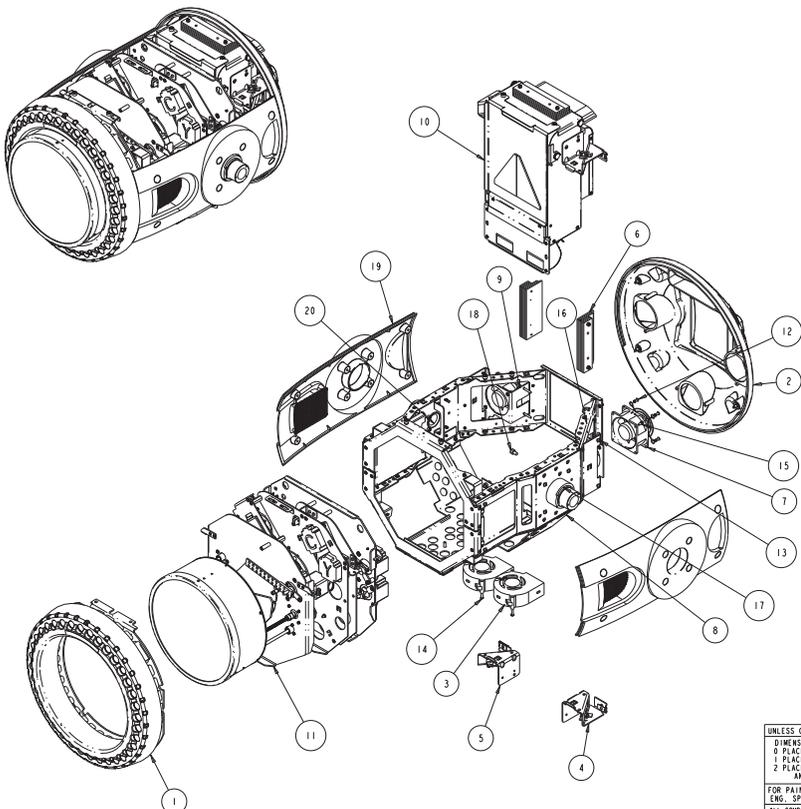
TTA003_SVC



FOR SERVICE REFERENCE ONLY

46	1	TWA093	CHARTED	YOKE, WELDED ASSY PAINTED SG
45	1	TW381	99140021	TUBE, TILT W/ RETAINING GROOVE
44	1	CAT327	99140018	TUBE, TILT CATALYST HEAD, DLT
43	2	TW517	80070464	STOP, TILT TUBE SG
42	4	DE329	90702415	STND, TILT BEARING REPAIR
41	4	STANDOFF_M4X6_M-F	90702376	STANDOFF, 6MM X 6MM L/ M/F M4 ALUM
40	4	SCREWM5AC16W-BZ	91000516	SCREW_M5 SOCKET CAP 16 BZ SEMS
39	4	SCREWM5AC10SSP	91100510	SCREW_M5 SOCKET CAP 10 SS W/PATCH
38	2	SCREWM4AC25W-BZ	91000425	SCREW_M4 SOCKET CAP 25 BZ SEMS
37	6	SCREWM4AC10W-BZ	91000410	SCREW_M4 SOCKET CAP 10 BZ SEMS
36	8	SCREWM4AC08BZ	91000408	SCREW_M4 SOCKET CAP 08 BZ SEMS
35	8	SCREWM4AB08BZ	91010408	SCREW_M4 BUTTON 08 BZ W/PATCH
34	4	SCREWM3AF08BZ	91040308	SCREW_M3 SOCKET CSNK FLAT 08 BZ W/PATCH
33	2	SCREWM3AC08BZP	91040306	SCREW_M3 SOCKET CSNK FLAT 08 BZ W/PATCH
32	4	SCREWM3AC06W-BZ	91000306	SCREW_M3 SOCKET CAP 06 BZ SEMS
31	4	SCREWM3AB08BZP	91010306	SCREW_M3 BUTTON SOCKET HD 06 BZ W/PATCH
30	6	SCREW6-19P250TL-SZ	90709123	SCREW, 6-19 PHIL PAN 1/4 SZ PLASTITE
29	2	SCREWB-18SH875ABTYPE-SS	90704040	SCREW, 88 HEX HEAD 7/8 SHEET METAL SS
28	2	SCREW10-14PP500TL-SZ	90709062	SCREW, 10 PHIL PAN 1/2 PLASTITE SZ
27	4	SCREWM4AC08W-BZ	91000406	SCREW_M4 SOCKET 08 BZ SEMS
26	1	RING, RETAINING, 175_SHAFT	90701375	RING, RETAINING, EXTERNAL, 1.618
25	1	CAT328	99360041	PULLEY ADAPTOR TILT DLT
24	2	DE193	99808431	PLT, TILT BEARING REPAIR
23	1	TW519	99808031	PLATE, TILT SENSOR SG
22	4	TW542	80070473	PLATE, COUNTERWEIGHT, ONE SG
21	1	DE131	99808030	PLATE, TILT STOP V3
20	2	CAT101	80071806	PLATE, TILT BEARING RETAINER BLK DLT
19	1	TW335	99430126	PILLOW ASSY 177 3MM HTD, LOW PROFILE
18	1	NUTM4KEP	91201204	NUT, M4 KEPS
17	2	TW526	99260504	MOUNT, TILT MOTOR, SG
16	1	TW502	INTERNAL	MOTOR, ENCODER ASSEMBLY SB/SG
15	1	CAT0A31	NA	LATCH, ASSY, TILT, DL
14	1	TW208_FORMED	90411075	INSULATOR, IGNITOR MEA1
13	1	TW426	90606007E	IGNITOR, POWER SUPPLY, 2KW, CCI, A1
12	1	TW380	99400097	HUB, TILT SENSOR SG
11	4	BUSHING312IDSNAPE	90410157	GROMMET, SNAP BUSHING 312 ID
10	1	DE132	99430131	GEAR, PULLEY, 170T TILT/PAN DRIVE V2
9	2	FA089	80360009	DAMPENER, BRAKE ASSY PAN X-SPOT/SG
8	1	TW146	99808309	COVER, IGNITOR BRACKET SG
7	2	CAT186	99260424	BRACKET, YOKE ARM COVER RETAINER DL
6	1	CAT198	99263113	BRACKET, WIRE GUIDE, RIGHT, DL
5	1	TW529	99260506	BRACKET, TILT SENSOR, SG
4	1	FS709	80040022E	BOARD, ASSY X-SPOT FLAG HOMING
3	1	TW503_TENSIONED	99360049	BECL, TITING 3MM HTD, 305 GROOVE, 6MM
2	2	BEARING_45-75MM_BALL	90719061	BEARING, 45MM, 6009 2RS
1	1	TW147	99808310	BASE, IGNITOR BRACKET SG

ITEM NO.	QTY.	FILENAME	ITEM CODE	DESCRIPTION
BILL OF MATERIALS				
UNLESS OTHERWISE SPECIFIED				
DIMENSIONAL TOLERANCES:				
FRACTIONS: 1/16, 1/8, 3/16, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 3, 3 1/4, 3 1/2, 4, 4 1/4, 4 1/2, 5, 5 1/4, 5 1/2, 6, 6 1/4, 6 1/2, 7, 7 1/4, 7 1/2, 8, 8 1/4, 8 1/2, 9, 9 1/4, 9 1/2, 10, 10 1/4, 10 1/2, 11, 11 1/4, 11 1/2, 12, 12 1/4, 12 1/2, 13, 13 1/4, 13 1/2, 14, 14 1/4, 14 1/2, 15, 15 1/4, 15 1/2, 16, 16 1/4, 16 1/2, 17, 17 1/4, 17 1/2, 18, 18 1/4, 18 1/2, 19, 19 1/4, 19 1/2, 20, 20 1/4, 20 1/2, 21, 21 1/4, 21 1/2, 22, 22 1/4, 22 1/2, 23, 23 1/4, 23 1/2, 24, 24 1/4, 24 1/2, 25, 25 1/4, 25 1/2, 26, 26 1/4, 26 1/2, 27, 27 1/4, 27 1/2, 28, 28 1/4, 28 1/2, 29, 29 1/4, 29 1/2, 30, 30 1/4, 30 1/2, 31, 31 1/4, 31 1/2, 32, 32 1/4, 32 1/2, 33, 33 1/4, 33 1/2, 34, 34 1/4, 34 1/2, 35, 35 1/4, 35 1/2, 36, 36 1/4, 36 1/2, 37, 37 1/4, 37 1/2, 38, 38 1/4, 38 1/2, 39, 39 1/4, 39 1/2, 40, 40 1/4, 40 1/2, 41, 41 1/4, 41 1/2, 42, 42 1/4, 42 1/2, 43, 43 1/4, 43 1/2, 44, 44 1/4, 44 1/2, 45, 45 1/4, 45 1/2, 46, 46 1/4, 46 1/2, 47, 47 1/4, 47 1/2, 48, 48 1/4, 48 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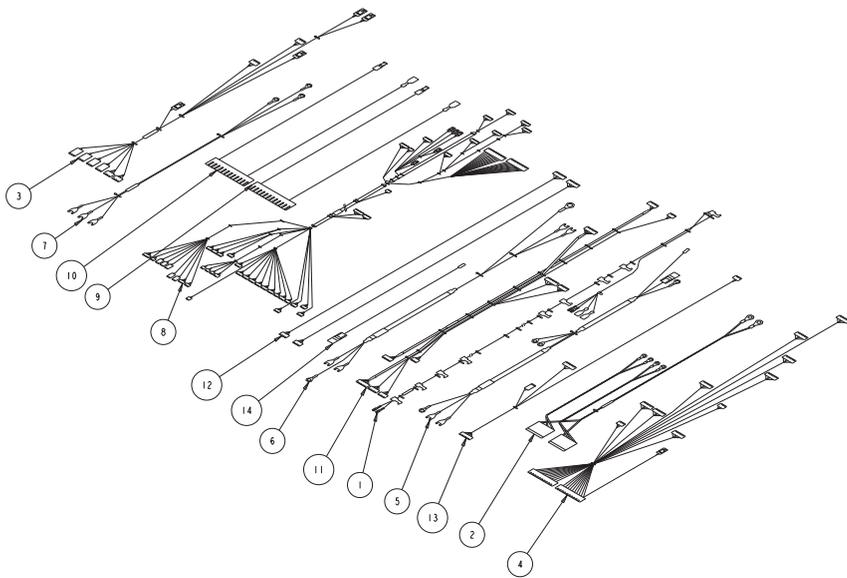
**FOR SERVICE
REFERENCE ONLY**

20	2	CAT327	99140018	TUBE, 1/11 CATALYST HEAD, DLI
19	2	TWA210	INTERNAL	SIDE COVER ASM, SG
18	10	SCREWM6AC10SS	91100610	SCREW, M6 SOCKET CAP 10 SS W/PATCH
17	6	SCREWM5AC10SSP	91100510	SCREW, M5 SOCKET CAP 10 SS W/PATCH
16	4	SCREWM4AF25BZ	91040425	SCREW, M4 SOCKET CSNK FLAT 25 BZ W/PATCH
15	4	SCREWM4AC08BZ	91000408	SCREW, M4 SOCKET CAP 08 BZ SEMS
14	4	SCREWM4AB08BZ	91010440	SCREW, M4 BUTTON 40 BZ W/PATCH
13	16	SCREW10-16PP5008TYPE-SS	90709203	SCREW, 10-16 PHIL PAN 1/2 B TYPE SS
12	8	RIVET158X460PUSH-NY	90701336	RIVET, 5/32 PUSH, .217", .256 NY BL
11	1	M8B0, OPTIC, LAYOUT2	INTERNAL	LAYOUT ASM, OPTICAL SG
10	1	TWA034	INTERNAL	HOUSING, REFLECTOR COMPLETE SG
9	2	GRILL, 80MM-FAN	99190100	GRILL, BLACK, 80MM FAN
8	1	TWA017	80460011	FRAME, ASM, OPTICAL MODULE SG
7	2	TW03	8027003BEF	FAN, ASSY, SUNON 80 X80 X38MM 74.5 CFM
6	2	TWA080	INTERNAL	COUNTERWEIGHT ASSEMBLY, HEAD SG
5	1	TW133	99260498	BRACKET, LAMP HOUSING MOUNT RH SG
4	1	TW134	99260499	BRACKET, LAMP HOUSING MOUNT LH SG
3	2	CAT121	80270021	BLOWER, ASSY 28.6 CFM, W/TACH DLI
2	1	TWA212	80450093	BEZEL, REAR, HEAD ASM SG SVC
1	1	TWA016	80450092	BEZEL ASSEMBLY, COMPLETE SG

BILL OF MATERIALS

UNLESS OTHERWISE SPECIFIED:	RELEASE DATE:	CC:	High End	2105 GRACY FARMS LANE	
DIMENSIONAL TOLERANCES:	ENG:	QA:		AUSTIN, TEXAS 78758	
0 PLACE DECIMAL: ±0.38	ME:			(512) 856-2240	
1 PLACE DECIMAL: ±0.25	MFG:	DRW:		FAX (512) 832-4128	
2 PLACE DECIMALS: ±0.13	ANGLES: ±0.5°			***** http://www.highend.com	
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W1-0592	DESCRIPTION:				
ALL COMPONENTS: MATERIALS AND FINISHES TO BE BANS COMPLIANT	HEAD, ASM SHONGUN				
FIN. SH.:	FINISH:				
W.1.0001	NA				
W.1.0001	NA				
FLATNESS:	INTERPRET DIMENSIONS PER ASME Y14.5M-1994				
THICKNESS:	THIRD ANGLE PROJECTION				
VOLUME:	DIMENSIONS ARE IN MILLIMETERS				
	SI METRIC A1				
	DO NOT SCALE				
	SCALE: 0.25x				
	SHEET: 1 OF 1				

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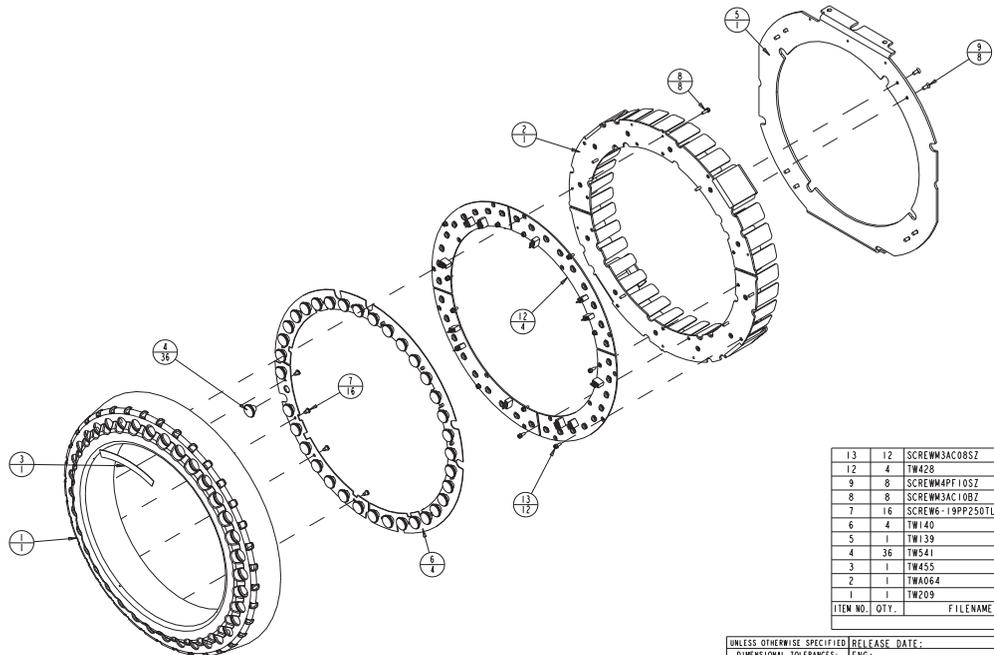
**FOR SERVICE
REFERENCE ONLY**

ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION
14	1	TW715	90409308EF	HARNES, THERMAL SWITCH JUMPER
13	1	TW707	90409304EF	HARNES, STATUS LED
12	2	TW717	90409309EF	HARNES, SERVICE SG
11	1	TW711	90409302EF	HARNES, PAN COM
10	1	TW722	90409294EF	HARNES, MPS, DC OUT 2
9	1	TW719	90409291EF	HARNES, MPS, DC OUT 1
8	1	TW718	90409312EF	HARNES, MAIN, TILT SG
7	1	TW723	90409300EF	HARNES, LPS, POWER LN
6	1	TW712	90409296EF	HARNES, LAMP WIRE LPS TO IGNITOR
5	1	TW708	90409297EF	HARNES, LAMP WIRE IGNITOR TO LAMP
4	1	TW702	90409301EF	HARNES, IRIS BULKHEAD
3	1	TW724	90409313EF	HARNES, ELECTRONIC ENCLOSURE, FAN SG
2	1	TW705	90409293EF	HARNES, DUAL MPS AC INPUT
1	1	TW709	90409290EF	HARNES, DUAL MODULE LNKN

BILL OF MATERIALS

UNLESS OTHERWISE SPECIFIED:	RELEASE DATE:	CE:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2240 FAX (512) 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG:	DA:			
0 PLACE DECIMAL = ±0.38	MEG:	DRW:			
1 PLACE DECIMAL = ±0.25					
2 PLACE DECIMALS = ±0.13					
ANGLES = ±0.5°					
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL WJ-0592	MATERIAL:				FINISH: NA
ALL COMPONENTS: MATURING AND FINISHES TO BE BANS COMPLIANT	CHARTED				
MIN. HOLE	INTERPRET DIMENSIONS PER	SI	PART NO.	DRAWING NO.	REV.
FLATNESS	ASME Y14.5M-1994	METRIC	NA	TWA008_SVC	NA
THICKNESS	THIRD ANGLE PROJECTION	A1	DO NOT SCALE	SCALE: 0.32x	SHEET: 1 OF 1
VOLUME	DIMENSIONS ARE IN MILLIMETERS				

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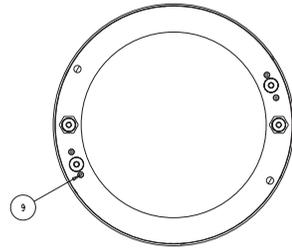
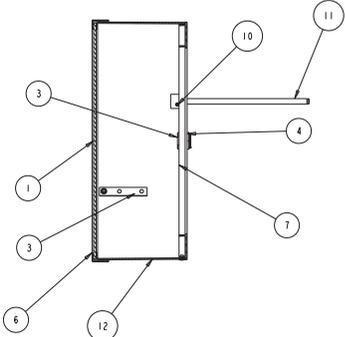
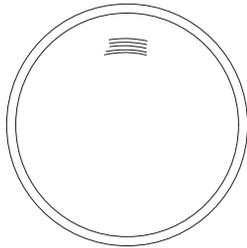
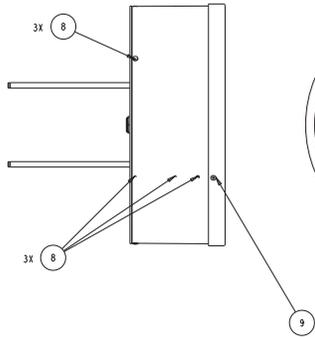
**FOR SERVICE
REFERENCE ONLY**

13	12	SCREWM3AC08SZ	25091125	SCREW, M3 SOCKET CAP 08 SZ STAINLESS
12	4	TW428	80060017EF	BOARD, LED RING, SG
9	8	SCREWM4PF10SZ	91511410	SCREW, M4 PHIL FLAT 10 SZ
8	8	SCREWM3AC10SZ	91000310	SCREW, M3 SOCKET CAP 10 BZ SEMS
7	16	SCREWM6-19P250TL-SZ	90709123	SCREW, 6-19 PHIL PAN 1/4 SZ PLASTITE
6	4	TW140	80070452	RETAINER, LENS, TRACKING RING SG
5	1	TW139	99080322	PLATE, MOUNTING, TRACKING RING SG
4	36	TW541	99090077EF	LENS, PROLIGHT LED 45 DEGREE DIFFUSION
3	1	TW455	99310464	LABEL, SUN CAUTION, LED BEZEL
2	1	TW4064	80510040	HEATSINK, ASM, TRACKING RING SG
1	1	TW209	99350091	BEZEL, HEAD, FRONT SG
ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION

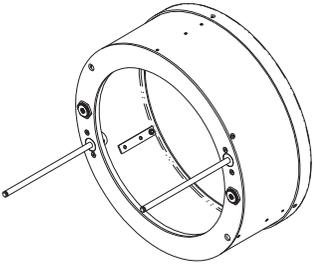
BILL OF MATERIALS

UNLESS OTHERWISE SPECIFIED:	RELEASE DATE:	CE:	High End 2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2242 FAX (512) 832-8542 ***** http://www.highend.com	LIGHTWAVE RESEARCH
DIMENSIONAL TOLERANCES:	ENG:	DA:		
1 PLACE DECIMALS ± .010	WE:	DRW:		
2 PLACE DECIMALS ± .010	MEG:			
3 PLACE DECIMALS ± .005	ANGLES ± .1°			
FOR PAINTED PARTS REFER TO:	DESCRIPTION:			
ENG. SPEC. MANUAL WJ-0592	BEZEL ASSEMBLY, COMPLETE SG			
ALL COMPONENTS, MATERIALS AND FINISHES TO BE DUNS COMPLIANT	MATERIAL:		FINISH:	
UNLESS OTHERWISE SPECIFIED	SIZE	PART NO.	DRAWING NO.	REV.
INTERPRET DIMENSIONS PER ASME Y14.5M-1994	D	80450092	TWA016_SVC	NA
DIMENSIONS ARE IN INCHES.	DO NOT SCALE DRAWING	SCALE: 0.480	SHEET: 1 OF 1	

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**FOR SERVICE
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ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION
13	6	10"	FOAM, 6mm X 17,1mm X, 8mm	99330162 FOAM, 6mm X 17,1mm x ,8mm GRAY ADHESIVE FOAM
12	1	TW122		80070445 TUBE, ZOOM, FRESNEL
11	2	TW385		99260520 SHAFT, .250 DIA., FRESNEL ZOOM
10	2	SCREW#44S06CUP-SSP		91190406 SCREW,M4 SOCKET SET, CUP, 06 SS W/PATCH
9	7	SCREW#3AF08BZ		91040308 SCREW,M3 SOCKET CSNK FLAT 08 BZ W/PATCH
8	12	RIVET#43DSP		90701091 RIVET,1/8 X .127-.187 GRIP AL BLK
7	1	TW316		80070447 RING,PUSH, FRESNEL
6	1	TW249		80070449 RETAINER, FORMED, ACRYLIC FRESNEL
5	3	TW124		80070440 PLATE,NUT, FRESNEL TUBE
4	2	NUT#8-24LPS		90703053 NUT,PANEL MOUNT 5/8-24 X 3/32 BRASS
3	2	SP096		90703052 NUT,LEAD SCREW, 1/4-16 4 START
2	2	TW384		99260524 MOUNT, SHAFT, FRESNEL
1	1	TW404		99090080 LENS,FRESNEL, 324mm (12.756") FL, ACRYLIC

ITEM NO. QTY. FILENAME PART NO. DESCRIPTION

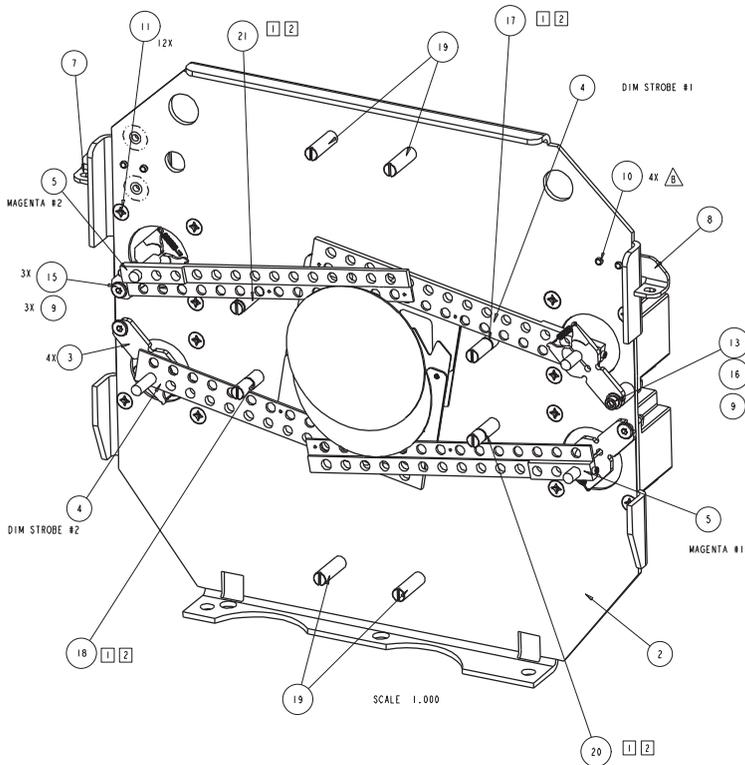
BILL OF MATERIALS

UNLESS OTHERWISE SPECIFIED:	RELEASE DATE:	CEL:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2240 FAX (512) 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG:	DA:			
0 PLACE DECIMAL = ±0.38	MEG:	DRW:			
1 PLACE DECIMAL = ±0.13	MEG:				
2 PLACE DECIMALS = ±0.13	MEG:				
ANGLES = ±0.5°					
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W1-0592	DESCRIPTION:	FRESNEL LENS TUBE ASSEMBLY			
ALL COMPONENTS: MATERIALS AND FINISHES TO BE BANS COMPLIANT	MATERIAL:				
MIN. HOLE:	FINISH:	N/A			
MIN. HOLE:	INTERPRET DIMENSIONS PER ASME Y14.5M-1994				
FLATNESS:	THIRD ANGLE PROJECTION				
THICKNESS:	DIMENSIONS ARE IN MILLIMETERS				
VOLUME:					

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PART NO. INTERNAL TW4020_SVC
DRAWING NO. TW4020_SVC
SCALE: 0.500
SHEET: 1 OF 1

TWA034



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REV.	DESCRIPTION	DATE	ENG	ECO #	APPR
1	CREATE DRAWING	3MAY07	MB		
2	REVISED WITH GROOVED STANDOFFS AND MOTOR TILT WASHERS	5JUN07	MB		
3	CHANGE TO INDIVIDUALLY GROOVED FLAG STOPS, SCREW 91000416 WAS 91000406, 2X	12JUN07	MB		
4	UPDATED DRAWING, NOTES	3JUL07	MB		
5	RELEASED DRAWING FOR INTERNAL SERVICE USE	01AUG07	KLB		KOB
6	CHANGED ITEM # FST19 SYM#18 80040024 TO 80040024EF	13AUG07	KLB	#2317	KOB
8	REMOVE FLATHEAD RIVETS AND REPLACE WITH DOME HEAD	16JUL08	PP	#2535	

NOTES:

1. ENERGIZED MOTORS ARE REQUIRED TO POSITION HOME THE FLAG ASSEMBLIES AGAINST THE CLOSED POSITION STOPS.
2. ALIGN TOP EDGE OF FLAG ASSEMBLY TO BOTTOM GROOVE EDGE FOR EACH MAGENTA AND DIM/STROBE FLAGS.

23	4	WASHER, 265-500-SS	90706020	WASHER, 1/4 FLAT SS .265x .50x .064
22	1	WASHER#-325	90706009	WASHER, #8 FLAT SS .174 x .375 x .032
21	1	TW393	85000268	STOP, MAGENTA 2
20	1	TW392	85000267	STOP, MAGENTA 1
19	4	TW373	85000271	STOP, M4, L=25.4
18	1	TW391	85000266	STOP, DIM/STROBE #2
17	1	TW390	85000265	STOP, DIM/STROBE #1
16	1	TW377	90702375	STANDOFF, BRAKE MOUNT
15	8	SCREW#M4AF6BZ	91040406	SCREW, M4 SOCKET CSNK FLAT 06 BZ W/PATCH
14	1	SCREW#M4AC30W-BZ	91000430	SCREW, M4 SOCKET CAP 3D BZ SEMS
13	2	SCREW#M4AC16W-BZ	91000416	SCREW, M4 SOCKET CAP 16 BZ SEMS
12	12	SCREW#1/2-24PF500TL-SZ	90711060	SCREW, 1/2-24 PHIL FLAT 1/2 THRD ROLL, TRI LOBE
11	3	TW378	90702373	SCREW, SHOULDER, M4, MOTOR MOUNT
10	4	RIVET#3-450MG-SS	90701388	RIVET, 1/8 DOMED, .188-.250, 18-8 STAINLESS
9	4	NUT#M4KEP	91201204	NUT, M4 KEPS
8	1	TW664	99260508	MOUNT, ANGLE, RIGHT
7	1	TW663	99260507	MOUNT, ANGLE, LEFT
6	4	_MEB0_NMB_23KN-K286-T21V_MOTOR	99270083	MOTOR, STEPPER NMB 23KN-K286-01V
5	2	TWA072	80560043	FLAG, ASSY, MAGENTA, SS
4	2	TWA096	80560040	FLAG ASSEMBLY, DIM/STROBE
3	4	TWA083	80140039	DAMPER ASSY, MTR BRAKE, HI-TEMP, 25 DIA
2	1	TW180	80070467	BULKHEAD, DIM/STROBE
1	1	FST19	80040024EF	BOARD ASSY TEMP SENSOR

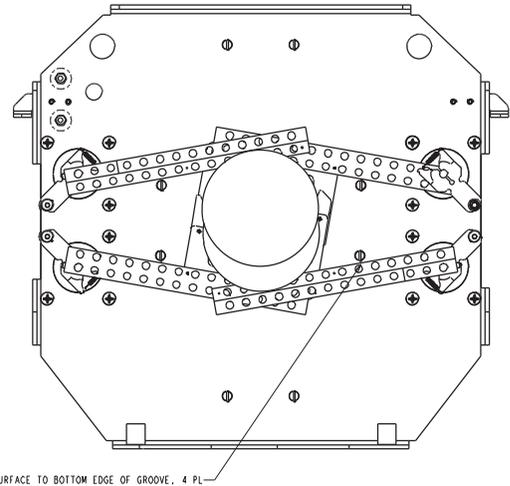
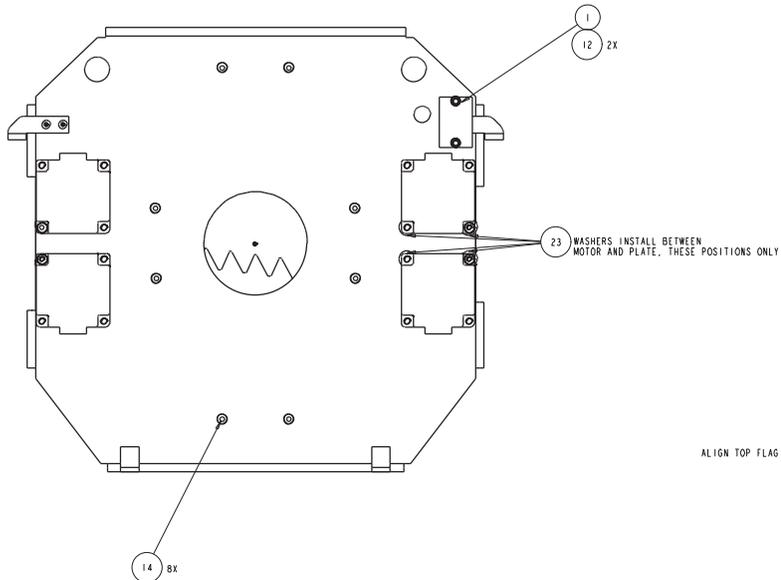
ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION
BILL OF MATERIALS				
UNLESS OTHERWISE SPECIFIED:		RELEASE DATE: 01AUG07	CE:	High End 2105 GRACY FARM, LANE
DIMENSIONAL TOLERANCES:		ENG: MIKE BELL	QA:	AUSTIN, TEXAS 78738
0 PLACE DECIMAL = ±0.38		MEG:	DRW: MIKE BELL	(512) 336-2242
1 PLACE DECIMAL = ±0.25		MEG:		FAX (512) 832-4128
2 PLACE DECIMALS = ±0.13		MEG:		***** http://www.highend.com
ANGLES = ±0.5°		FINISHES:		
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W-0582		DIM/STROBE BULKHEAD ASSEMBLY		
ALL COMPONENTS, MATERIALS AND FINISHES TO BE AS COMPLIANT		CHARTED:		
MIN. DRIFT		INTERPRET DIMENSIONS PER	SI	PART NO. 80430099
MIN. HOLE		ASME Y14.5M-1994	METRIC	DRAWING NO. TWA034
LAYERS		THIRD ANGLE PROJECTION	A1	REV. B
FINISHES		DIMENSIONS ARE IN MILLIMETERS	DO NOT SCALE	SCALE: 0.333
VOLUME				SHEET: 1 OF 2

Production Print
High End Systems

7/22/2008

Issued By: Lee Fredrickson

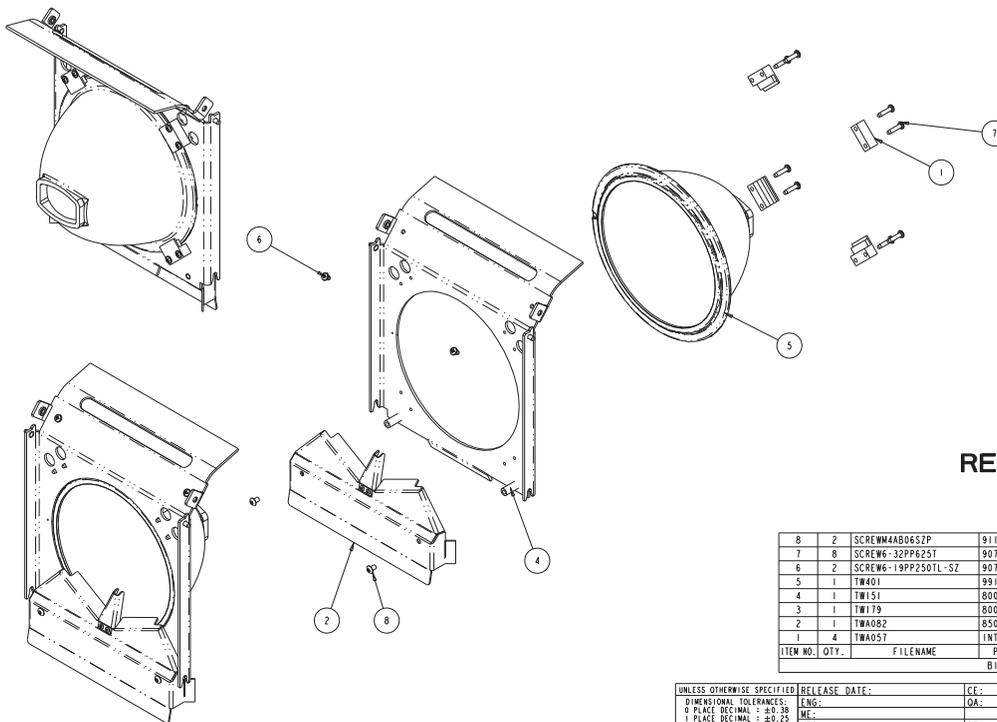
TWA034 -- Type: ASSEM



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UNLESS OTHERWISE SPECIFIED	RELEASE DATE: 01AUG07	CE:	High End	2100 GRACY FARMS LANE AUSTIN, TEXAS 78758	
DIMENSIONAL TOLERANCES:	ENG: MIKE BELL	QA:	High End	(512) 836-2242 FAX: (512) 837-4128 http://www.highend.com	
0 PLACE DECIMAL = ±0.38	ME:				
1 PLACE DECIMAL = ±0.25	MEG:	DRW: MIKE BELL			
2 PLACE DECIMALS = ±0.13					
ANGLES = ±0.5°	DESCRIPTION: D/M/STROBE BULKHEAD ASSEMBLY				
FOR PAINTED PARTS REFER TO	MATERIAL:				
ENG. SPEC. MANUAL W-0582	FINISH:				
ALL COMPONENTS, MATERIALS AND	CHARTED:				
FINISHES TO BE AS COMPLIANT	PART NO: 80430099				
MIN. SHFT	DRAWING NO: TWA034				
MIN. SHFT	REV: B				
PLATERS	INTERPRET DIMENSIONS PER				
TOLERANCES	ASME Y14.5M-1994				
VOLUME	THIRD ANGLE PROJECTION				
	DIMENSIONS ARE IN MILLIMETERS				
	SI METRIC A1				
	DO NOT SCALE				
	SCALE: 0.333				
	SHEET: 2 OF 2				



FOR SERVICE REFERENCE ONLY

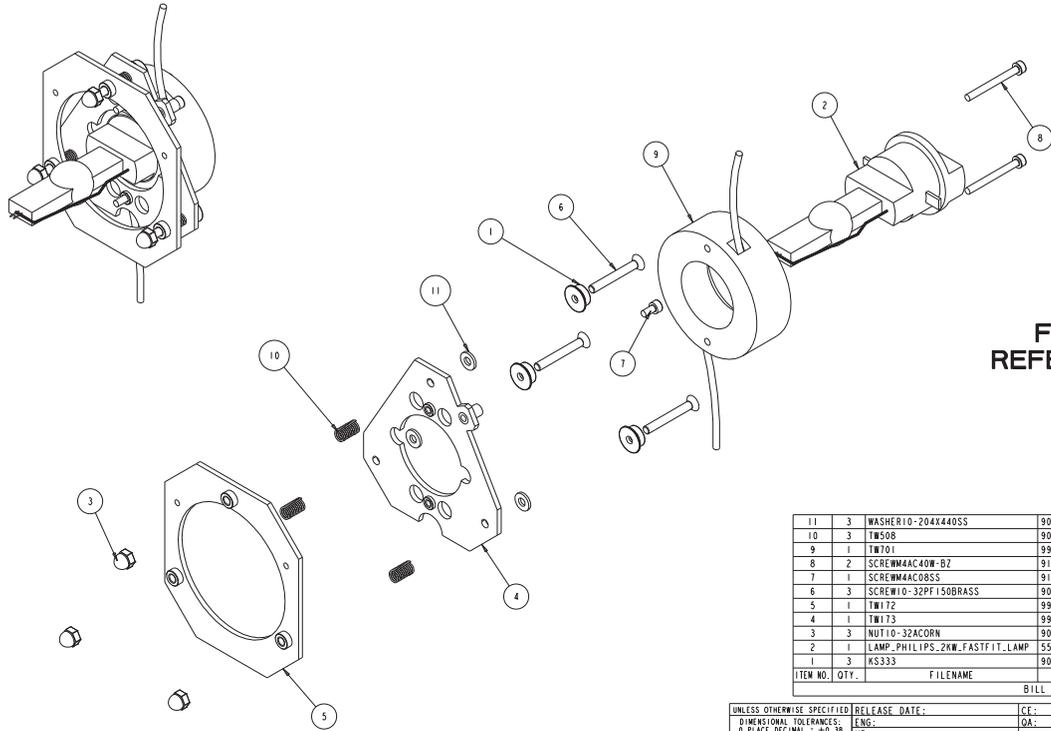
8	2	SCREW#M4B06S2P	91110406	SCREW_M4 BUTTON 06 SS W/PATCH
7	8	SCREW#-32PP625T	90709017	SCREW_6-32 PHIL PAN 5/8 TYPE 23 S2
6	2	SCREW#-19PP250TL-SZ	90709123	SCREW_6-19 PHIL PAN 1/4 SZ PLASTITE
5	1	TWA01	99130022	REFLECTOR, FACETED
4	1	TW151	80070450	PLATE, MOUNTING, REFLECTOR SG
3	1	TW179	80070458	PLATE, LIGHT BLOCK, REFLECTOR SG
2	1	TWA082	85000262	DEFLECTOR ASM, LAMP HOUSING SG
1	4	TWA057		INTERNAL CLAMP, REFLECTOR ASM SG
ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION

BILL OF MATERIALS

UNLESS OTHERWISE SPECIFIED:	RELEASE DATE:	CEL:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2244 FAX (512) 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG:	QA:			
0 PLACE DECIMAL = ±0.38	ME:	DRW:			
1 PLACE DECIMAL = ±0.25	WEG:				
2 PLACE DECIMALS = ±0.13	DESCRIPTION:				
ANGLES = ±0.5°	REFLECTOR, ASM, COMPLETE, SG				
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W-0592	MATERIAL:	FINISH:			
ALL COMPONENTS: MATERIALS AND FINISHES TO BE HANS COMPLIANT	INTERPRET DIMENSIONS PER ASME Y14.5M-1994 THIRD ANGLE PROJECTION DIMENSIONS ARE IN MILLIMETERS				
MIN. HOLE:	SI	PART NO.	INTERNAL	DRAWING NO.	TWA052_SVC
FLATNESS:	METRIC	REV.	NA		
THICKNESS:	A1	DO NOT SCALE	SCALE: 0.630	SHEET: 1 OF 1	
VOLUME:					

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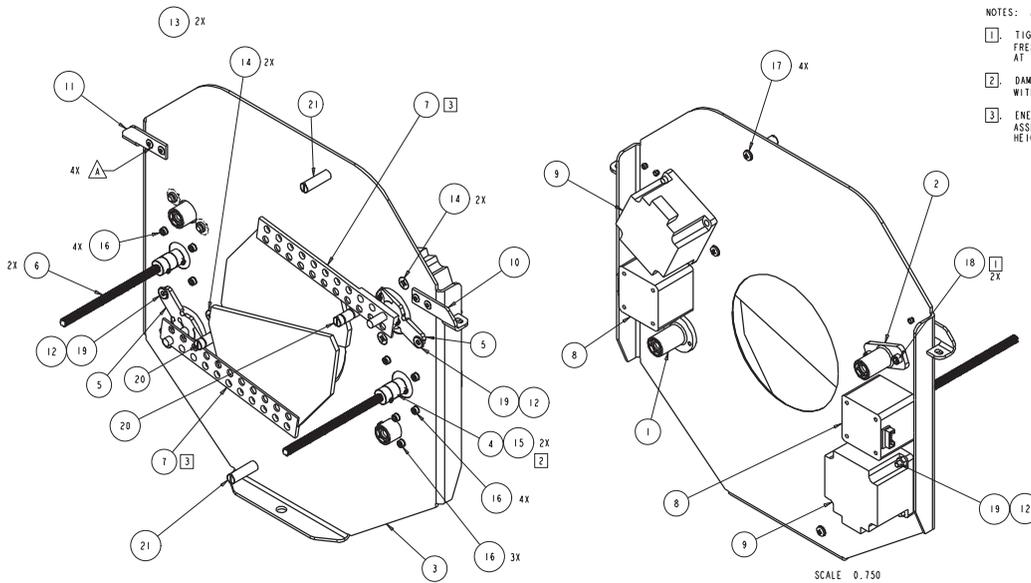


**FOR SERVICE
REFERENCE ONLY**

ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION
11	3	WASHER10-204X40SS	90706012	WASHER, FLAT #10 SS
10	3	TW508	90701210	SPRING, COMPRESSION, .30 OD x 1.0 L SS
9	1	TW701	99150025EF	SOCKET, LAMP, PG150
8	2	SCREW4A4C40W-BZ	91000440	SCREW, M4 SOCKET CAP 40 BZ SEMS
7	1	SCREW4A4C08SS	91000408	SCREW, M4 SOCKET CAP 08 SS
6	3	SCREW10-32PF150BRASS	90711062	SCREW, 10-32 PHIL FLAT 1.50 BRASS
5	1	TW172	99080302	PLATE, LAMP ADJUST, SG
4	1	TW173	99080303	PLATE, LAMP MOUNTING SG
3	3	NUT10-32ACORN	90703016	NUT, ACORN NUT 10-32 LOW CROWN SZ
2	1	LAMP_PHILIPS_2KW_FASTFIT_LAMP	55030084	LAMP, MSR GOLD 2000 SA FASTFIT
1	3	KS333	90410152	KNOB, KNURLED S-CMD-1200

UNLESS OTHERWISE SPECIFIED		RELEASE DATE:	CC:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2244 FAX (512) 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:		ENG:	QA:			
0 PLACE DECIMAL = ±0.38		MEG:	DRW:			
1 PLACE DECIMAL = ±0.25						
2 PLACE DECIMALS = ±0.13						
ANGLES = ±0.5°						
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W1-0592		MATERIAL:		FINISH:		
ALL COMPONENTS: MATERIALS AND FINISHES TO BE BANS COMPLIANT		CHARTEED		NA		
MIN. HOLE		INTERPRET DIMENSIONS PER	SI	PART NO.	DRAWING NO.	REV.
MIN. HOLE		ASME Y14.5M-1994	METRIC	N/A	TWA055_SVC	NA
FLATNESS		THIRD ANGLE PROJECTION				
TOLERANCES		DIMENSIONS ARE IN MILLIMETERS		DO NOT SCALE	SCALE: 1:000	SHEET: 1 OF 1

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NOTES: APPLICABLE TO THIS PAGE ONLY

1. TIGHTEN 2 EACH SCREWS ONLY AFTER FRESNEL TUBE ASSEMBLY HAS BEEN INSTALLED AT THE NEXT HIGHER ASSEMBLY.
2. DAMPER RECEPTACLE TO BE FULLY ENGAGED TO MOTOR SHAFT WITH TOP OF MOTOR SHAFT FIRMLY AGAINST DAMPER.
3. ENERGIZED MOTOR REQUIRED TO HOME FLAG ASSEMBLY AGAINST THE CLOSED STOP. SET FLAG HEIGHT AS SHOWN IN AUX VIEWS, PAGE 1

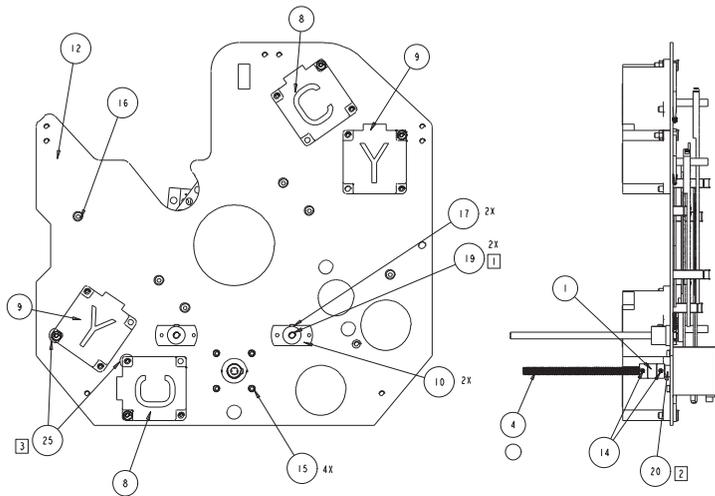
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UNLESS OTHERWISE SPECIFIED	RELEASE DATE: 20AUG07	CE:	High End	2100 GRACY FARMS LANE AUSTIN, TEXAS 78758	 Lightwave RESEARCH
DIMENSIONAL TOLERANCES:	ENG: MIKE BELL	DA:	 High End	(512) 836-2242	
0 PLACE DECIMAL = ±0.38	ME:			FAX: (512) 837-4128	http://www.highend.com
1 PLACE DECIMAL = ±0.25	MFG:	DRW: MIKE BELL			
2 PLACE DECIMALS = ±0.13					
MILES = ±0.5"	DESCRIPTION:				
	FOR PAINTED PARTS REFER TO				
	ENG. SPEC. MANUAL W-0582				
	MATERIAL:				
	ALL COMPONENTS, MATERIALS AND FINISHES TO BE AS COMPLIANT				
	FINISH:				
	CHARTED:				
	W/1. SHAF				
	W/1. SHAF				
	FLATNESS				
	THICKNESS				
	VOLUME				
	DESCRIPTION:				
	R11, SOFT EDGE BULKHEAD SHOWGUN SVC				
	INTERPRET DIMENSIONS PER				
	ASME Y14.5M-1994				
	THIRD ANGLE PROJECTION				
	DIMENSIONS ARE IN MILLIMETERS				
	SI METRIC				
	A1				
	PART NO:	80430100			
	DO NOT SCALE				
	SCALE: 0.500				
	DRAWING NO:	TWA058			
	SHEET: 2 OF 3				
	REV:	A			

TWA076



NOTES: APPLICABLE TO VIEWS ON THIS SHEET ONLY

1. SHAFT TO BE FLUSH WITH BACK SIDE OF MOUNT, 2 PLACES
2. SPACER TO BE INSTALLED BETWEEN COUPLER AND MOTOR HOUSING.
3. INSERT WASHER BETWEEN MOTOR AND PLATE, 2 POSITIONS ONLY.

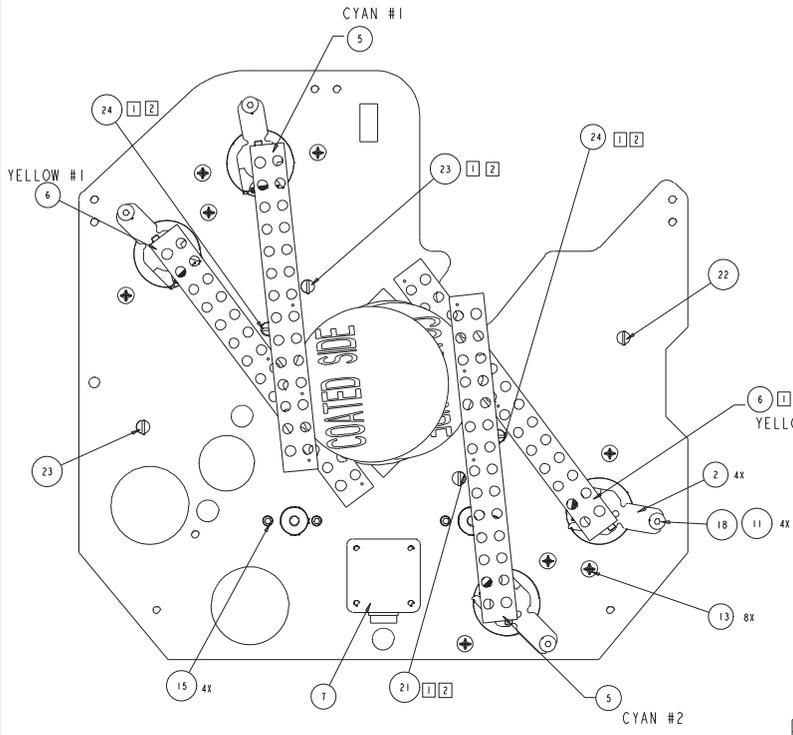
REV	DESCRIPTION	DATE	ENG	ECO #	APPR
1	CREATE DRAWING	BARROD	NB		
2	UPDATE ASSEMBLY WITH GROOVED STOPS, SPACER WASHER, ITEM #S	31MAY07	NB		
3	ADD DIFFUSION GLASS, MOTOR TILT WASHERS	2JUN07	NB		
4	ADD SPACER(90702216) TO MOTOR/COUPLING ASSY	7JUN07	NB		
5	SCREW 91040408 WAS 91040406; ADD LOCTITE THREADLOCKER TO M4 SET SCREWS; TW994 WAS TW388, 1 EACH, ADD KRITOX	12JUN07	NB		
6	DIFFUSION GLASS TO 80530095; SET SCREW 91100406 WAS 91130406, 80071904 WAS QTY 3, 91040408 WAS QTY 7; ELIMINATE LOCTITE 242 & KRITOX; REPOSITION WASHER ON MOTOR	3JUL07	NB		
-	PRODUCTION RELEASE	27AUG07	KLB		KDB

ITEM NO.	QTY.	FILENAME	PART NO.	REV	DESCRIPTION
25	2	WASHER_265_500_SS	90706020	-	WASHER, 1/4 FLAT .265 x .50 x .064 SS
24	2	TW372	80071904	C	STOP, M4, L=16, 26 L=641
23	2	TW374	80071906	C	STOP, M4, L=31, 7511, 251
22	1	TW373	85000271	B	STOP, M4, L=25.4
21	1	TW394	85000269	-	STOP, CYAN #2 SG
20	1	SPACER_5-3-10_5MM_NY	90702216	-	SPACER, 5.3mm ID x 10.0 x 5.0 LG, NYLON
19	2	TW365	99260513	A	SHAFT, ACHROMAT ZOOM, A1
18	4	TW378	90702373	-	SCREW, SHOULDER, M4, MOTOR MOUNT
17	2	SCREW_M4_CONE_POINT_06_SS_PATCH	91190406	-	SCREW, M4 SOCKET SET, CUP, 06 SS PATCH
16	6	SCREW_M4_08BZ	91040408	-	SCREW, M4 SOCKET CSW FLAT 08 BZ NYTEMP
15	8	SCREW_M3_08BZ	91000306	-	SCREW, M3 SOCKET CAP 06 BZ SENS
14	2	SCREW_8-32_250FBZ	90707091	-	SCREW, 8-32 SOCKET SET 1/4 BZ FLAT PT
13	8	SCREW_12-24_L5_FLTHD_PHIL	90711060	-	SCREW, 12-24 PHIL FLTHD, THRD ROLL, TRI LOBE
12	1	TW658	80070465	E	PLATE, MOUNT, YELLOW/CYAN
11	4	NUT_M4KEP	91201204	-	NUT, M4 KEPS
10	2	TW317	80070448	-	MOUNT, SHAFT ZOOM, A1
9	2	M80_YELLOW_SIZE23MOTOR	99270083	B	MOTOR, STEPPER NMB 23KN-K286-121V
8	2	M80_CYAN_SIZE23MOTOR	99270083	B	MOTOR, STEPPER NMB 23KN-K286-121V
7	1	M108_01	99270075	-	MOTOR, STEP 2PH MET S17 11.5mm ALNICO NMB
6	2	TWA088	80560044	B	FLAG ASSY, YELLOW
5	2	TWA087	80560042	B	FLAG ASSY, CYAN
4	1	TW341	90721013	A	DRIVE SCREW, FRESNEL LENS, 7.11 L, 2801 LG, SHANK
3	1	TWA080	80530095	-	DIFFUSION GLASS W/ADHESIVE PADS
2	4	TWA083	80140039	A	DAMPER ASSY, MTR BRAKE, HI-TEMP, .25 DIA
1	1	SP191	90701149	C	COUPLER, .88 SLIM-LINE, VIBRATION CONTROL
		FILENAME	PART NO.	REV	DESCRIPTION
		BILL OF MATERIALS			

UNLESS OTHERWISE SPECIFIED	RELEASE DATE: 27AUG07	CC:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 15121 836-2242 FAX 15121 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG: MIKE BELL	QA:			
0 PLACE DECIMAL : ±0.38	ME:				
1 PLACE DECIMAL : ±0.25	MFG:	DRW: MIKE BELL			
2 PLACE DECIMALS : ±0.13					
ANGLES : ±0.5°					
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W1-0592	MODULE, ASSY, COLOR, YELLOW/CYAN, SG SVC				
ALL COMPONENTS, MATERIALS AND FINISHES TO BE RNS COMPLIANT	MATERIALS: CHARTED				
FIN. DRWT	INTERPRET DIMENSIONS PER ASME Y14.5M-1994	SI METRIC	PART NO.	80430101	DRAWING NO.
FIN. DRWT	THIRD ANGLE PROJECTION	A1	SCALE:	1:000	TWA076
FIN. DRWT	DIMENSIONS ARE IN MILLIMETERS		DO NOT SCALE		SHEET: 1 OF 3
FIN. DRWT					
VOLUME					

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TWA076

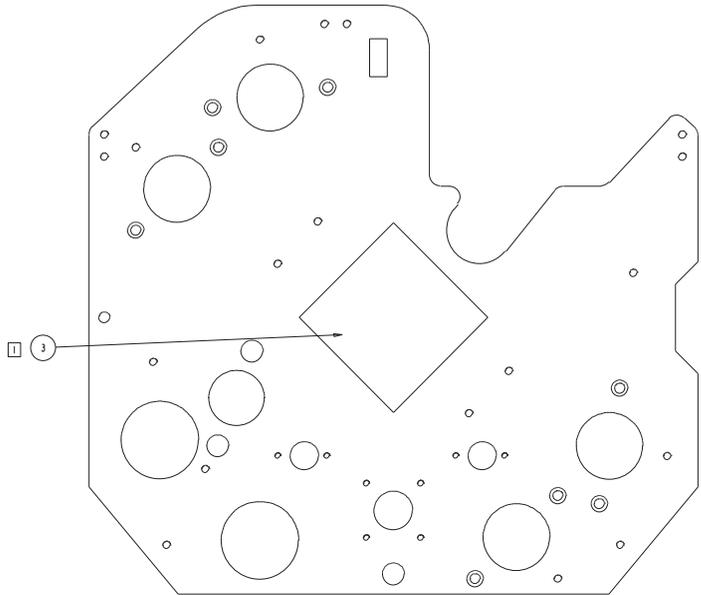


- NOTES: APPLICABLE TO VIEWS ON THIS SHEET ONLY
- [1] ENERGIZED MOTORS ARE REQUIRED TO PRODUCTION HOME FLAG ASSEMBLIES AGAINST THE CLOSED STOP.
 - [2] ALIGN TOP EDGE OF FLAG ASSEMBLY TO BOTTOM GROOVE EDGE OF STOP FOR EACH FLAG

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UNLESS OTHERWISE SPECIFIED	RELEASE DATE: 27AUG07	CC:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78759 15123 836-2242 FAX 15123 837-4126 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG: MIKE BELL	QA:			
0 PLACE DECIMAL : ±0.38	ME:				
1 PLACE DECIMAL : ±0.25	MFG:				
2 PLACE DECIMALS : ±0.13	DRW: MIKE BELL				
ANGLES : ±0.5°					
DESCRIPTION:	MODULE, ASSY, COLOR, YELLOW/CYAN, SG SVC				
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W1-0592	MATERIAL:		FINISH:		
	CHARTED		N/A		
ALL COMPONENTS, MATERIALS AND FINISHES TO BE AMS COMPLIANT	INTERPRET DIMENSIONS PER ASME Y14.5M-1994		PART NO. 80430101		DRAWING NO. TWA076
	THIRD ANGLE PROJECTION		DO NOT SCALE		SCALE: 0.333
	DIMENSIONS ARE IN MILLIMETERS		SI METRIC A1		SHEET: 2 OF 3

TWA076



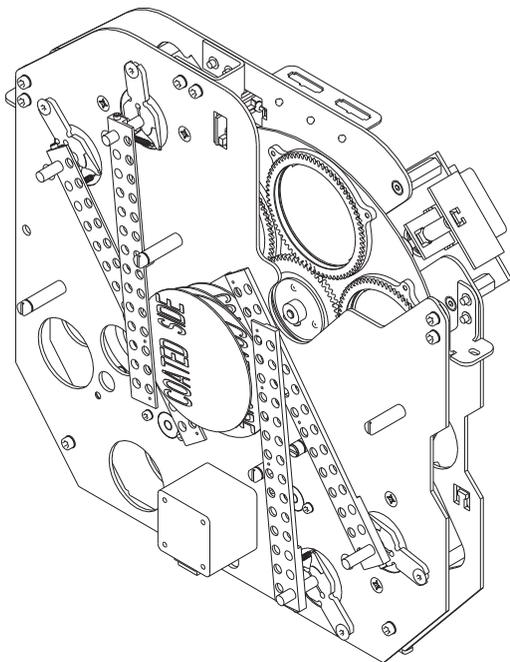
NOTES: APPLICABLE TO VIEWS THIS PAGE ONLY

- 1. REMOVE PROTECTIVE LINER FROM THE 4 ADHESIVE PADS TO BOND THE DIFFUSION GLASS TO MOUNT PLATE. CENTER OVER APERTURE.

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UNLESS OTHERWISE SPECIFIED	RELEASE DATE: 27AUG07	CC:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758	 LIGHTWAVE RESEARCH
DIMENSIONAL TOLERANCES:	ENG: MIKE BELL	QA:		15123 836-2242 FAX: 15123 837-4128 http://www.highend.com	
0 PLACE DECIMAL : ±0.38	ME:	DRW: MIKE BELL			
1 PLACE DECIMAL : ±0.25	MFG:				
2 PLACE DECIMALS : ±0.13	DESCRIPTION:	MODULE, ASSY, COLOR, YELLOW/CYAN, SG SVC			
ANGLES : ±0.5°	FOR PAINTED PARTS REFER TO	FINISH:			
	ENG. SPEC. MANUAL W1-0592	N/A			
	ALL COMPONENTS, MATERIALS AND FINISHES TO BE RUSK COMPLIANT	MATERIALS:			
		CHARTED			
		INTERPRET DIMENSIONS PER			
		ASME Y14.5M-1994			
		THIRD ANGLE PROJECTION			
		DIMENSIONS ARE IN MILLIMETERS			
		SI PART NO. 80430101 DRAWING NO. TWA076 REV. - METRIC A1 DO NOT SCALE SCALE: 1:000 SHEET: 3 OF 3			

TWA077_SVC



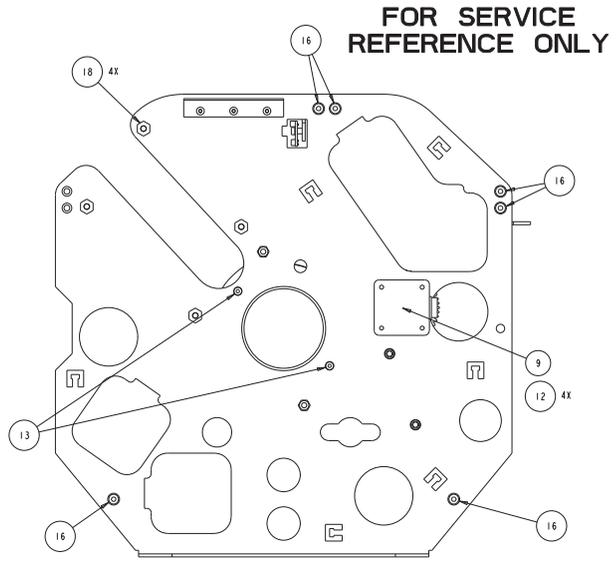
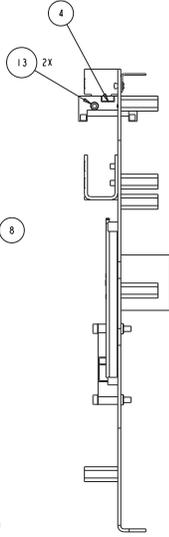
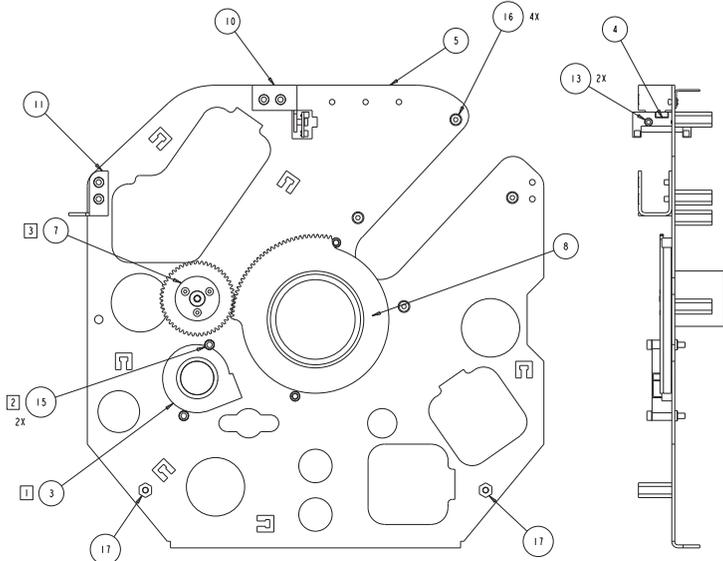
**FOR SERVICE
REFERENCE ONLY**

19	AR	GREASE, KRYTOX	99250004	GREASE, KRYTOX
18	I	TWA092	80560047	WHEEL ASSY, W/LITHO & MOTORS SG SVC
17	4	TW368	90702370	STANDOFF, M4, F/F, L:1.115
16	2	TW369	80070478	STANDOFF, M4, F/F, L:1.000
15	16	SCREWM4AF08Z	91040408	SCREW, M4 SOCKET CSNK FLAT 08 BZ W/PATCH
14	2	SCREWM4K25M-BZ	91000425	SCREW, M4 SOCKET CAP 25 BZ SEMS
13	8	SCREWM4K08BZ	91000408	SCREW, M4 SOCKET CAP 08 BZ SEMS
12	2	SCREWM3AF06BZP	91040306	SCREW, M3 SOCKET CSNK FLAT 06 BZ W/PATCH
11	6	SCREWM3AC06W-BZ	91000306	SCREW, M3 SOCKET CAP 06 BZ SEMS
10	2	TW665	99263121	MOUNT, SUPPORT, IRIS BULKHEAD
9	I	TW662	99263120	MOUNT, SENSOR PCB, ROT GOBO
8	I	MR108_01	99270075	MOTOR, STEP 2PH MET S17 11.5mm ALNICO NMB
7	I	TWA076	80430101	MODULE ASSY, COLOR, YELLOW/CYAN, SG SVC
6	I	TWA079	80160065	LENS ASSY, ACHROMAT, SG SVC
5	I	WE80_SAHM_DRIVERING	99290033	IRIS, HI TEMP, 75MM ID, 18 LEAF, GEARDR IA
4	I	FS405B	99430067	GEAR, ASSY DRIVE 52 TOOTH OVERMOLD
3	I	TW659	80070471	BULKHEAD, IRIS
2	I	CT413	80040021EF	BOARD, SENSOR MINIATURE ASSY COLOR PRO HX
1	I	BLOWER_DELTA_BFB0524HH	80270041EF	BLOWER ASSY, 24 V 51mm, GOBO
ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION
				BILL OF MATERIALS

UNLESS OTHERWISE SPECIFIED	RELEASE DATE:	CE:	High End	2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2240 FAX (512) 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG:	DA:			
0 PLACE DECIMAL = ±0.38	MEG:	DRW:			
1 PLACE DECIMAL = ±0.25	MEG:				
2 PLACE DECIMALS = ±0.13	MEG:				
ANGLES = ±0.5°	DESCRIPTION:				
FOR PAINTED PARTS REFER TO	BULKHEAD ASSY, IRIS SG SVC				
ENG. SPEC. MANUAL W-0592	MATERIAL:				
ALL COMPONENTS, MATERIALS AND FINISHES TO BE HANS COMPLIANT	FINISH:				
MIN. HOLE	INTERPRET DIMENSIONS PER	SI	PART NO.	DRAWING NO.	
MIN. HOLE	ASME Y14.5M-1994	METRIC	80430102	TWA077_SVC	
FLATTEN	THIRD ANGLE PROJECTION	AS			
THICKNESS	DIMENSIONS ARE IN MILLIMETERS		DO NOT SCALE	SCALE: 0.333	
VOLUME				SHEET: 1 OF 3	

DISPABLE LEADY NOT CCX

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NOTES: APPLICABLE TO VIEWS ON THIS SHEET ONLY

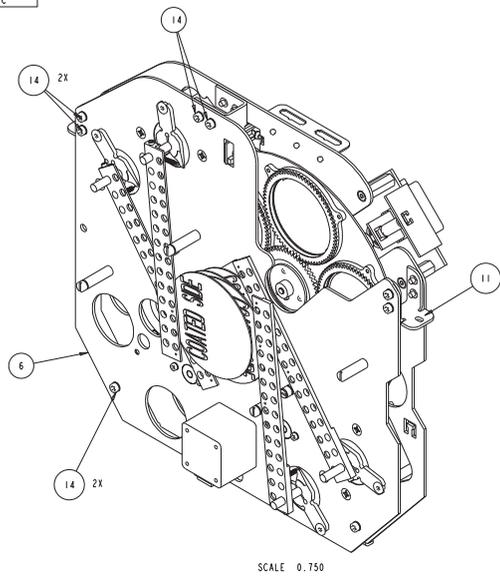
- 1. VERIFY WIRING ON BLOWER MOUNT FACE IS ENGAGED UNDER WIRE RETENTION TAB.
- 2. MAX TORQUE ON MOUNT SCREWS 6 IN POUNDS.
- 3. SET TOP FACE OF OVERMOLDED GEAR ASSEMBLY FLUSH WITH TOP FACE OF IRIS GEAR.

COLOR ASSEMBLY TWA076, GOBO ASSEMBLY TWA092, AND LENS ASSEMBLY TWA079 DELETED THIS PAGE FOR CLARITY

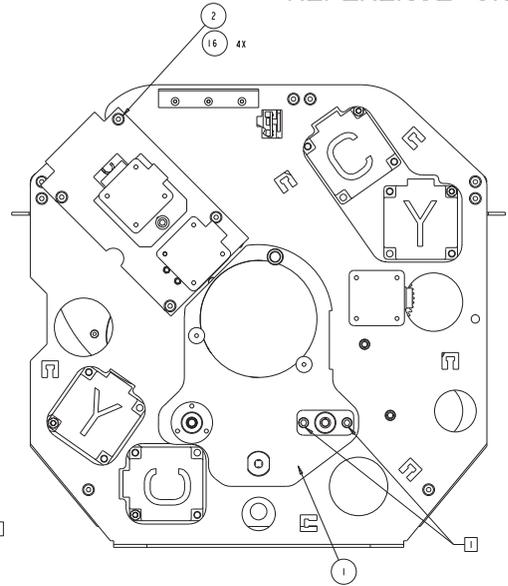
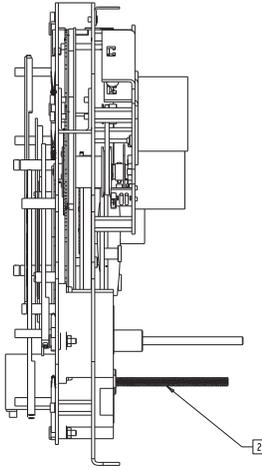
DISPENSABLE COPY NOTICE:
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UNLESS OTHERWISE SPECIFIED	RELEASE DATE:	CC:	High End 2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2240 FAX (512) 832-4128 http://www.highend.com	
DIMENSIONAL TOLERANCES:	ENG:	DA:		
0 PLACE DECIMAL: ±0.38	MEG:	DRW:		
1 PLACE DECIMAL: ±0.25	MEG:			
2 PLACE DECIMALS: ±0.13	ANGLES: ±0.5°			
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL W1-0592	DESCRIPTION: BULKHEAD ASSY, IRIS SG SVC	MATERIAL:	FINISH: N/A	
ALL COMPONENTS: MATURING AND FINISHES TO BE BENS COMPLIANT	INTERPRET DIMENSIONS PER ASME Y14.5M-1994	THIRD ANGLE PROJECTION		
W.T. UNIT: INCHES	SI METRIC A1		PART NO. 80430102	DRAWING NO. TWA077_SVC
FLATNESS:	DIMENSIONS ARE IN MILLIMETERS		DO NOT SCALE	SCALE: 0.333
SURFACES:				SHEET: 2 OF 3
VOLUME:				REV. NA

FOR SERVICE
REFERENCE ONLY



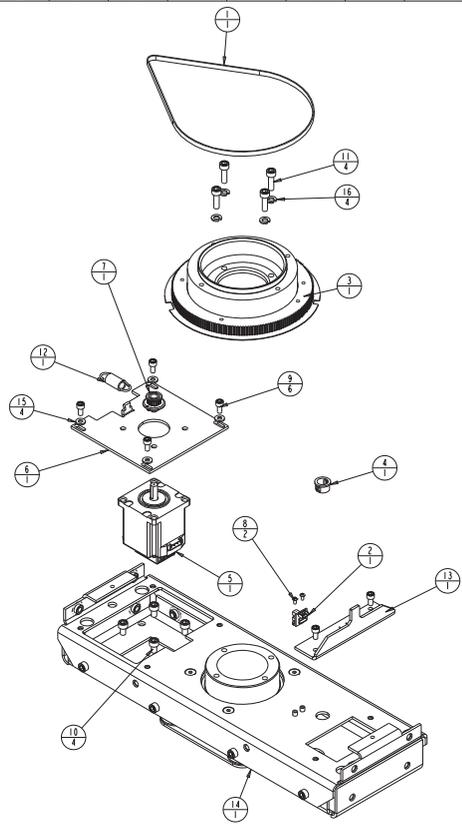
SCALE 0.750



- NOTES: APPLICABLE TO VIEWS ON THIS SHEET ONLY
- 1. TIGHTEN SCREWS AFTER ACHROMAT LENS ASSEMBLY IS INSTALLED ONTO SHAFTS AND DRIVE NUT IS ENGAGED FULL TRAVEL AGAINST HOWING STOP.
 - 2. APPLY NRYTOX LUBRICANT TO DRIVE SCREW.

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DIMENSIONAL TOLERANCES:	ENG:	DA:			
0 PLACE DECIMAL: ±0.38	MEG:	DRW:			
1 PLACE DECIMAL: ±0.13	MEG:				
2 PLACE DECIMALS: ±0.13	MEG:				
ANGLES: ±0.5°	DESCRIPTION:				
FOR PAINTED PARTS REFER TO	BULKHEAD ASSY, IRIS SG SVC				
ENG. SPEC. MANUAL W1-0592	MATERIAL:	FINISH:			
ALL COMPONENTS: MATURING AND	CHARTE				
FINISHES TO BE BANS COMPLIANT					
MIN. HOLE	INTERPRET DIMENSIONS PER	SI	PART NO.	DRAWING NO.	REV.
MIN. HOLE	ASME Y14.5M-1994	METRIC	80430102	TWA077_SVC	NA
FLATNESS	THIRD ANGLE PROJECTION	A1	DO NOT SCALE	SCALE: 0.333	SHEET: 3 OF 3
THICKNESS	DIMENSIONS ARE IN MILLIMETERS				
VOLUME					



FOR SERVICE
REFERENCE ONLY

16	4	WASHER_M6_SPLITLOCK_SS	91109206	WASHER_LOCK_SPLIT_M6_SS
15	4	WASHER10_204X440SS	90706012	WASHER_FLAT #10 SS
14	1	TWA094	80460012	SUPPORT_ASSY_PAN BEARING V4
13	1	TW536	99260515	STOP_PAN LOCK_SG
12	1	SPRING500_1250_LG	90701354	SPRING_EXTENSION_500 X 1.25 LG
11	4	SCREWM6AC20SS	91100620	SCREW_M6 SOCKET CAP 20 SS
10	4	SCREWM6AC10SS	91100610	SCREW_M6 SOCKET CAP 10 SS W/PATCH
9	6	SCREWM5AC10SSP	91100510	SCREW_M5 SOCKET CAP 10 SS W/PATCH
8	2	SCREWM3AB06B2P	91010306	SCREW_M3 BUTTON SOCKET HD 06 B2 W/PATCH
7	1	TW335	99430126	PINION ASSY 17T 3MM HTD, LOW PROFILE
6	1	TW527	99260505	MOUNT_PAN MOTOR_SG
5	1	TW502	INTERNAL	MOTOR_ENCODER ASSEMBLY MEA1
4	1	BUSHING500SNAP	90410102	GROMMET_SNAP BUSHING .50 ID
3	1	DBA015	INTERNAL	GEAR ASSY_PAN DL2
2	1	FS709	80040022EF	BOARD_ASSY_X-SPOT FLAG HOMING SENSOR
1	1	TW504	99360500	BELT_TIMING 3MM HTD, 200 GROOVE, 6MM
ITEM NO.	QTY.	FILENAME	PART NO.	DESCRIPTION

UNLESS OTHERWISE SPECIFIED:		RELEASE DATE:	CE:	High End 2105 GRACY FARMS LANE AUSTIN, TEXAS 78758 (512) 836-2244 FAX (512) 832-4128 http://www.highend.com	 LIGHTWAVE RESEARCH
DIMENSIONAL TOLERANCES:		ENG:	DA:		
0 PLACE DECIMAL = ±0.38		MEG:	DRW:		
1 PLACE DECIMAL = ±0.25					
2 PLACE DECIMALS = ±0.13				DESCRIPTION:	
ANGLES = ±0.5°				PAN BEARING COMPLETE SG	
FOR PAINTED PARTS REFER TO ENG. SPEC. MANUAL WJ-0592		MATERIAL:		FINISH:	
ALL COMPONENTS: MATERIALS AND FINISHES TO BE BANS COMPLIANT		CHARTED		NONE	
MATERIAL:		INTERPRET DIMENSIONS PER ASME Y14.5M-1994		PART NO. INTERNAL TWA081_SVC	
MATERIAL:		THIRD ANGLE PROJECTION		DRAWING NO. TWA081_SVC	
MATERIAL:		DIMENSIONS ARE IN MILLIMETERS		SCALE: 0.500	
MATERIAL:		SI METRIC A1		SHEET: 1 OF 1	

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