

The image shows the iconic Star Wars logo in white on a black background. The text "STAR THE EMPIRE STRIKES BACK WARS" is arranged in a slanted rectangular frame. "STAR" is at the top left, "THE" is in the middle left, "EMPIRE" is the largest word in the center, "STRIKES BACK" is below it, and "WARS" is at the bottom right.

STAR THE EMPIRE STRIKES BACK WARS

MANUAL

STAR THE
EMPIRE
STRIKES BACK
WAR

MANUAL : "THE EMPIRE STRIKES BACK"

A. GENERAL GAME OPERATION

1. Power-Up Sequence

When power is applied to the machine there is a short delay of approximately 10 seconds before the machine plays a "power-up" tune to announce that it is ready to play. During the power-up period the machine is performing six tests on its own hardware, the successful completion of each being signalled by a single flash of a LED on the M.P.U. module (A1) and a simultaneous tone from the sound system. After power-up the machine goes into attract mode waiting for a game to be played.

2. Attract Mode

In this mode the four score windows display the player's score for the last game, alternating with the highest score to date. Some lamp flashing will occur on the playfield. As coins are inserted a "coin-in" tune will sound and the accumulated credit will be shown in the credit window.

3. Game Start

A game is started by pressing the credit button located on the front end of the cabinet. The first player's score flashes '00', a '1' appears in the ball-in-play window, the credit display is reduced by one and a "player-up" tune is played. Additional players are posted each time the credit button is pressed. Up to four players can play at a time, each player's turn being indicated by the flashing of score display. The credit button has no effect after the fourth player has been added or the credit display reads '0'. Pressing the credit button after the first player has scored cancels the game and posts the first player for a new game.

When a game is started a background sound may be produced depending on game option switch 11.

The background sound will increase in pitch periodically while the ball is in play as long as scoring occurs.

4. Game Scoring

Shooting the ball initiates play. Bumpers and spinners score 100 points or 1000 points when lit. Side kickers score 10 points. Rebound switches score 50 points. Outlanes score 5000 points.

- i) Outside return lanes - Scores 500 points plus 1 bonus advance or 5 000 points, 3 bonus advances and lights wedge for Planet Bespin eject hole when lit.
- ii) Inside return lanes - Scores 500 points plus 1 bonus advance or 5 000 points, 3 bonus advances and lights wedge for Planet Dagobah eject hole when lit.

iii) Single drop target - Scores 500 points plus 1 bonus advance or 50 000 points when 50 000 points wedge is flashing.

iv) Ball shooter lane - Resets single drop target, performs bonus countdown and then resets bonus to previous value. If single drop target is down and 50 000 points wedge is flashing ball shooter lane scores 50 000 points.

v) Six central targets - Score 1 000 points.
Completing all six targets for the first time lights two pop bumpers, both spinner targets and flashes the inserts of the inside ball return lanes.

Completing all six targets for the second time lights remaining pop bumpers and flashes the inserts of the outside ball return lanes.

vi) Three drop targets - Score 500 points and 1 bonus advance.

Completing all three drop targets -
for the first time scores 10 000 points
for the second time scores 15 000 points
for the third time scores 20 000 points
for the fourth time scores 25 000 points
for the fifth time and successive times score 25 000 points
and special

Option switch 14 can be used to link fourth and fifth times together

vii) Dagobah eject hole - Scores the value of the three drop targets. When lit performs bonus countdown and then resets bonus value to previous value.

viii) Bespin eject hole - first time scores 10 000 points
second time scores 20 000 points
third time scores 30 000 points
fourth time and successive times scores 50 000 points

When Bespin wedge lit extra ball is scored.

ix) Top target - Scores 1 000 points plus 1 bonus advance or value of lit insert.

x) 4 top lanes - Scores 500 points plus 1 bonus advance.
The player has control over the position of the 4 top lane lamps. By operating the right hand flipper the lit lamps will move to the right one position at a time. The lit lamp in top lane '4' will move to top lane '1'.

Completing all 4 top lanes for the first time lights the 2x multiplier and lights the 10 000 points insert for the top target.

Completing all 4 top lanes for the second time lights the 3x multiplier and lights the 20 000 points insert for the top target.

Completing all 4 top lanes for the third time lights the 4x multiplier and lights the 30 000 points insert for the top target.

Completing all 4 top lanes for the fourth time lights the 5x multiplier

Option switch 12 allows the status of the top lanes to be remembered throughout the player's game.

xi) Bonus - Once the maximum bonus of 39 000 points is achieved, no more bonus points can be accumulated. Bonus lamps score 1 000 points each. The value of the multiplier lit determines how many times the bonus is counted off. The bonus is collected when the ball enters the outhole.

Memory option exists for Bonus multiplier to be remembered throughout the player's game.

5. Outhole Sequence

After the ball returns to the outhole and there is only one player the "ball-in-play" number will advance by one. If there is more than one player, "ball-in-play" will remain the same and the next player's turn is indicated by the flashing score. However, if the ball enters the outhole without scoring it is returned to the same player for replay. The game continues until each player has played the allowable number of balls (adjustable). The "game-over" light will then be lit and an optional "game-over" tune will sound. A random "match" number appears and the match light is lit (optional). If the number is the same as the last two digits in the player's score, a free game is awarded.

6. Extra Balls

When a player wins an extra ball a unique tune is played and the "shoot-again" light on the playfield will flash during the play of the regular ball. Once this ball enters the outhole, the score display will flash to prompt the same player and the "ball-in-play" number will not advance.

7. Tilt

If the machine is tilted during play a tilt sound is made, all scoring will stop and the bumpers, flipper and kickers are disabled. Bonus points are not collected. The player only resumes control of the machine after the current ball enters the outhole.

8. Slam

Slamming the machine will result in a more severe penalty. The current game is cancelled, score displays and feature lights go out and the machine will remain "dead" for approximately 10 seconds. After this delay the "power-up" tune is played, the "game-over" light is lit and the machine returns to attract mode.

B. SELF TEST SEQUENCE

Self test can be entered at any time by pressing the push button on the inside of the front door. By pressing the button once the sequence is started with the test number 1. Subsequent tests are activated by re-pressing the button. For all except the first test, the self test number is displayed in the "ball-in-play" window. Tests 1 to 5 are routine maintenance checks. Tests 6 to 17 are bookkeeping functions, designed to help the operator perform certain accounting tasks.

1. Routine Maintenance Tests

Test 1 - Display Test : All five displays cycle 0 - 9 and repeat continuously.

Test 2 - Feature Lamp Test : All switched lamps flash on and off continuously.

Test 3 - Solenoid Test : All solenoids are activated one at a time in a continuous sequence. The flipper solenoids may be tested by holding both flipper buttons in during the test. Solenoid identification numbers are shown in the player score displays. Refer to Appendix 1 for a Solenoid Identification Chart.

Test 4 - Switch Test : The switch assembly is searched for stuck contacts. If any are found the identification number of the first set encountered is flashed on the player score displays. The number remains until the fault is cleared. Other numbers may follow if more stuck contacts are present. Once stuck switches are found "00" is displayed. Refer to Appendix 2 for a switch identification chart.

Test 5 - Sound Test : The 10 points sound is pulsed continuously.

2. Bookkeeping Functions

The bookkeeping functions are displayed in the all player score windows. The test number appears in the "ball-in-play" window.

Test 6 - First High Score Level : The game is designed to award a free game or extra ball (optional) at each of three score levels. Any desired level from 10 000 to 999 000 can be set. The level can be increased by 10 000 points at a time by holding in the credit button. It can be decreased by 1 000 points at a time by holding in the slam switch inside the coin door. The level can be reset to "00" by simultaneously operating the slam and coin door switches.

Test 10 - This test displays the total number of times the coin switches have operated with the coin door open. The number is normally not resettable.

Test 11 - This test displays the total coins through both chutes with the coin door closed. The number is normally not resettable.

Test 12 - Number of free games awarded with the coin door closed. This figure can be reset by simultaneously operating the slam and coin door switches.

Test 13 - Number of paid games with the coin door closed. This figure can be reset as for test 12.

Test 14 - Number of times the Highest Score to Date changes with the coin door closed. Can be reset as for test 12.

Test 15 - Number of extra balls awarded with the coin door closed. Can be reset as for test 12.

Test 16 - Number of tilts and slams with coin door closed. Can be reset as for test 12.

Test 17 - This test displays the percentage of free games to paid games awarded with the coin door closed. The percentage can be reset as for test 12. It should be noted that the number of free games and paid games displayed in tests 12 and 13 are not affected when the percentage is reset. The ratio is calculated using separate date areas.

Pressing the self test button once more while in test 17 causes the game to return to attract mode after performing the power-up sequence. For a more rapid return to attract mode, self test can be aborted at any stage by turning the power off, then on.

A self test time out feature is built into the machine so that it can never be left in any test mode. After about two minutes in any self test the game automatically resets by going through the power-up sequence. (For maximum flexibility, however, this time-out feature can be disabled by first switching power off, then setting switch 24 on the M.P.U. board, A1 to the OFF position).

C. GAME FEATURE ADJUSTMENTS

Each game has twenty four switches located on the M.P.U. board, A1, that allow play to be customised to the location. The switches are contained in 3 packages and numbered S1-S8, S9-S16 and S17-S24. Game adjustments must be made while the power is turned off.

Credits/Coin Adjustments : The credits/coin options are set by means of switches 1, 2 and 3. There are 8 different settings as shown below.

<u>Switches</u>			<u>Credits/Coin</u>
1	2	3	
OFF	OFF	OFF	1/1
ON	OFF	OFF	1/2
OFF	ON	OFF	1/3
ON	ON	OFF	1/4
OFF	OFF	ON	1/1, 3/2 *
ON	OFF	ON	1/2, 2/3 *
OFF	ON	ON	2/3, 4/5 * #
ON	ON	ON	2/5 #

* Coin Counter reset at first score of each ball

No credits until third coin dropped

No credit until fifth coin dropped

High Score Award : At each of the three high score levels, the game can be programmed to give either an extra ball or a free game by setting switch 4.

<u>Switch 4</u>	<u>Award</u>
OFF	FREE GAME
ON	EXTRA BALL

Match Feature : With this feature on a random number appears in the "ball-in-play" window at game over. If this number matches the tens digit in the player's score, a free game is awarded. The feature is controlled by switch 5.

<u>Switch 5</u>	<u>Match Feature</u>
ON	ON
OFF	OFF

High Score to Date Award

<u>Switch</u>		<u>Award</u>
	<u>6</u> <u>7</u>	
OFF	OFF	NO AWARD
ON	OFF	1 FREE GAME
OFF	ON	2 FREE GAMES
ON	ON	3 FREE GAMES

Coin Alarm Sound

The alarm sound may be turned ON or OFF by switch 9.

<u>Switch 9</u>	<u>Alarm Sound</u>
OFF	DISABLED
ON	ENABLED

Background Sound Feature

A background sound may be produced during play depending on the setting of switch 11.

<u>Switch 11</u>	<u>Background Sound</u>
OFF	DISABLED
ON	ENABLED

Top Lane Memory

The lit lamps of the 4 top lanes may be remembered from ball to ball using option switch 12

<u>Switch 12</u>	<u>Top 4 Lane Memory</u>
OFF	DISABLED
ON	ENABLED

Multiplier Memory

Option switch 13 enables the 2x, 3x, 4x and 5x multiplier to be remembered throughout the player's game.

<u>Switch 13</u>	<u>Multiplier Memory</u>
OFF	DISABLED
ON	ENABLED

Bottom 3 Drop Target

25 000 point insert and special insert may be linked together by option switch 14.

<u>Switch 14</u>	<u>25000 point/special</u>
OFF	NOT LINKED
ON	LINKED

Coin Alarm

A coin alarm is available using switch 15. This sets a maximum time for coin travel through the coin chute. If this time is exceeded the credit is not incremented and an alarm sound can occur depending on the setting of switch 9. This fundion only operates with the coin door closed.

<u>Switch 15</u>	<u>Coin Alarm</u>
OFF	DISABLED
ON	ENABLED

Balls per Game

<u>Switch 16</u>	<u># Balls/Game</u>
OFF	3
ON	5

Maximum Credits

The limit on the number of games that can be accumulated by either inserting coins or winning free games is set by switches 17 and 18.

<u>Switch</u>		<u>Maximum Credits</u>
<u>17</u>	<u>18</u>	
OFF	OFF	5
ON	OFF	10
OFF	ON	15
ON	ON	20

- Note:
1. When lowering the credit limit any surplus credits are lost
 2. Coin counters operate regardless of maximum credit settings

Free Game Sound

<u>Switch 22</u>	<u>Sound When Free Game Awarded</u>
OFF	SPECIAL TUNE
ON	KNOCKER

Self-Test Time-Out Option

The machine can be set by switch 24 to automatically exit self-test after 2 minutes in any one test

<u>Switch 24</u>	<u>Time Out Feature</u>
OFF	DISABLED
ON	OPERATIVE

Note: Any unused switches should be turned OFF

APPENDIX 1

Solenoid Identification Chart for "The Empire Strikes Back"

The following chart may be used with self test number 3 to identify the solenoids of the game.

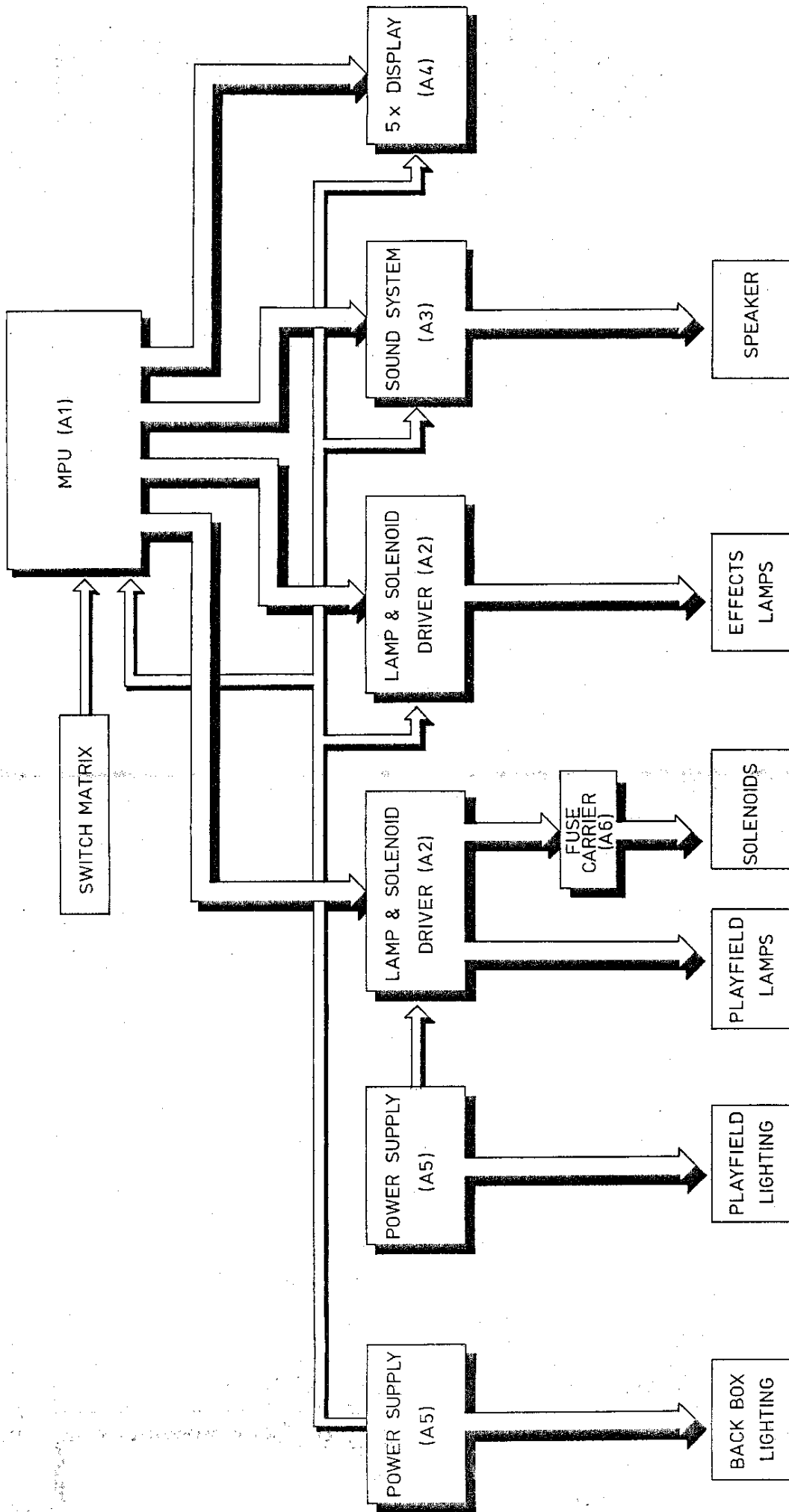
<u>Identification Number</u>	<u>Solenoid Description</u>
01	KNOCKER (if installed)
02	3 DROP TARGET
03	DAGOBAH EJECT HOLE
04	BESPIN EJECT HOLE
05	'1' DROP TARGET
06	RIGHT BOTTOM BUMPER
07	OUTHOLE KICKER
08	NOT USED
09	LEFT TOP BUMPER
10	RIGHT TOP BUMPER
11	LEFT BOTTOM BUMPER
12	RIGHT SLINGSHOT
13	NOT USED
14	LEFT SLINGSHOT
15	COIN LOCKOUT
16	FLIPPER ENABLE RELAY
17	

APPENDIX 2

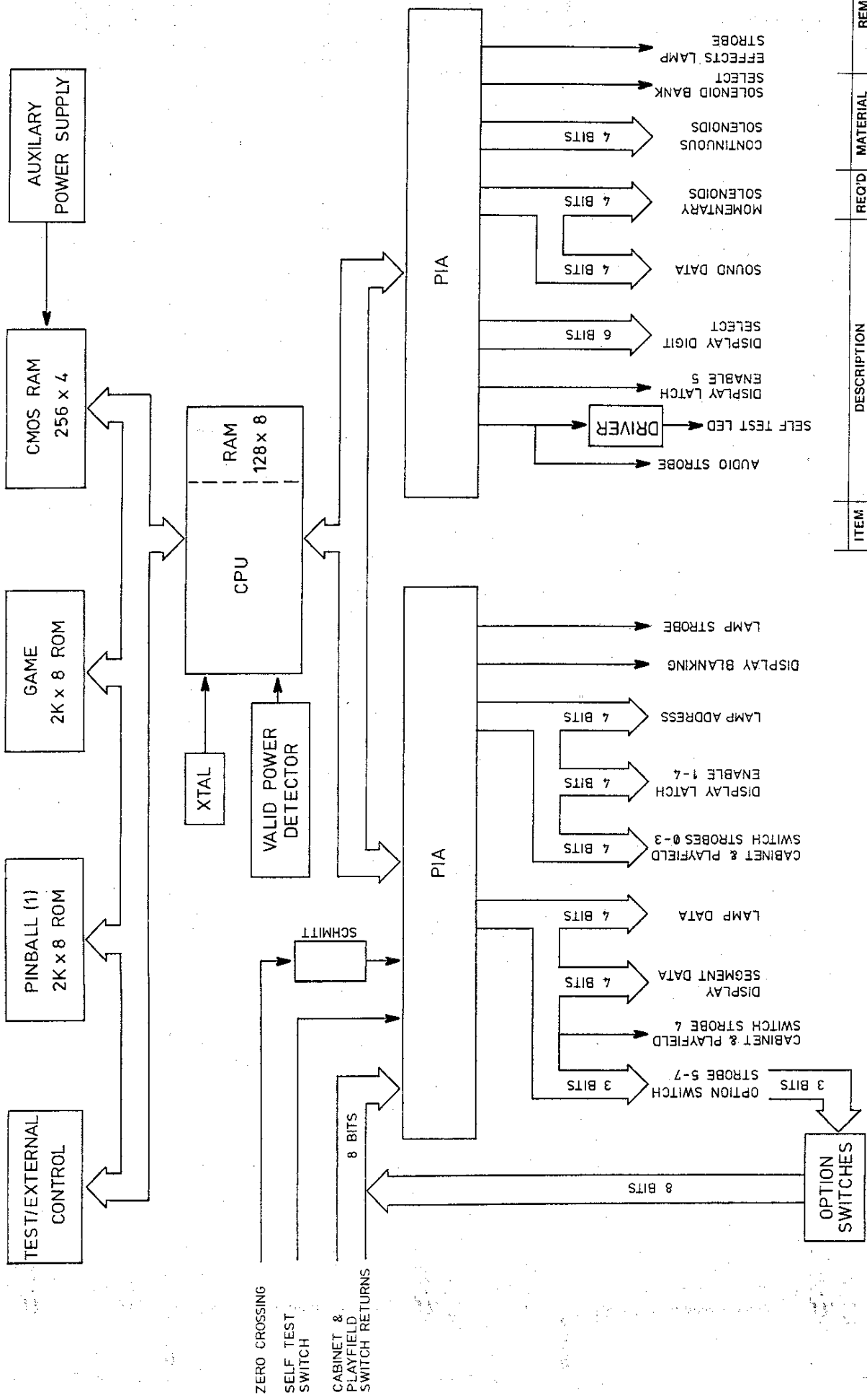
Switch Identification Chart for "The Empire Strikes Back"

The following chart may be used with self test number 4 to identify the switches of the game.

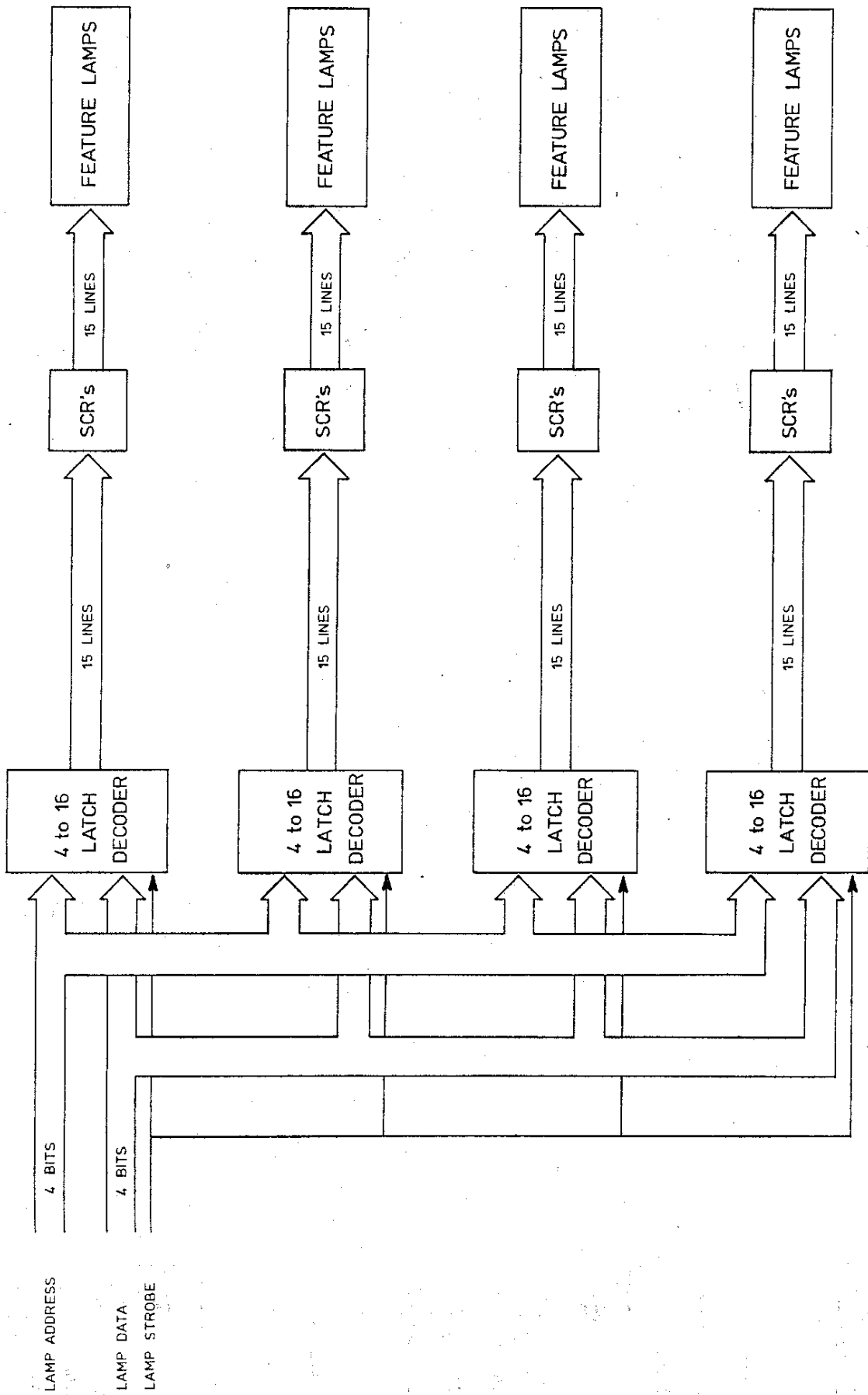
<u>Id. Number</u>	<u>Switch Description</u>
01	RIGHT FLIPPER
02	TILT
03	CREDIT
04	RIGHT OUTLANE
05	LEFT OUTLANE
06	RIGHT INSIDE RETURN LANE
07	RIGHT SPINNER
08	LEFT SPINNER
09	SLAM
10	COIN DOOR
11	TOP LANE 1
12	RIGHT OUTSIDE RETURN LANE
13	TOP LANE 2
14	TOP LANE 3
15	TOP LANE 4
16	COIN SWITCHES
17	LEFT INSIDE RETURN LANE
18	CENTRE TARGET
19	TARGET 1
20	TARGET 2
21	TARGET 3
22	TARGET 4
23	TARGET 5
24	TARGET 6
25	3 DROP TARGET 1
26	3 DROP TARGET 2
27	3 DROP TARGET 3
28	DROP TARGET 1
29	LEFT OUTSIDE RETURN LANE
30	BESPIN EJECT HOLE
31	REBOUND
32	DAGOBAN EJECT HOLE
33	TOP LEFT BUMPER
34	TOP RIGHT BUMPER
35	LEFT BOTTOM BUMPER
36	LEFT SLINGSHOT
37	RIGHT SLINGSHOT
38	RIGHT BOTTOM BUMPER
39	BALL SHOOTER LANE
40	OUTHOLE



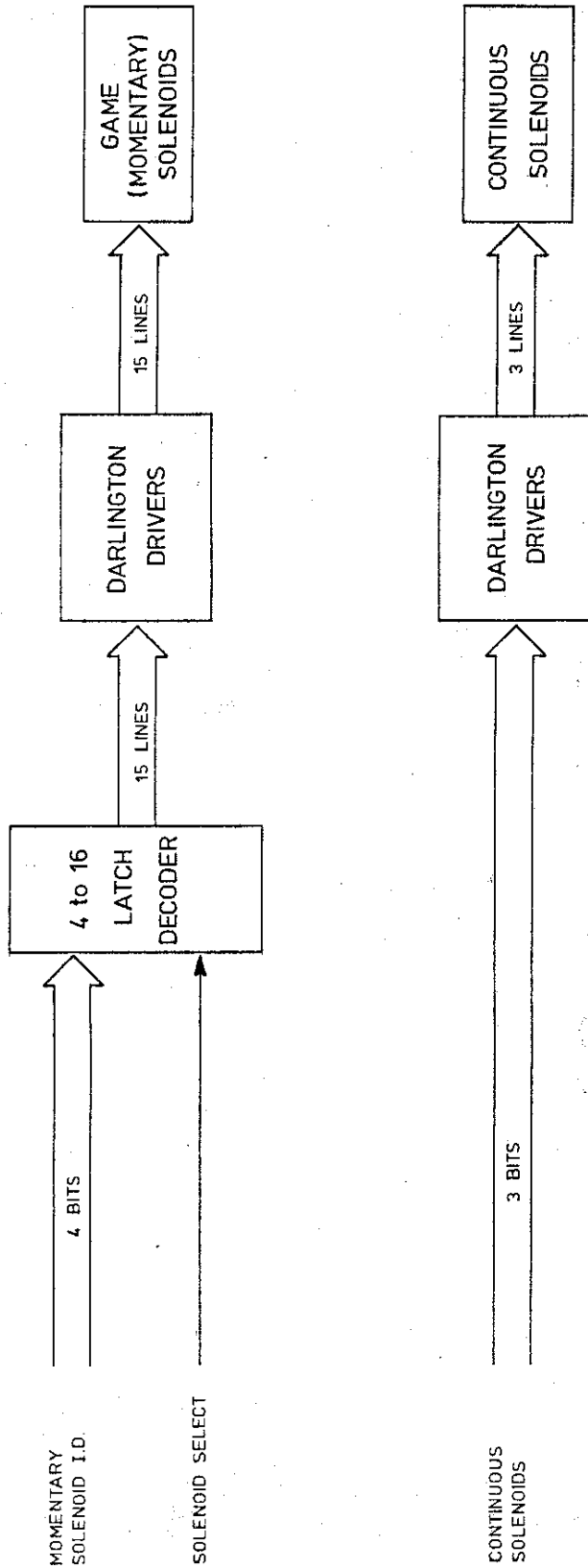
ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS				
				PASSED	DATE			
	A. Hankin & Co. Pty. Ltd.		SCALE		3/9/80			
STAR WARS SYSTEM ARCHITECTURE						DRAWN	G.T.	DRAWING NUMBER HD1114
						TRACED	A.P.	
						CHECKED		



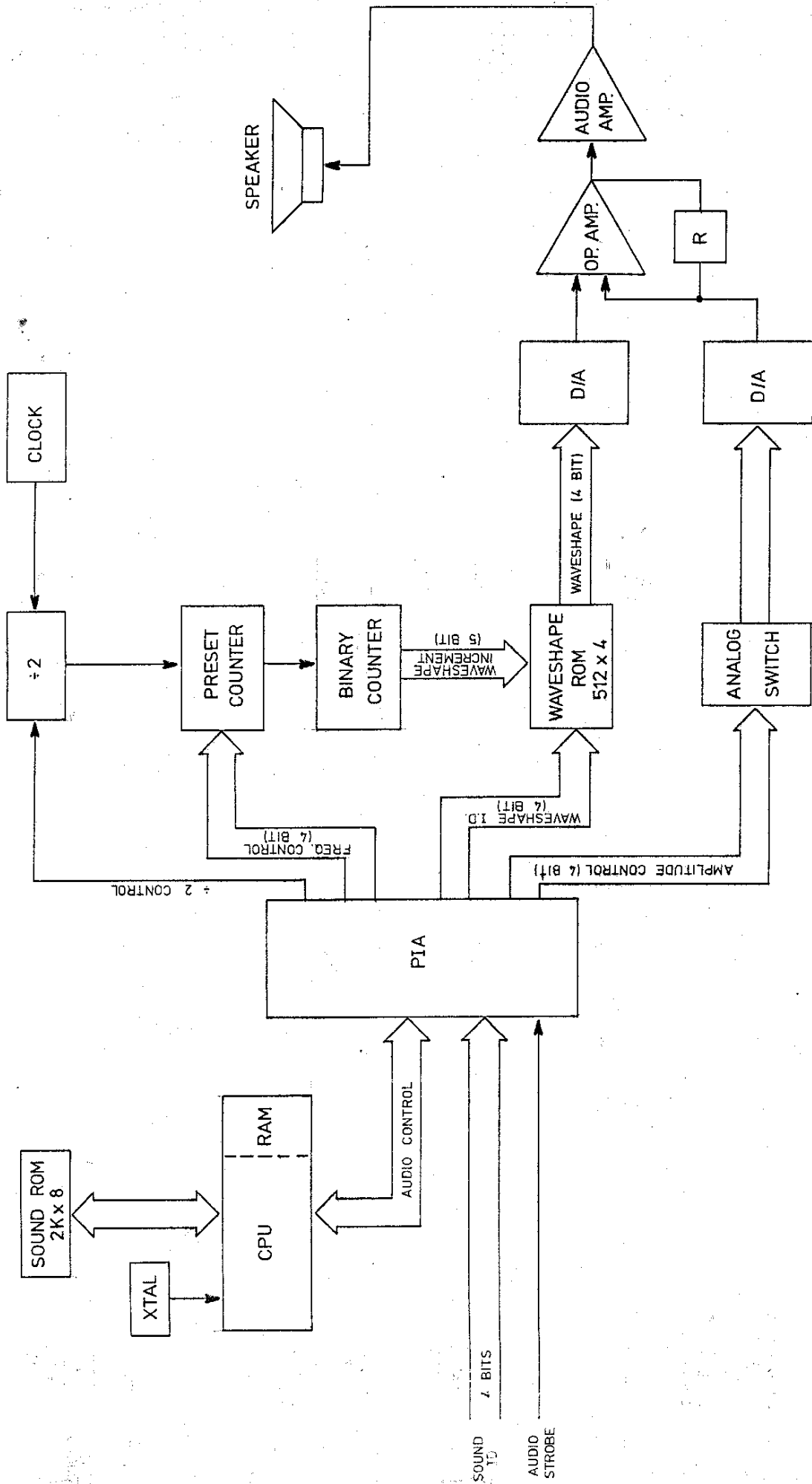
ITEM	DESCRIPTION	REMARKS	
		PASSED	DATE
	A. Hankin & Co. Pty. Ltd.		3/19/80
STAR WARS MPU BLOCK DIAGRAM		REQ'D	MATERIAL
		SCALE	
		DRAWN	G.T.
		TRACED	A.P.
		CHECKED	
		DRAWING NUMBER HD1113	



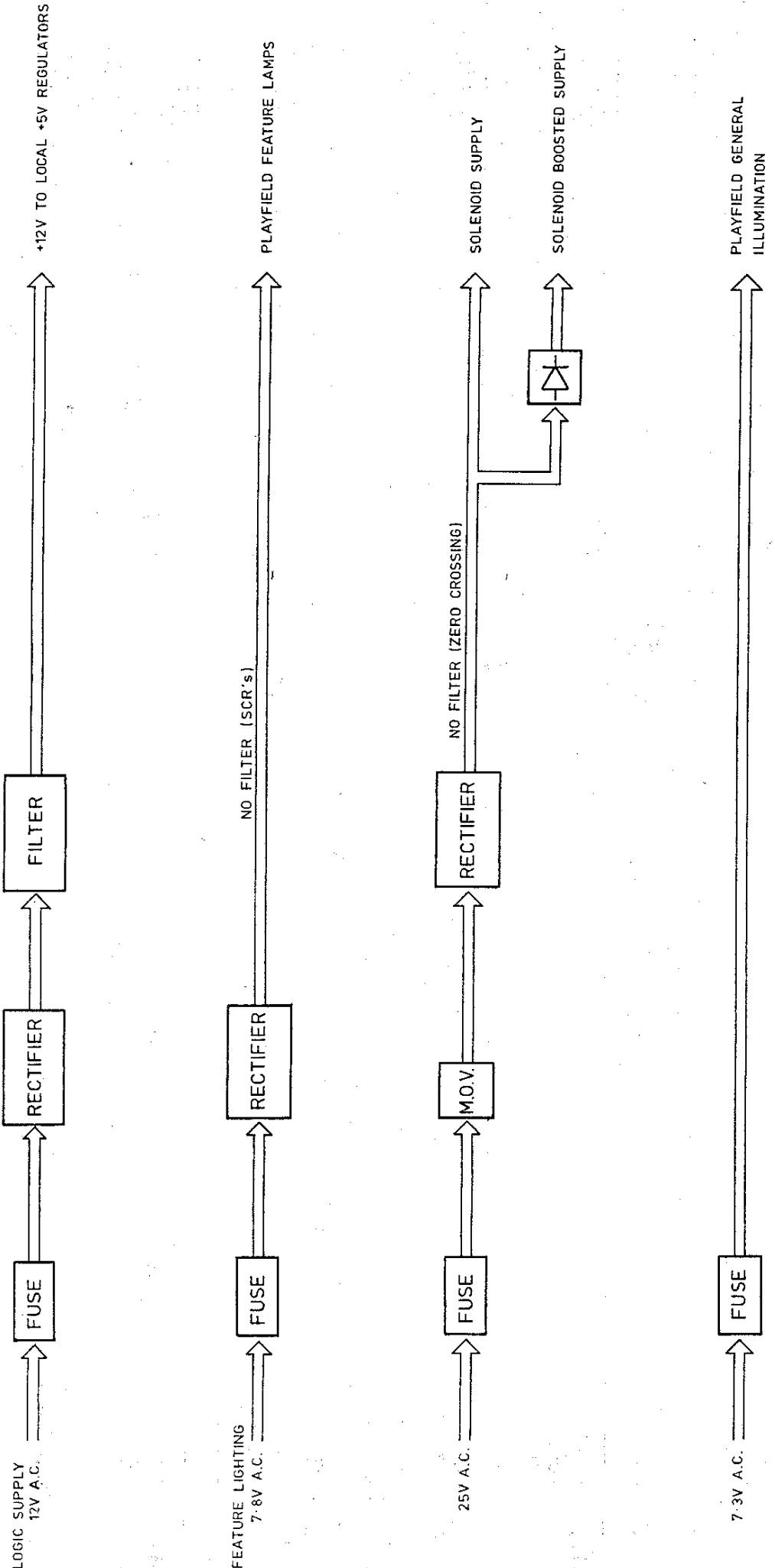
ITEM	DESCRIPTION	REQ'D MATERIAL		REMARKS	
		SCALE	PASSED	DATE	
	A. Hankin & Co. Pty. Ltd.				13/11/79
LAMP DRIVER BLOCK DIAGRAM		DRAWN	PG.	DRAWING NUMBER HD1056	
		TRACED	A.P.		
		CHECKED			



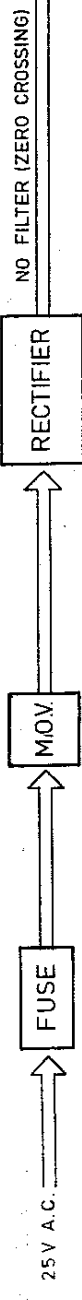
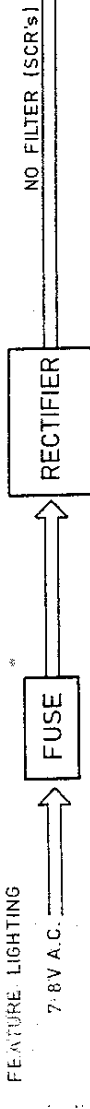
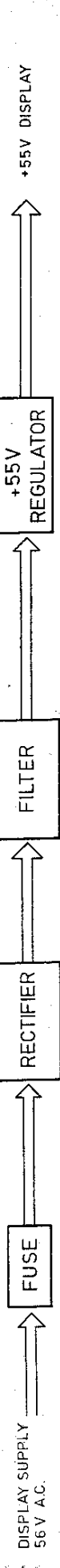
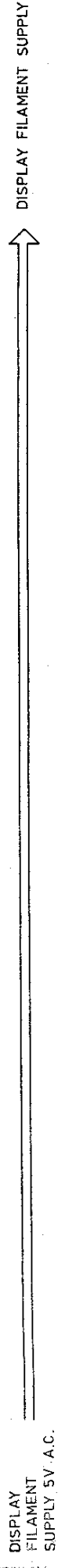
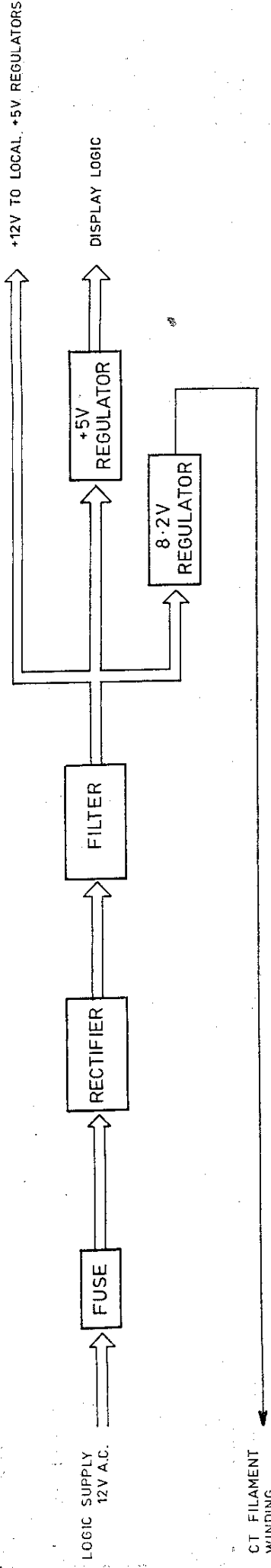
ITEM	DESCRIPTION	REQ'D		MATERIAL		REMARKS	
		SCALE	DATE	PASSED	DATE		
	A. Hankin & Co. Pty. Ltd.						13/11/79
SOLENOID DRIVER BLOCK DIAGRAM		DRAWN	P.G.				
		TRACED	A.P.				
		CHECKED					
						DRAWING NUMBER	
						HD1055	



ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	A. Hankin & Co Pty. Ltd.		SCALE	PASSED
	SOUND SYSTEM BLOCK DIAGRAM			DATE 12/11/79
		DRAWN	PG.	DRAWING NUMBER HD1054
		TRACED	A.P.	
			CHECKED	

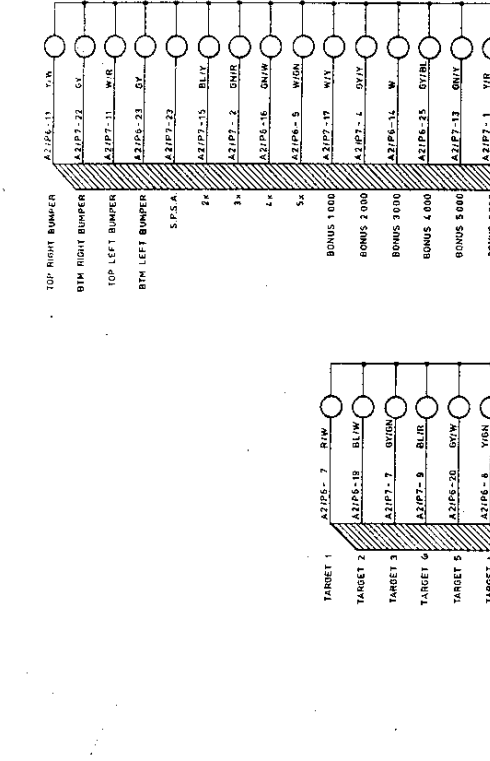
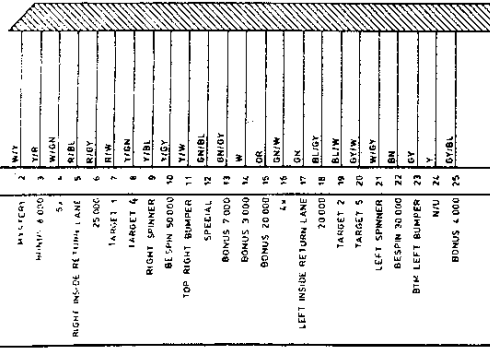


ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.	SCALE		PASSED
				DATE
				2/9/80
CABINET POWER SUPPLY BLOCK DIAGRAM		DRAWN	G.T.	DRAWING NUMBER
		TRACED	A.P.	
		CHECKED		
				HD1112

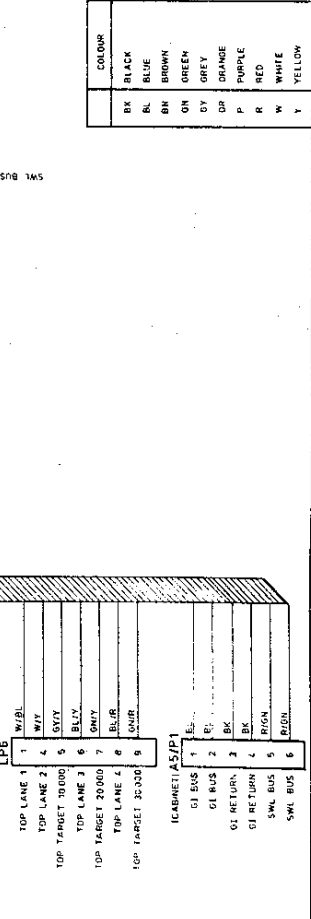
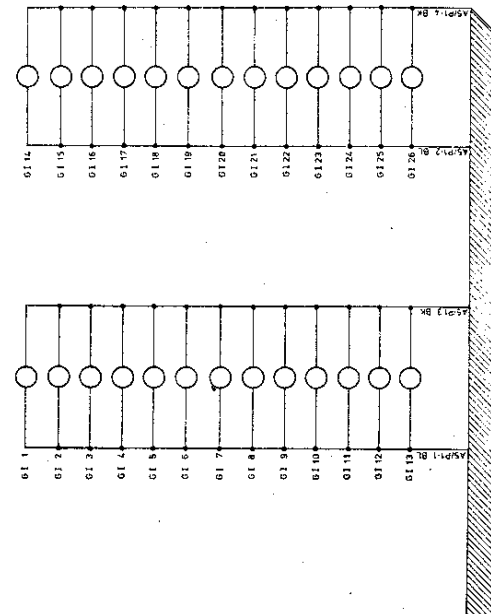
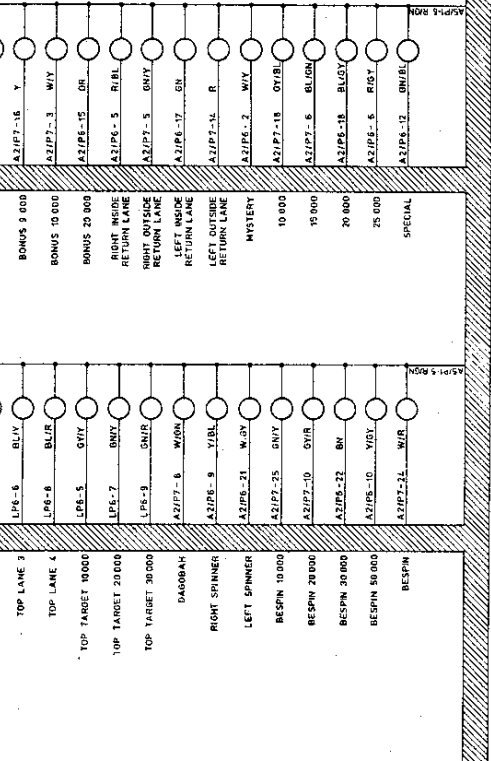
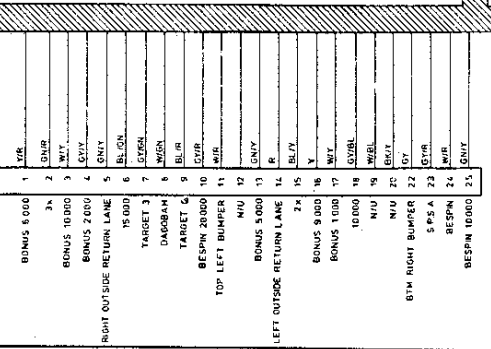


ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.	SCALE	PASSED	DATE
	BACK BOX POWER	DRAWN	G.T.	DRAWING NUMBER
	SUPPLY BLOCK DIAGRAM	TRACED	A.P.	2/9/80
		CHECKED		HD 1111

ICABINET AS/PS



ICABINET AS/PT



COLOUR	CODE
BLACK	BK
BLUE	BL
BROWN	BN
GREEN	GN
GREY	GY
ORANGE	OR
PURPLE	P
RED	R
WHITE	W
YELLOW	Y

DESCRIPTION: STAR WARS PLAYFIELD WIRING DIAGRAM

ITEM: A. HODKIN & Co. Pty Ltd

SCALE: N.T.S.

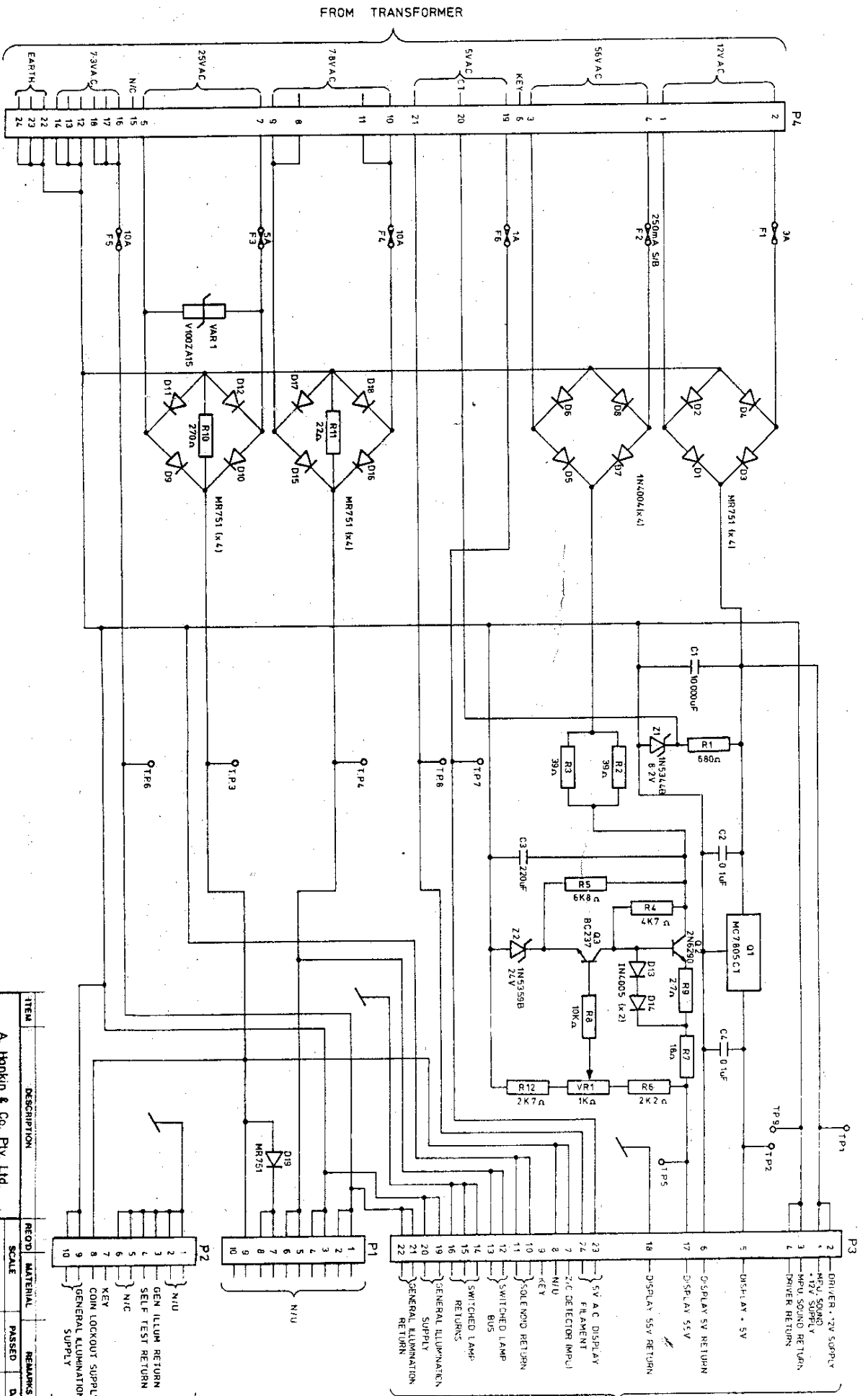
DRAWN: G.T.

CHECKED: A.P.

REVISIONS: 1

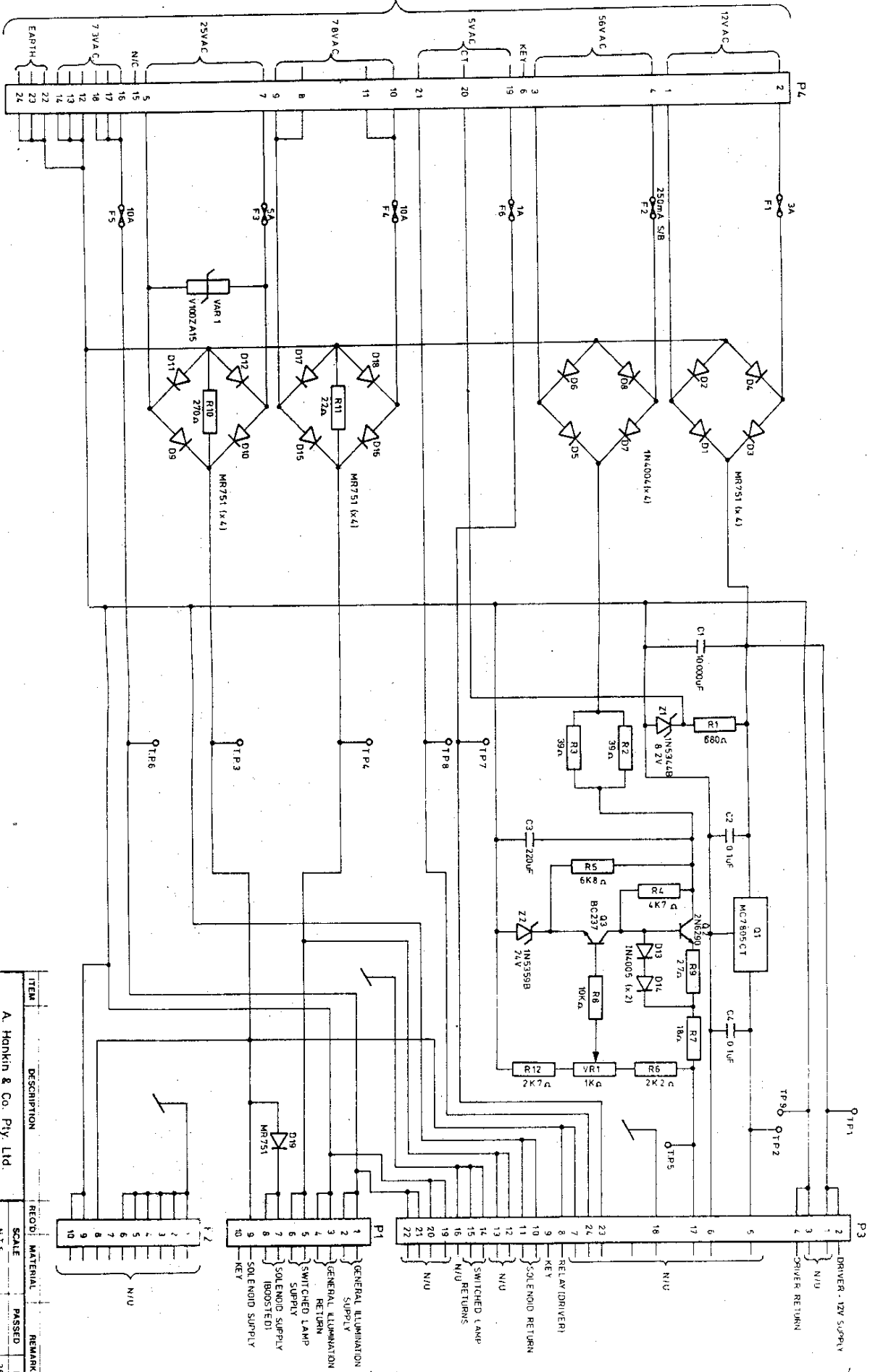
DATE: 25/1/88

HD 1107

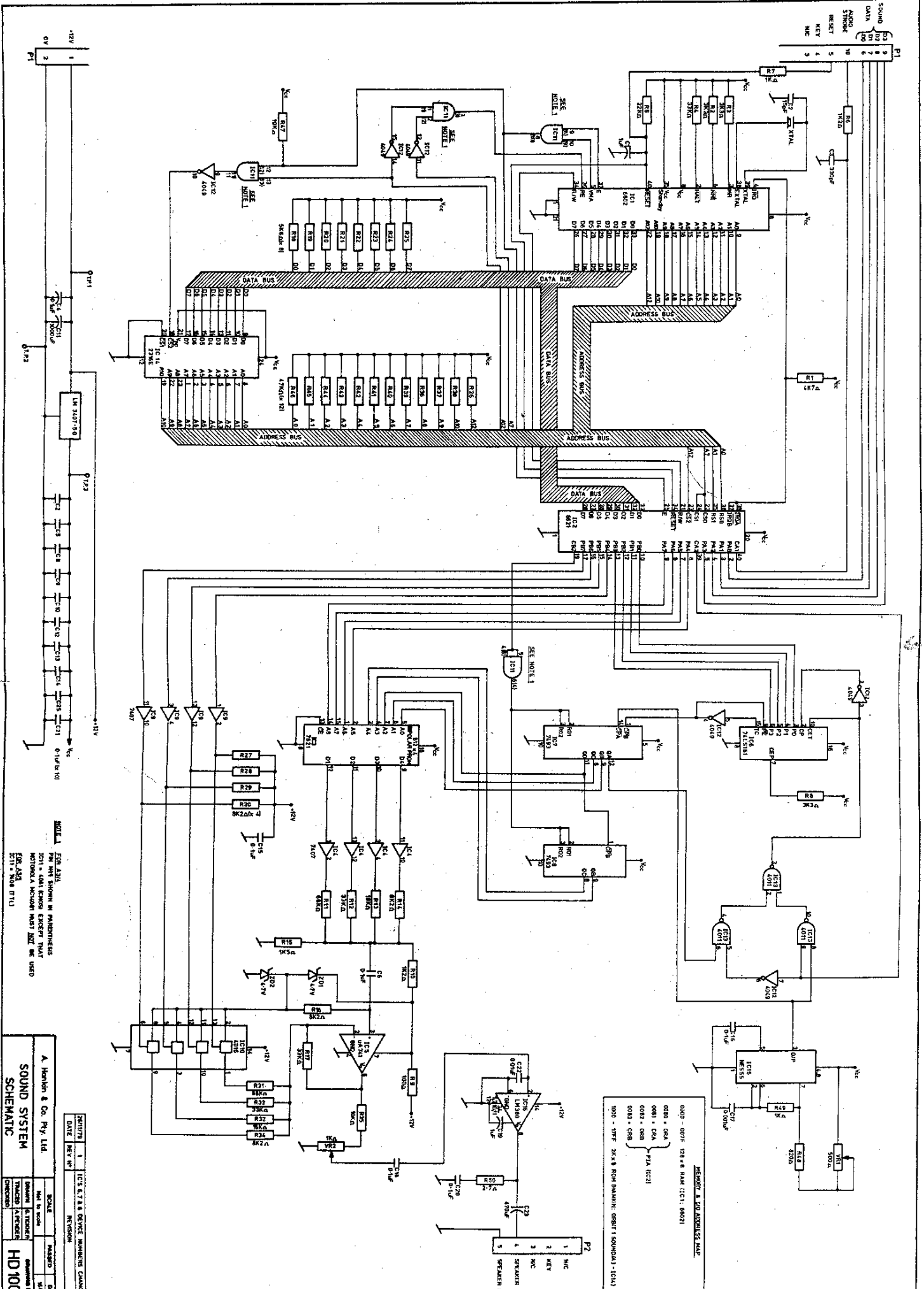


ITEM	DESCRIPTION	RECD.	MATERIAL	REMARKS
A. Honkin & Co. Pty Ltd.				
POWER SUPPLY A5				
SCHEMATIC - BACK BOX				
SCALE	N.T.S.	PASSED	DATE	29/8
DRAWN	C. HICKAY			
TRACED	A.P.			
CHECKED				
DRAWING NO. HD110				

FROM TRANSFORMER



ITEM	DESCRIPTION	RECD.	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.			
	POWER SUPPLY AS			
	SCHEMATIC - CABINET			
	DRAWN: J.C. MCKAY			
	TRACED: A.P.			
	CHECKED:			
	DATE: 25/8/8			
	PASSED:			
	SCALE: N.T.S.			
	DRAWING NO. HD11055			



MEMORY AND ADDRESS MAP

0000 - 007F 128 x 8 RAM (IC1: 8002)

0080 - 00A { 0080 - 00A } P1A (IC2)

00B0 - 00B { 00B0 - 00B } P1A (IC2)

00C0 - 00C { 00C0 - 00C } P1A (IC2)

00D0 - 00D { 00D0 - 00D } P1A (IC2)

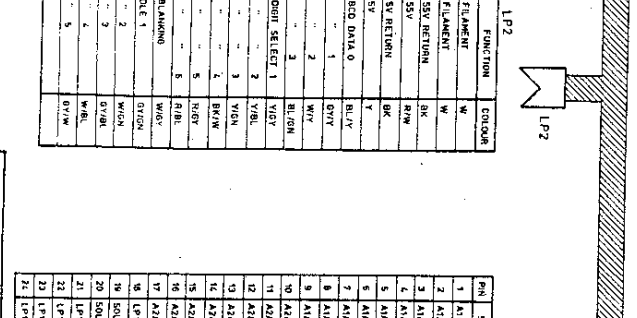
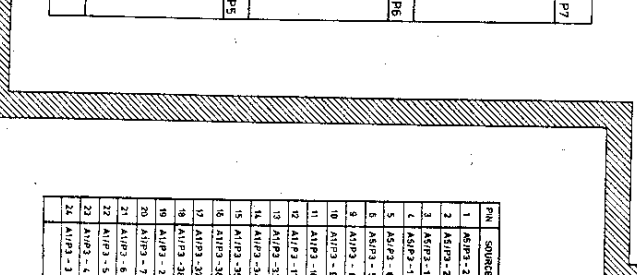
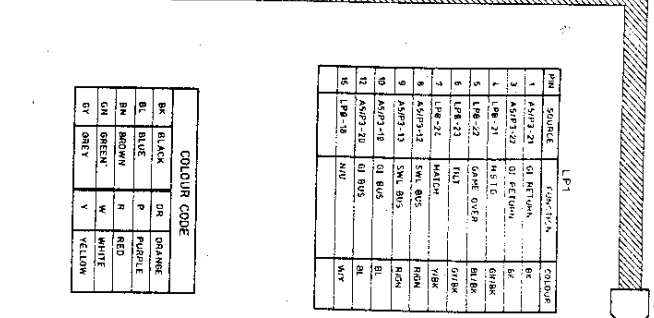
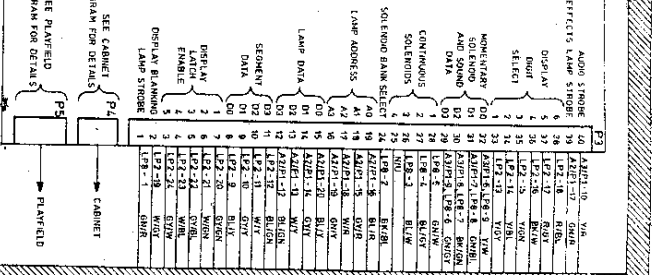
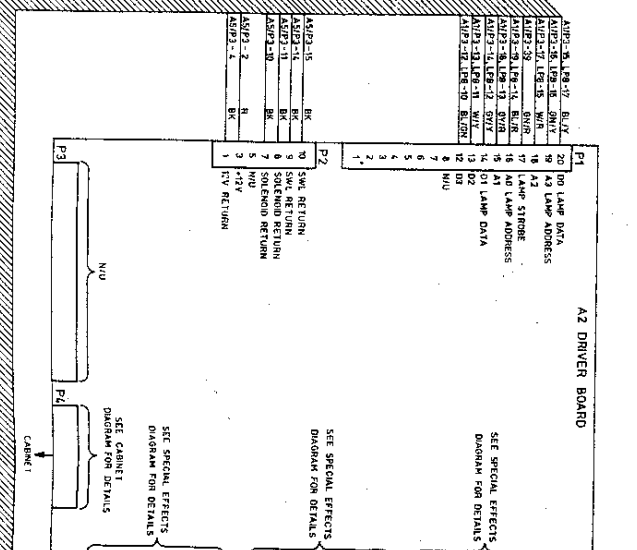
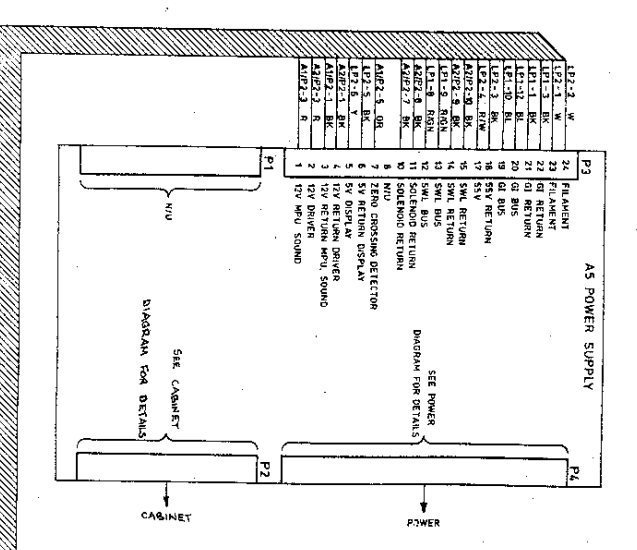
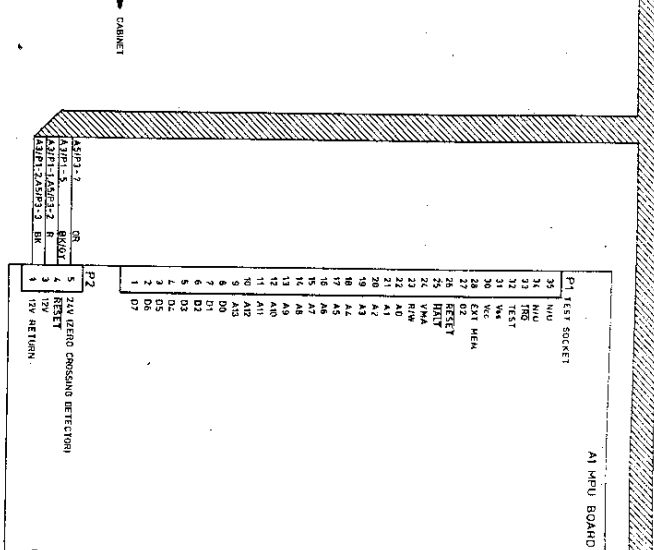
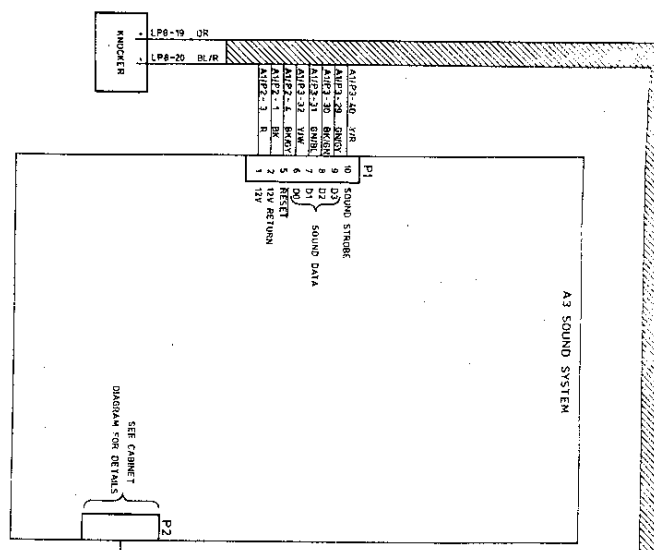
00E0 - 00E { 00E0 - 00E } P1A (IC2)

00F0 - 00F { 00F0 - 00F } P1A (IC2)

0100 - 01FF 256 x 8 ROM (RAMIN: 00B11 00B0A3 - 010A)

NOTE 1 FOR A11
PIN NUMBERS IN PARENTHESES
DO NOT APPLY EXCEPT THAT
MOTOROLA MCD600 MUST BE USED
FOR A11
E111 X08 0111

A. Hamilton & Co. Pty. Ltd.		DRAWN		DATE	
SOUND SYSTEM		CHECKED		REVISED	
SCHEMATIC		THROU		APPROVED	
HD 1001		REVISIONS		DATE	
DATE		REV		BY	
1		1		1	



Colour	Code
Black	BK
Blue	BL
Brown	BN
Green	GN
Grey	GY
Orange	OR
Purple	PU
Red	RD
White	W
Yellow	Y

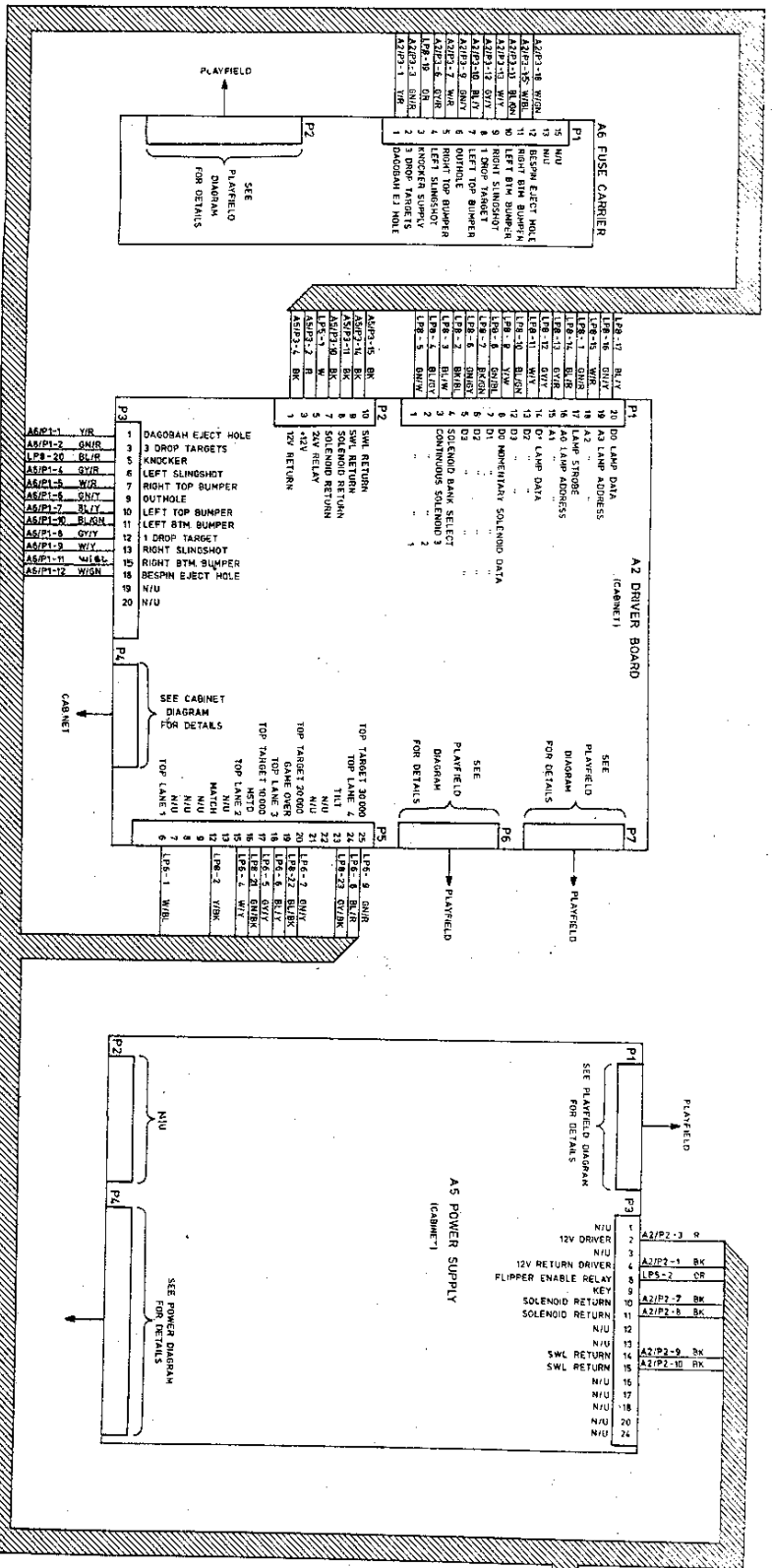
Pin	Source	Function	Colour
1	AMP3-20	FLUORESCENT	OR
2	AMP3-21	FLUORESCENT	OR
3	AMP3-22	FLUORESCENT	OR
4	AMP3-23	FLUORESCENT	OR
5	AMP3-24	FLUORESCENT	OR
6	AMP3-25	FLUORESCENT	OR
7	AMP3-26	FLUORESCENT	OR
8	AMP3-27	FLUORESCENT	OR
9	AMP3-28	FLUORESCENT	OR
10	AMP3-29	FLUORESCENT	OR
11	AMP3-30	FLUORESCENT	OR
12	AMP3-31	FLUORESCENT	OR
13	AMP3-32	FLUORESCENT	OR
14	AMP3-33	FLUORESCENT	OR
15	AMP3-34	FLUORESCENT	OR
16	AMP3-35	FLUORESCENT	OR
17	AMP3-36	FLUORESCENT	OR
18	AMP3-37	FLUORESCENT	OR
19	AMP3-38	FLUORESCENT	OR
20	AMP3-39	FLUORESCENT	OR
21	AMP3-40	FLUORESCENT	OR
22	AMP3-41	FLUORESCENT	OR
23	AMP3-42	FLUORESCENT	OR
24	AMP3-43	FLUORESCENT	OR

Pin	Source	Function	Colour
1	AMP3-23	FILAMENT	W
2	AMP3-24	FILAMENT	W
3	AMP3-25	FILAMENT	W
4	AMP3-26	FILAMENT	W
5	AMP3-27	FILAMENT	W
6	AMP3-28	FILAMENT	W
7	AMP3-29	FILAMENT	W
8	AMP3-30	FILAMENT	W
9	AMP3-31	FILAMENT	W
10	AMP3-32	FILAMENT	W
11	AMP3-33	FILAMENT	W
12	AMP3-34	FILAMENT	W
13	AMP3-35	FILAMENT	W
14	AMP3-36	FILAMENT	W
15	AMP3-37	FILAMENT	W
16	AMP3-38	FILAMENT	W
17	AMP3-39	FILAMENT	W
18	AMP3-40	FILAMENT	W
19	AMP3-41	FILAMENT	W
20	AMP3-42	FILAMENT	W
21	AMP3-43	FILAMENT	W
22	AMP3-44	FILAMENT	W
23	AMP3-45	FILAMENT	W
24	AMP3-46	FILAMENT	W

Pin	Source	Function	Colour
1	AMP3-23	FILAMENT	W
2	AMP3-24	FILAMENT	W
3	AMP3-25	FILAMENT	W
4	AMP3-26	FILAMENT	W
5	AMP3-27	FILAMENT	W
6	AMP3-28	FILAMENT	W
7	AMP3-29	FILAMENT	W
8	AMP3-30	FILAMENT	W
9	AMP3-31	FILAMENT	W
10	AMP3-32	FILAMENT	W
11	AMP3-33	FILAMENT	W
12	AMP3-34	FILAMENT	W
13	AMP3-35	FILAMENT	W
14	AMP3-36	FILAMENT	W
15	AMP3-37	FILAMENT	W
16	AMP3-38	FILAMENT	W
17	AMP3-39	FILAMENT	W
18	AMP3-40	FILAMENT	W
19	AMP3-41	FILAMENT	W
20	AMP3-42	FILAMENT	W
21	AMP3-43	FILAMENT	W
22	AMP3-44	FILAMENT	W
23	AMP3-45	FILAMENT	W
24	AMP3-46	FILAMENT	W

STAR WARS BACK BOX
WIRING DIAGRAM

HD1101



COLOR CODE

BK	BLACK	OR	ORANGE
BL	BLUE	F	PURPLE
BR	BROWN	R	RED
GN	GREEN	W	WHITE
GR	GRAY	Y	YELLOW

L6

PIN	SOURCE	FUNCTION	COLOR
1	A2/P5-6	TOP LANE 1	W/B
2	A2/P5-11	N/U	R
3	A2/P5-15	TOP LANE 2	W
4	A2/P5-17	TOP LANE 2	W/Y
5	A2/P5-17	TOP LANE 2	W/Y
6	A2/P5-18	TOP LANE 3	BL/Y
7	A2/P5-20	TOP TARGET 3000	BL/Y
8	A2/P5-21	TOP LANE 4	BL/W
9	A2/P5-22	TOP TARGET 3000	GR/W

L5

PIN	SOURCE	FUNCTION	COLOR
1	A2/P2-5	RELAY	W
2	A2/P2-6	RELAY SUPPLY	OR

L8

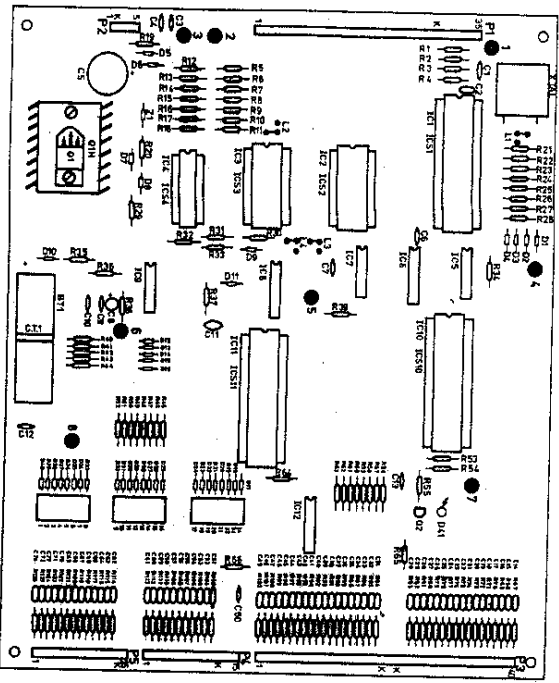
PIN	SOURCE	FUNCTION	COLOR
1	A2/P1-17	LAMP STROBE	GR/W
2	A2/P1-17	SOLNOID RELAY	GR/W
3	A2/P1-17	SOLENOID 1	BL/W
4	A2/P1-17	SOLENOID 2	BL/W
5	A2/P1-17	SOLENOID 3	GR/W
6	A2/P1-17	SOLENOID 4	GR/W
7	A2/P1-17	SOLENOID 5	GR/W
8	A2/P1-17	SOLENOID 6	GR/W
9	A2/P1-17	SOLENOID 7	GR/W
10	A2/P1-17	SOLENOID 8	GR/W
11	A2/P1-17	SOLENOID 9	GR/W
12	A2/P1-17	SOLENOID 10	GR/W
13	A2/P1-17	SOLENOID 11	GR/W
14	A2/P1-17	SOLENOID 12	GR/W
15	A2/P1-17	SOLENOID 13	GR/W
16	A2/P1-17	SOLENOID 14	GR/W
17	A2/P1-17	SOLENOID 15	GR/W
18	A2/P1-17	SOLENOID 16	GR/W
19	A2/P1-17	SOLENOID 17	GR/W
20	A2/P1-17	SOLENOID 18	GR/W
21	A2/P1-17	SOLENOID 19	GR/W
22	A2/P1-17	SOLENOID 20	GR/W
23	A2/P1-17	SOLENOID 21	GR/W
24	A2/P1-17	SOLENOID 22	GR/W

STAR WARS DRIVER WIRING DIAGRAM

A. Hopkins & Co Pty Ltd

DATE: 9/8/80

REVISIONS: HD1100



ITEM	DESCRIPTION	QTY	REMARKS
AI	NEW CONTROL COMPLETE	1	
REB	PRINTED CIRCUIT BOARD	1	
IC1	ICM807 MICROPROCESSOR	1	
IC2	74LS164 8-BIT SHIFTER	1	
IC3	74LS165 8-BIT COUNTER	1	
IC4	74LS163 4-BIT COUNTER	1	
IC5	74LS162 4-BIT COUNTER	1	
IC6	74LS161 4-BIT COUNTER	1	
IC7	74LS160 4-BIT COUNTER	1	
IC8	74LS164 8-BIT SHIFTER	1	
IC9	74LS165 8-BIT COUNTER	1	
IC10	74LS163 4-BIT COUNTER	1	
IC11	74LS162 4-BIT COUNTER	1	
IC12	74LS161 4-BIT COUNTER	1	
IC13	74LS160 4-BIT COUNTER	1	
IC14	74LS164 8-BIT SHIFTER	1	
IC15	74LS165 8-BIT COUNTER	1	
IC16	74LS163 4-BIT COUNTER	1	
IC17	74LS162 4-BIT COUNTER	1	

ITEM	DESCRIPTION	QTY	REMARKS
IC18	74LS161 4-BIT COUNTER	1	
IC19	74LS160 4-BIT COUNTER	1	
IC20	74LS164 8-BIT SHIFTER	1	
IC21	74LS165 8-BIT COUNTER	1	
IC22	74LS163 4-BIT COUNTER	1	
IC23	74LS162 4-BIT COUNTER	1	
IC24	74LS161 4-BIT COUNTER	1	
IC25	74LS160 4-BIT COUNTER	1	
IC26	74LS164 8-BIT SHIFTER	1	
IC27	74LS165 8-BIT COUNTER	1	
IC28	74LS163 4-BIT COUNTER	1	
IC29	74LS162 4-BIT COUNTER	1	
IC30	74LS161 4-BIT COUNTER	1	
IC31	74LS160 4-BIT COUNTER	1	
IC32	74LS164 8-BIT SHIFTER	1	
IC33	74LS165 8-BIT COUNTER	1	
IC34	74LS163 4-BIT COUNTER	1	
IC35	74LS162 4-BIT COUNTER	1	
IC36	74LS161 4-BIT COUNTER	1	
IC37	74LS160 4-BIT COUNTER	1	
IC38	74LS164 8-BIT SHIFTER	1	
IC39	74LS165 8-BIT COUNTER	1	
IC40	74LS163 4-BIT COUNTER	1	
IC41	74LS162 4-BIT COUNTER	1	
IC42	74LS161 4-BIT COUNTER	1	
IC43	74LS160 4-BIT COUNTER	1	
IC44	74LS164 8-BIT SHIFTER	1	
IC45	74LS165 8-BIT COUNTER	1	
IC46	74LS163 4-BIT COUNTER	1	
IC47	74LS162 4-BIT COUNTER	1	
IC48	74LS161 4-BIT COUNTER	1	
IC49	74LS160 4-BIT COUNTER	1	
IC50	74LS164 8-BIT SHIFTER	1	
IC51	74LS165 8-BIT COUNTER	1	
IC52	74LS163 4-BIT COUNTER	1	
IC53	74LS162 4-BIT COUNTER	1	
IC54	74LS161 4-BIT COUNTER	1	
IC55	74LS160 4-BIT COUNTER	1	
IC56	74LS164 8-BIT SHIFTER	1	
IC57	74LS165 8-BIT COUNTER	1	
IC58	74LS163 4-BIT COUNTER	1	
IC59	74LS162 4-BIT COUNTER	1	
IC60	74LS161 4-BIT COUNTER	1	
IC61	74LS160 4-BIT COUNTER	1	
IC62	74LS164 8-BIT SHIFTER	1	
IC63	74LS165 8-BIT COUNTER	1	
IC64	74LS163 4-BIT COUNTER	1	
IC65	74LS162 4-BIT COUNTER	1	
IC66	74LS161 4-BIT COUNTER	1	
IC67	74LS160 4-BIT COUNTER	1	
IC68	74LS164 8-BIT SHIFTER	1	
IC69	74LS165 8-BIT COUNTER	1	
IC70	74LS163 4-BIT COUNTER	1	
IC71	74LS162 4-BIT COUNTER	1	
IC72	74LS161 4-BIT COUNTER	1	
IC73	74LS160 4-BIT COUNTER	1	
IC74	74LS164 8-BIT SHIFTER	1	
IC75	74LS165 8-BIT COUNTER	1	
IC76	74LS163 4-BIT COUNTER	1	
IC77	74LS162 4-BIT COUNTER	1	
IC78	74LS161 4-BIT COUNTER	1	
IC79	74LS160 4-BIT COUNTER	1	
IC80	74LS164 8-BIT SHIFTER	1	
IC81	74LS165 8-BIT COUNTER	1	
IC82	74LS163 4-BIT COUNTER	1	
IC83	74LS162 4-BIT COUNTER	1	
IC84	74LS161 4-BIT COUNTER	1	
IC85	74LS160 4-BIT COUNTER	1	
IC86	74LS164 8-BIT SHIFTER	1	
IC87	74LS165 8-BIT COUNTER	1	
IC88	74LS163 4-BIT COUNTER	1	
IC89	74LS162 4-BIT COUNTER	1	
IC90	74LS161 4-BIT COUNTER	1	
IC91	74LS160 4-BIT COUNTER	1	
IC92	74LS164 8-BIT SHIFTER	1	
IC93	74LS165 8-BIT COUNTER	1	
IC94	74LS163 4-BIT COUNTER	1	
IC95	74LS162 4-BIT COUNTER	1	
IC96	74LS161 4-BIT COUNTER	1	
IC97	74LS160 4-BIT COUNTER	1	
IC98	74LS164 8-BIT SHIFTER	1	
IC99	74LS165 8-BIT COUNTER	1	
IC100	74LS163 4-BIT COUNTER	1	

ITEM	DESCRIPTION	QTY	REMARKS
IC101	74LS162 4-BIT COUNTER	1	
IC102	74LS161 4-BIT COUNTER	1	
IC103	74LS160 4-BIT COUNTER	1	
IC104	74LS164 8-BIT SHIFTER	1	
IC105	74LS165 8-BIT COUNTER	1	
IC106	74LS163 4-BIT COUNTER	1	
IC107	74LS162 4-BIT COUNTER	1	
IC108	74LS161 4-BIT COUNTER	1	
IC109	74LS160 4-BIT COUNTER	1	
IC110	74LS164 8-BIT SHIFTER	1	
IC111	74LS165 8-BIT COUNTER	1	
IC112	74LS163 4-BIT COUNTER	1	
IC113	74LS162 4-BIT COUNTER	1	
IC114	74LS161 4-BIT COUNTER	1	
IC115	74LS160 4-BIT COUNTER	1	
IC116	74LS164 8-BIT SHIFTER	1	
IC117	74LS165 8-BIT COUNTER	1	
IC118	74LS163 4-BIT COUNTER	1	
IC119	74LS162 4-BIT COUNTER	1	
IC120	74LS161 4-BIT COUNTER	1	
IC121	74LS160 4-BIT COUNTER	1	
IC122	74LS164 8-BIT SHIFTER	1	
IC123	74LS165 8-BIT COUNTER	1	
IC124	74LS163 4-BIT COUNTER	1	
IC125	74LS162 4-BIT COUNTER	1	
IC126	74LS161 4-BIT COUNTER	1	
IC127	74LS160 4-BIT COUNTER	1	
IC128	74LS164 8-BIT SHIFTER	1	
IC129	74LS165 8-BIT COUNTER	1	
IC130	74LS163 4-BIT COUNTER	1	
IC131	74LS162 4-BIT COUNTER	1	
IC132	74LS161 4-BIT COUNTER	1	
IC133	74LS160 4-BIT COUNTER	1	
IC134	74LS164 8-BIT SHIFTER	1	
IC135	74LS165 8-BIT COUNTER	1	
IC136	74LS163 4-BIT COUNTER	1	
IC137	74LS162 4-BIT COUNTER	1	
IC138	74LS161 4-BIT COUNTER	1	
IC139	74LS160 4-BIT COUNTER	1	
IC140	74LS164 8-BIT SHIFTER	1	
IC141	74LS165 8-BIT COUNTER	1	
IC142	74LS163 4-BIT COUNTER	1	
IC143	74LS162 4-BIT COUNTER	1	
IC144	74LS161 4-BIT COUNTER	1	
IC145	74LS160 4-BIT COUNTER	1	
IC146	74LS164 8-BIT SHIFTER	1	
IC147	74LS165 8-BIT COUNTER	1	
IC148	74LS163 4-BIT COUNTER	1	
IC149	74LS162 4-BIT COUNTER	1	
IC150	74LS161 4-BIT COUNTER	1	

ITEM	DESCRIPTION	QTY	REMARKS
IC151	74LS162 4-BIT COUNTER	1	
IC152	74LS161 4-BIT COUNTER	1	
IC153	74LS160 4-BIT COUNTER	1	
IC154	74LS164 8-BIT SHIFTER	1	
IC155	74LS165 8-BIT COUNTER	1	
IC156	74LS163 4-BIT COUNTER	1	
IC157	74LS162 4-BIT COUNTER	1	
IC158	74LS161 4-BIT COUNTER	1	
IC159	74LS160 4-BIT COUNTER	1	
IC160	74LS164 8-BIT SHIFTER	1	
IC161	74LS165 8-BIT COUNTER	1	
IC162	74LS163 4-BIT COUNTER	1	
IC163	74LS162 4-BIT COUNTER	1	
IC164	74LS161 4-BIT COUNTER	1	
IC165	74LS160 4-BIT COUNTER	1	
IC166	74LS164 8-BIT SHIFTER	1	
IC167	74LS165 8-BIT COUNTER	1	
IC168	74LS163 4-BIT COUNTER	1	
IC169	74LS162 4-BIT COUNTER	1	
IC170	74LS161 4-BIT COUNTER	1	
IC171	74LS160 4-BIT COUNTER	1	
IC172	74LS164 8-BIT SHIFTER	1	
IC173	74LS165 8-BIT COUNTER	1	
IC174	74LS163 4-BIT COUNTER	1	
IC175	74LS162 4-BIT COUNTER	1	
IC176	74LS161 4-BIT COUNTER	1	
IC177	74LS160 4-BIT COUNTER	1	
IC178	74LS164 8-BIT SHIFTER	1	
IC179	74LS165 8-BIT COUNTER	1	
IC180	74LS163 4-BIT COUNTER	1	
IC181	74LS162 4-BIT COUNTER	1	
IC182	74LS161 4-BIT COUNTER	1	
IC183	74LS160 4-BIT COUNTER	1	
IC184	74LS164 8-BIT SHIFTER	1	
IC185	74LS165 8-BIT COUNTER	1	
IC186	74LS163 4-BIT COUNTER	1	
IC187	74LS162 4-BIT COUNTER	1	
IC188	74LS161 4-BIT COUNTER	1	
IC189	74LS160 4-BIT COUNTER	1	
IC190	74LS164 8-BIT SHIFTER	1	
IC191	74LS165 8-BIT COUNTER	1	
IC192	74LS163 4-BIT COUNTER	1	
IC193	74LS162 4-BIT COUNTER	1	
IC194	74LS161 4-BIT COUNTER	1	
IC195	74LS160 4-BIT COUNTER	1	
IC196	74LS164 8-BIT SHIFTER	1	
IC197	74LS165 8-BIT COUNTER	1	
IC198	74LS163 4-BIT COUNTER	1	
IC199	74LS162 4-BIT COUNTER	1	
IC200	74LS161 4-BIT COUNTER	1	

MPU ASSEMBLY (A1)

DATE: 01/17/81

REV: 1

DESIGNED BY: [Name]

CHECKED BY: [Name]

DATE: 01/17/81

REV: 1

DESIGNED BY: [Name]

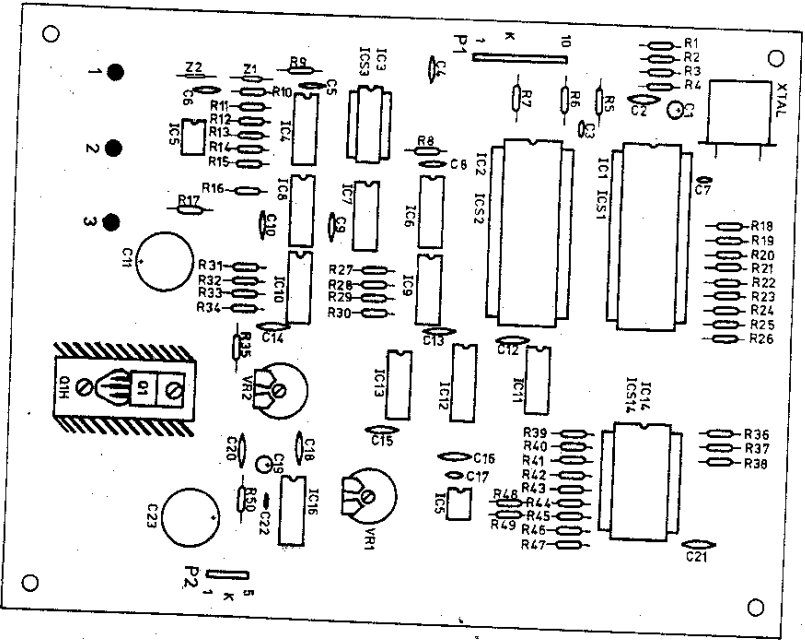
CHECKED BY: [Name]

DATE: 01/17/81

REV: 1

DESIGNED BY: [Name]

CHECKED BY: [Name]



DATE	REV. N°	REVISION
26/11/79	1	IC1 CORRECTED. IC14, NDW EPROM. IC6 NOW ZLS161

ITEM	DESCRIPTION	QTY	REF. DESIG.	PART N°	REMARKS
A3	SOUND SYSTEM (COMPLETE)	-			
PCB	A3/5 PRINTED CIRCUIT BOARD	1	EP 21		
IC1	MC6802 MICROPROCESSOR	1	EE 300		
IC2	MC6821 PERIPHERAL INTERFACE ADP	1	EE 330		
IC3	MCW7221 512 x 4 BIPOLAR PROM	1	EE 370		
IC 4	7407PC HEX NON-INVERTING BUFFER	1	EE 450		WAVESHARE (1)
IC 5	MC1714CP1 OPERATIONAL AMPLIFIER	1	EE 530		
IC 6	74LS16PC SYNCHRONOUS 4 BIT COUNTER	1	EE 550		
IC 7	7493PC BINARY COUNTER	1	EE 490		
IC 8	7407PC HEX NON-INVERTING BUFFER	1	EE 450		
IC9	MC1408B QUAD ANALOG SWITCH	1	EE 390		
IC10	7408 PC QUAD 2 INPUT AND GATE	1	EE 460		
IC11	MC14049 HEX INVERTING BUFFER	1	EE 400		ON A3/4 USE 4081 CMOS
IC12	MC14017B QUAD 2 INPUT NAND GATE	1	EE 380		BUFFERED DEVICE ONLY
IC14	2716 2K x 8 EPROM	1	EE 201		SOUND FIRMWARE
IC15	MC145591 TIMER	1	EE 510		
IC16	LM380 AUDIO AMP	1	EE 520		
IC51	40 PIN GOLD IC SOLDER SOCKET	1	EG 700		
IC52	40	1	EG 700		
IC53	16	1	EG 730		
IC54	24	1	EG 710		
C1	100µF ELECTROLYTIC CAPACITOR 25V RB	1	EC 500		
C2	0.1µF CERAMIC CAPACITOR	1	EC 200		
C3	330µF	1	EC 120		
C4	0.1µF	1	EC 200		
C5	"	1	"		
C6	"	1	"		
C7	15µF	1	EC 700		
C8	0.1µF	1	EC 200		
C9	"	1	"		
C10	"	1	"		
C11	1000µF ELECTROLYTIC CAPACITOR 25V RB	1	EC 560		
C12	0.1µF CERAMIC CAPACITOR	1	EC 180		
C13	"	1	"		
C14	"	1	"		
C15	"	1	"		
C16	"	1	"		
C17	0.001µF	1	EC 170		
C18	0.4µF	1	EC 200		
C19	1µF ELECTROLYTIC CAPACITOR 63V RB	1	EC 300		
C20	0.1µF CERAMIC CAPACITOR	1	EC 200		
C21	"	1	"		
C22	0.01µF	1	EC 180		
C23	470µF ELECTROLYTIC CAPACITOR 25V RB	1	EC 550		
Z1	1N750 4.7V 400mW ZENER DIODE	1	EF 280		
Z2	"	1	EF 280		
VR1	PT55VH2.5I K TRIMPOT (SCREW SLOT)	1	ER 700		
VR2	PT55VH2.5I K TRIMPOT (NUTTED KNOB)	1	ER 720		

ITEM	DESCRIPTION	QTY	REF. DESIG.	PART N°	REMARKS
R1	4K7 OHM RESISTOR 1/4W 5%	1	ER 300		
R2	3K3	1	ER 280		
R3	3K3	1	ER 370		
R4	33K	1	ER 350		
R5	22K	1	ER 360		
R6	1K2	1	ER 240		
R7	1K	1	ER 230		
R8	3K3	1	ER 280		
R9	100	1	ER 150		
R10	1K2	1	ER 240		
R11	68K	1	ER 400		
R12	33K	1	ER 370		
R13	18K	1	ER 350		
R14	8K2	1	ER 330		
R15	1K5	1	ER 250		
R16	8K2	1	ER 330		
R17	33K	1	ER 370		
R18	5K6	1	ER 310		
R19	"	1	"		
R20	"	1	"		
R21	"	1	"		
R22	"	1	"		
R23	"	1	"		
R24	"	1	"		
R25	"	1	"		
R26	47K	1	ER 380		
R27	8K2	1	ER 330		
R28	"	1	ER 330		
R29	"	1	ER 330		
R30	"	1	"		
R31	68K	1	ER 400		
R32	18K	1	ER 350		
R33	33K	1	ER 370		
R34	8K2	1	ER 330		
R35	10K	1	ER 390		
R36	47K	1	ER 340		
R37	"	1	ER 380		
R38	"	1	"		
R39	"	1	"		
R40	"	1	"		
R41	"	1	"		
R42	"	1	"		
R43	"	1	"		
R44	"	1	"		
R45	"	1	"		
R46	"	1	"		
R47	10K	1	ER 340		
R48	820	1	ER 220		
R49	1K	1	ER 230		
R50	2.7	1	ER 100		
Q1H	TV21 HEATSINK	1	EG 930		
P1	1/8" x 3/8" RHMT	2			
P2	1/8" MACHINED NUT	2			
Q1	1/8" SHAKEPROOF WASHER	2			
XTAL	3.27680 MHZ CRYSTAL	1	EF 700		
Q1	MC7805CT POSITIVE 5V REGULATOR	1	EF 500		
P1	HL030-10A MOLDED WAFER ASSY	1	EJ 110		
P2	HL030-5A MOLDED WAFER ASSY	1	EJ 100		
TF-1-3	WIRE TEST POINT LOOP	3	EG 900		

A. Honkin & Co. Pty. Ltd.
SOUND SYSTEM ASSEMBLY (A3)

DRAWN	SCALE	PASSED	DATE
TRACED	Full size		11/4/79

DRAWING NUMBER: HD 1000/L

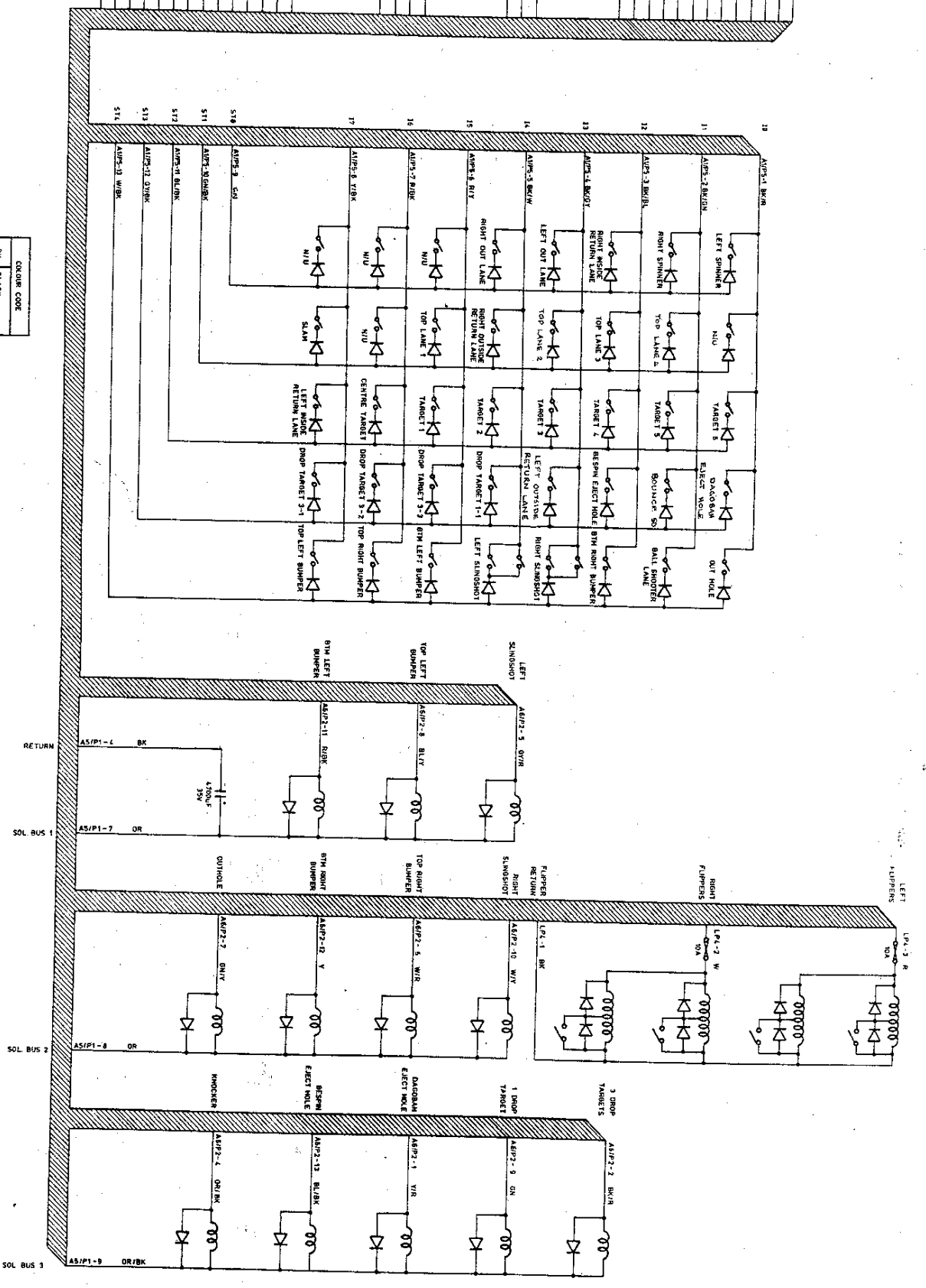
- AS/P2
- 1 BK
 - 2 BK/BL
 - 3 BK/BL
 - 4 BK/BL
 - 5 BK/BL
 - 6 BK/BL
 - 7 BK/BL
 - 8 BK/BL
 - 9 BK/BL
 - 10 BK/BL
 - 11 BK/BL
 - 12 BK/BL
 - 13 BK/BL
 - 14 BK/BL
 - 15 BK/BL

- AS/P1
- 1 BK
 - 2 BK
 - 3 BK
 - 4 BK
 - 5 BK
 - 6 BK
 - 7 BK
 - 8 BK
 - 9 BK
 - 10 BK
 - 11 BK
 - 12 BK
 - 13 BK
 - 14 BK
 - 15 BK

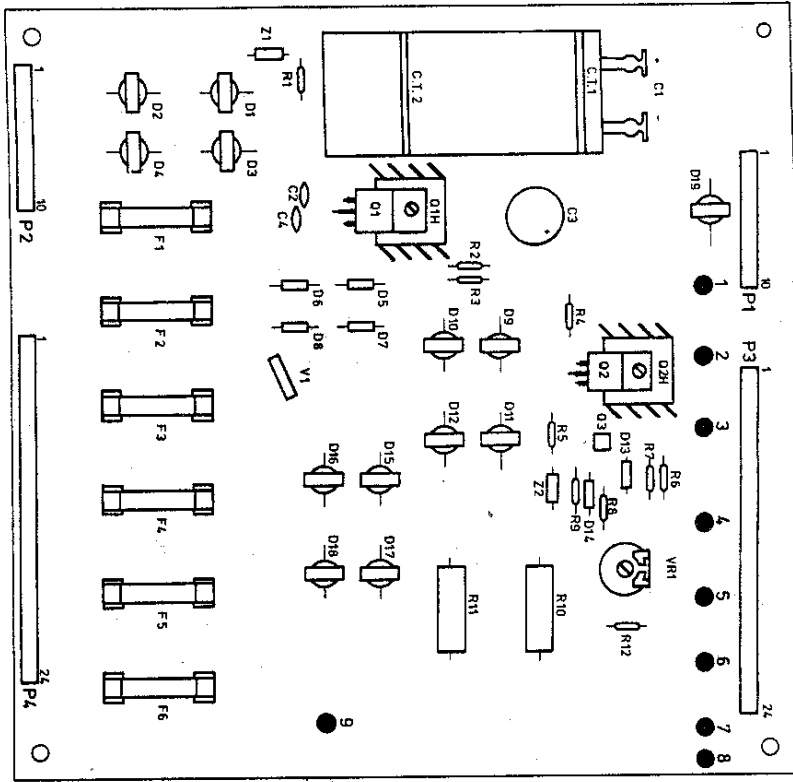
- LP4
- 1 BK
 - 2 BK
 - 3 BK
 - 4 BK
 - 5 BK
 - 6 BK
 - 7 BK
 - 8 BK
 - 9 BK
 - 10 BK
 - 11 BK
 - 12 BK
 - 13 BK
 - 14 BK
 - 15 BK

- AS/P2
- 1 BK
 - 2 BK
 - 3 BK
 - 4 BK
 - 5 BK
 - 6 BK
 - 7 BK
 - 8 BK
 - 9 BK
 - 10 BK
 - 11 BK
 - 12 BK
 - 13 BK
 - 14 BK
 - 15 BK

COLOUR CODE	
BK	BLACK
BL	BLUE
BR	BROWN
BN	BROWN
DN	GREEN
DR	GREEN
OR	ORANGE
P	PURPLE
R	RED
W	WHITE
Y	YELLOW



ITER	DESCRIPTION	NO. OF MATERIAL	REMARKS
1	A. Hendon & Co. Pty. Ltd.		
STAR WARS PLAYFIELD			
WIRING DIAGRAM			
DATE	SCALE	DATE	DATE
27/1/51	1/4"	27/1/51	27/1/51
DRWING	BY	CHECKED	DATE
HD1104	51		
HD1104	51		
HD1104	51		



ITEM	DESCRIPTION	REV'D	PART N°	REMARKS
AS	POWER SUPPLY COMPLETE	-		
PCB	A5/3 PRINTED CIRCUIT BOARD	1	EP140	
P1	M2402-10 STANDARD WAFER	1	EJ210	
P2	M2402-10	1		
P3	M2402-12	2	EJ230	
P4	M2402-12	2		
	1397-01-28 PC MOUNTING FUSE CLIP	12	EG300	

ITEM	DESCRIPTION	REV'D	PART N°	REMARKS
C1	1000µF ELECTROLYTIC CAPACITOR 25V 5G	1	EG370	
C2	0.1µF CERAMIC CAPACITOR 63V	1	EG200	
C3	220µF ELECTROLYTIC CAPACITOR 80V RB	1	EG540	
C4	0.1µF CERAMIC CAPACITOR 63V	1	EC200	
Z1	1N5344B 82V 25W ZENER DIODE	1	EF230	
Z2	1N5359B 24V 2.5W	1	EF240	
D1	MR751 100V 6A DIODE	1	EF220	
D2	"	1	"	
D3	"	1	"	
D4	"	1	"	
D5	1N4004 400V 1A SILICON DIODE	1	EF200	
D6	"	1	"	
D7	"	1	"	
D8	"	1	"	
D9	MR751 100V 6A DIODE	1	EF220	
D10	"	1	"	
D11	"	1	"	
D12	"	1	"	
D13	1N4004 400V 1A SILICON DIODE	1	EF200	
D14	"	1	"	
D15	MR751 100V 6A DIODE	1	EF220	
D16	"	1	"	
D17	"	1	"	
D18	"	1	"	
D19	"	1	"	
R1	680 OHM 1/2 W 5% RESISTOR	1	ER310	
R2	39	1	ER130	
R3	39	1	ER300	
R4	4K7	1	ER320	
R5	6K8	1	ER280	
R6	2K2	1	ER320	
R7	18	1	ER320	
R8	10K	1	ER340	
R9	2.7	1	ER100	
R10	REB83V1 270V 270 OHM 5W 10% RESISTOR	1	ER600	
R11	REB83V1 221 22	1	ER610	
R12	2K7 1/4 W 5% RESISTOR	1	ER270	
V1	PT5V1251 K TRIM POT (SCREW SLOT)	1	ER700	
V1	V100ZAN5 100V 1500µF WARRISTOR	1	EF600	
Q1H	TYS HEATSINK	2	EJ970	
O2H	1/8 x 3/16 RHMT	2		
	1/8" MACHINED NUT	2		
	1/8" SHAKERPROOF WASHER	2		
Q1	MC7805CT POSITIVE SV REGULATOR	1	EF500	
Q2	2N6290 45V BA NPN TRANSISTOR	1	EF120	
Q3	BC237 50V 200mA NPN TRANSISTOR	1	EF100	
F1	3A 3AG FUSE	1	EG340	
F2	250mA	1	EG320	
F3	5A 5/8	1	EG361	
F4	10A	1	EG370	
F5	15A	1	EG390	
F6	1A	1	EG330	
	1P-1-9 WIRE TEST POINT LOOP	9	EG900	
C11&2	PL12M 2.5mm x 200mm NYLON CABLE TIE	2	EP700	

DATE	REV N°	REVISION
17/10/79	1	F1 RATING CHANGED
		REVISION

A. Harkin & Co. Pty. Ltd.
POWER SUPPLY ASSEMBLY (A5)

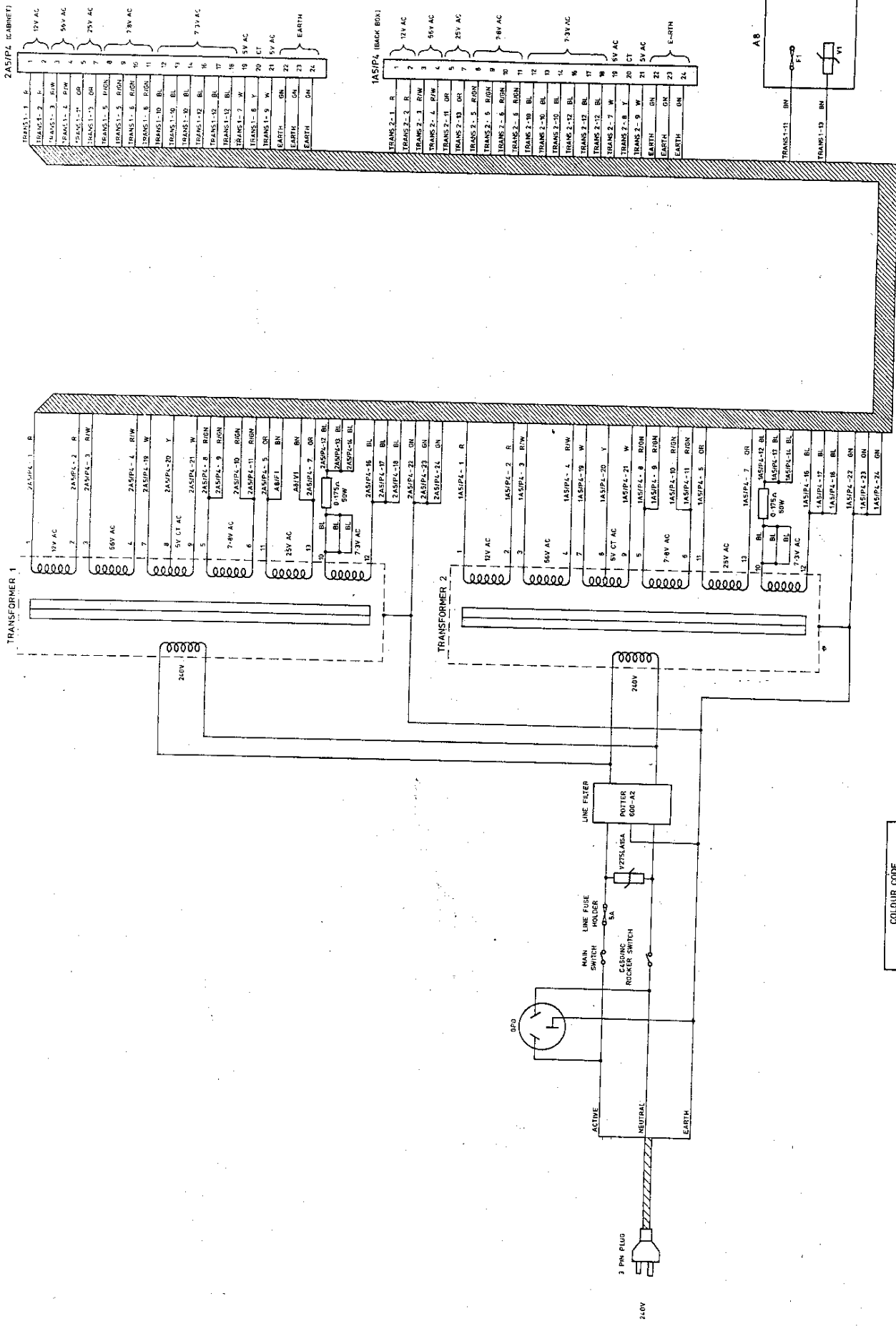
DRAWING NUMBER
HD1021/1

DRAWN
 TRACED
 CHECKED

SCALE
 FULL SIZE

DATE
 28/5/79

PASSED
 DATE

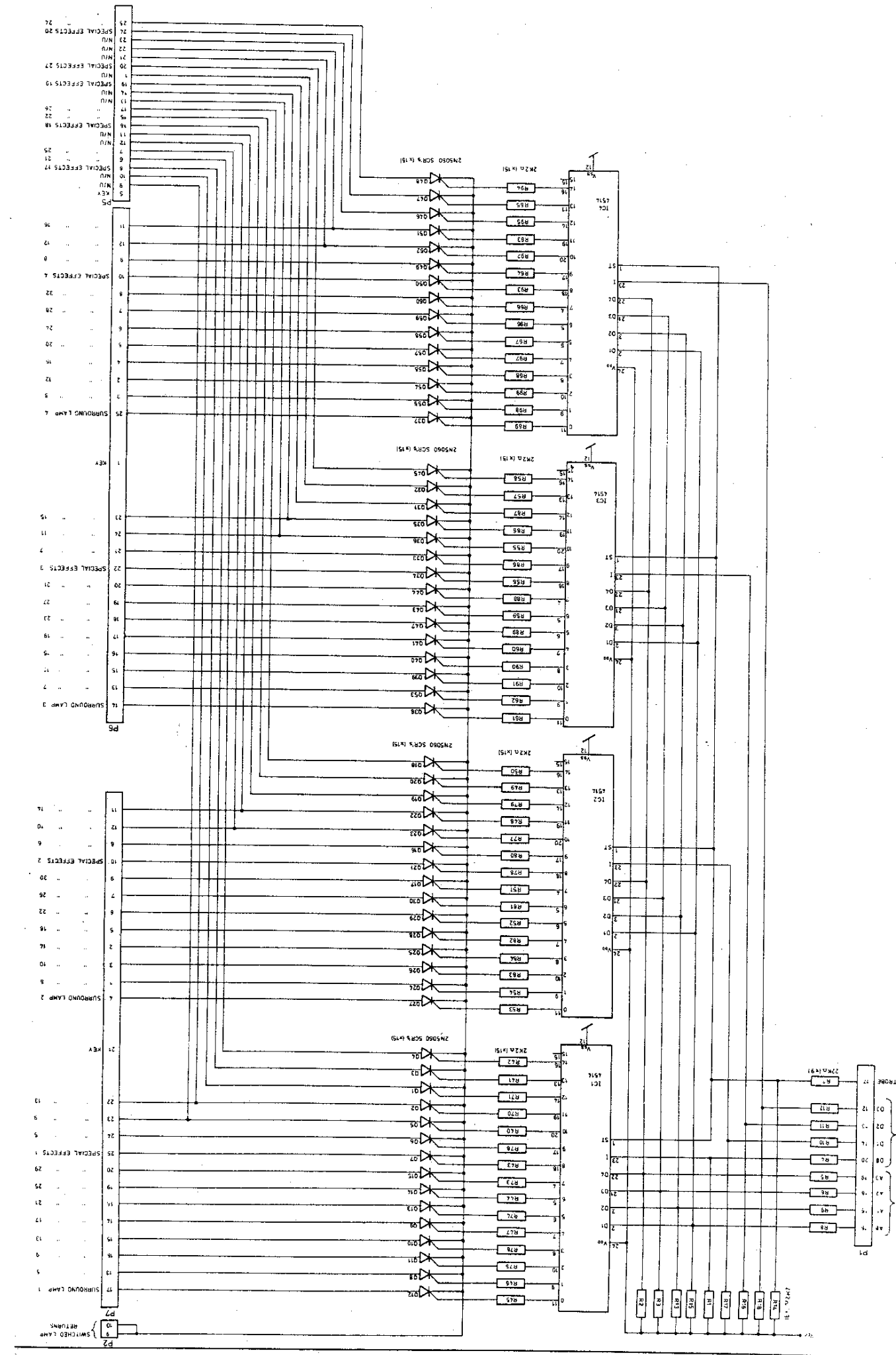


COLOUR CODE

BK	BLACK	OR	ORANGE
BL	BLUE	P	PURPLE
BN	BROWN	R	RED
GN	GREEN	W	WHITE
GY	GREY	Y	YELLOW

ITEM	DESCRIPTION	RECD.	MATERIAL	REMARKS
	A. Honkin & Co Pty. Ltd.			
		SCALE	N.T.S.	DATE 22/1/80
		DRAWN	A.P.	DRAWING NUMBER HD 1102
		TRACED		
		CHECKED		

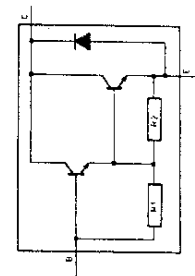
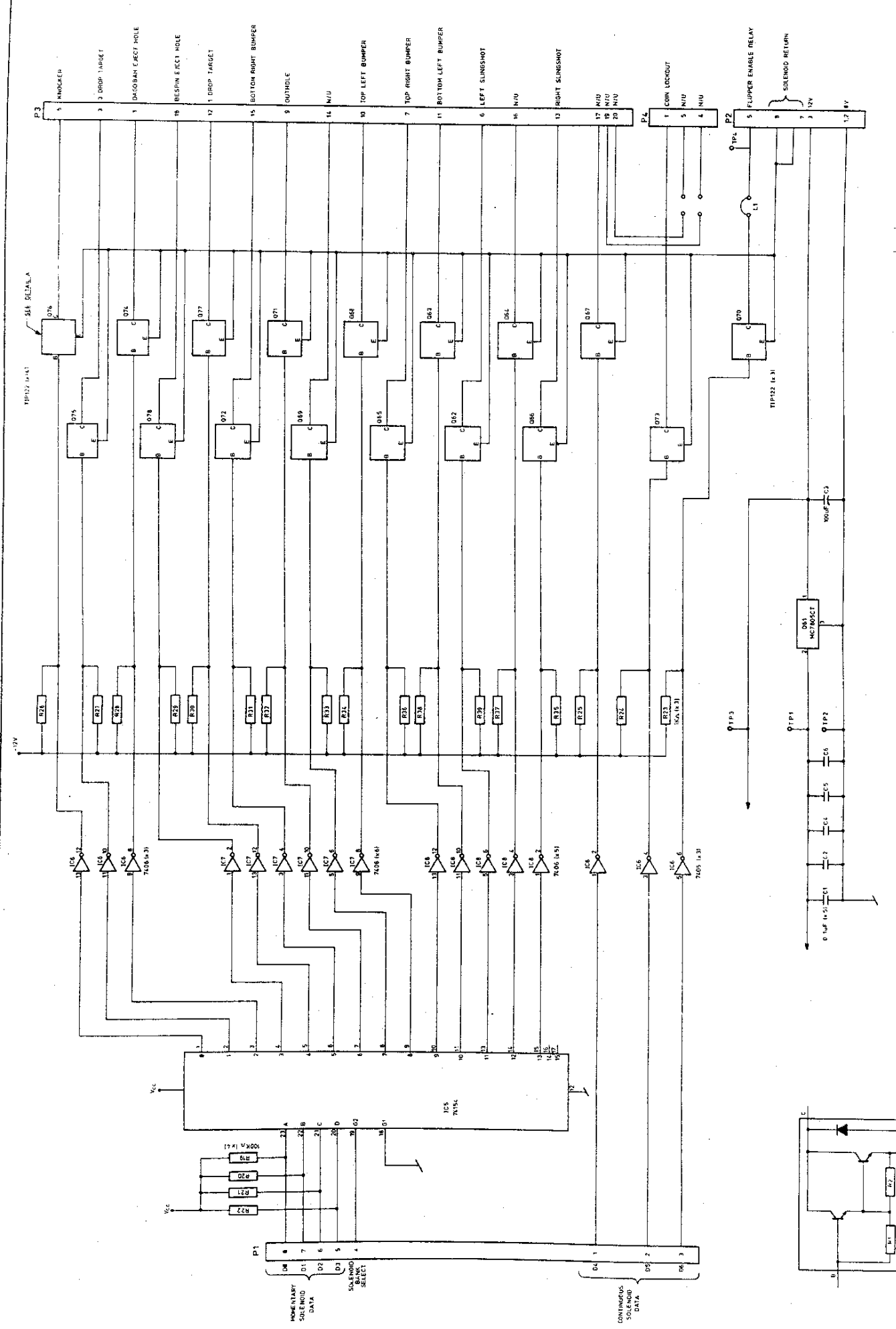
**STAR WARS
TRANSFORMERS
WIRING DIAGRAM**



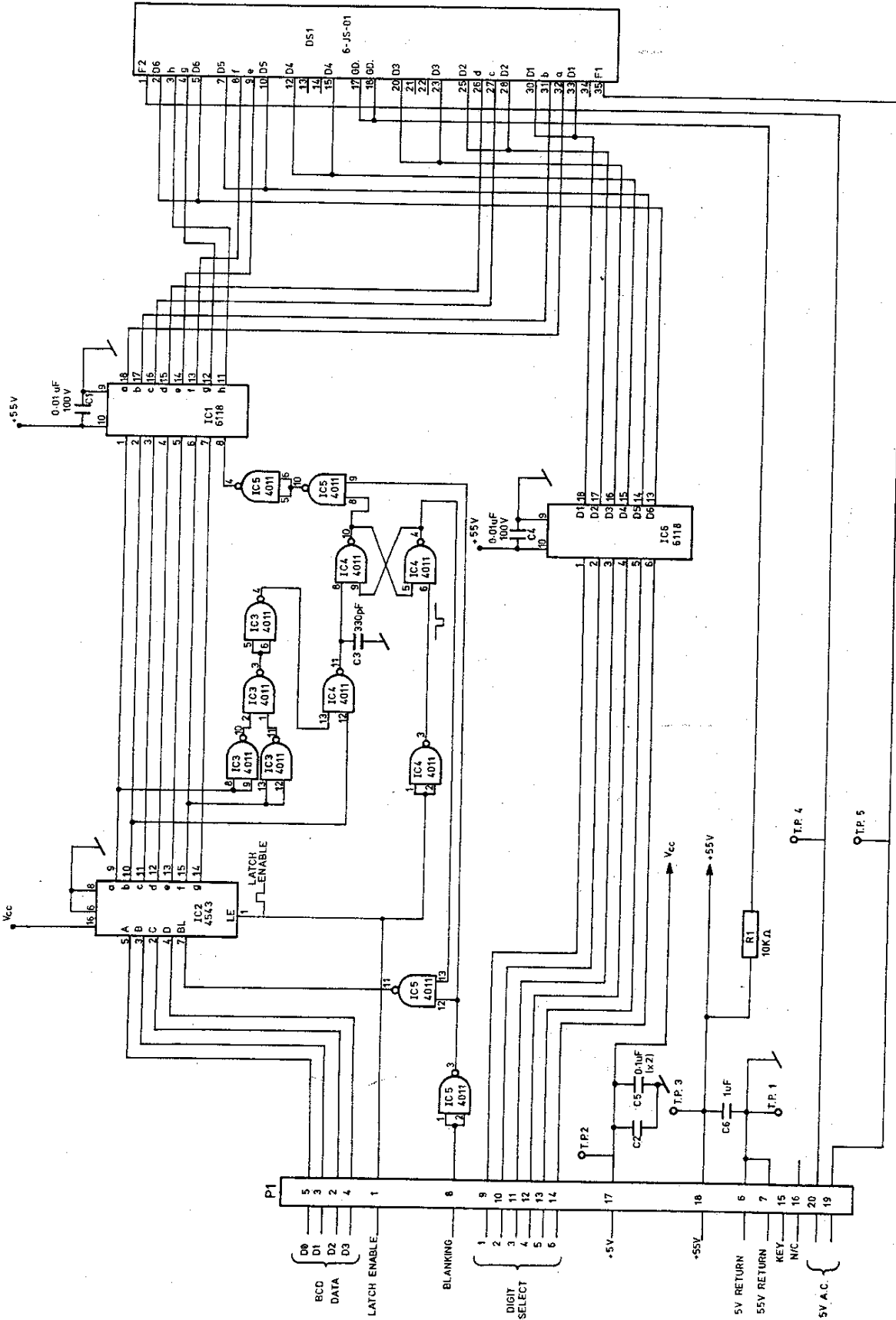
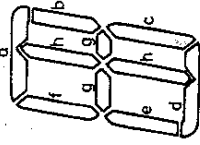
ITEM	DESCRIPTION	REQD.	MATERIAL	SCALE	PASSED	DATE	REMARKS
	A. Honkin & Co Fly Ltd					2/21/60	

ITEM	DESCRIPTION	REQD.	MATERIAL	SCALE	PASSED	DATE	REMARKS
	LAMP & SOLENOID DRIVER						
	SCHEMATIC - BACK BOX						

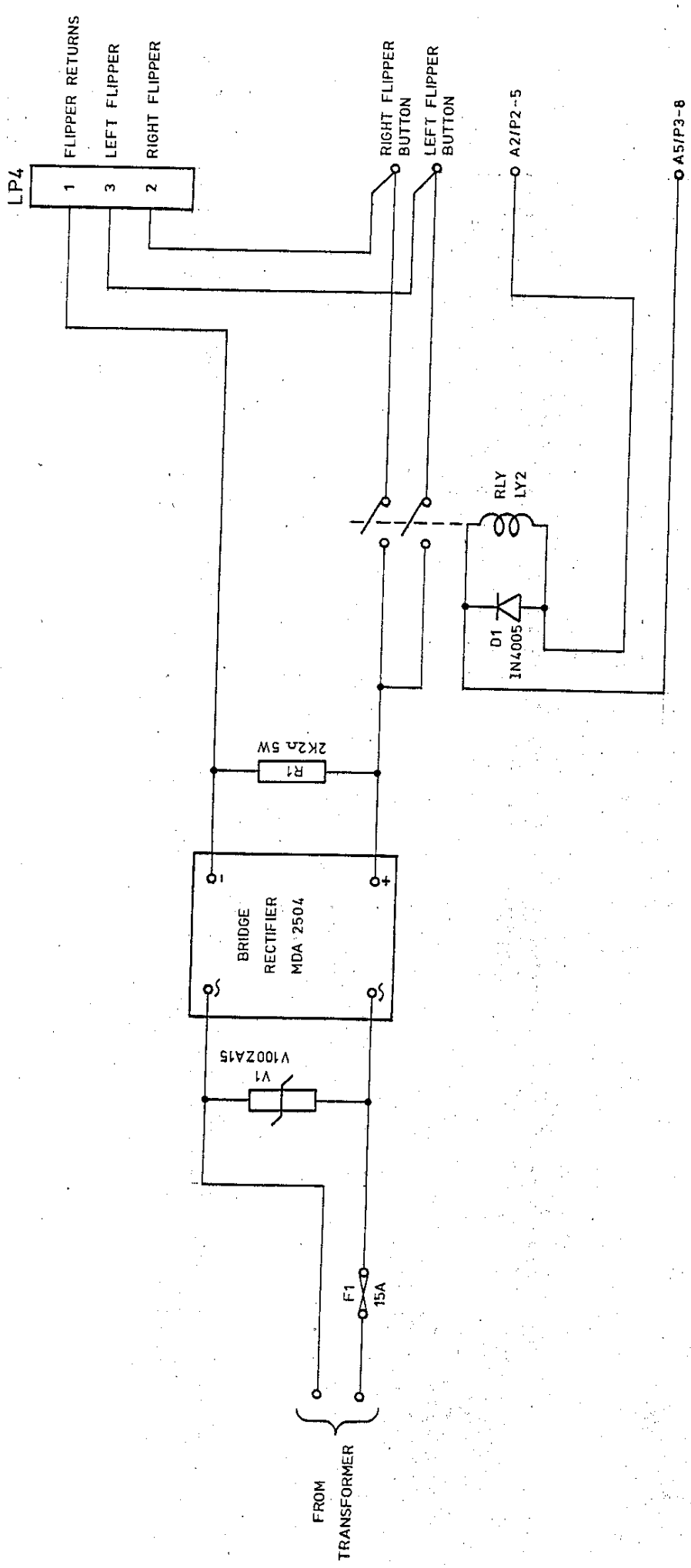
DRAWN: C. MCKAY
 CHECKED: A.P.
 PROJECT: HD 1107
 SHEET: 1 OF 1



ITEM	DESCRIPTION	RECD.	MATERIAL	REMARKS
A	Hottel & Co. Pty Ltd	SCALE	N.T.S.	DATE
LAMP & SOLENOID DRIVER				
SCHEMATIC - CABINET				
DRAWN: C. HALL CHECKED: A.P. HD 1106 SHEET 1 OF 2				

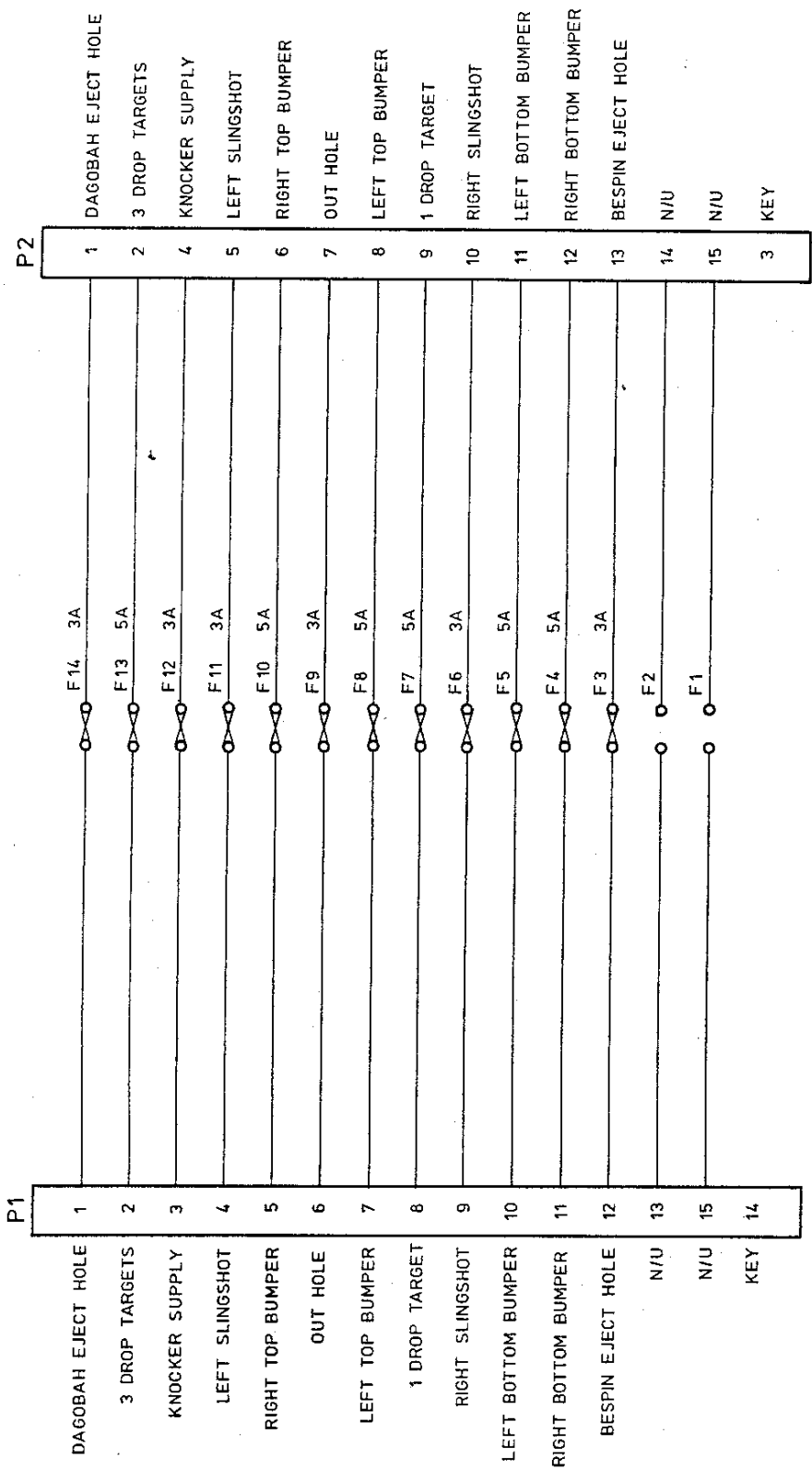


ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.			
		SCALE	N.T.S.	PASSED DATE
				3/7/76
		DRAWN	C. MCKAY	DRAWING NUMBER
		TRACED	A. PENDER	HD 1002
		CHECKED		



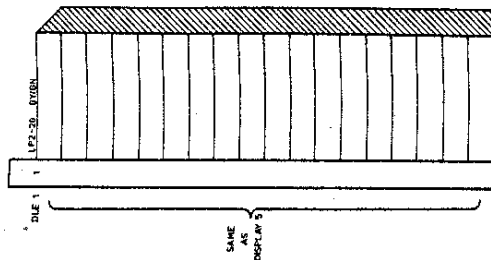
ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.	SCALE		PASSED
		N.T.S.		DATE
				16/7/80
	FLIPPER BOOSTER SCHEMATIC (A8)	DRAWN	J.R.	DRAWING NUMBER
		TRACED	A.P.	
		CHECKED		

HD1091

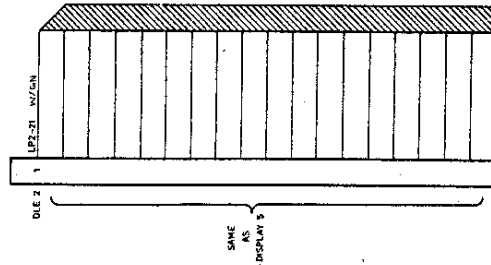


ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.	SCALE	N.T.S.	PASSED
		DATE	2/19/80	
STAR WARS FUSE BOARD A6 SCHEMATIC		DRAWN	A.P.	DRAWING NUMBER
		TRACED		HD1110
		CHECKED		

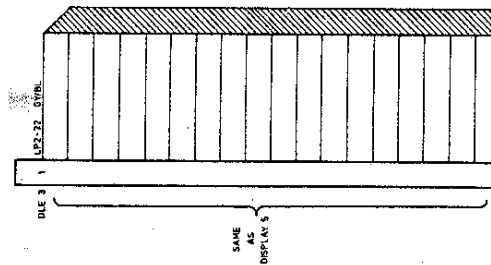
DISPLAY 1



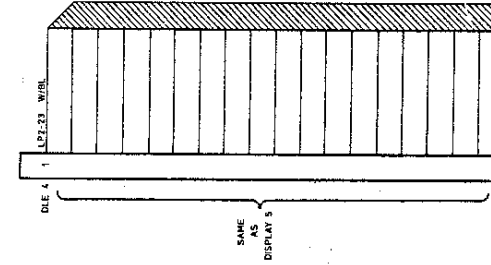
DISPLAY 2



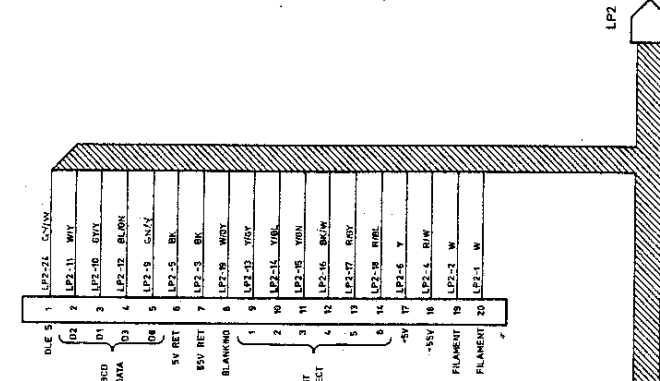
DISPLAY 3



DISPLAY 4



DISPLAY 5



PN	SOURCE	FUNCTION	COLOR
1	ASPP-23	FILAMENT	W
2	ASPP-24	FILAMENT	W
3	ASPP-18	55V RETURN	BK
4	ASPP-17	55V	R/W
5	ASPP-6	5V RETURN	BK
6	ASPP-5	5V	Y
7	ASPP-8	5V	Y
8	ASPP-9	5V	Y
9	ASPP-10	5V	Y
10	ASPP-11	5V	Y
11	ASPP-12	5V	Y
12	ASPP-13	5V	Y
13	ASPP-14	5V	Y
14	ASPP-15	5V	Y
15	ASPP-16	5V	Y
16	ASPP-17	5V	Y
17	ASPP-18	5V	Y
18	ASPP-19	5V	Y
19	ASPP-20	5V	Y
20	ASPP-21	5V	Y
21	ASPP-22	5V	Y
22	ASPP-23	5V	Y
23	ASPP-24	5V	Y
24	ASPP-25	5V	Y

COLOR CODE	DESCRIPTION
B/L	BLUE
BK	BLACK
BH	BROWN
GN	GREEN
DY	DRY
OR	ORANGE
P	PURPLE
R	RED
W	WHITE
Y	YELLOW

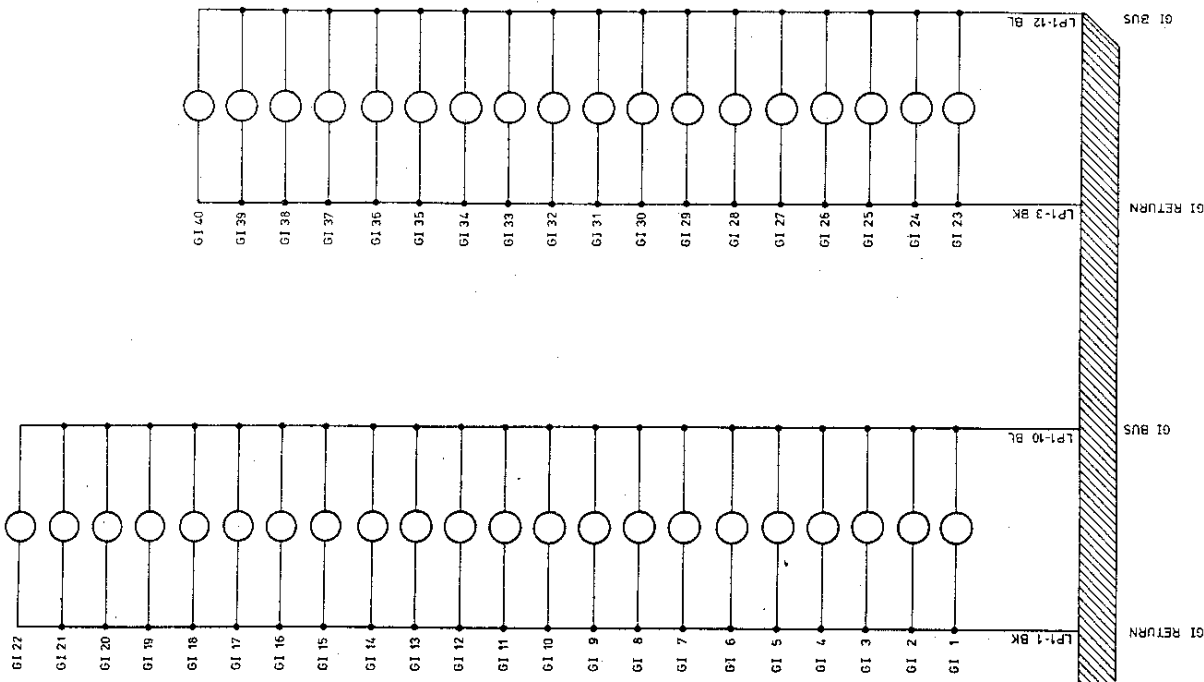
ITEM	DESCRIPTION	QTY	MATERIAL	REMARKS
1	DISPLAY	1		
2	WIRING	1		

DATE	REV. NO.	REVISION
	1	REVISED TO SMT. TORZAI

NO.	DESCRIPTION	DATE
1	ASPP-23	8/17/75
2	ASPP-24	8/17/75
3	ASPP-18	8/17/75
4	ASPP-17	8/17/75
5	ASPP-6	8/17/75
6	ASPP-5	8/17/75
7	ASPP-8	8/17/75
8	ASPP-9	8/17/75
9	ASPP-10	8/17/75
10	ASPP-11	8/17/75
11	ASPP-12	8/17/75
12	ASPP-13	8/17/75
13	ASPP-14	8/17/75
14	ASPP-15	8/17/75
15	ASPP-16	8/17/75
16	ASPP-17	8/17/75
17	ASPP-18	8/17/75
18	ASPP-19	8/17/75
19	ASPP-20	8/17/75
20	ASPP-21	8/17/75
21	ASPP-22	8/17/75
22	ASPP-23	8/17/75
23	ASPP-24	8/17/75
24	ASPP-25	8/17/75

NO.	DESCRIPTION	DATE
1	ASPP-23	8/17/75
2	ASPP-24	8/17/75
3	ASPP-18	8/17/75
4	ASPP-17	8/17/75
5	ASPP-6	8/17/75
6	ASPP-5	8/17/75
7	ASPP-8	8/17/75
8	ASPP-9	8/17/75
9	ASPP-10	8/17/75
10	ASPP-11	8/17/75
11	ASPP-12	8/17/75
12	ASPP-13	8/17/75
13	ASPP-14	8/17/75
14	ASPP-15	8/17/75
15	ASPP-16	8/17/75
16	ASPP-17	8/17/75
17	ASPP-18	8/17/75
18	ASPP-19	8/17/75
19	ASPP-20	8/17/75
20	ASPP-21	8/17/75
21	ASPP-22	8/17/75
22	ASPP-23	8/17/75
23	ASPP-24	8/17/75
24	ASPP-25	8/17/75

HD1030/1



LP1 24 PIN

PIN	SOURCE	FUNCTION	COLOUR
1	A5/P3-21	GI RETURN	BK
3	A5/P3-22	GI RETURN	BK
4	A2/P5-16	HSTD	GN/BK
5	A2/P5-19	GAME OVER	BL/BK
6	A2/P5-23	TILT	GY/BK
7	A2/P5-12	MATCH	Y/BK
8	A5/P3-12	SWL BUS	R/BN
9	A5/P3-13	SWL BUS	R/BN
10	A5/P3-19	GI BUS	BL
12	A5/P3-20	GI BUS	BL

COLOUR CODE

BK	BLACK	OR	ORANGE
BL	BLUE	P	PURPLE
BN	BROWN	R	RED
GN	GREEN	W	WHITE
GY	GREY	Y	YELLOW

ITEM	DESCRIPTION	RECD	MATERIAL	SCALE	DATE	REMARKS
	A. Hankin & Co. Pty. Ltd.		N.T.S.		13/8/80	
STAR WARS BACK GLASS WIRING DIAGRAM				DRAWN	A.P.	DRAWING NUMBER
				TRACED		HD1098
				CHECKED		

LP7

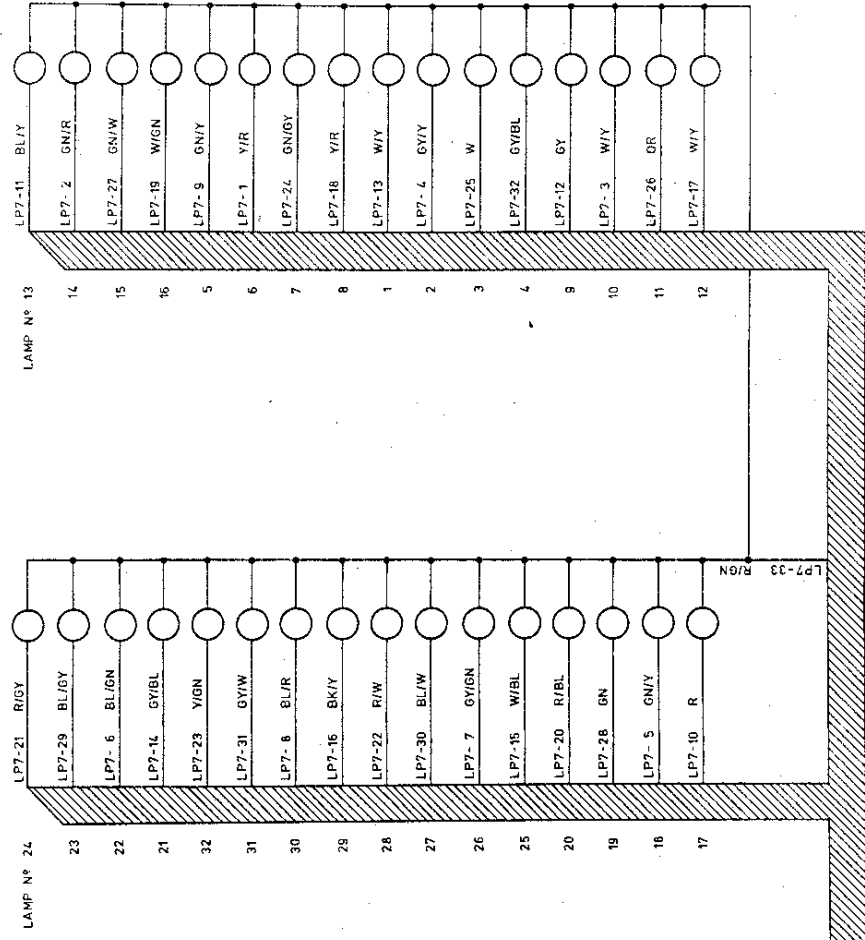


LP7 1x24 PIN & 1x12 PIN

PIN	SOURCE	FUNCTION	COLOUR
1	A2/P7-1	LAMP N° 6	Y/R
2	A2/P7-2	" " 14	GN/R
3	A2/P7-3	" " 10	W/Y
4	A2/P7-4	" " 2	GY/Y
5	A2/P7-5	" " 18	GN/Y
6	A2/P7-6	" " 22	BL/GN
7	A2/P7-7	" " 26	GY/GN
8	A2/P7-9	" " 30	BL/R
9	A2/P7-13	" " 5	GN/Y
10	A2/P7-14	" " 17	R
11	A2/P7-15	" " 13	BL/Y
12	A2/P7-16	" " 9	GY
13	A2/P7-17	" " 1	W/Y
14	A2/P7-18	" " 21	GY/BL
15	A2/P7-19	" " 25	W/BL
16	A2/P7-20	" " 29	BK/Y
17	A2/P6-2	" " 12	W/Y
18	A2/P6-3	" " 8	Y/R
19	A2/P6-4	" " 16	W/GN
20	A2/P6-5	" " 20	R/BL
21	A2/P6-6	" " 24	R/GY
22	A2/P6-7	" " 28	R/W
23	A2/P6-8	" " 32	Y/GN
24	A2/P6-13	" " 7	GN/GY
25	A2/P6-14	" " 3	W
26	A2/P6-15	" " 11	OR
27	A2/P6-16	" " 15	GN/W
28	A2/P6-17	" " 19	GN
29	A2/P6-18	" " 23	BL/GY
30	A2/P6-19	" " 27	BL/W
31	A2/P6-20	" " 31	GY/W
32	A2/P6-25	" " 4	GY/BL
33	SP EFFECT3	SWL BUS	R/GN

24 PIN
LINE PLUG

12 PIN
LINE PLUG



SWL BUS

COLOUR CODE			
BK	BLACK	OR	ORANGE
BL	BLUE	P	PURPLE
BN	BROWN	R	RED
GN	GREEN	W	WHITE
GY	GREY	Y	YELLOW

ITEM	DESCRIPTION	REMARKS	
		REV'D	MATERIAL
A	Hankin & Co. Ply. Ltd.	SCALE	PASSED
		R.T.S.	DATE
		DRAWN	17/8/60
		TRACED	
		CHECKED	

STAR WARS
BACK GLASS SURROUND
WIRING DIAGRAM

HD1097

LP7 TO BACK GLASS SURROUND

AZ/IP7

1	Y/R
2	GN/R
3	W/Y
4	GY/Y
5	BL/GN
6	GN/GN
7	W/GN
8	BL/R
9	GY/R
10	W/R
11	Y
12	GN/Y
13	R
14	BL/Y
15	BL/Y
16	GY
17	W/Y
18	GN/Y
19	W/R
20	BK/Y
21	GY
22	GY/R
23	W/R
24	GN/Y
25	GN/Y

SPECIAL EFFECTS

KEY

13	22	GY
22	23	GY/R
23	24	W/R
24	25	GN/Y
25	1	GN/Y

AZ/IP6

1	W/Y
2	Y/R
3	W/GN
4	R/BL
5	R/BL
6	R/GY
7	R/W
8	Y/GN
9	Y/BL
10	Y/GY
11	Y/W
12	GN/BL
13	GN/GY
14	W
15	GN/W
16	GN
17	BL/GY
18	BL/W
19	GY/W
20	W/GY
21	BN
22	GY
23	Y
24	GY/BL
25	GN/R

SPECIAL EFFECTS

KEY

5	W/BL
6	GY/BL
7	W/GN
8	W/Y
9	GN/BL
10	GN/BK
11	GY/Y
12	BL/Y
13	BL/BK
14	GN/Y
15	GN/Y
16	BL/R
17	GN/R
18	GN/R
19	GN/R
20	BL/R
21	GN/R
22	GN/R
23	GN/R
24	GN/R
25	GN/R

AZ/IP5

1	W/Y
2	Y/R
3	W/GN
4	R/BL
5	R/BL
6	R/GY
7	R/W
8	Y/GN
9	Y/BL
10	Y/GY
11	Y/W
12	GN/BL
13	GN/GY
14	W
15	GN/W
16	GN
17	BL/GY
18	BL/W
19	GY/W
20	W/GY
21	BN
22	GY
23	Y
24	GY/BL
25	GN/R

SPECIAL EFFECTS

KEY

21	6	W/BL
22	7	GY/BL
23	8	W/GN
24	9	W/Y
25	10	GN/BL
26	11	GN/BK
27	12	GY/Y
28	13	BL/Y
29	14	BL/BK
30	15	GN/Y
31	16	BL/R
32	17	GN/R
33	18	GN/R
34	19	GN/R
35	20	BL/R
36	21	GN/R
37	22	GN/R
38	23	GN/R
39	24	GN/R
40	25	GN/R

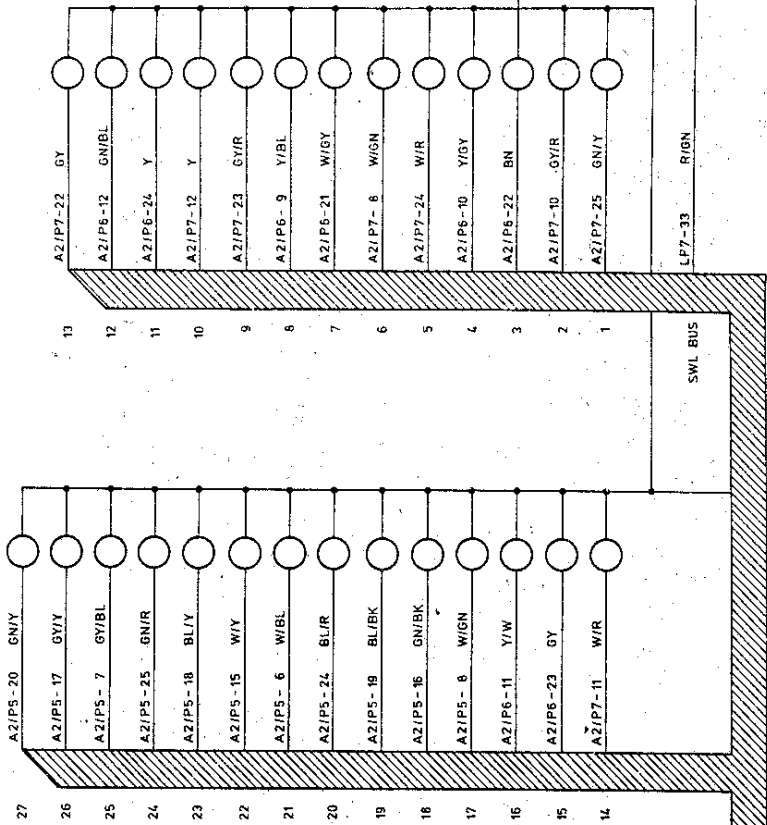
LP7 1x 24 PIN & 1x 12 PIN

PIN	SOURCE	FUNCTION	COLOUR
1	AZ/IP7-1	LAMP No. 6	Y/R
2	AZ/IP7-2	" " " 14	GN/R
3	AZ/IP7-3	" " " 10	W/Y
4	AZ/IP7-4	" " " 2	GY/Y
5	AZ/IP7-5	" " " 18	GN/Y
6	AZ/IP7-6	" " " 22	BL/GN
7	AZ/IP7-7	" " " 26	GY/GN
8	AZ/IP7-9	" " " 30	BL/R
9	AZ/IP7-13	" " " 5	GN/Y
10	AZ/IP7-14	" " " 17	R
11	AZ/IP7-15	" " " 13	BL/Y
12	AZ/IP7-16	" " " 9	GY
13	AZ/IP7-17	" " " 1	W/Y
14	AZ/IP7-18	" " " 21	GY/BL
15	AZ/IP7-19	" " " 25	W/BL
16	AZ/IP7-20	" " " 29	BK/Y
17	AZ/IP6-2	" " " 12	W/Y
18	AZ/IP6-3	" " " 8	Y/R
19	AZ/IP6-4	" " " 16	W/GN
20	AZ/IP6-5	" " " 20	R/BL
21	AZ/IP6-6	" " " 24	R/GY
22	AZ/IP6-7	" " " 28	R/W
23	AZ/IP6-8	" " " 32	Y/GN
24	AZ/IP6-13	" " " 7	GN/GY
25	AZ/IP6-14	" " " 3	W
26	AZ/IP6-15	" " " 11	OR
27	AZ/IP6-16	" " " 15	GN/W
28	AZ/IP6-17	" " " 19	GN
29	AZ/IP6-18	" " " 23	BL/GY
30	AZ/IP6-19	" " " 27	BL/W
31	AZ/IP6-20	" " " 31	GY/W
32	AZ/IP6-25	" " " 4	GY/BL
33	SP EFFECT 3	SWL BUS	R/GN

COLOUR CODE

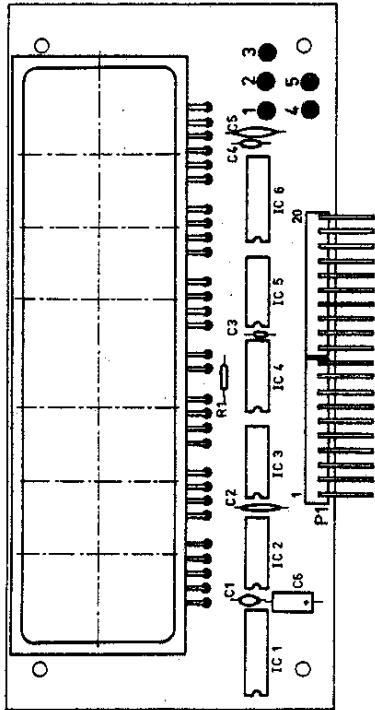
BK	BLACK	OR	ORANGE
BL	BLUE	P	PURPLE
BN	BROWN	R	RED
GN	GREEN	W	WHITE
GY	GREY	Y	YELLOW

SPECIAL EFFECTS LAMPS



FROM BACK GLASS WIRING DIAGRAM
 LP1-8 R/GN
 LP1-9 R/GN

ITEM	DESCRIPTION	RECD	MATERIAL	REMARKS
	A. Hankin & Co. Pty. Ltd.			
	STAR WARS SPECIAL EFFECTS WIRING DIAGRAM	SCALE	NTS	PASSED
		DRAWN	A.P.	DATE
		TRACED		14/8/60
		CHECKED		DRAWING NUMBER
				HD1099

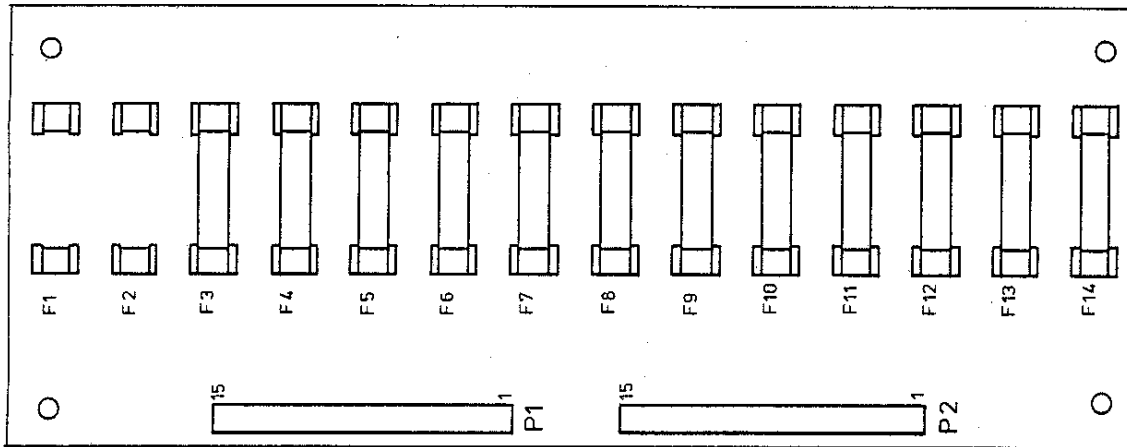


ITEM	DESCRIPTION	QTY	PART NO.	REMARKS
A.1	DISPLAY BOARD (COMPLETE)	1	EA130	
PCB	A4/2 PRINTED CIRCUIT BOARD	1	EA130	
IC1	XR-6118 DISPLAY DRIVER	1	EE540	
IC2	MC14513 BCP BCD-7SEG LAT/DEC/DRM	1	EE430	
IC3	MC14011 BCP QUAD 2 INPUT NAND	1	EE380	
IC4	"	1	"	
IC5	"	1	"	
IC6	XR-6118 DISPLAY DRIVER	1	EE540	
R1	10KΩ 1/4 W. 5% RESISTOR	1	ER340	
C1	0.01μF 100V CERAMIC CAPACITOR	1	EC185	
C2	0.01μF 25V "	1	EC180	
C3	330pF 25V "	1	EC120	
C4	0.01μF 100V "	1	EC185	
C5	0.01μF 25V "	1	EC180	
C6	10μF 100V RT ELECTROLYTIC CAPACITOR	1	EC510	
DS1	6-JS-01 6 DIGIT FLUORESCENT DISPLAY	1	EG100	
P1	M2373-10 RIGHT ANGLE WAFER	2	EJ580	
TP1-5	WIRE TEST POINT LOOP	5	EG900	
RECD PART N°				
SCALE				
Full size				
DRAWN A. FENDER				
TRACED				
CHECKED				
DATE 3/1/79				
DRAWING NUMBER				
HD 1008/1				

A. Hankin & Co. Pty. Ltd.

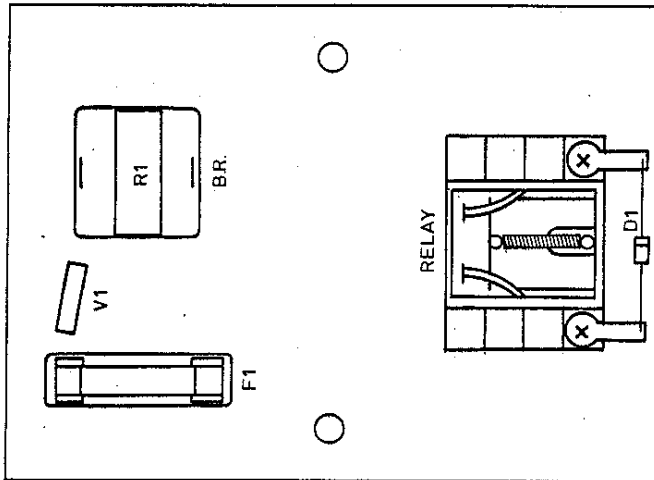
DISPLAY ASSEMBLY (A4)

DATE	REV. NO.	REVISION
9/1/80	1	C2 & C5 NOW 0.01μF.



A6 FUSE CARRIER (COMPLETE)		--	
PCB	A6/3 PRINTED CIRCUIT BOARD	1	EP150
F1	--		
F2	--		N/U
F3	3A 3AG FUSE	1	EG350
F4	"	1	EG360
F5	"	1	"
F6	3A	1	EG350
F7	5A	1	EG360
F8	"	1	"
F9	3A	1	EG350
F10	5A	1	EG360
F11	3A	1	"
F12	"	1	EG350
F13	5A	1	EG360
F14	3A	1	EG350
P1	M2402-15 STANDARD WAFER	1	EJ220
P2	M2402-15	1	"
ITEM	DESCRIPTION	REQ'D	MATERIAL
	1397-01-28 PCB MOUNTED FUSE CLIP (BAG)	28	EG300
A Hankin & Co. Pty. Ltd.		SCALE	
		FULL SIZE	
		DATE	
		22/8/80	
STAR WARS FUSE CARRIER ASSEMBLY (A6)		DRAWN A.P.	
		TRACED	
		CHECKED	
		REMARKS	
		DAG08AH EJECT HOLE	
		3 DROP TARGETS	
		KNOCKER SUPPLY	
		LEFT SLINGSHOT	
		RIGHT TOP BUMPER	
		OUTHOLE	
		LEFT TOP BUMPER	
		1 DROP TARGET	
		RIGHT SLINGSHOT	
		LEFT BTM. BUMPER	
		RIGHT BTM. BUMPER	
		BESPIN EJECT HOLE	
		N/U	
		N/U	

DRAWING NUMBER
HD1103



ITEM	DESCRIPTION	REQ'D	PART N°	REMARKS
A8	FLIPPER BOOSTER (COMPLETE)			
RELAY	LY2 2 POLE RELAY - 24V DC COIL	1	EG120	
RLY.BS	PTF08 SCREW MOUNTED RELAY BASE	1	EG131	
BR.	MDA2504 BRIDGE RECTIFIER	1	EG133	
R1	2K Ω 5W 5% RESISTOR	1	ER615	
V1	V100ZA15 100V 15 JOULE VARISTOR	1	EF600	
D1	IN4005 SILICON DIODE	1	EF200	
F1	15A 3AG FUSE	1	EG380	
	SCREW MOUNTED 3AG FUSE HOLDER	1	EG315	
	1397-01-28 PCB MOUNT FUSE CLIP (3AG)	2	EG300	
A. Hankin & Co. Pty. Ltd.				
FLIPPER BOOSTER ASSEMBLY (A8)				
SCALE		PASSED		DATE
FULL SIZE				2/7/80
DRAWN		A.P.		DRAWING NUMBER
TRACED				HD1086
CHECKED				