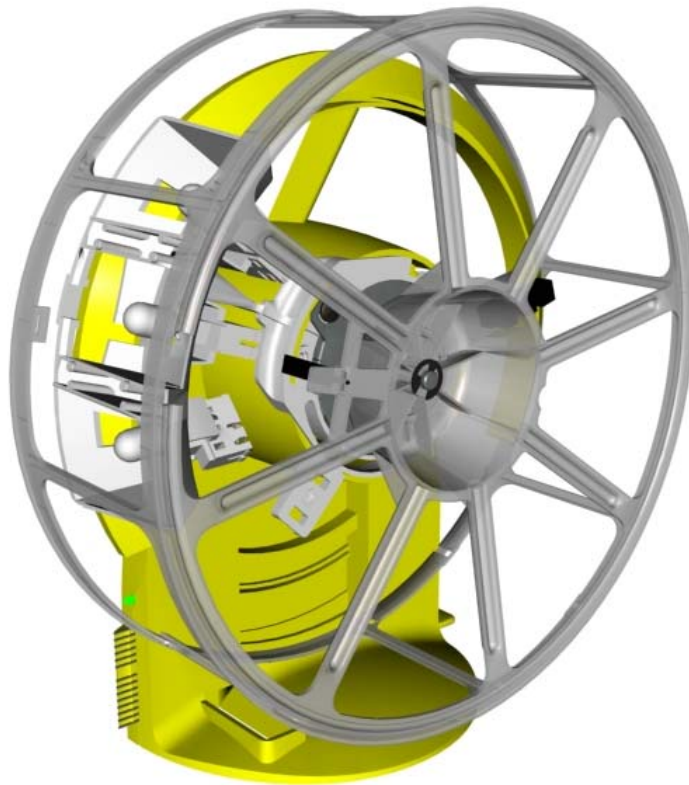




Gamesman

GM1000 Gamemech Technical Specification Document



Issue	4
Status	Released
Author	Andrea Newcombe, Development Co-ordinator
File	GM1000 Technical Specification Document.pdf
Date of creation	16.01.2006

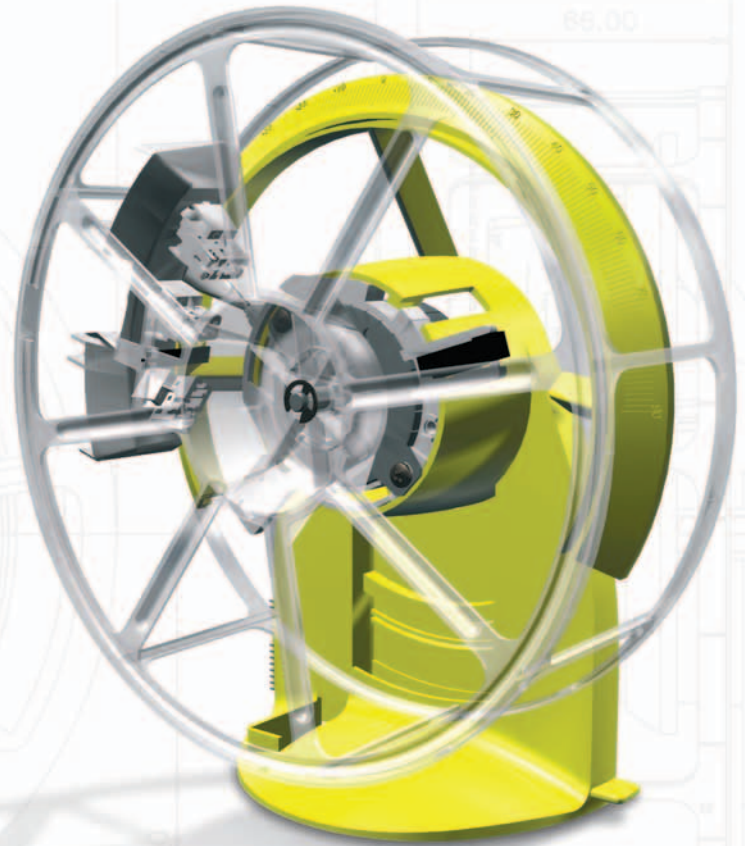
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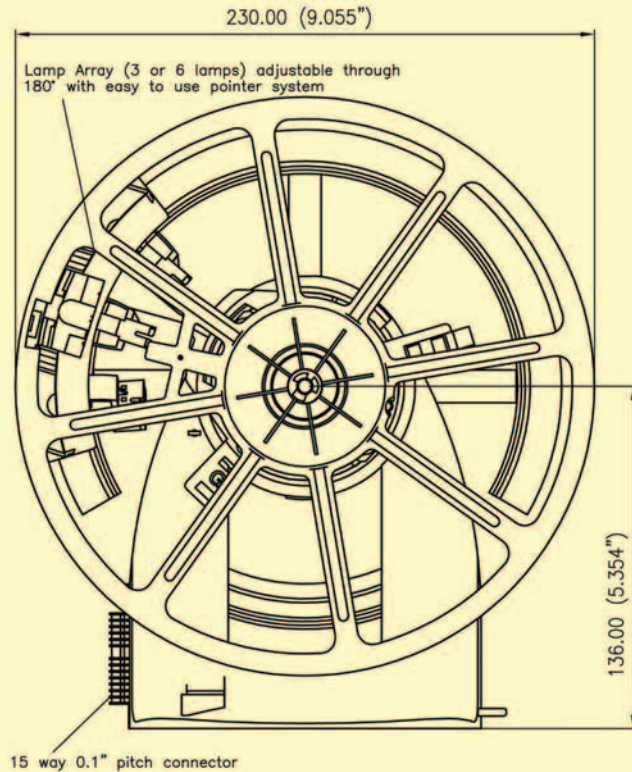
GameMech® 1000

The latest version of the GameMech® 1000 provides even greater benefits to manufactures in terms of both game design and production. A new pointer system developed by Gamesman allows easy and accurate adjustment of the win line without the need to re-phase set the motor.

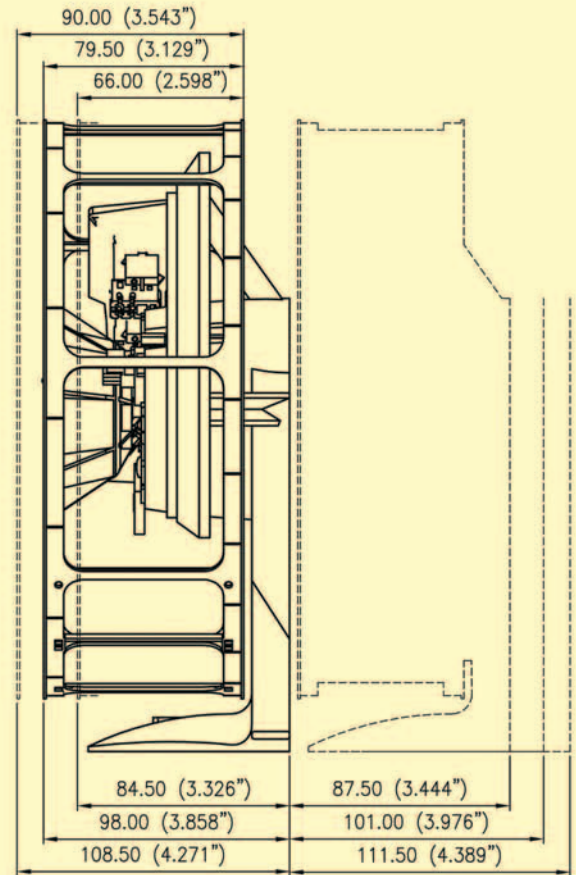
- **Reel**- The reel is offered in 3 widths of 66mm, 79.5mm and 90mm and gives calibrated tape positioning as well as two sided support.
- **Lamp Array**- The GameMech® 1000 can accommodate 12, 16 or 24 symbols and offers single or double rows of illumination to suit different reel widths. The lamp array can easily be adjusted through 180 degrees for win line angle changes.
- **Motor**- The GameMech® 1000 takes advantage of an improved torque 48 step motor with guaranteed reliability and performance. A 200 step motor is also available.
- **Fixing**- The GameMech® 1000 frame can be mounted directly to a shelf and secured by means of individual fixing feet. Alternatively, using the GameMech® 1000 mounting tray enables a bank of 3 or more reels to be offered to the machine as one unit.



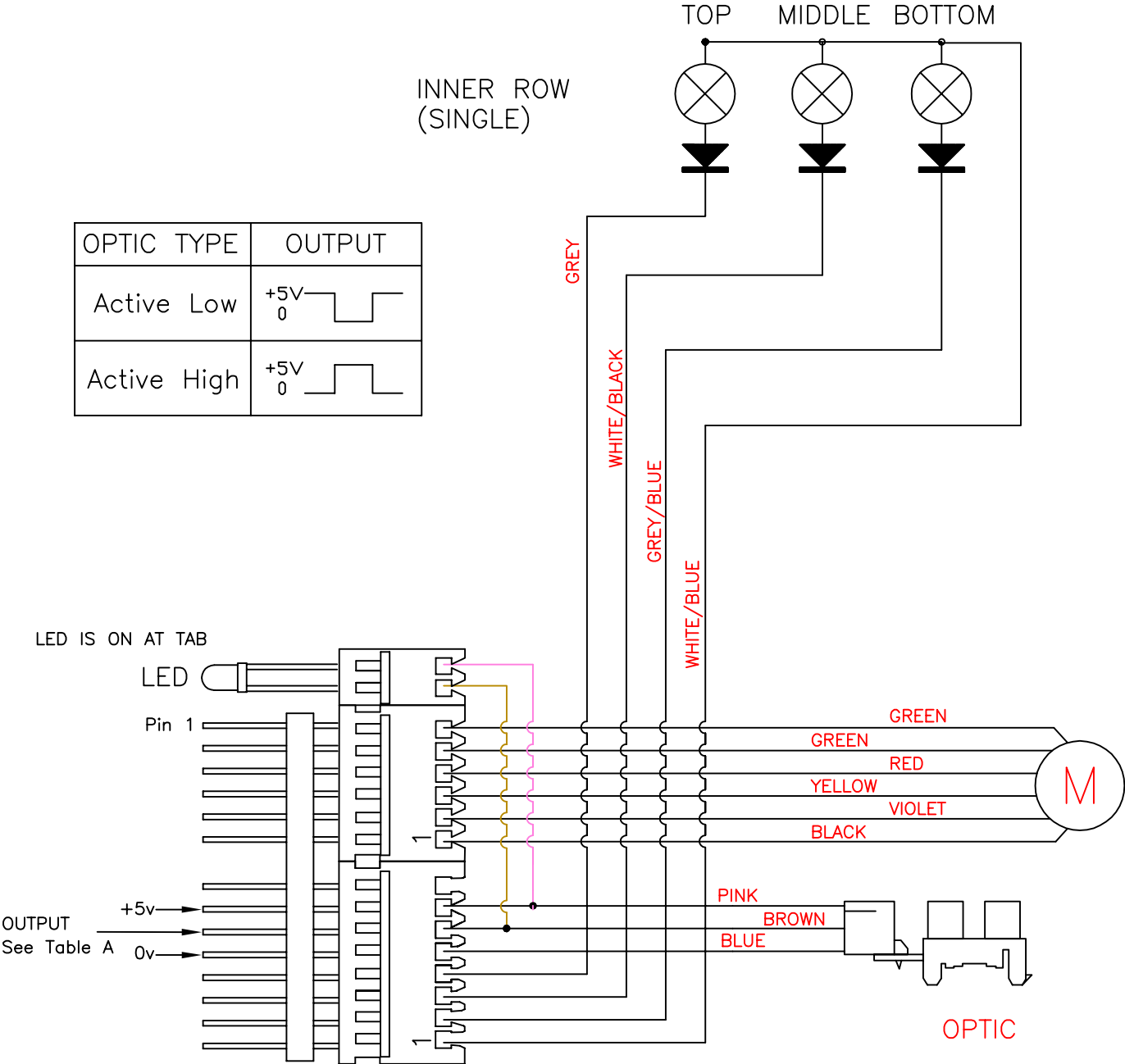
FRONT



SIDE



OPTIC TYPE	OUTPUT
Active Low	$+5V$ 0
Active High	$+5V$ 0



SWITCHING SEQUENCE

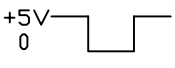
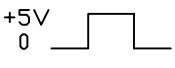
COLOUR STEP	BLACK	RED	VIOLET	YELLOW	GREEN GREEN
1	ON	—	—	ON	+
2	ON	ON	—	—	
3	—	ON	ON	—	
4	—	—	ON	ON	

Optic Output Table A Added 05/08/03	3
LED IS 'ON' AT TAB, CHANGED 26/8/97	2
DRAWN 6/3/97	1
MODIFICATION:	ISSUE:
	DRAWN: R.L.
	DRAWING NO: G4-222

 Gamesman

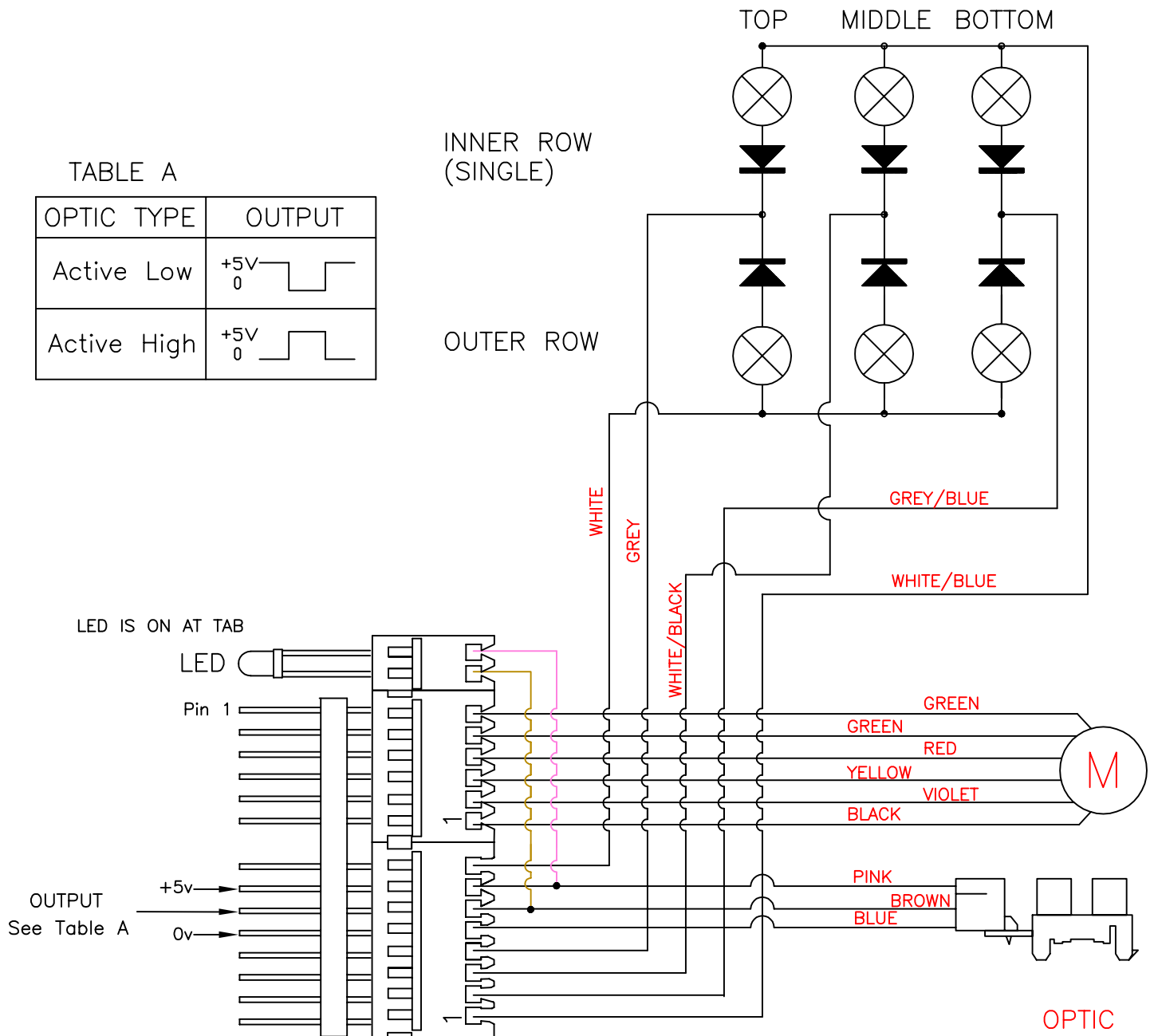
TITTLE: 3 LAMP SINKING CIRCUIT DIAGRAM
GM1000

TABLE A

OPTIC TYPE	OUTPUT
Active Low	
Active High	

INNER ROW
(SINGLE)

OUTER ROW



SWITCHING SEQUENCE

COLOUR STEP	BLACK	RED	VIOLET	YELLOW	GREEN GREEN
1	ON	—	—	ON	+
2	ON	ON	—	—	
3	—	ON	ON	—	
4	—	—	ON	ON	

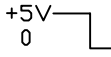
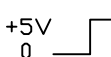
CW

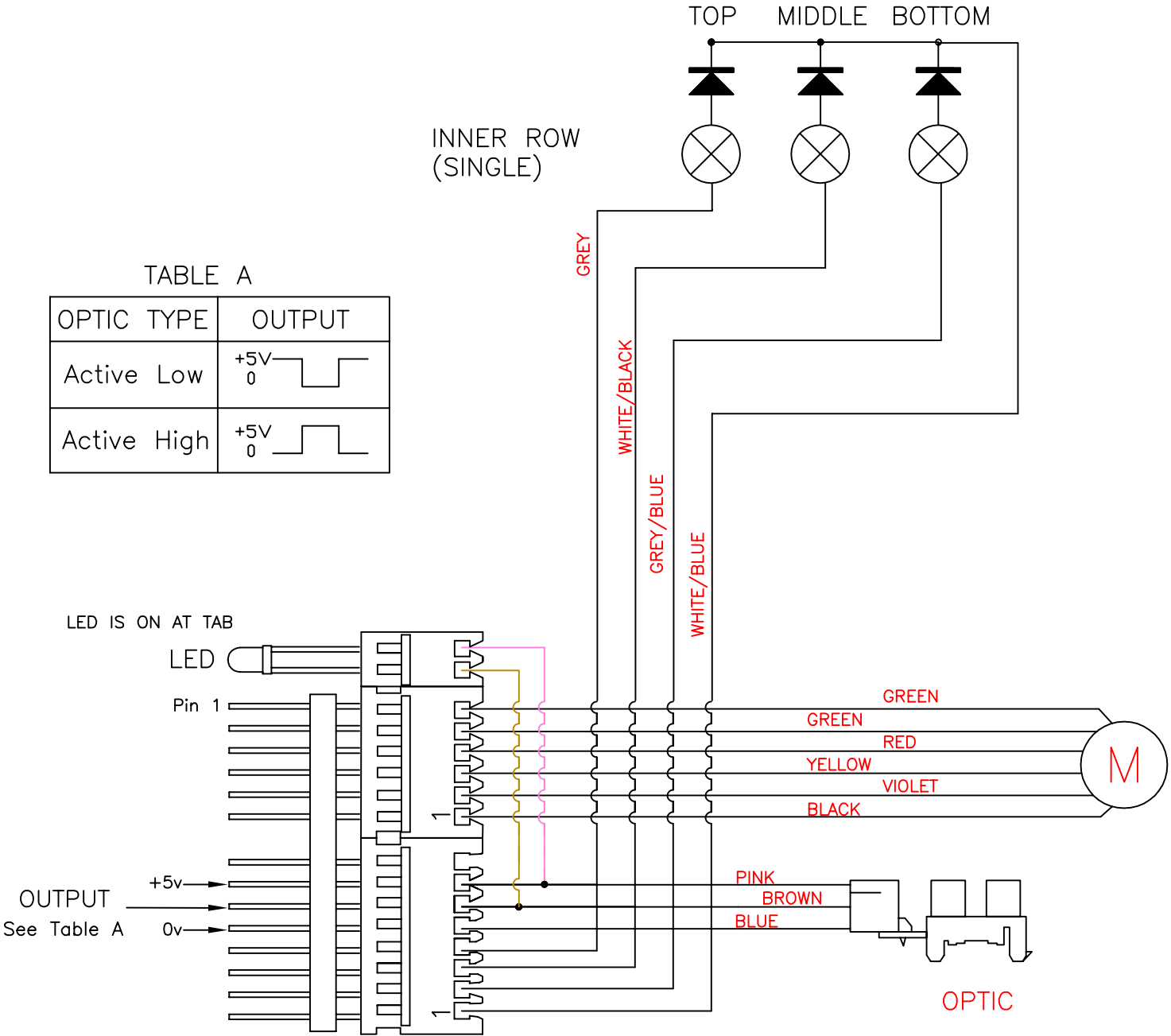
CCW

Optic Output Table A Added 06/08/03	3
LED IS 'ON' AT TAB, CHANGED 26/8/97	2
DRAWN 6/3/97	1
MODIFICATION:	ISSUE:
	DRAWN: R.L.
	DRAWING NO: G4-223

 Gamesman

TITLE: 6 LAMP SINKING CIRCUIT DIAGRAM
GM1000

TABLE A	
OPTIC TYPE	OUTPUT
Active Low	
Active High	

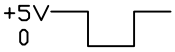
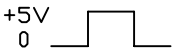


SWITCHING SEQUENCE					
COLOUR STEP	BLACK	RED	VIOLET	YELLOW	GREEN GREEN
1	ON	—	—	ON	+
2	ON	ON	—	—	
3	—	ON	ON	—	
4	—	—	ON	ON	

Optic Output Table A Added 06/08/03	3
LED IS 'ON' AT TAB,CHANGED 26/8/97	2
DRAWN 6/3/97	1
MODIFICATION:	ISSUE:
TITLE: 3 LAMP SOURCING CIRCUIT DIAGRAM GM1000	DRAWN: R.L.
	DRAWING NO: G4-225

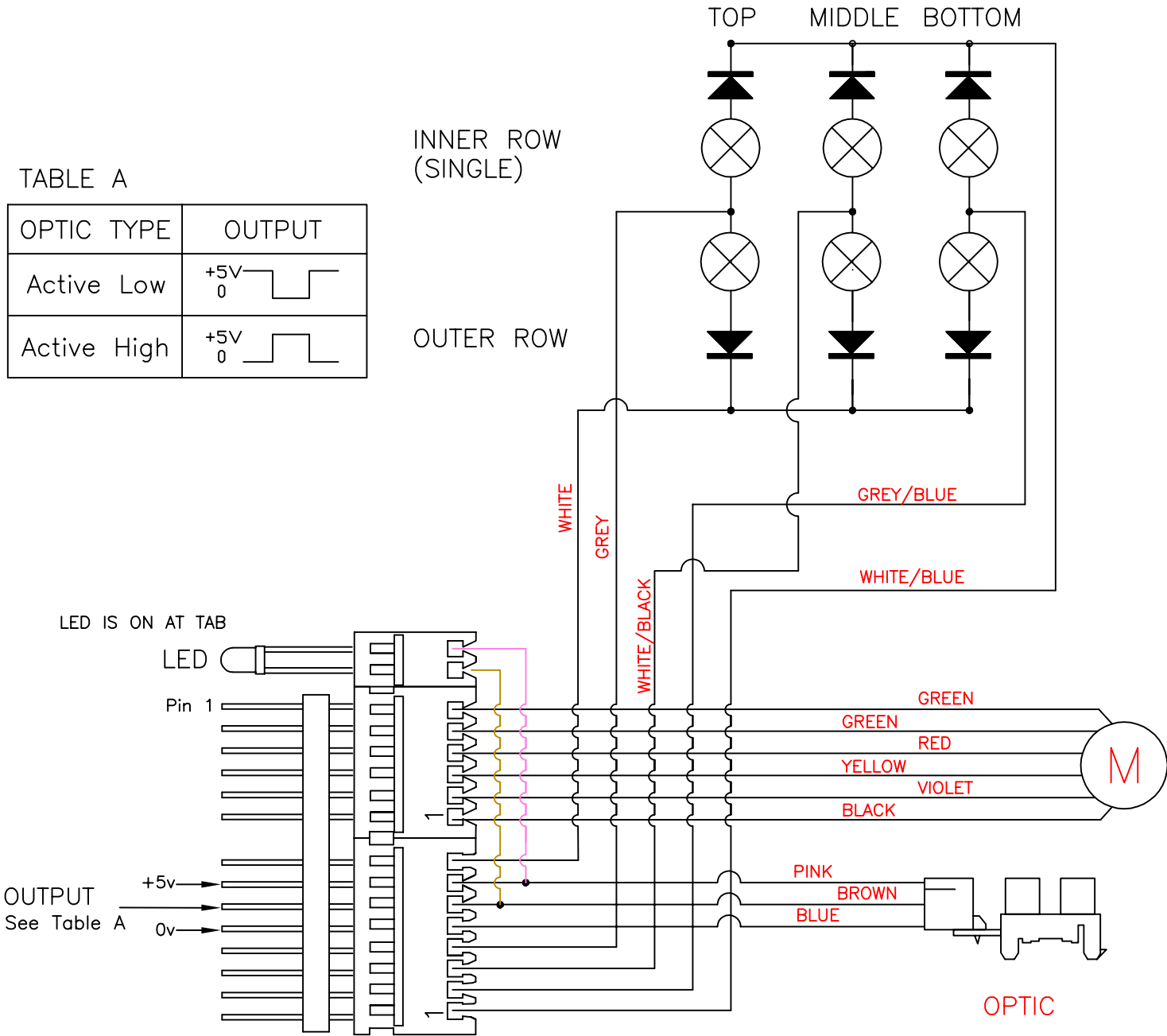


TABLE A

OPTIC TYPE	OUTPUT
Active Low	
Active High	

INNER ROW
(SINGLE)

OUTER ROW



SWITCHING SEQUENCE



COLOUR STEP	BLACK	RED	VIOLET	YELLOW	GREEN GREEN
1	ON	—	—	ON	+
2	ON	ON	—	—	
3	—	ON	ON	—	
4	—	—	ON	ON	

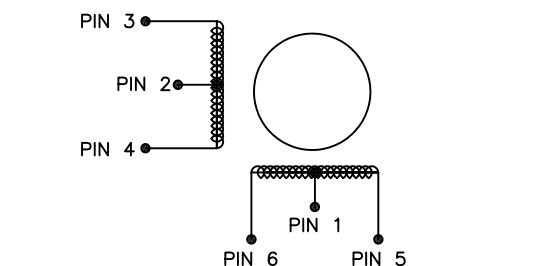
Optic Output Table A Added 06/08/03	3
LED IS 'ON' AT TAB,CHANGED 26/8/97	2
DRAWN 6/3/97	1
MODIFICATION:	ISSUE:
	DRAWN: R.L.
	DRAWING NO: G4-224

 Gamesman

TITLE: 6 LAMP SOURCING CIRCUIT DIAGRAM
GM1000

Table A

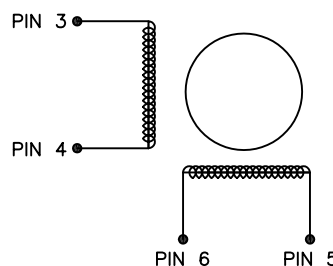
<i>Optic Type</i>	<i>Output</i>
Active Low	+5V 0 
Active High	+5V 0 



DRIVING AS A UNIPOLAR MOTOR

PIN No. STEP	PIN 5	PIN 4	PIN 6	PIN 3	PIN 1 PIN 2
1	—	ON	ON	—	+ VOLTAGE
2	—	—	ON	ON	
3	ON	—	—	ON	
4	ON	ON	—	—	

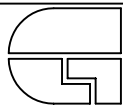
SWITCHING SEQUENCE



DRIVING AS A BI-POLAR MOTOR

PIN No. STEP	PIN 5	PIN 4	PIN 6	PIN 3
1	+VE	OV	OV	+VE
2	+VE	+VE	OV	OV
3	OV	+VE	+VE	OV
4	OV	OV	+VE	+VE

SWITCHING SEQUENCE



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Crompton Fields, Crompton Way, Crawley, W.Sussex
RH10 2QR. Tel:01293 418888 Fax:01293 418880

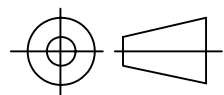
DRAWN 7/2/02

1

MODIFICATION:

ISSUE:

THIRD ANGLE PROJECTION



UNLESS OTHERWISE STATED :-

DIMENSIONS IN
mm & TO APPLY
AFTER PLATING

TOLERANCES :-

2 DEC PLACES $\pm 0.40\text{mm}$ CONCENTRICITY 0.08mm MAX
3 DEC PLACES $\pm 0.13\text{mm}$ MOULDING DRAFT 1° PER SIDE

DRAWN: JC

SCALE: 1:1

FINISH:

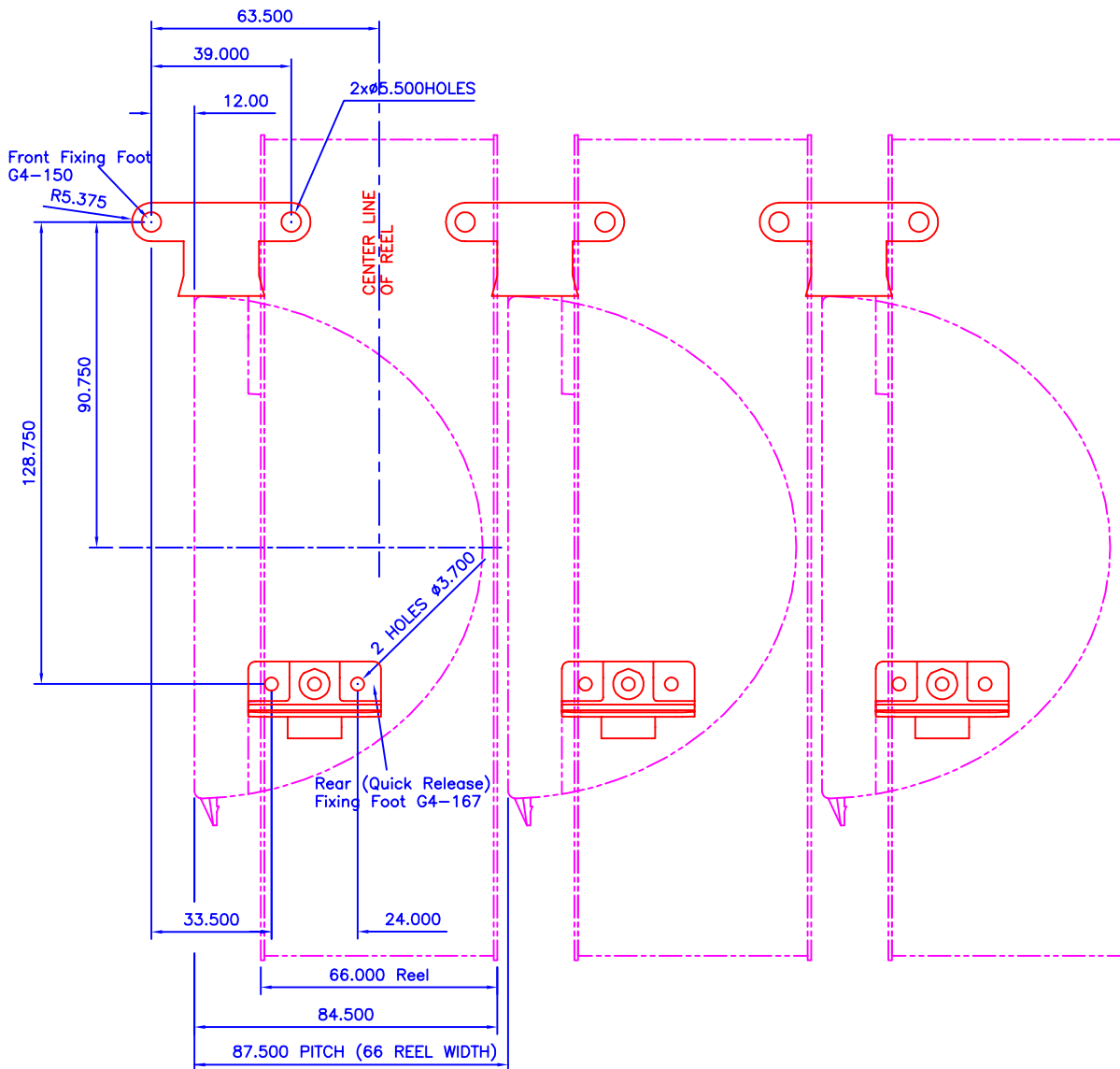
MATERIAL:

TITLE: 200 STEP MOTOR CIRCUIT DIAGRAM

DRIVING AS A UNIPOLAR OR BIPOLAR MOTOR

DRAWING NO:

G4-837



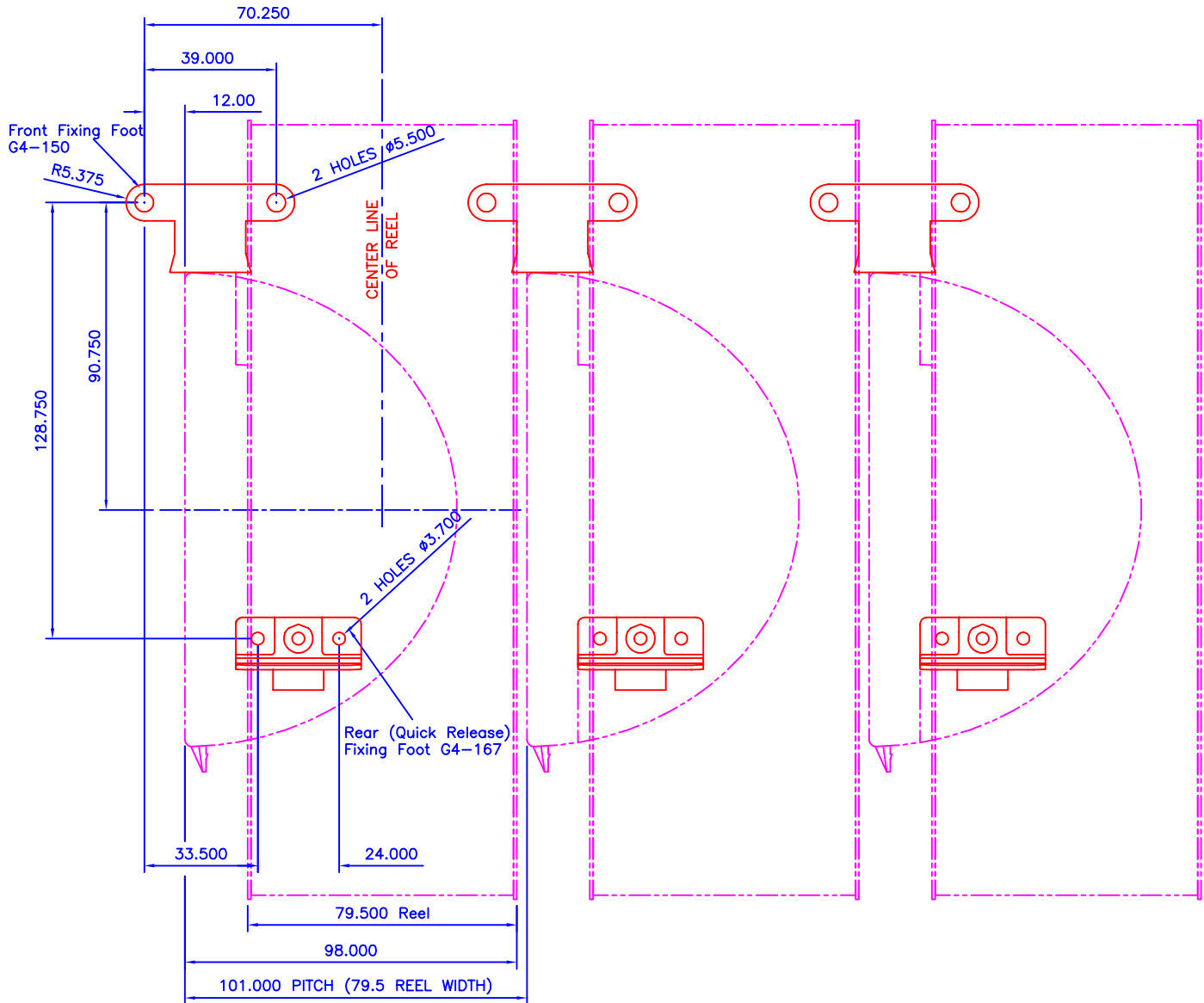
Rear fixing feet changed 21/12/98		5
Dims 12.00 & 63.50 added 2/3/98		4
Front foot details changed 8/1/97		3
Feet fixing dimensions added 20/11/96		2
DRAWN 23/9/96		1
MODIFICATION:		ISSUE:
SCALE:	1:2	DRAWN: J.C.
GameMech Fixing Feet Pitch 66mm Reel		DRAWING NO: G4-189



Gamesman

TITLE:

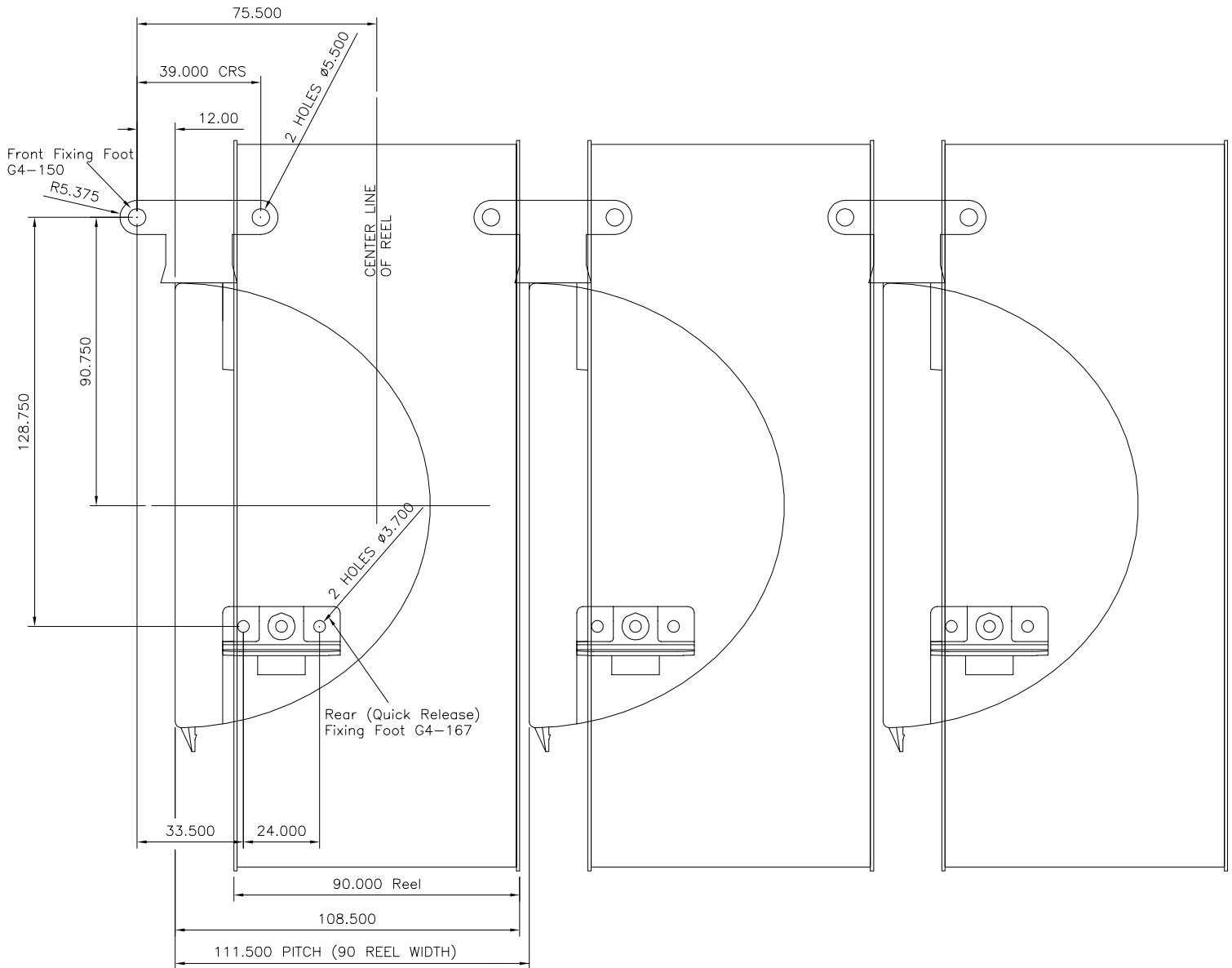
GameMech Fixing Feet Pitch 66mm Reel



Rear fixing feet changed 21/12/98		5
Dims 12.00 & 70.25 added 2/3/98		4
Front foot details changed 8/1/97		3
Feet fixing dimensions added 20/11/96		2
DRAWN 23/9/96		1
MODIFICATION:		ISSUE:
SCALE:	1:2	DRAWN: J.C.
GameMech Fixing Feet Pitch 79.5mm Reel		DRAWING NO: G4-181

 Gamesman

TITLE:

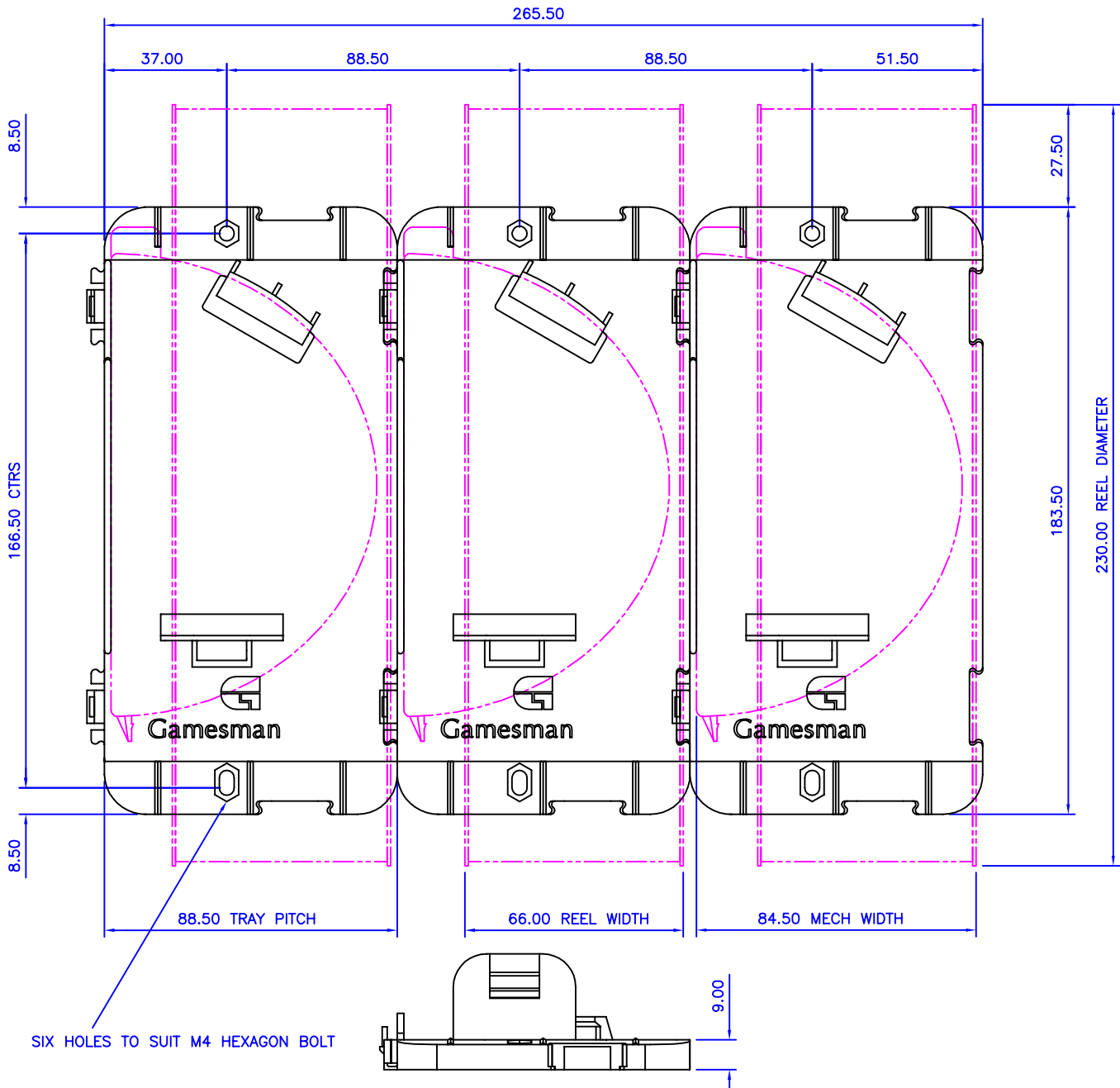


Rear fixing feet changed 21/12/98	6
Dims 12.00 & 75.5 added 2/3/98	5
Rear Right foot position corrected 28/4/97	4
Front foot details changed 8/1/97	3
Feet fixing dimensions added 20/11/96	2
DRAWN 23/9/96	1
MODIFICATION:	ISSUE:
SCALE:	1:2
DRAWN: J.C.	DRAWING NO: G4-190

 Gamesman

TITLE:

GameMech Fixing Feet Pitch 90mm Reel

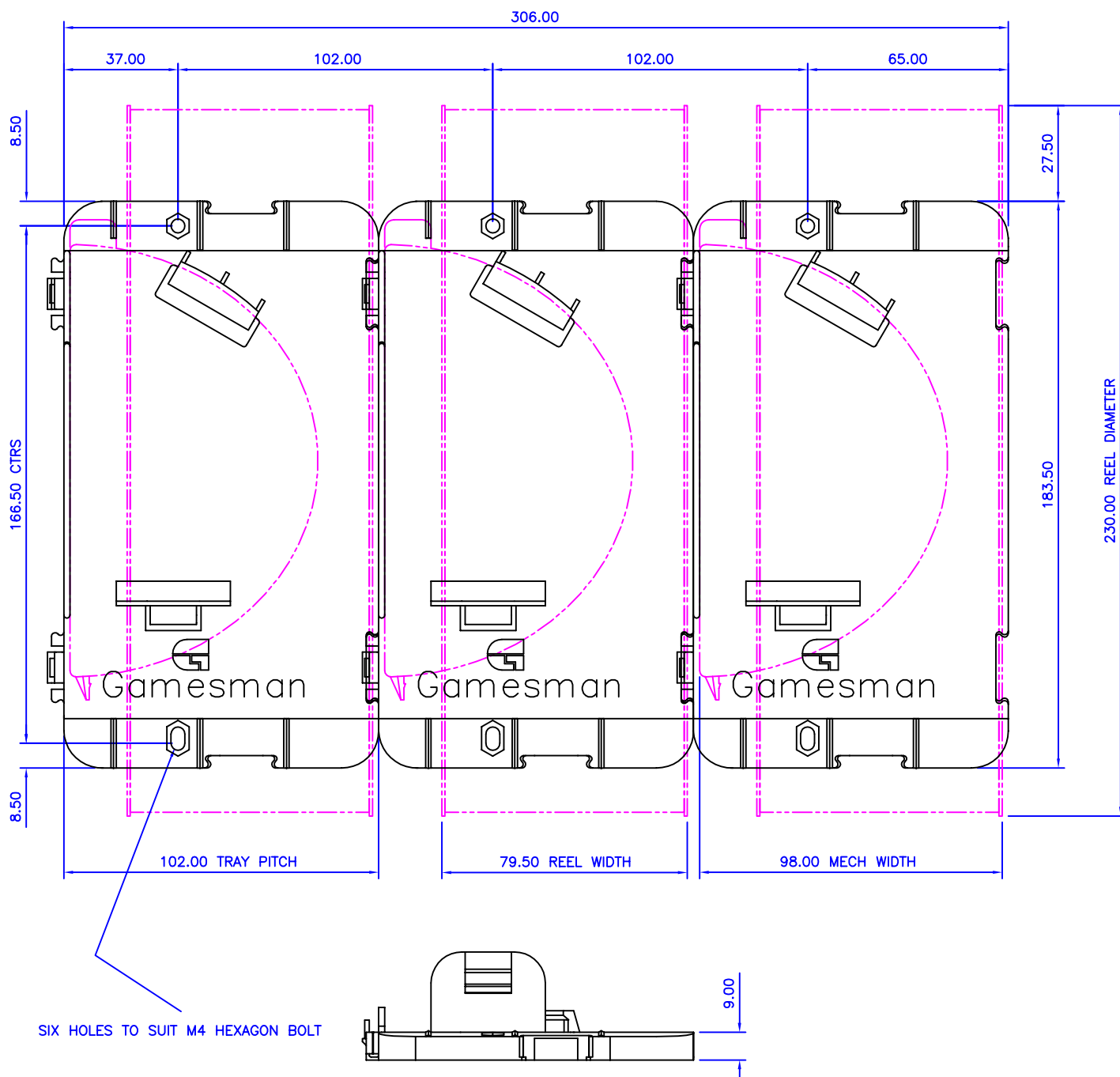


Parts Updated - 17/12/98	3
FRONT VIEW ADDED 14/5/97	2
DRAWN 7/5/97	1
SCALE 1:2	ISSUE:
	DRAWN: R.L.
	DRAWING NO: G4-256



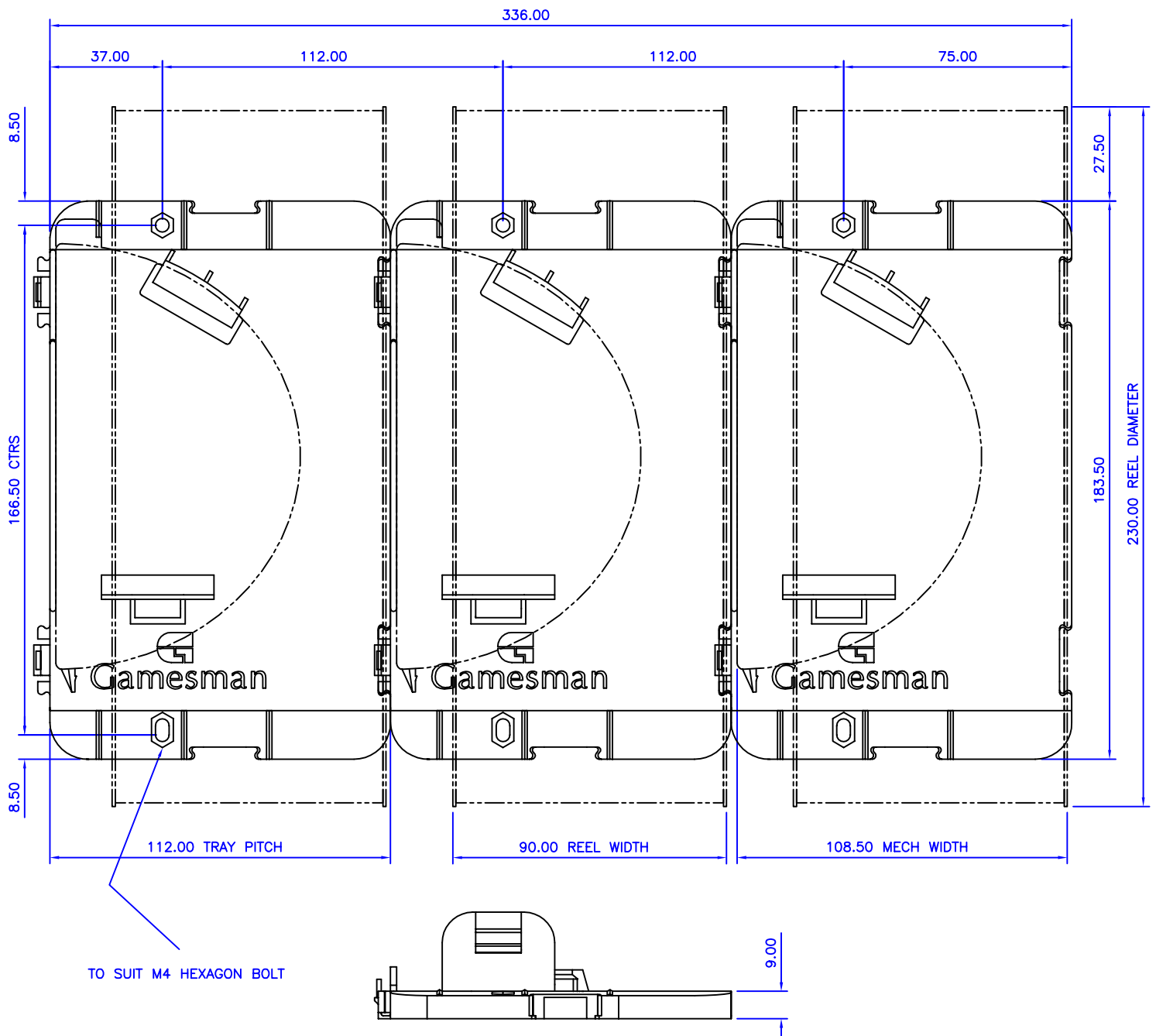
Gamesman

TITLE: GAMEMECH 1000 Mounting Plate Pitch
66mm Reel



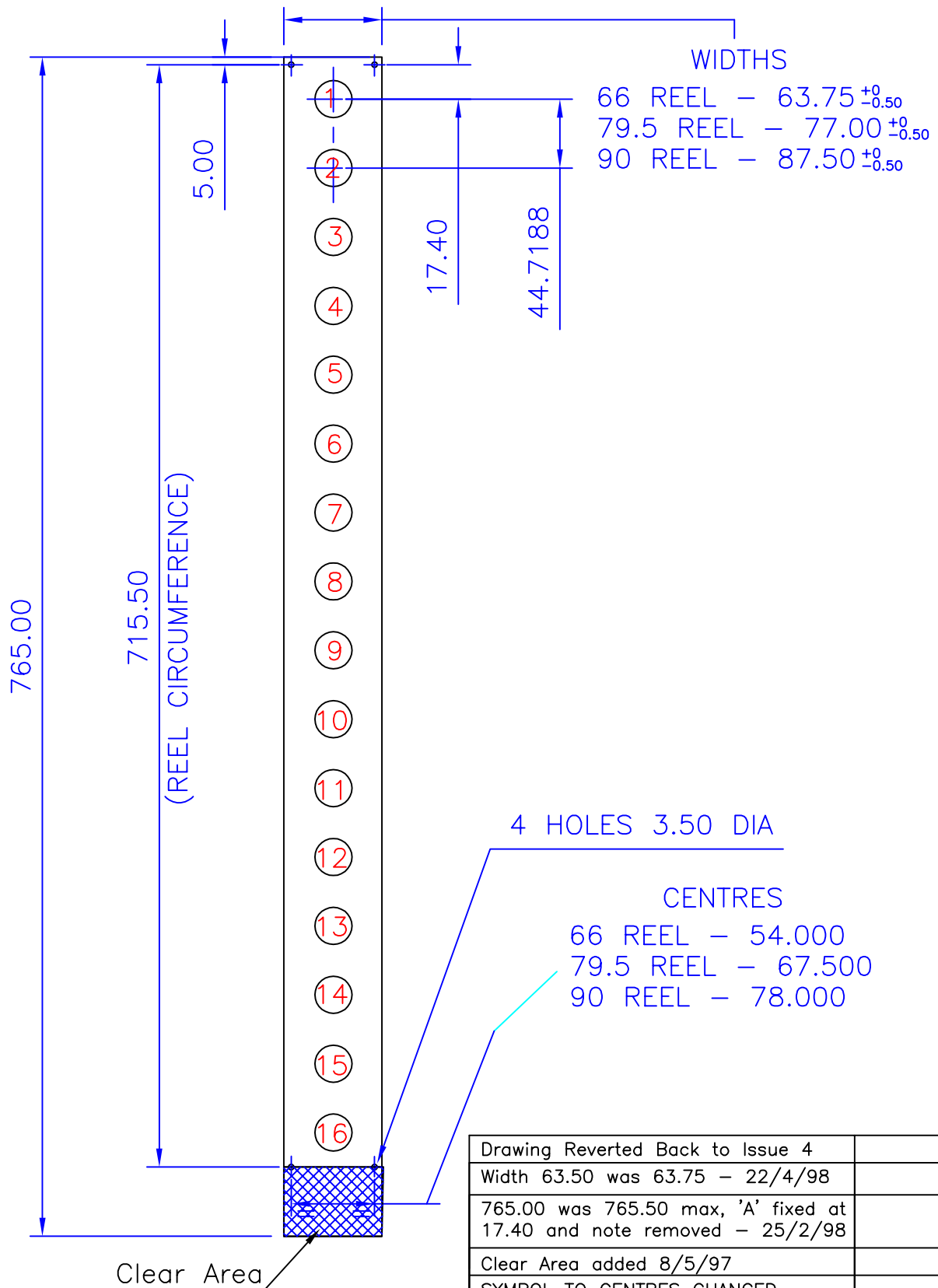
Gamesman

Parts Updated - 17/12/98	3
FRONT VIEW ADDED 14/5/97	2
DRAWN 29/4/97	1
SCALE 1:2	ISSUE:
TITLE: GAMEMECH Mounting Plate Pitch 79.5mm Reel	DRAWN: R.L.
	DRAWING NO: G4-254



Gamesman

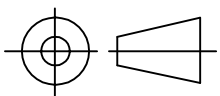
Parts Updated – 17/12/98	3
FRONT VIEW ADDED 14/5/97	2
DRAWN 7/5/97	1
SCALE 1:2	ISSUE:
TITLE: GAMEMECH 1000 Mounting Plate Pitch 90mm Reel	DRAWN: R.L.
	DRAWING NO: G4-258



Drawing Reverted Back to Issue 4	6
Width 63.50 was 63.75 – 22/4/98	5
765.00 was 765.50 max, 'A' fixed at 17.40 and note removed – 25/2/98	4
Clear Area added 8/5/97	3
SYMBOL TO CENTRES CHANGED TO 'A' DIMENSION – 8/5/97	2
DRAWN 10/4/97	1
MODIFICATION:	ISSUE:

G Gamesman

THIRD ANGLE PROJECTION



UNLESS OTHERWISE STATED :–

DIMENSIONS IN
mm & TO APPLY
AFTER PLATING

TOLERANCES :–

2 DEC PLACES ± 0.40 mm CONCENTRICITY 0.08mm MAX
 3 DEC PLACES ± 0.13 mm MOULDING DRAFT 1° PER SIDE

DRAWN: R.L.

SCALE: 1:4

FINISH:

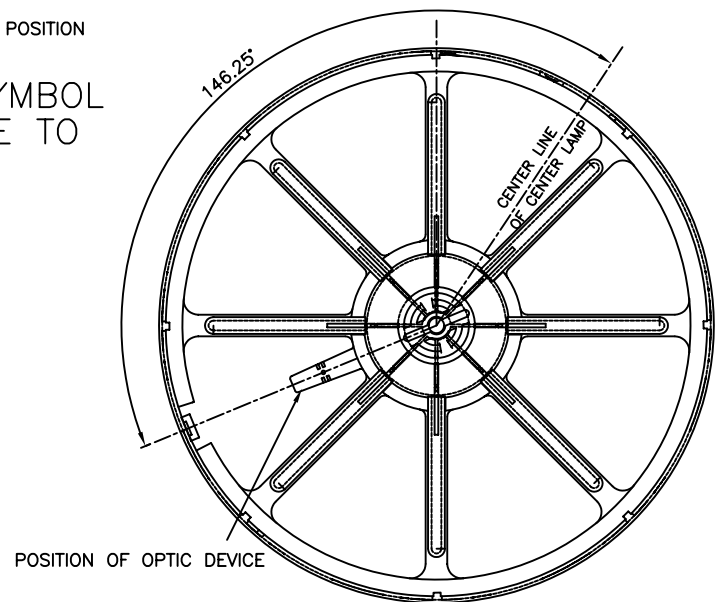
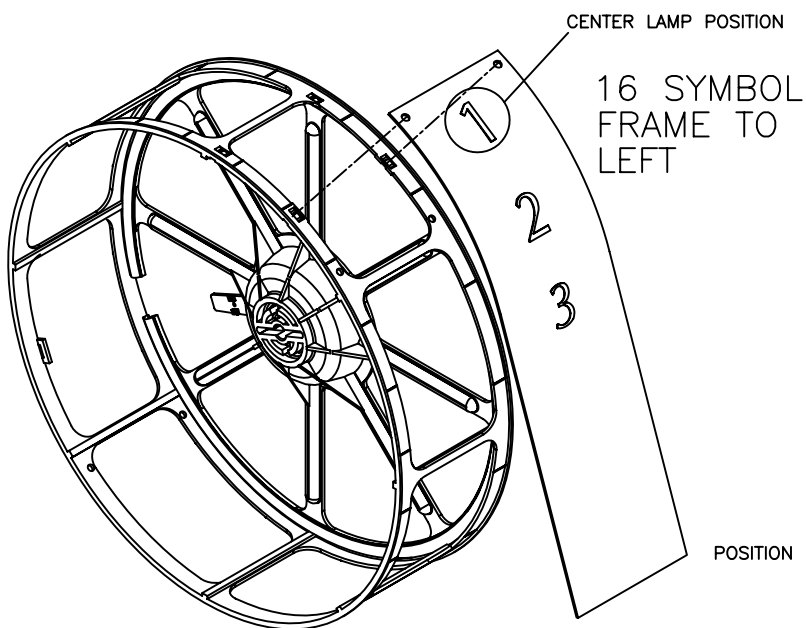
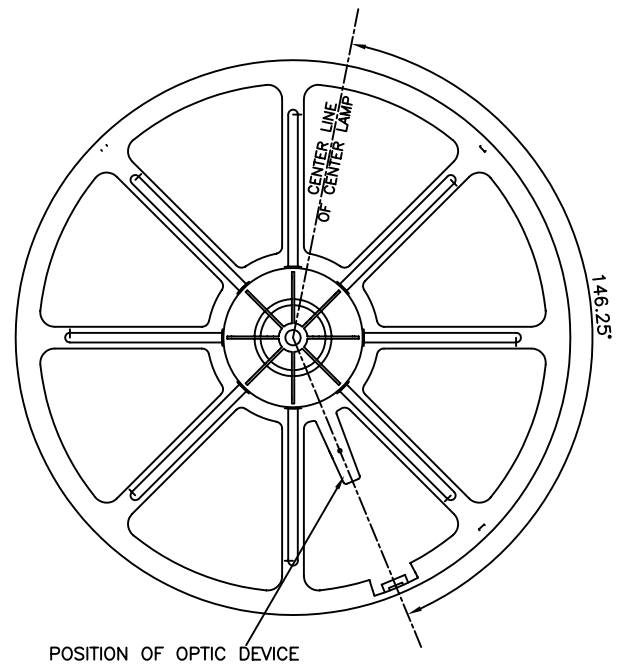
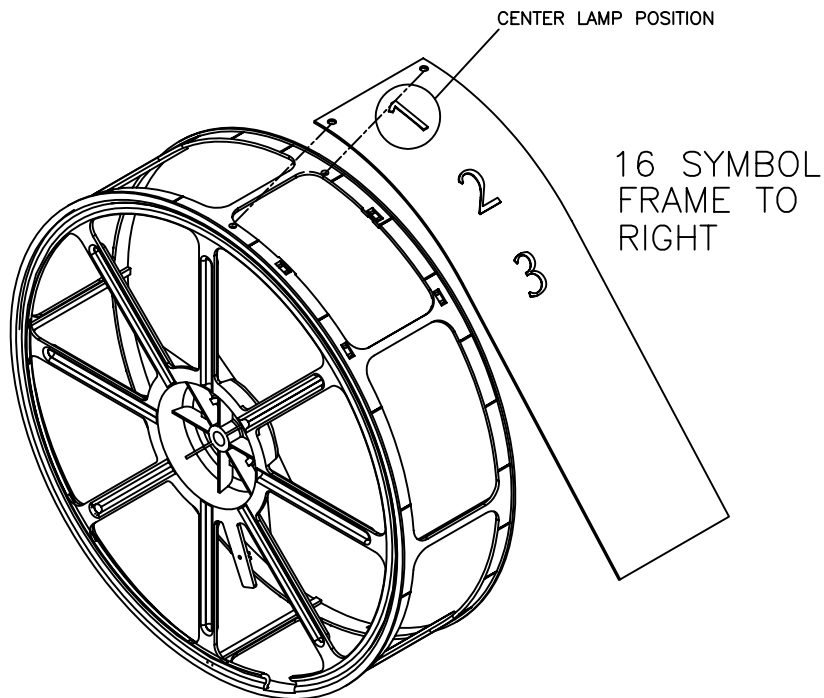
MATERIAL:

TITLE:

16 SYMBOL REEL TAPE

DRAWING NO:

G4–237



Reference to Rear and Front door removed
Left & Right Reference added 09.06.05

3

Dim 146.25*(D2) WAS 123.75*
Dim 146.25*(C3) WAS 168.75* 15/5/98

2

Gamesman

Crompton Fields, Crompton Way, Crawley, W.Sussex
RH10 2QR. Tel:01293 418888 Fax:01293 418880

DRAWN 26/2/98

1

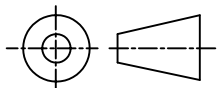
MODIFICATION:

ISSUE:

THIRD ANGLE PROJECTION

UNLESS OTHERWISE STATED :-

DRAWN: J.C.



DIMENSIONS IN
mm & TO APPLY
AFTER PLATING

TOLERANCES :-

2 DEC PLACES $\pm 0.40\text{mm}$ CONCENTRICITY 0.08mm MAX
3 DEC PLACES $\pm 0.13\text{mm}$ MOULDING DRAFT 1° PER SIDE

SCALE: 1:3

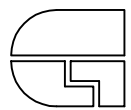
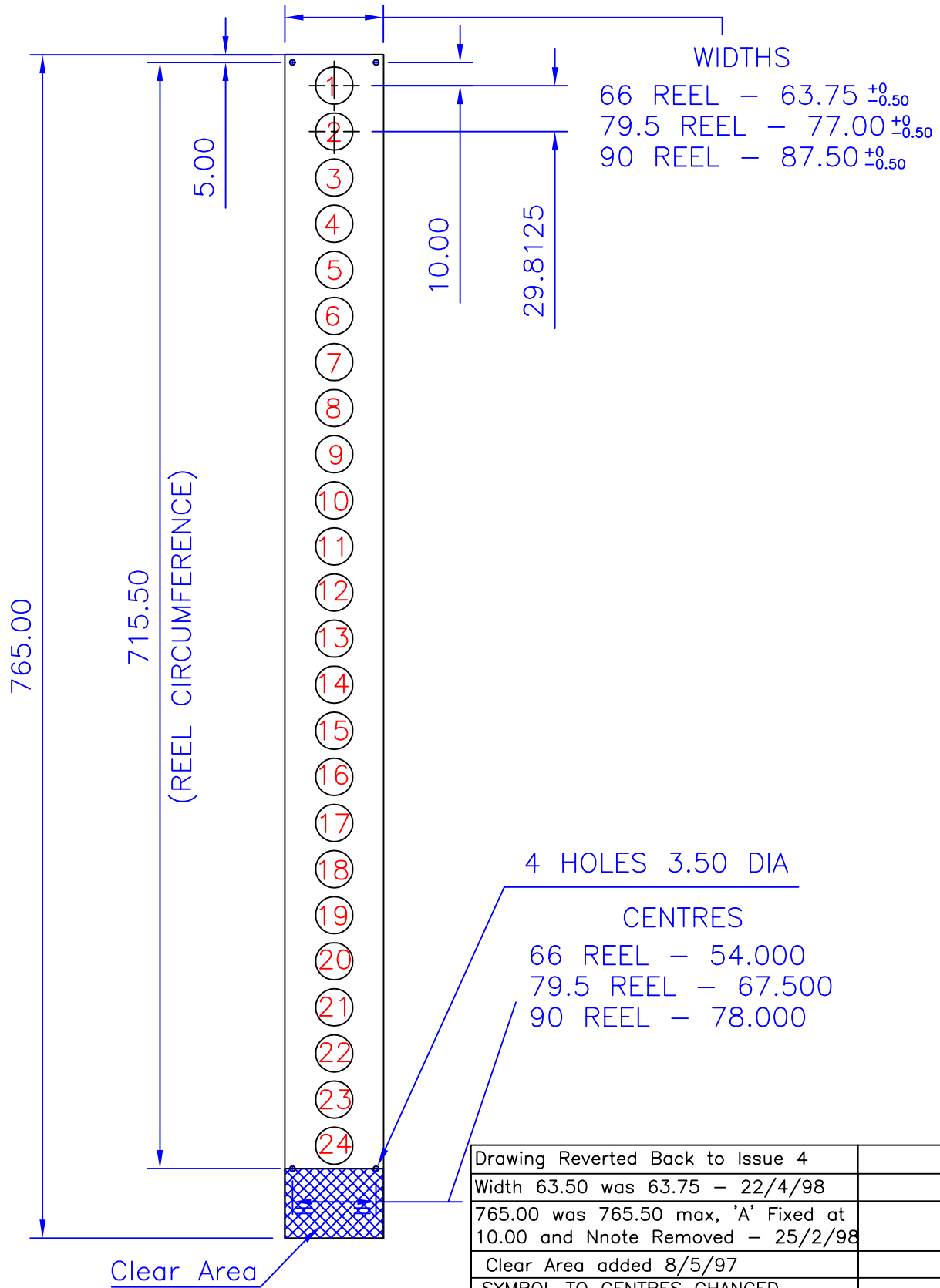
FINISH:

MATERIAL:

TITLE:

16 SYMBOL TAPE DIAGRAM

DRAWING NO:
G4-327



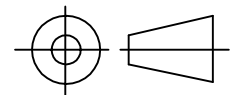
Gamesman

DRAWN 10/4/97

MODIFICATION:

ISSUE:

THIRD ANGLE PROJECTION



UNLESS OTHERWISE STATED :-

DIMENSIONS IN
mm & TO APPLY
AFTER PLATING

TOLERANCES :-

2 DEC PLACES $\pm 0.40\text{mm}$ CONCENTRICITY 0.08mm MAX
 3 DEC PLACES $\pm 0.13\text{mm}$ MOULDING DRAFT 1° PER SIDE

DRAWN: R.L.

SCALE: 1:4

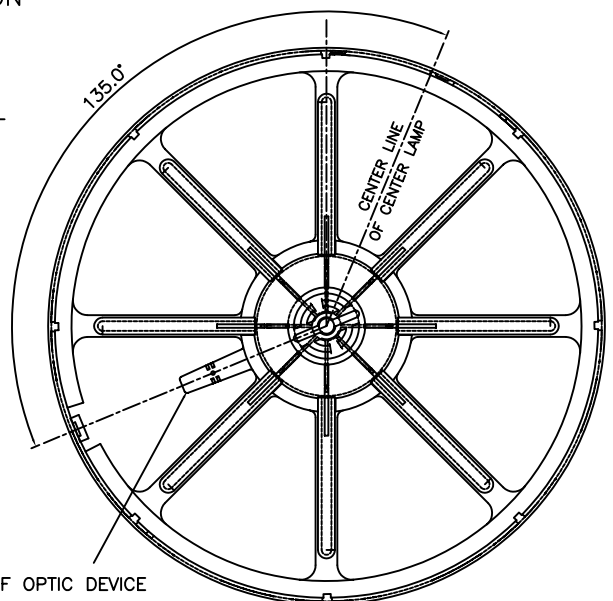
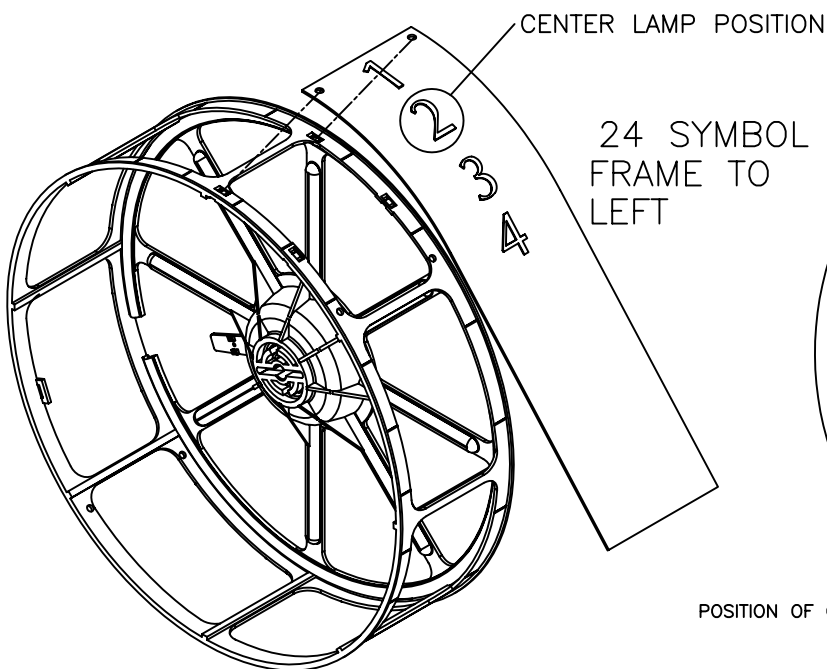
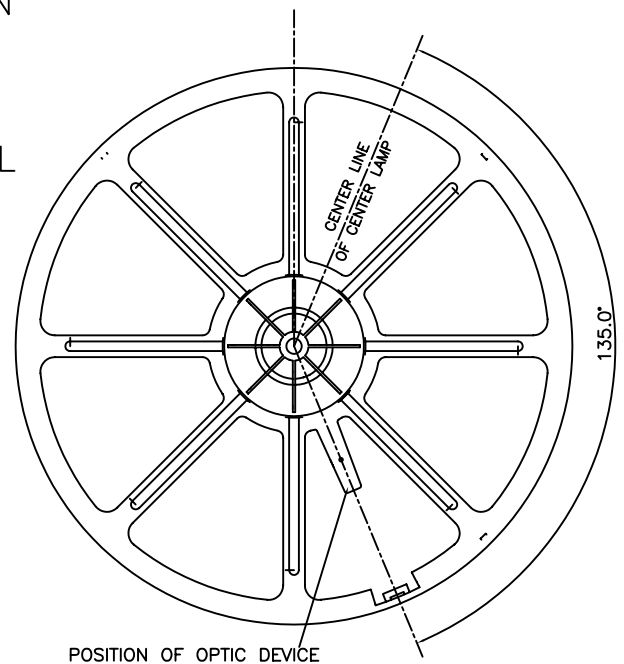
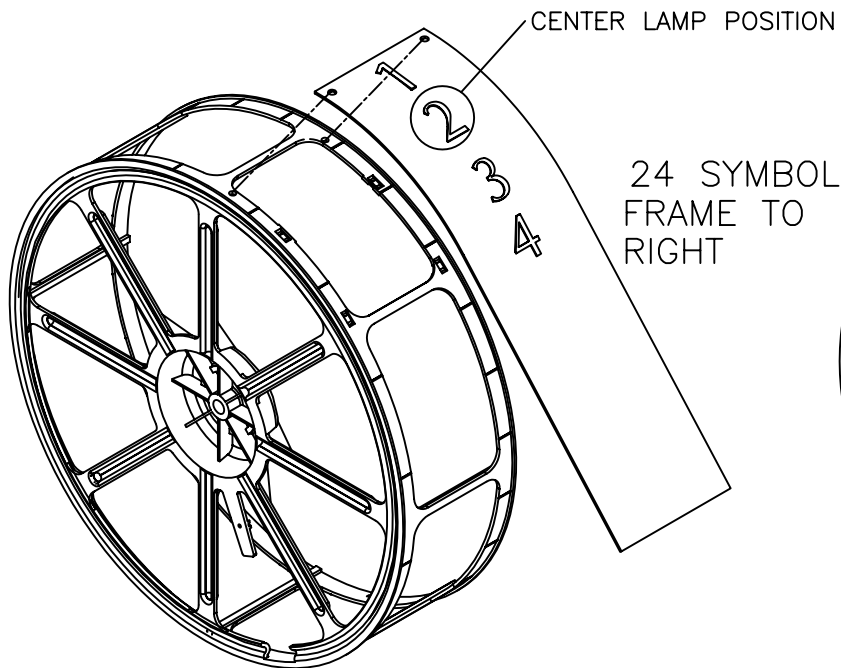
FINISH:

MATERIAL:

TITLE:

24 SYMBOL REEL TAPE

DRAWING NO:
G4-238

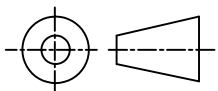


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RH10 2QR. Tel:01293 418888 Fax:01293 418880

See ECN0169 16.01.2006	2
DRAWN 26/2/98	1
MODIFICATION:	ISSUE:
DRAWN: J.C.	
SCALE: 1:3	
DRAWING NO: G4-326	

THIRD ANGLE PROJECTION



UNLESS OTHERWISE STATED :-

DIMENSIONS IN
mm & TO APPLY
AFTER PLATING

TOLERANCES :-

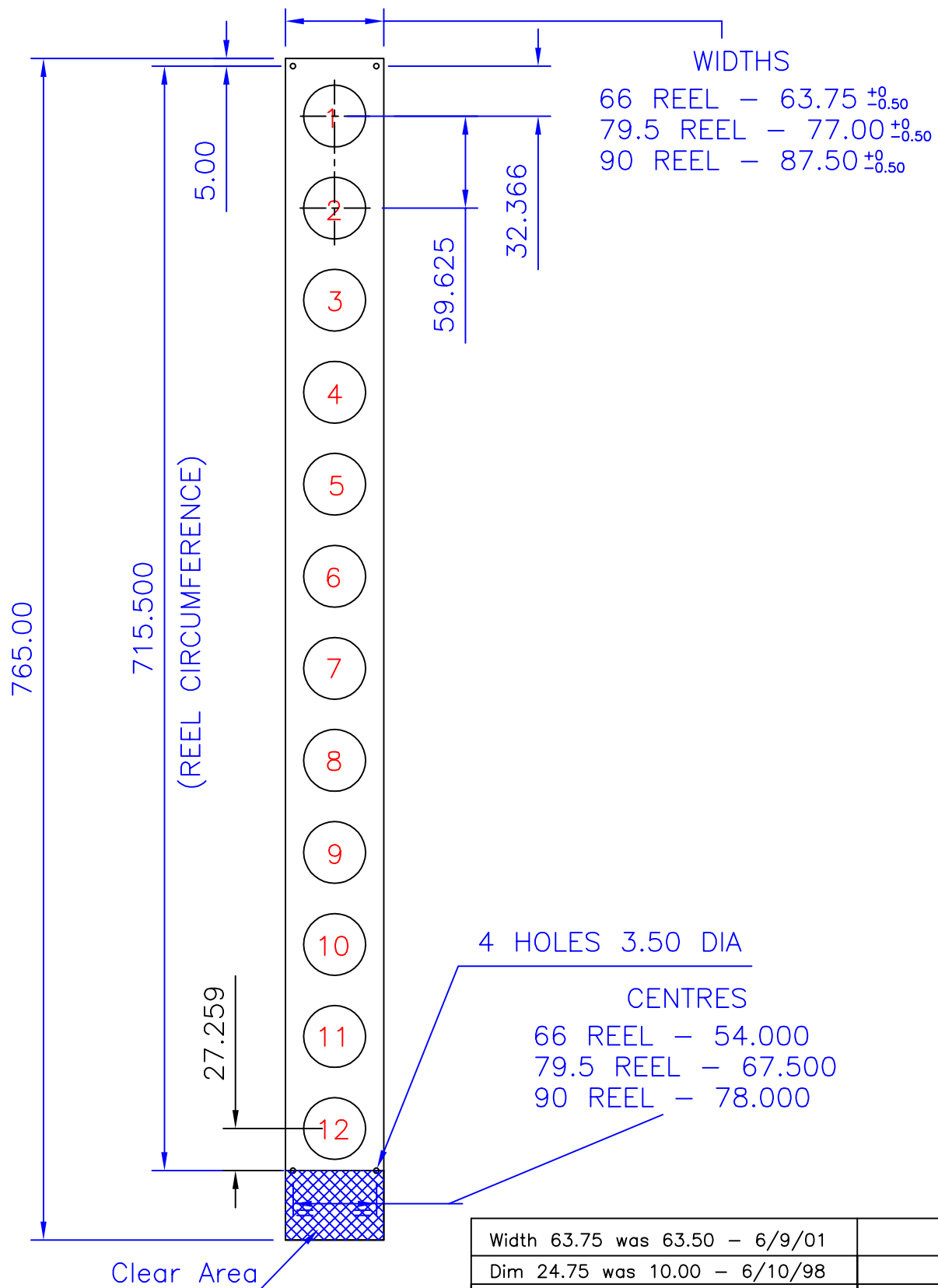
2 DEC PLACES $\pm 0.40\text{mm}$ CONCENTRICITY 0.08mm MAX
3 DEC PLACES $\pm 0.13\text{mm}$ MOULDING DRAFT 1° PER SIDE

FINISH:

MATERIAL:

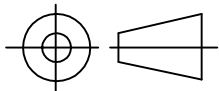
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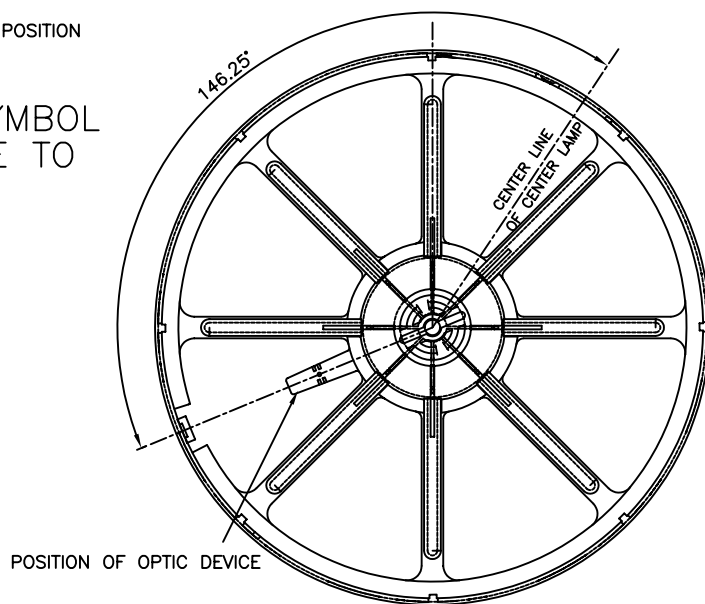
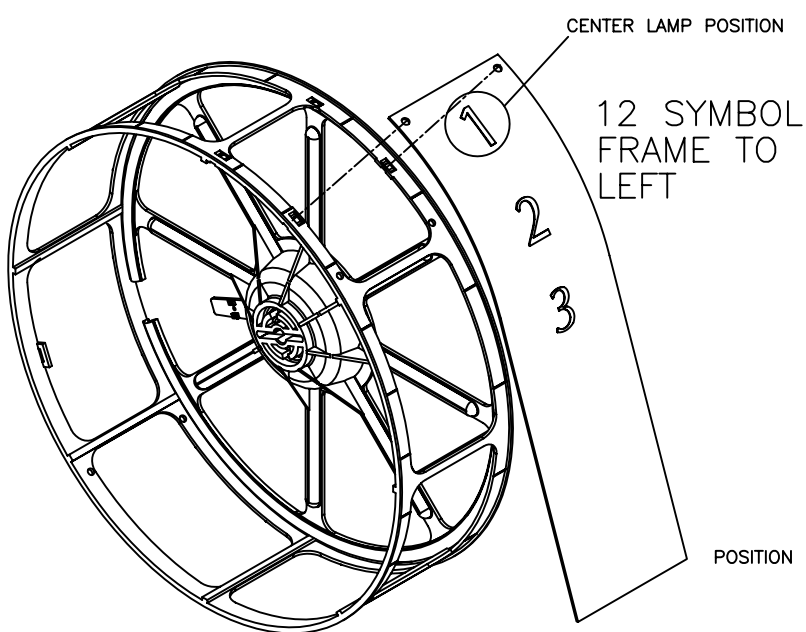
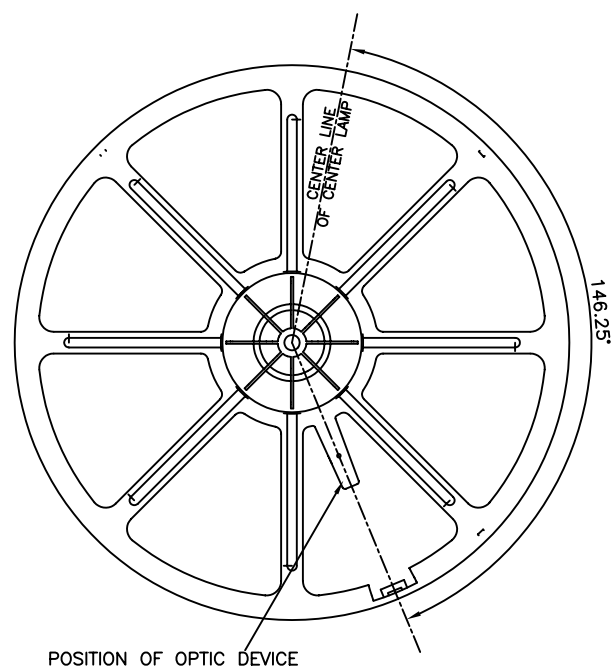
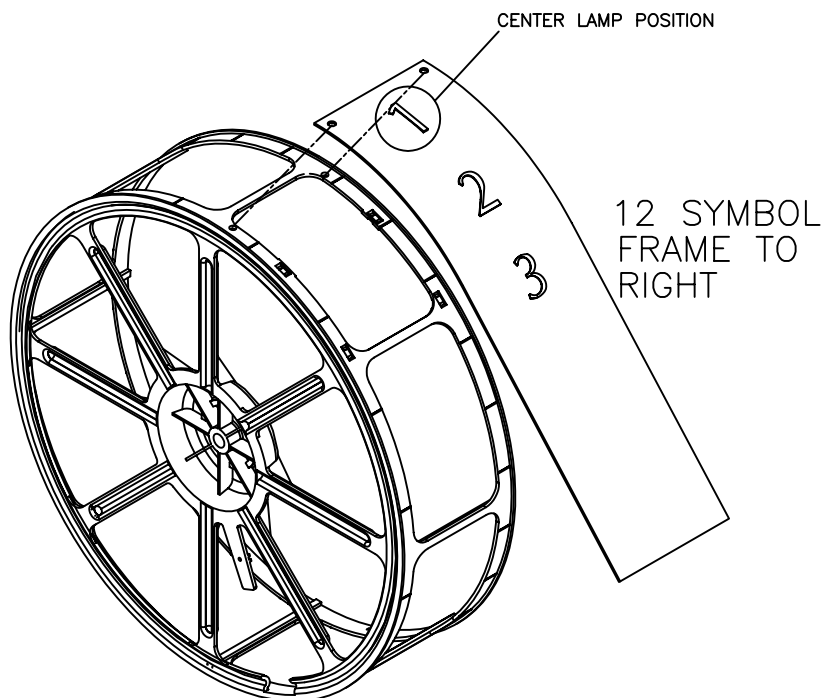
24 SYMBOL TAPE DIAGRAM



Width 63.75 was 63.50 – 6/9/01	4
Dim 24.75 was 10.00 – 6/10/98	3
Width 63.50 was 63.75 – 22/4/98	2
DRAWN 26/2/98	1
MODIFICATION:	ISSUE:

 **Gamesman**

THIRD ANGLE PROJECTION 	UNLESS OTHERWISE STATED :- DIMENSIONS IN mm & TO APPLY AFTER PLATING TOLERANCES :- 2 DEC PLACES $\pm 0.40\text{mm}$ CONCENTRICITY 0.08mm MAX 3 DEC PLACES $\pm 0.13\text{mm}$ MOULDING DRAFT 1° PER SIDE		DRAWN: J.C.
			SCALE: 1:4
FINISH:	MATERIAL:	TITLE: 12 SYMBOL REEL TAPE	DRAWING NO: G4-324



See ECN0170 16.01.2006

3

Dim 146.25*(D2) WAS 135*
Center lamp position now at ① .19-9-01

2



Gamesman

Crompton Fields, Crompton Way, Crawley, W.Sussex
RH10 2QR. Tel:01293 418888 Fax:01293 418880

DRAWN 26/2/98

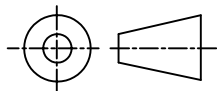
1

MODIFICATION:

ISSUE:

THIRD ANGLE PROJECTION

UNLESS OTHERWISE STATED :-



DIMENSIONS IN
mm & TO APPLY
AFTER PLATING

TOLERANCES :-

2 DEC PLACES ± 0.40 mm CONCENTRICITY 0.08mm MAX
3 DEC PLACES ± 0.13 mm MOULDING DRAFT 1° PER SIDE

DRAWN: J.C.

SCALE: 1:3

FINISH:

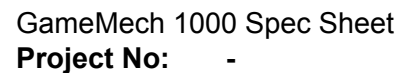
MATERIAL:

TITLE:

12 SYMBOL TAPE DIAGRAM

DRAWING NO:

G4-328



Customer Signature	Gamesman Signature	Gamesman Internal Code	MMR	L/A	LED	MAT	MO