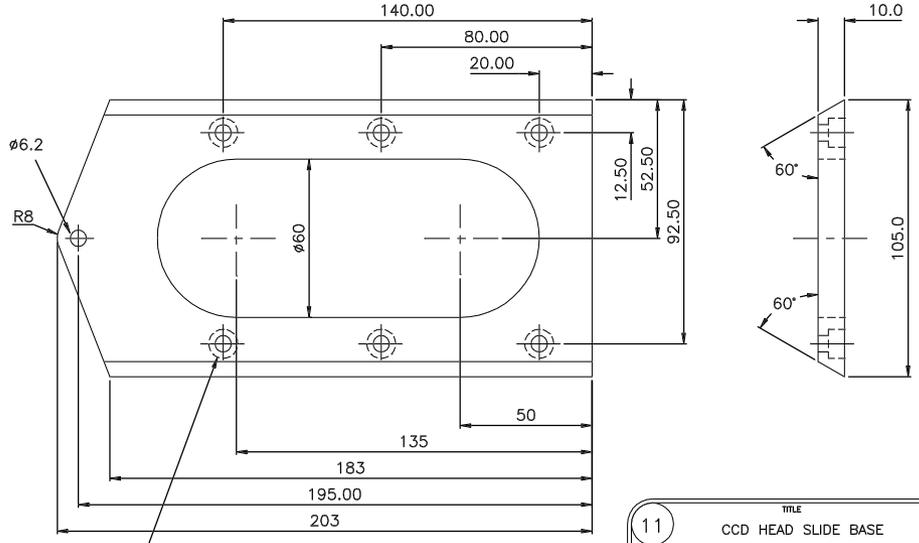
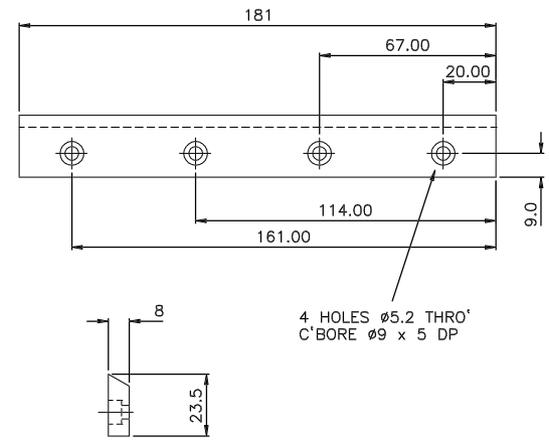


REMOVE ALL SHARP EDGES



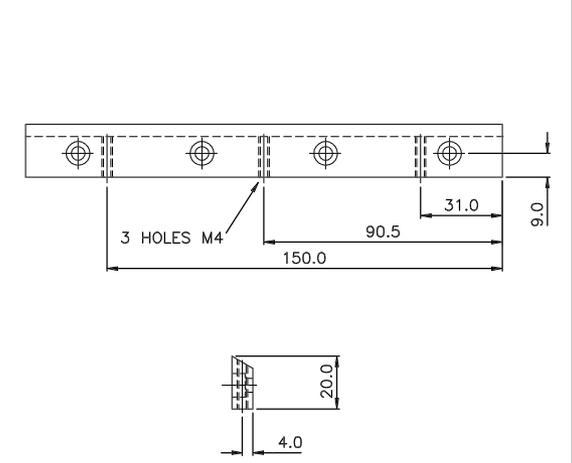
11			
TITLE CCD HEAD SLIDE BASE			
MATERIAL MS	SCALE FULL	TOLERANCES x. ±0.5 x.x ±0.3 x.xx ±0.1	
FINISH BLK NICKEL	No. REQD. PER UNIT 1		
G.A. No. W/BF/150	R.G.O.	DRAWING No. W/BF/161	

REMOVE ALL SHARP EDGES



12			
TITLE HEAD SLIDE			
MATERIAL MS	SCALE FULL	TOLERANCES x. ±0.5 x.x ±0.3 x.xx ±0.1	
FINISH BLK NICKEL	No. REQD. PER UNIT 1		
G.A. No. W/BF/150	R.G.O.	DRAWING No. W/BF/162	

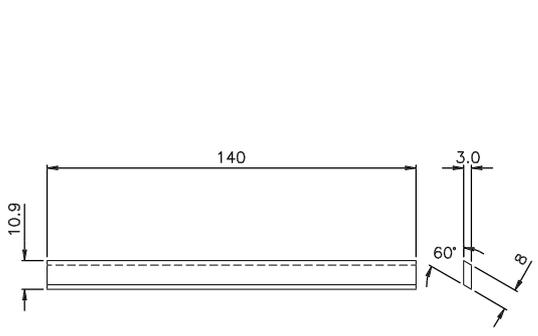
REMOVE ALL SHARP EDGES



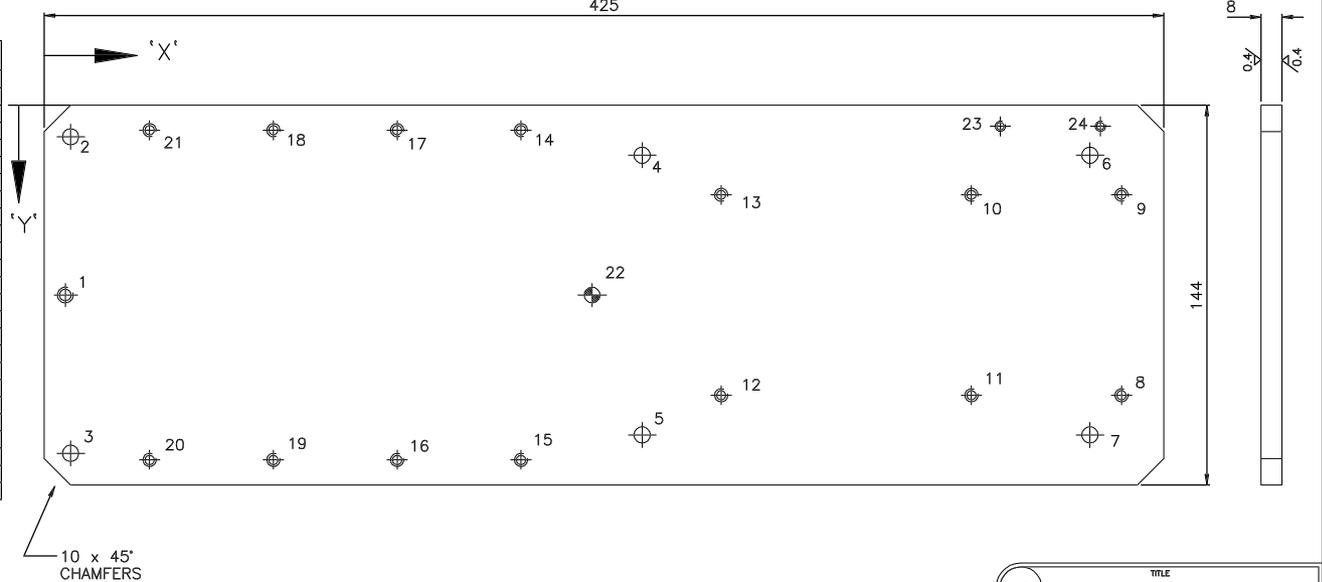
ALL OTHER DIMS AS ITEM 12

13			
TITLE HEAD SLIDE (GIBBED)			
MATERIAL MS	SCALE FULL	TOLERANCES x. ±0.5 x.x ±0.3 x.xx ±0.1	
FINISH BLK NICKEL	No. REQD. PER UNIT 1		
G.A. No. W/BF/150	R.G.O.	DRAWING No. W/BF/163	

REMOVE ALL SHARP EDGES



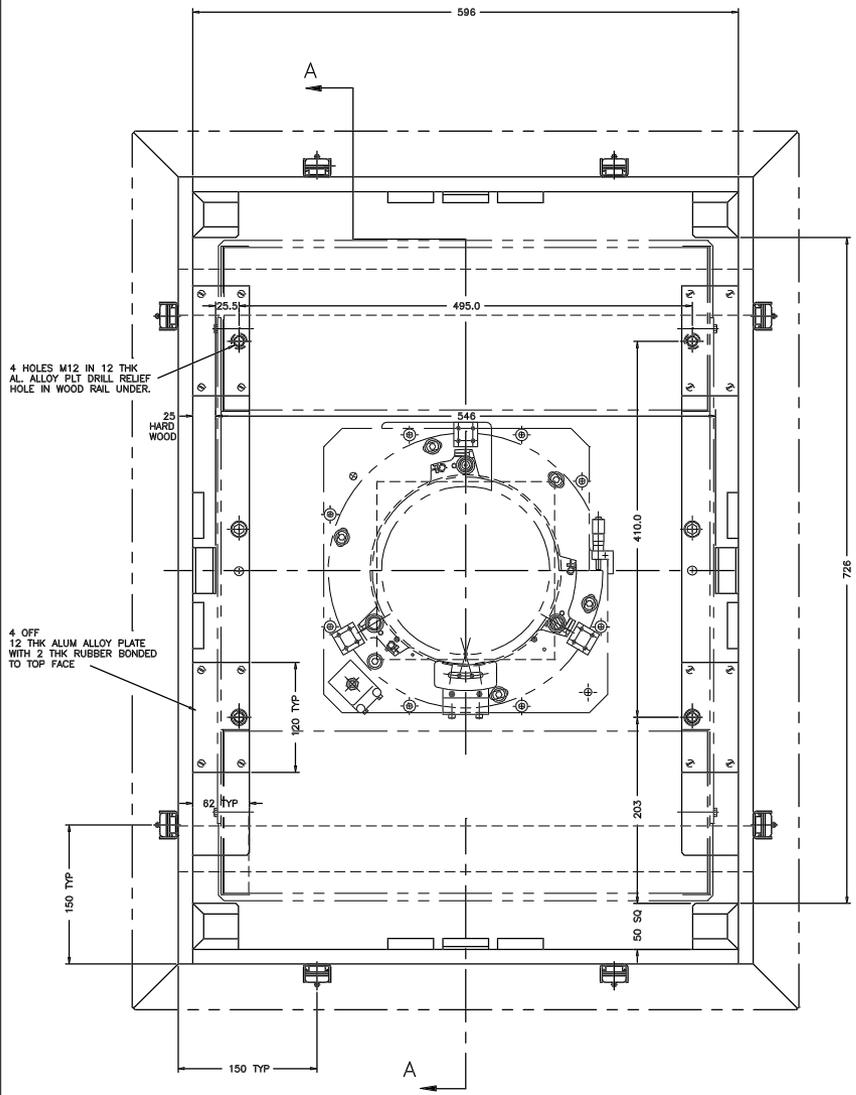
HOLE	DIM 'X'	DIM 'Y'	SIZE
1	8.00	- 72.00	M6
2	10.00	- 12.00	Ø6.2
3	10.00	-132.00	Ø6.2
4	227.00	- 19.00	Ø6.2
5	227.00	-125.00	Ø6.2
6	397.00	- 19.00	Ø6.2
7	397.00	-125.00	Ø6.2
8	409.00	-110.00	M5
9	409.00	- 34.00	M5
10	352.00	- 34.00	M5
11	352.00	-110.00	M5
12	257.00	-110.00	M5
13	257.00	- 34.00	M5
14	181.00	- 9.50	M5
15	181.00	-134.50	M5
16	134.00	-134.50	M5
17	134.00	- 9.50	M5
18	87.00	- 9.50	M5
19	87.00	-134.50	M5
20	40.00	-134.50	M5
21	40.00	- 9.50	M5
22	208.00	- 72.00	Ø6 RM
23	363.00	- 8.00	M4
24	401.00	- 8.00	M4



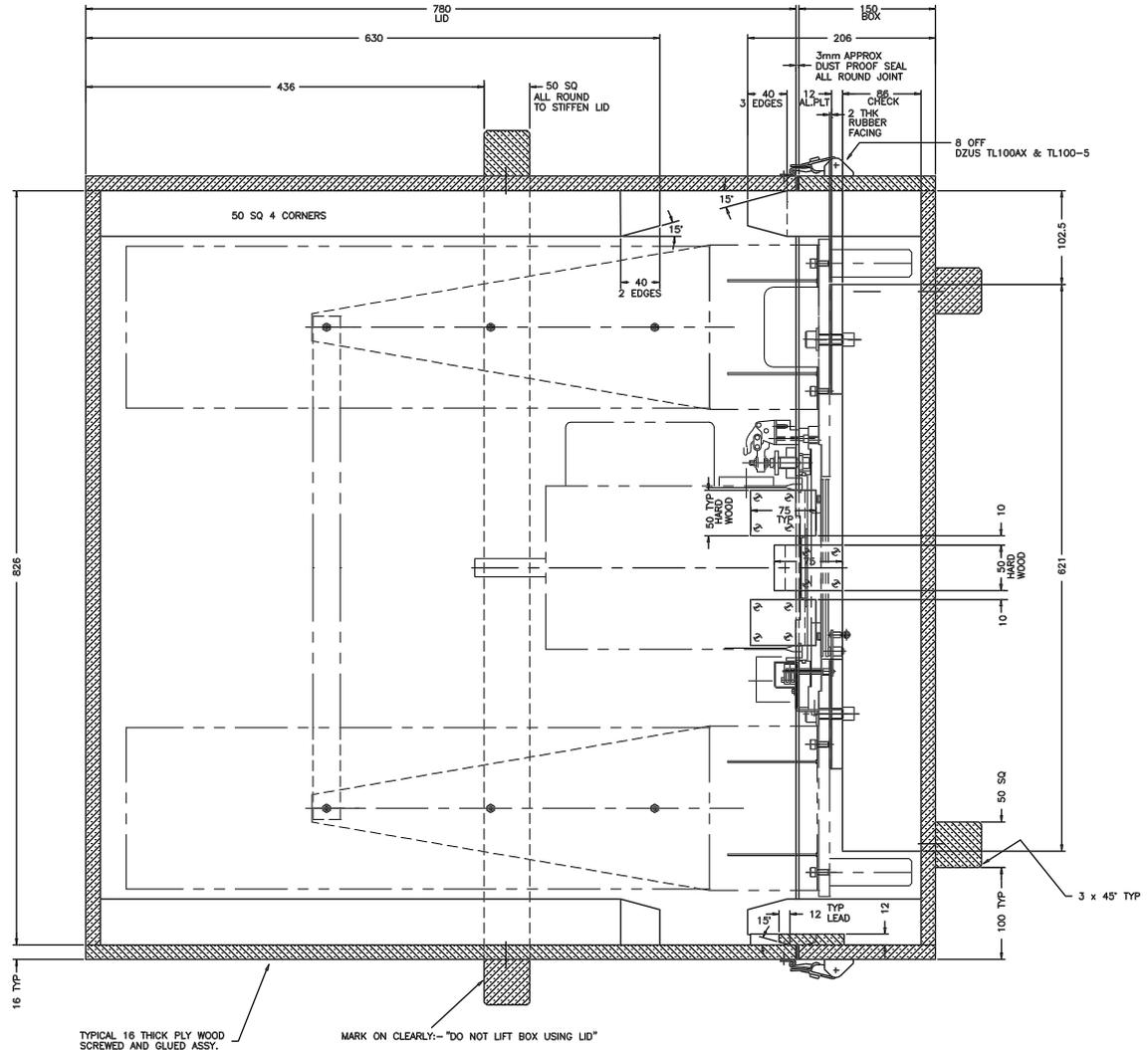
REMOVE ALL SHARP EDGES

14			
TITLE GIB			
MATERIAL BRASS	SCALE FULL	TOLERANCES x. ±0.5 x.x ±0.3 x.xx ±0.1	
FINISH CLEAN	No. REQD. PER UNIT 1		
G.A. No. W/BF/150	R.G.O.	DRAWING No. W/BF/164	

15			
TITLE ASSEMBLY BASE PLATE			
MATERIAL MS	SCALE FULL	TOLERANCES x. ±0.5 x.x ±0.3 x.xx ±0.1	
FINISH BLK NICKEL	No. REQD. PER UNIT 1		
G.A. No. W/BF/150	R.G.O.	DRAWING No. W/BF/165	

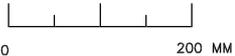


PLAN VIEW OF LOWER BOX



SECTION A-A

NOTE GENERAL CONSTRUCTION OF PLYWOOD PANELS WITH HARD WOOD RAILS FINISH TO RGO SPEC.



ISSUE	MOD. NO.	DATE	DRAWN BY	ISSUE	MOD. NO.	DATE	DRAWN BY
						MAY 93	PROMECH

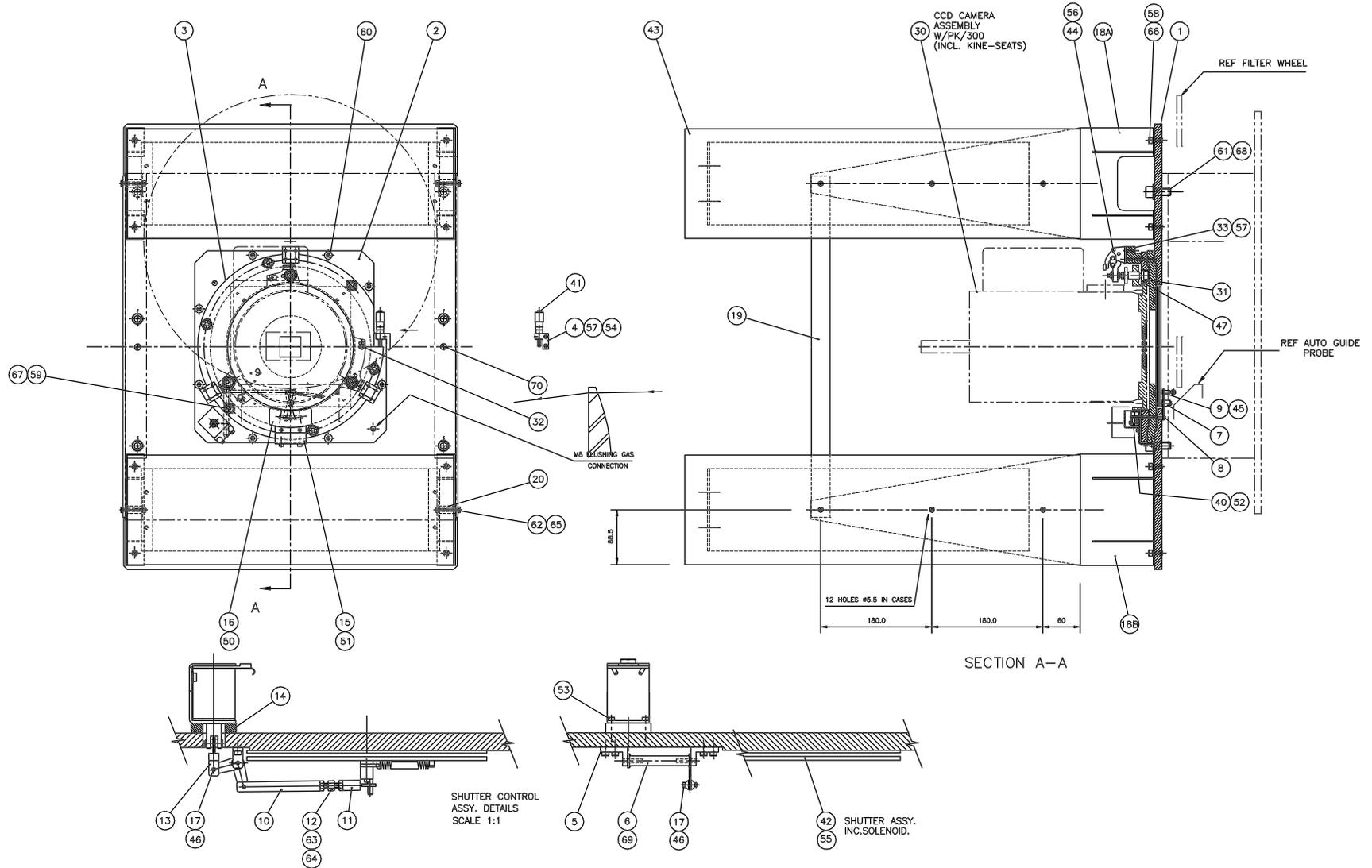
TOLERANCES (UNLESS OTHERWISE STATED)
X +/-
XX +/-
XXX +/-
ANG +/-

MATERIAL	FINISH	DRG NO.	NO REQ	USED ON

DM IN MM SCALE 1/2
ROYAL GREENWICH OBSERVATORY
MADINGLEY ROAD
CAMBRIDGE CB3 0EZ

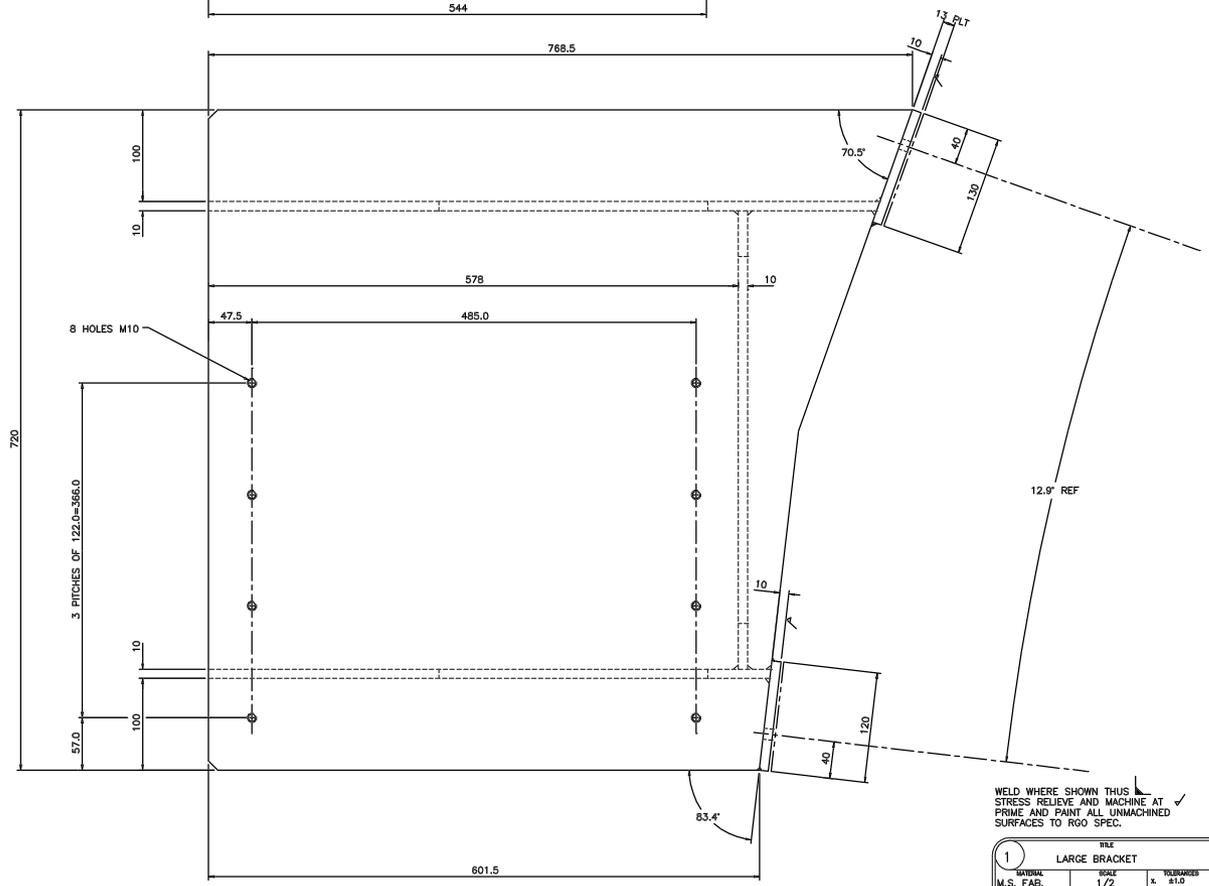
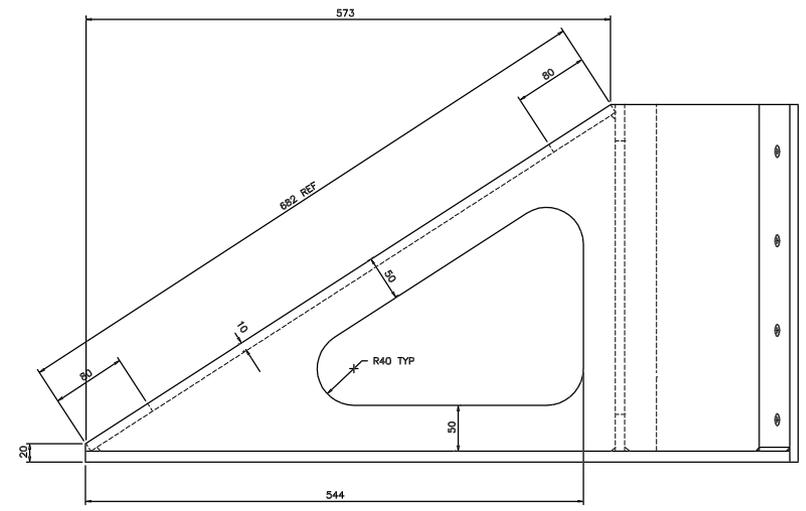
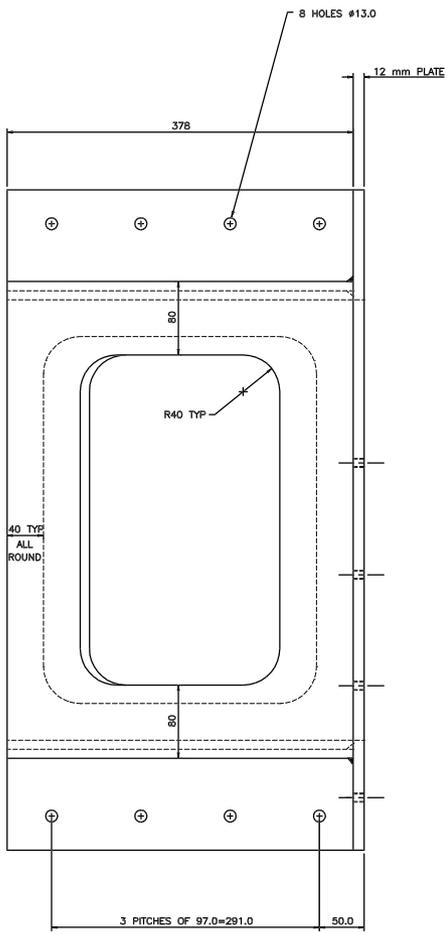
THIRD ANGLE PROJECTION
TITLE
4.2 WHT
STORAGE BOX FOR CYRO.CAMERA MTG.

G.A. NO. SHT 1 OF 1
DRG NO. V/BF/290



						1/12/02		PROMECH		TOLERANCES (UNLESS OTHERWISE STATED) X ±0.1 XX ±0.05 AND ±0.02		MATERIAL FINISH		DIM IN MM ROYAL GREENWICH OBSERVATORY MADINGLEY ROAD CAMBRIDGE CB3 0EZ		SCALE 1:2 & 1:1 THIRD ANGLE PROJECTION		G.A. NO. SH1 1 OF 1 DRG NO. V/BF/310	
ISSUE	MOD. NO.	DATE	DRAWN BY	ISSUE	MOD. NO.	DATE	DRAWN BY	DRG NO.	NO REQ	USED ON									

TITLE
WHT PRIME FOCUS CCD CAMERA ASSY.



WELD WHERE SHOWN THUS
STRESS RELIEVE AND MACHINE AT
PRIME AND PAINT ALL UNMACHINED
SURFACES TO ROO SPEC.

1				TITLE	
LARGE BRACKET					
MATERIAL	SCALE	TOLERANCES			
M.S. F.A.B.	1/2	X	±0.0		
TO ROO SPEC		XX	±0.5		
			XXX		
D.A. No.	No. REQS. PER UNIT	DRAWING No.			
V/BF/331	1	R.G.G.		V/BF/332	

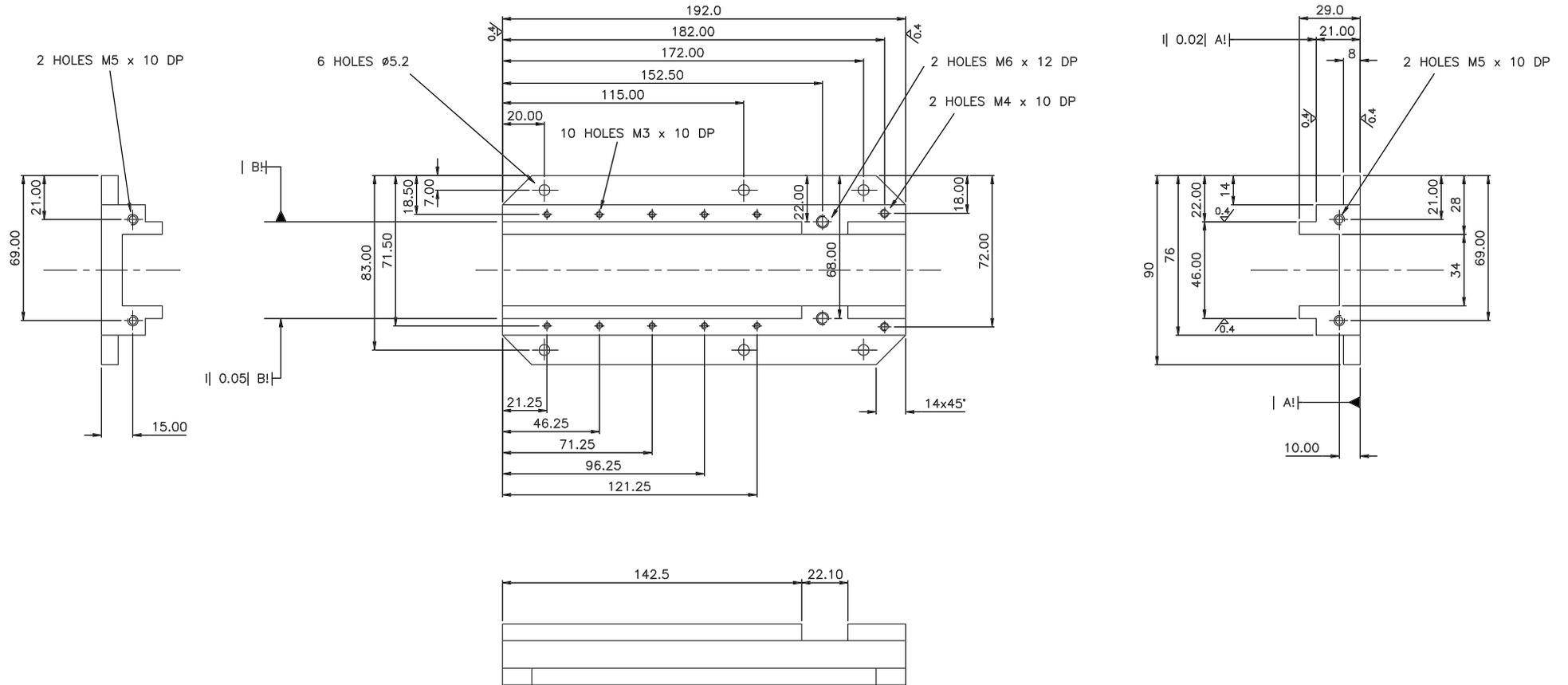
ISSUE	MOD. NO.	DATE	DRAWN BY	ISSUE	MOD. NO.	DATE	DRAWN BY
						22/3/93	PROMECH

TOLERANCES (UNLESS OTHERWISE STATED)		MATERIAL		DIM IN MM	SCALE 1/2	TITLE
X	+/-					THIRD ANGLE PROJECTION
X.X	+/-	FINISH		DRG NO.	NO REQ.	DETAIL
X.XXX	+/-			USED ON		
ANG	+/-					

ROYAL GREENWICH OBSERVATORY MADINGLEY ROAD CAMBRIDGE CB3 0EZ	
--	--

G.A. NO.	SHT 1 OF 1
DRG NO.	V/BF/332

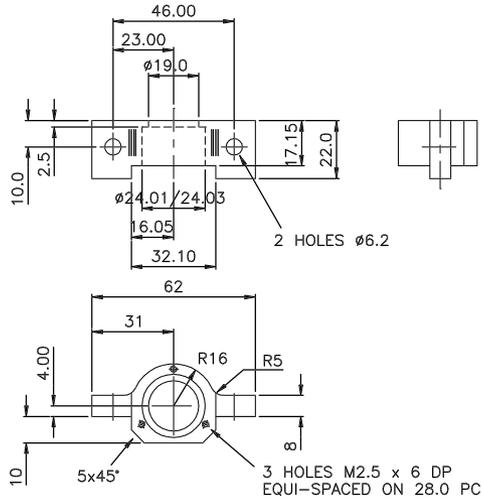
REMOVE ALL SHARP EDGES



1		TITLE	
BASE			
MATERIAL	SCALE	TOLERANCES	
AL 6082 7F	FULL	x	±0.5
FINISH	No. REQD. PER UNIT	x.x	±0.3
BLK ANODISE	1	x.xx	±0.1
GA. No.	DRWING No.		
W/BF/150	R.G.O. W/BF/151		

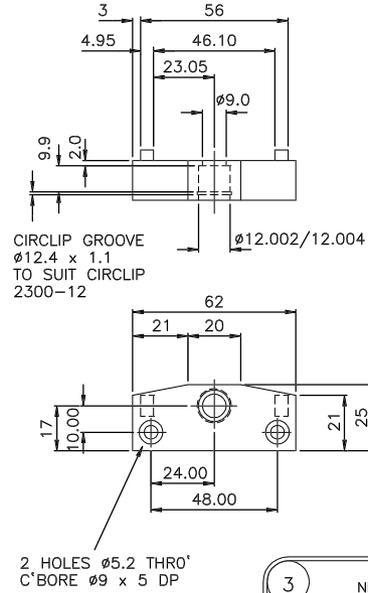
				Tolerance (Unless otherwise stated)				Material		Dimns.in m.m.		Scale		THIRD ANGLE PROJECTION		GA No.	
				x +/-												Drawing No.	
				x.x +/-				Finish		Drg.No.		No.Req.		ROYAL GREENWICH OBSERVATORY		Title	
				x.xx +/-						Used on				MADINGLEY ROAD		DETAIL	
				ANG. +/-										CAMBRIDGE CB3 0EZ		W/BF/151	
Issue	Mod.No	Date	Drawn by	Issue	Mod.No	Date	Drawn by									FILE WBF151	

REMOVE ALL SHARP EDGES



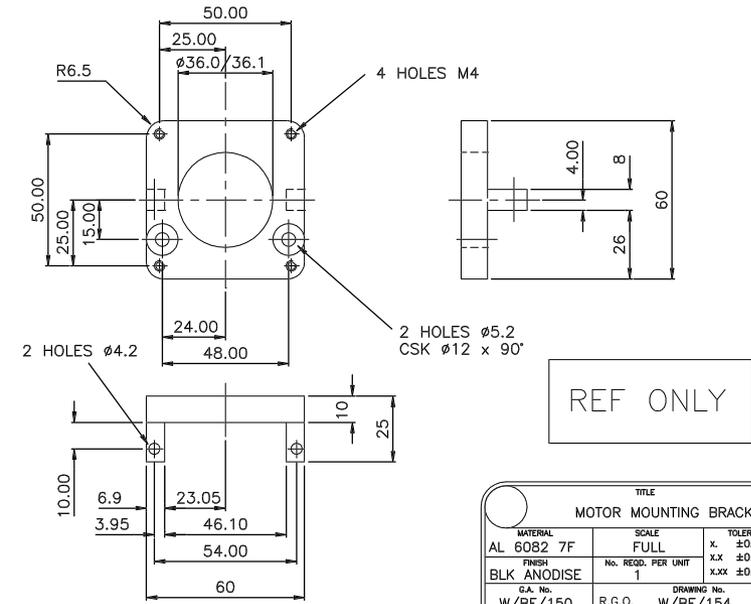
TITLE			
2 THRUST BEARING HOUSING			
MATERIAL	SCALE	TOLERANCES	
AL 6082 7F	FULL	x	±0.5
FINISH	No. REQD. PER UNIT	xx	±0.3
BLK ANODISE	1	xxx	±0.1
G.A. No.	DRAWING No.		
W/BF/150	R.G.O. W/BF/152		

REMOVE ALL SHARP EDGES



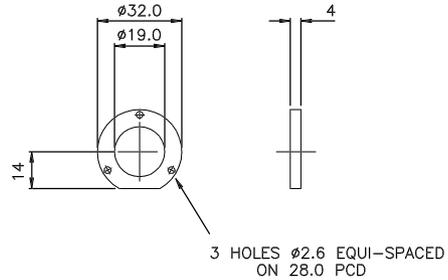
TITLE			
3 NEEDLE BEARING HOUSING			
MATERIAL	SCALE	TOLERANCES	
AL 6082 7F	FULL	x	±0.5
FINISH	No. REQD. PER UNIT	xx	±0.3
BLK ANODISE	1	xxx	±0.1
G.A. No.	DRAWING No.		
W/BF/150	R.G.O. W/BF/153		

REMOVE ALL SHARP EDGES



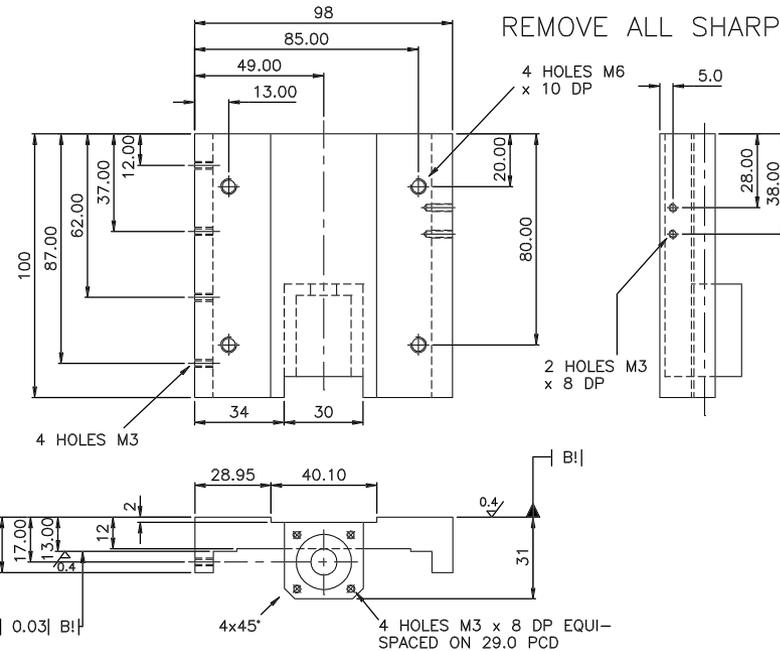
TITLE			
MOTOR MOUNTING BRACKET			
MATERIAL	SCALE	TOLERANCES	
AL 6082 7F	FULL	x	±0.5
FINISH	No. REQD. PER UNIT	xx	±0.3
BLK ANODISE	1	xxx	±0.1
G.A. No.	DRAWING No.		
W/BF/150	R.G.O. W/BF/154		

REMOVE ALL SHARP EDGES



TITLE			
5 THRUST BEARING RETAINER			
MATERIAL	SCALE	TOLERANCES	
AL 6082 7F	FULL	x	±0.5
FINISH	No. REQD. PER UNIT	xx	±0.3
BLK ANODISE	1	xxx	±0.1
G.A. No.	DRAWING No.		
W/BF/150	R.G.O. W/BF/155		

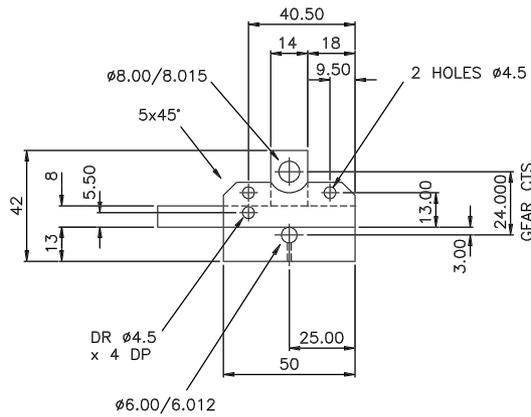
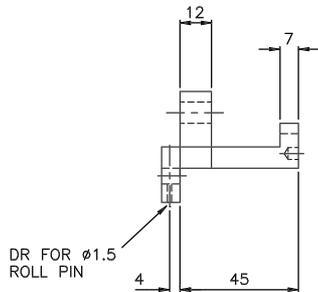
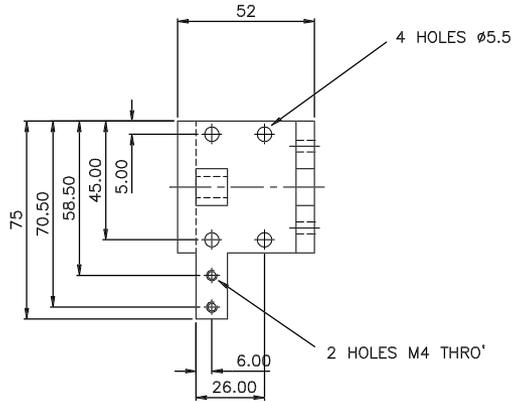
REMOVE ALL SHARP EDGES



TITLE			
6 MOUNTING TABLE			
MATERIAL	SCALE	TOLERANCES	
AL 6082 7F	FULL	x	±0.5
FINISH	No. REQD. PER UNIT	xx	±0.3
BLK ANODISE	1	xxx	±0.1
G.A. No.	DRAWING No.		
W/BF/150	R.G.O. W/BF/156		

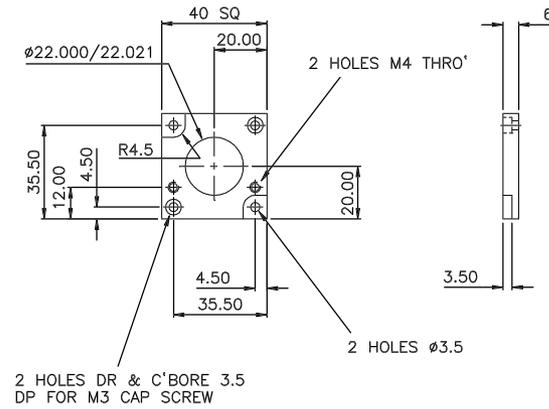
DRAWING NUMBER	No. OF SHEETS	GA ITEM No.	DRAWING TITLE OR COMPONENT NAME	No. OFF	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE
V / BF / 310									
W / BF / 311		1	BASEPLATE	1	M.S				
W / BF / 312		2	SHUTTER MTG. PLATE	1	ALUM.ALLOY				
W / BF / 313		3	CCD MTG. FLANGE	1	ALUM.ALLOY				
W / BF / 314		4	BRKT. MICROMETER	1	ALUM.ALLOY				
W / BF / 315		5	PIVOT BRKT.	2	BRASS				
W / BF / 316		6	CRANK	1	M.S				
W / BF / 317		7	LEVER ARM	1	M.S				
W / BF / 318		8	SWITCH TRIP	1	M.S				
W / BF / 319		9	OPERATING PEG	1	MOD.EXISTING ITEM	FROM SHUTTER ASSY			
W / BF / 320		10	LINK BAR	1	M.S				
W / BF / 321		11	LINK	1	M.S				
W / BF / 322		12	ADJUSTER	1	M.S				
W / BF / 323		13	SOLENOID LINK	1	M.S				
W / BF / 324		14	SPACER	1	ALUM.ALLOY				
W / BF / 325		15	SWITCH BRKT.	1	M.S				
W / BF / 326		16	SWITCH COVER	1	SHT.STL.				
W / BF / 327		17	PIN	2	BRASS				
W / BF / 328A		18A	SUPPORT BRKT.	2	M.S				
W / BF / 328B		18B	SUPPORT BRKT.	2	M.S				
W / BF / 329		19	STRAP	2	M.S				
W / BF / 330A		20	SPACER	12	M.S				
W / BF / 330B		21	SOCKET SUPPORT	1	ALUM.ALLOY				
W / PK / 300		30	CCD CAMERA ASSY	1					
W / GE / 304		31	INSULATOR	3					
W / GE / 308		32	MICROMETER PAD	3					
W / GE / 303		33	BLOCK	3	ALUM.ALLOY				
/ /									
/ /		40	MICRO SWITCH (PLAIN LEVER)	4	RS.320-512				
/ /		41	MICROMETER	1	MITUTOYO 148-801				
/ /		42	SHUTTER & SOLENOID ASSY 100mm DIA.	1	STOCK CODE:1177627	GEORGE ELLIOTT WESTERHAM, KENT			
/ /		43	SOLIDUS INSTRUMENT CASE	2	XIXIN SOL.S.3600				
/ /		44	TOGGLE CLAMP	3	DE.STA.CO 305				
/ /		45	'E' RING ø4	1	SALTERFIX 7133-032				
/ /		46	'E' RING ø3	2	SALTERFIX 7133-023				
/ /		47	'O' RING	1	TO-SUIT				
/ /									
/ /									
JOB TITLE WHT PRIME FOCUS CCD CAMERA ASSEMBLY						ASS'Y DRG No. V/BF/310	SHEET No. 1 OF 2	DRAWN BY PROMECH(UK) DATE DEC 92	
ROYAL GREENWICH OBSERVATORY, MADINGLEY ROAD, CAMBRIDGE									

REMOVE ALL SHARP EDGES



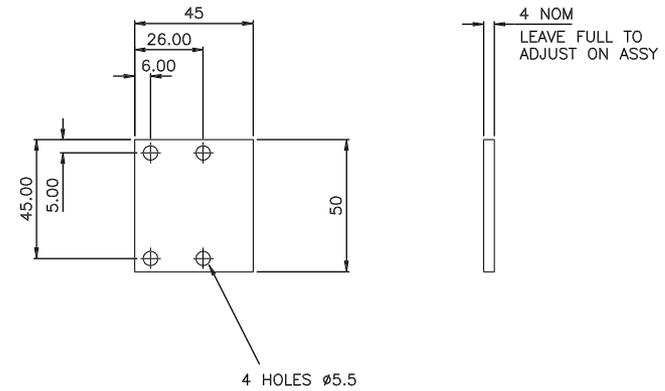
1		TITLE	
BASE			
MATERIAL	SCALE	TOLERANCES	
ALUM ALLOY	FULL	x.	±0.5
FINISH	No. REQD. PER UNIT	x.x	±0.3
BLK ANODISE	1	x.xx	±0.1
G.A. No.	DRAWING No.		
W/BF/240	R.G.O.	W/BF/241	

REMOVE ALL SHARP EDGES



2		TITLE	
MOTOR MTG PLATE			
MATERIAL	SCALE	TOLERANCES	
ALUM ALLOY	FULL	x.	±0.5
FINISH	No. REQD. PER UNIT	x.x	±0.3
BLK ANODISE	1	x.xx	±0.1
G.A. No.	DRAWING No.		
W/BF/240	R.G.O.	W/BF/242	

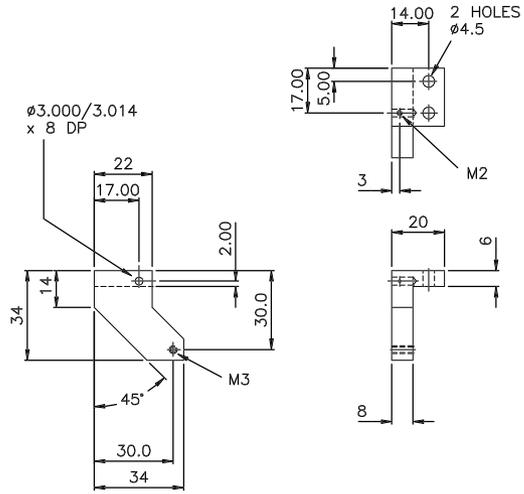
REMOVE ALL SHARP EDGES



3		TITLE	
PACKER			
MATERIAL	SCALE	TOLERANCES	
ALUM ALLOY	FULL	x.	±0.5
FINISH	No. REQD. PER UNIT	x.x	±0.3
BLK ANODISE	1	x.xx	±0.1
G.A. No.	DRAWING No.		
W/BF/240	R.G.O.	W/BF/243	

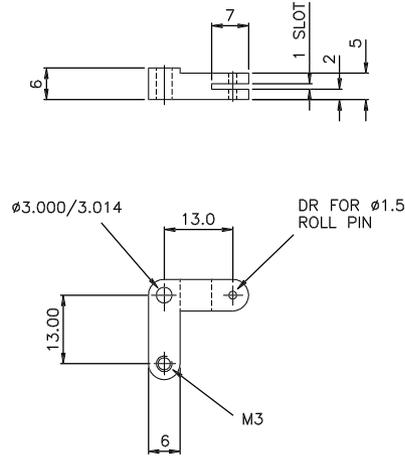
Tolerance (Unless otherwise stated)				Material		Dimns.in m.m.		Scale		THIRD ANGLE PROJECTION		GA No. W/BF/240	
x ±0.5				Finish		Drg.No.		No.Req.		Title		Drawing No. 243	
x.x ±0.3						Used on				ROYAL GREENWICH OBSERVATORY		W/BF/241	
x.xx ±0.1										MADINGLEY ROAD			
ANG. +/-										CAMBRIDGE CB3 0EZ			

REMOVE ALL SHARP EDGES



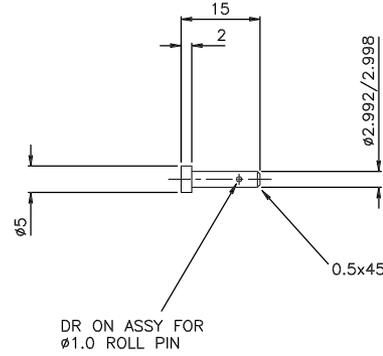
11			TITLE LEVER BRKT		
MATERIAL	SCALE	TOLERANCES			
ALUM ALLOY	FULL	x. ±0.5			
FINISH	No. RECD. PER UNIT	x.x ±0.3			
BLK ANODISE	1	x.xx ±0.1			
G.A. No.	DRAWING No.				
W/BF/240	R.G.O. W/BF/251				

REMOVE ALL SHARP EDGES



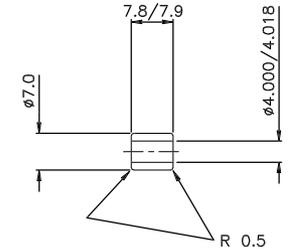
12			TITLE LEVER ARM		
MATERIAL	SCALE	TOLERANCES			
ALUM ALLOY	2:1	x. ±0.5			
FINISH	No. RECD. PER UNIT	x.x ±0.3			
BLK ANODISE	1	x.xx ±0.1			
G.A. No.	DRAWING No.				
W/BF/240	R.G.O. W/BF/252				

REMOVE ALL SHARP EDGES



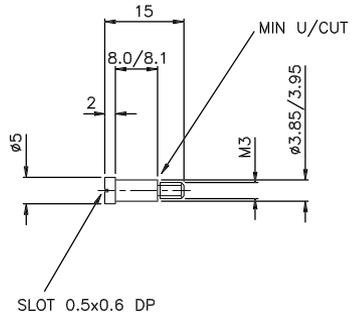
13			TITLE PIVOT PIN		
MATERIAL	SCALE	TOLERANCES			
ST. STL	2:1	x. ±0.5			
FINISH	No. RECD. PER UNIT	x.x ±0.3			
BLK NIC PLT	1	x.xx ±0.1			
G.A. No.	DRAWING No.				
W/BF/240	R.G.O. W/BF/253				

REMOVE ALL SHARP EDGES



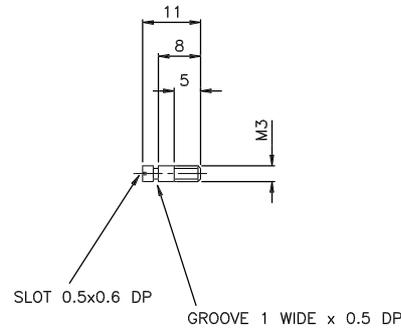
14			TITLE ROLLER		
MATERIAL	SCALE	TOLERANCES			
ST. STL	2:1	x. ±0.5			
FINISH	No. RECD. PER UNIT	x.x ±0.3			
BLK NIC PLT	1	x.xx ±0.1			
G.A. No.	DRAWING No.				
W/BF/240	R.G.O. W/BF/254				

REMOVE ALL SHARP EDGES



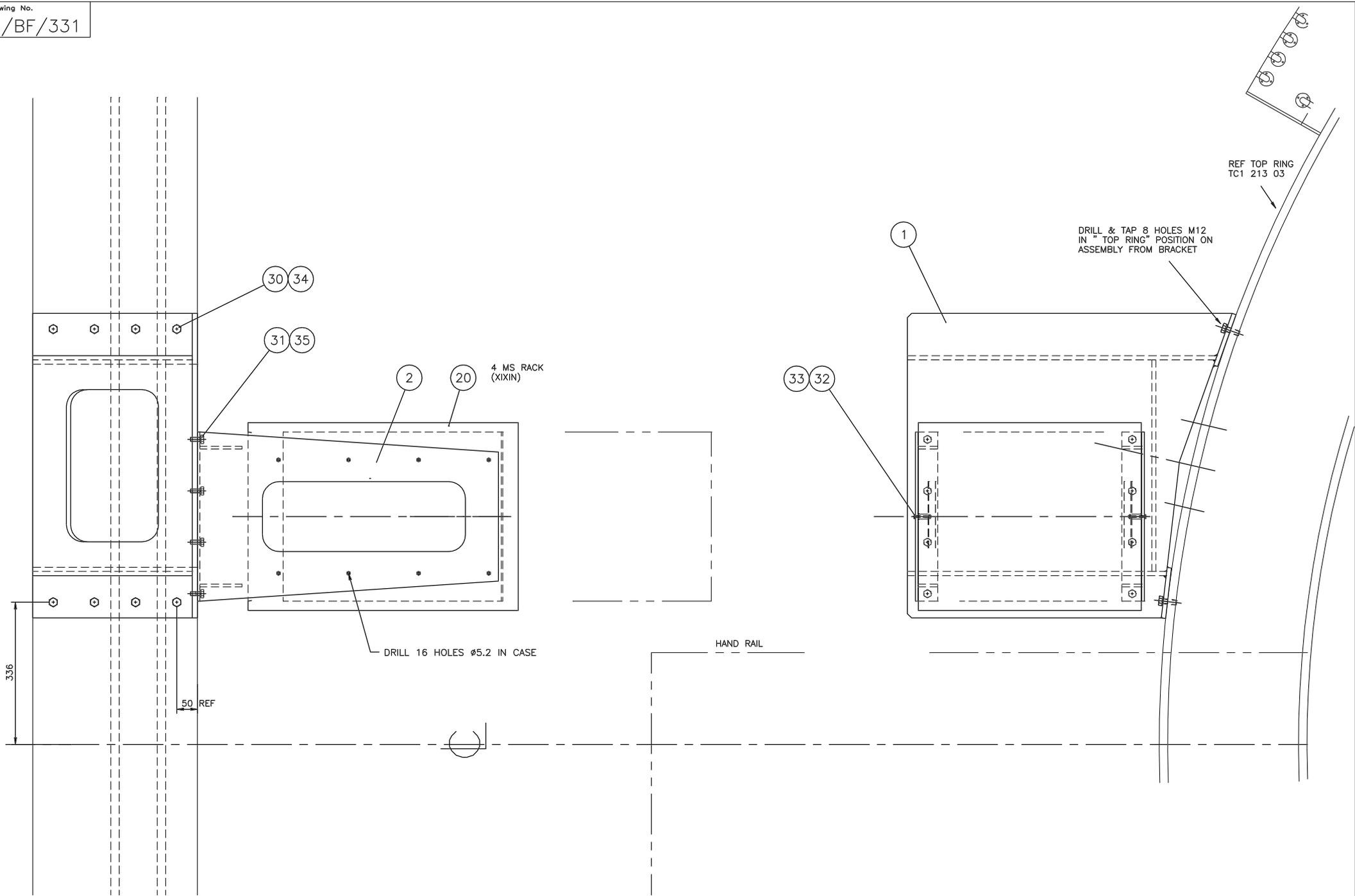
15			TITLE ROLLER PIN		
MATERIAL	SCALE	TOLERANCES			
ST. STL	2:1	x. ±0.5			
FINISH	No. RECD. PER UNIT	x.x ±0.3			
BLK NIC PLT	1	x.xx ±0.1			
G.A. No.	DRAWING No.				
W/BF/240	R.G.O. W/BF/255				

REMOVE ALL SHARP EDGES



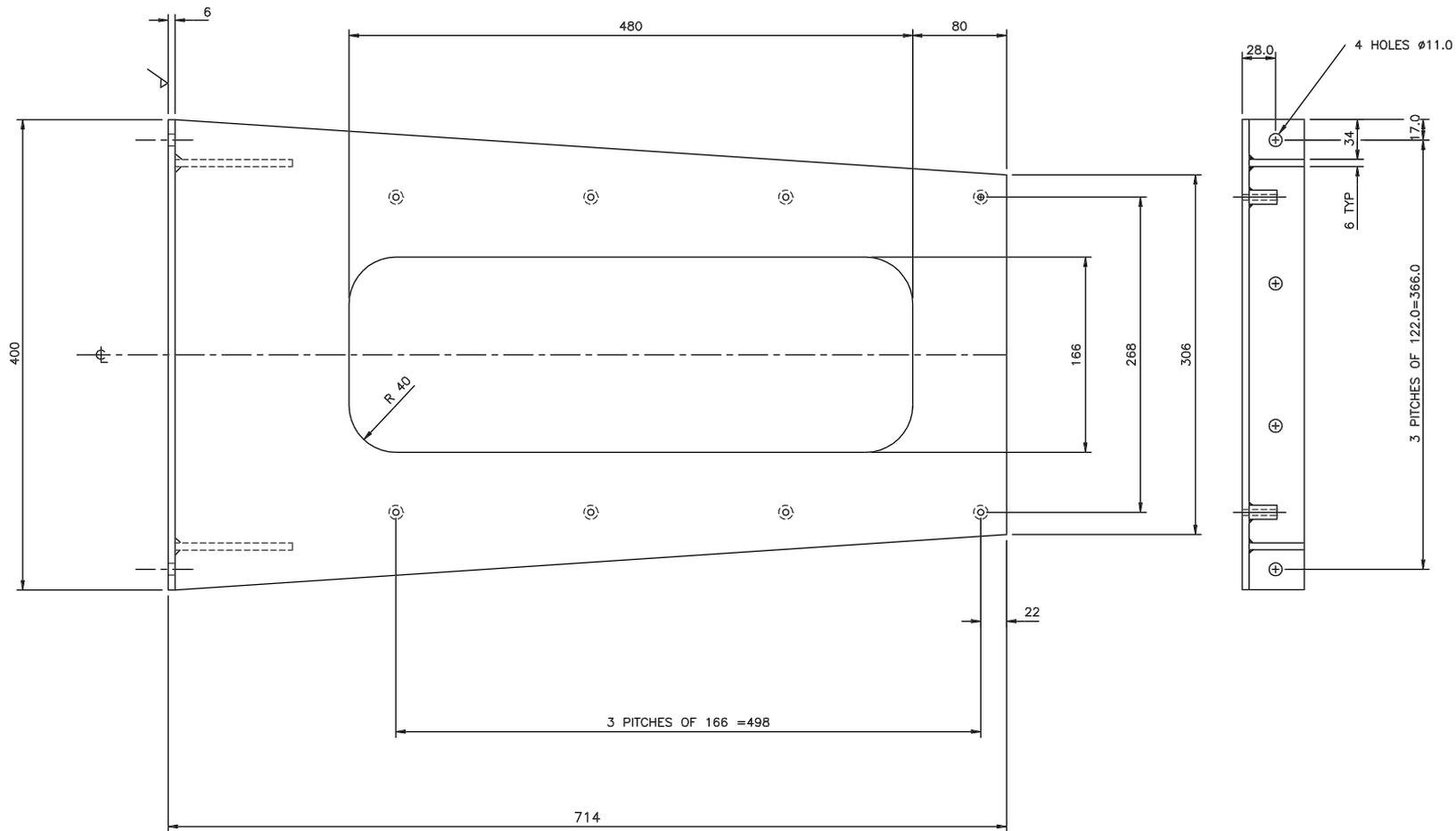
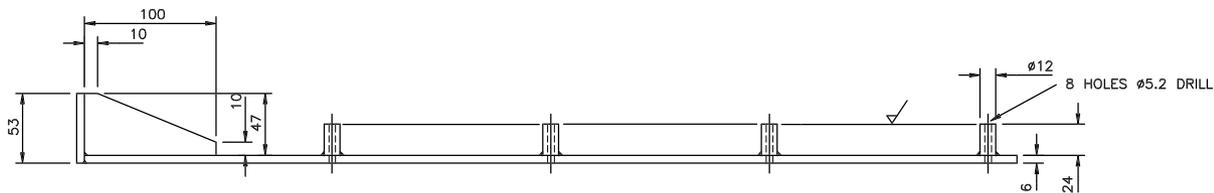
16			TITLE SPRING POST		
MATERIAL	SCALE	TOLERANCES			
ST. STL	2:1	x. ±0.5			
FINISH	No. RECD. PER UNIT	x.x ±0.3			
BLK NIC PLT	2	x.xx ±0.1			
G.A. No.	DRAWING No.				
W/BF/240	R.G.O. W/BF/256				

Tolerance (Unless otherwise stated)		Material		Dimns.in m.m.		Scale		THIRD ANGLE PROJECTION		GA No. W/BF/240	
x	±0.5									Drawing No. 256	
x.x	±0.3	Finish		Drg.No.		ROYAL GREENWICH OBSERVATORY		Title		W/BF/251	
x.xx	±0.1			Used on		MADINGLEY ROAD		DETAILS			
ANG.	+/-					CAMBRIDGE CB3 0EZ					



		2		480X166 HOLE ADDED		29/3/93		RHA		Tolerance (Unless otherwise stated)		Material		Dimns.in m.m.		Scale 1 : 4		THIRD ANGLE PROJECTION		GA No.	
										X +/-								Title		Drawing No.	
										X.X +/-		Finish		Drg.No.		No.Req.		ROYAL GREENWICH OBSERVATORY		W/BF/331	
Issue		Mod.No		Date		Drawn by		Issue		Mod.No		Date		Drawn by		Used on		MADINGLEY ROAD		TOP END RING RACK MOUNTING G.A.	
																		CAMBRIDGE		CB3 0EZ	

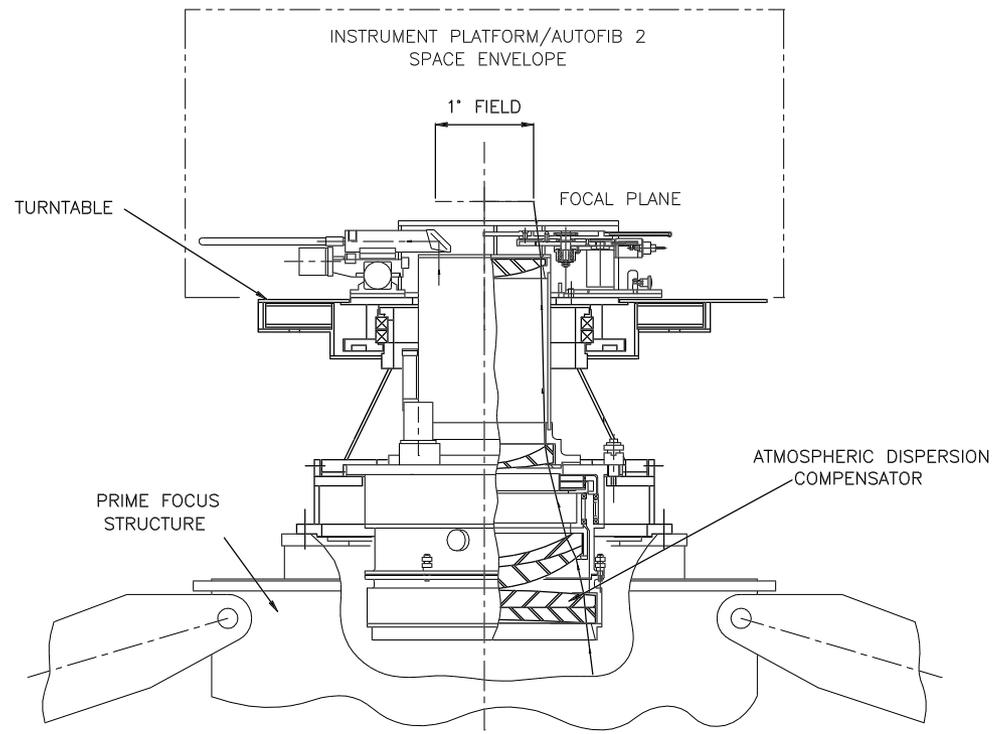
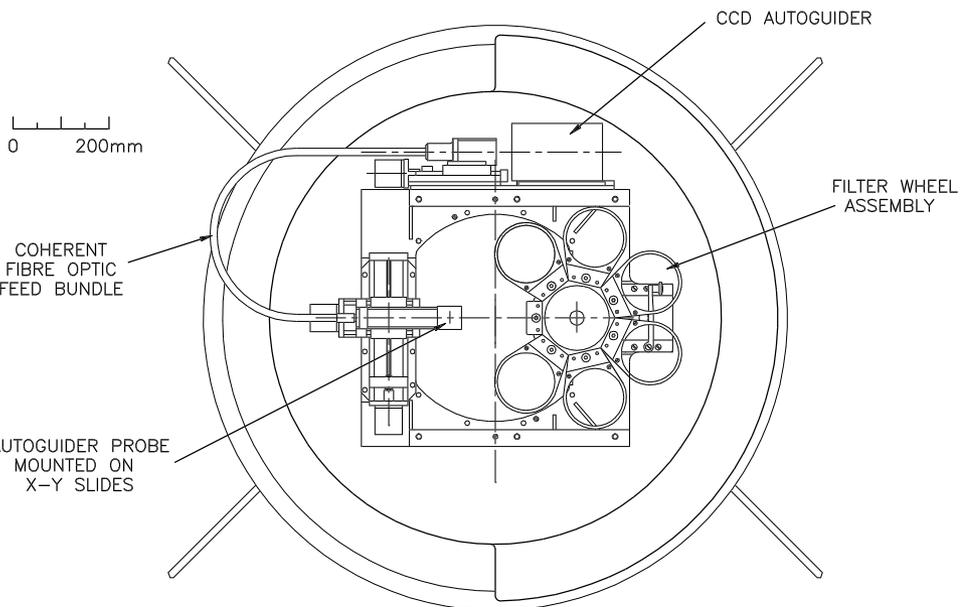
REMOVE ALL SHARP EDGES



WELD WHERE SHOWN THUS STRESS RELIEVE AND MACHINE AT PRIME AND PAINT ALL UNMACHINED SURFACES TO RGO SPEC.

2		TITLE RACK BRACKET	
MATERIAL M.S. FAB.	SCALE 1/2	TOLERANCES x ±0.5 xx ±0.3 xxx ±0.1	
FINISH TO RGO SPEC.	No. RECD. PER UNIT 2	DRAWING No. W/BF/333	
G.A. No. V/BF/331		R.G.O. W/BF/333	

Issue				Mod.No				Date				Drawn by				Tolerance (Unless otherwise stated)				Material				Dimns.in m.m.				Scale 1/2				THIRD ANGLE PROJECTION				Title WHT PRIME FOCUS DETAIL OF 4MS RACK SUPPORT BRACKET				GA No. V/BF/331 Drawing No. W/BF/333			
2				480X166				29/3/93				RHA				X +/-				ROYAL GREENWICH OBSERVATORY				Scale 1/2				MADINGLEY ROAD				CAMBRIDGE CB3 0EZ				W/BF/333							
				22/3/93				PROMECH				X.XX +/-																															



4.2m WHT PRIME FOCUS

DRAWING NUMBER	No. OF SHEETS	GA ITEM No.	DRAWING TITLE OR COMPONENT NAME	No. OFF	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE	
V / BF / 150	1		GENERAL ASSY.							
W / BF / 151	1	1	BASE	1						
W / BF / 152	1	2	THRUST BEARING HOUSING	1						
/ / 153		3	NEEDLE BEARING HOUSING	1						
/ /										
/ / 155		5	THRUST BEARING RETAINER	1						
/ / 156		6	MOUNTING TABLE	1						
/ /		7								
/ /		8								
/ /		9								
/ /		10								
W / BF / 161	1	11	CCD HEAD SLIDE BASE	1						
/ / 162		12	HEAD SLIDE	1						
/ / 163		13	HEAD SLIDE (GIBBED)	1						
/ / 164		14	GIB	1						
/ / 165		15	ASSEMBLY BASE PLATE	1						
W / BF / 166	1	16	FOCUS ADJUSTER	1						
/ / 167		17	ADJUSTER CLAMP	1						
W / BF / 241	1	18	BASE	1						
/ / 242		19	MOTOR MTG PLATE	1						
/ / 243		20	PACKER	1	PG 0.5-72 STL	HPC LTD				
W / BF / 244	1	21	FILTER WHEEL	1	G 0.5-24 STL	HPC LTD				
/ / 245		22	SPUR GEAR	1						
/ / 246		23	SPUR GEAR	1						
/ / 247		24	STUB SHAFT	1						
/ / 248		25	WASHER	2						
/ / 249		26	GEAR SHAFT	1						
/ / 250		27	WASHER	1						
W / BF / 251	1	28	LEVER BRKT	1						
/ / 252		29	LEVER ARM	1						
/ / 253		30	PIVOT PIN	1						
/ / 254		31	ROLLER	1						
/ / 255		32	ROLLER PIN	1						
/ / 256		33	SPRING POST	1						
/ /										
/ /										
/ /										
/ /										
JOB TITLE	WHT PRIME FOCUS INSTRUMENT PLATFORM AUTOGUIDER FOCUS SLIDE/FILTER WHEEL					ASS'Y DRG No. W/BF/150	SHEET No. 1 of 2	DRAWN BY PROMECH DATE 12/01/96		
ROYAL GREENWICH OBSERVATORY, MADINGLEY ROAD, CAMBRIDGE										

DRAWING NUMBER	No. OF SHEETS	GA ITEM No.	DRAWING TITLE OR COMPONENT NAME	No. OFF	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE	
		40	STOP	1	504-202	WDS LTD				
		41	THRUST BEARING	1	ZKLN 0624-2RS	INA LTD				
		42	NEEDLE BEARING	1	NK 6-10TN	INA LTD				
		43	LOCK NUT	1	ZM06	INA LTD				
		44	LINEAR BEARING TRACK	4	R3125	SCHNEEBERGER				
		45	ROLLER CAGE	2	AC-SIZE 3-24 ROLLERS	SCHNEEBERGER				
		46	SEALING RING	1	G6X12X2	INA LTD				
		47	ROLLER SCREW	1	RGT 8-2-100	INA LTD				
		48	ROLLER SCREW NUT	1	RGT 8-2-100	INA LTD				
		49	CIRCLIP	1	DIN.471-5x0.6	ANDERTON				
		50	STEPPER MOTOR	1	RDM 544/100A	BERGER-LAHR LTD				
		51	FLEXIBLE COUPLING	1	BFC-12	HPC LTD				
		52	NEEDLE BEARING	1	HK 0812-2RS	INA LTD				
		53	OILITE BEARING	1	AMC 0508x12LG					
		54	EXTENSION SPRING	1	MF 4405	FLEXO				
		55	CIRCLIP	1	DIN.471-8x0.8	ANDERTON				
		60	SOC CAP SCREW	3	M2X10	STEEL BLACK				
		61	" " "	2	M3X8	STEEL BLACK				
		62	" " "	4	M4X12	STEEL BLACK				
		63	" " "	2	M4X15	STEEL BLACK				
		64	" " "	2	M4X20	STEEL BLACK				
		65	" " "	8	M5X12	STEEL BLACK				
		66	" " "	6	M5X15	STEEL BLACK				
		67	" " "	4	M5X20	STEEL BLACK				
		68	" " "	3	M6X15	STEEL BLACK				
		69	SOC GRUB SCREW	2	M2X3	STEEL BLACK				
		70	" " "	4	M3X6	STEEL BLACK				
		71	" " "	3	M4X20	STEEL BLACK				
		72	HEX NUT	2	M3	STEEL BLACK				
		73	ROLL PIN	1	Ø1.5X6					
		74	" " "	4	Ø1.0X12					
		75	" " "	1	Ø1.5X20					
		76	SOC CAP SCREW	3	M2.5X8	STEEL BLACK				
		77	SOC CAP SCREW	4	M3X10	STEEL BLACK				
JOB TITLE	WHT PRIME FOCUS INSTRUMENT PLATFORM AUTOGUIDER FOCUS SLIDE/FILTER WHEEL					ASS'Y DRG No. W/BF/150	SHEET No. 2 of 2	DRAWN BY PROMECH DATE 12/01/96		
ROYAL GREENWICH OBSERVATORY, MADINGLEY ROAD, CAMBRIDGE										