

## ALLIED LEISURE PINBALL MACHINES

The following information answers some commonly asked questions about ALLIED LEISURE electronic pinball machines.

All games manufactured by Allied Leisure are based on the same basic design. The features we re-arranged on each game to change the rules of the game.

The wiring diagram attached refers to cocktail table style machines, although the same applies to upright pinball cabinet models as well.

The games to which the following diagrams apply to are:

- DISCO 79 - cocktail
- ERON ONE - cocktail
- HEARTS & SPADES - cocktail
- ICE DOWN - upright
- ROY CLARK THE ENTERTAINER - cocktail
- SHARSHOOTER - cocktail
- SUPER PICKER - upright
- TAKI FIVE - cocktail
- THUNDERBOLT - upright

## SWITCH IDENTIFICATION

- 10 Drop coil - 100 points - advance left value
- 20 Collect left value - advance bonus
- 30 Drive coil - 10 points
- 40 Collect right value - advance bonus
- 50 Drive coil - 10 points
- 60 Out-hole switch
- 70 Fire when lit - advance bonus - 500 points
- 80 Ball in play switch
- 100 Raise drop target - 500 points - advance bonus
- 110 open gate
- 120 Raise drop target - 500 points - advance bonus
- 130 Close gate - 100 points
- 140 500 points
- 150 Raise drop target - 500 points
- 160 Extra ball when lit - 1000 points - advance bonus
- 170 Drop target down switch
- 180 Drop target down switch
- 190 Drop target down switch
- 200 Drop target down switch
- 210 Tilt switches
- 220 Credit switch
- 230 Slam switch
- 240 Coin switch #1 - left side
- 250 Coin switch #2 - right side
- 260 Coin switch #3 - center

## ALLIED LEISURE PINBALL MACHINES

The following information answers some frequently asked questions about ALLIED LEISURE electronic pinball machines.

All games manufactured used the same computer board. The features we re-arranged on each game to change the rules of the game.

The wiring diagram attached refers to cocktail table style machines, although the standard upright pinball cabinet models are very similiar.

The games to which the following diagrams apply to are:

*DISCO 79* - cocktail  
*EROS ONE* - cocktail  
*HEARTS & SPADES* - cocktail  
*HOE DOWN* - upright  
*ROY CLARK THE ENTERTAINER* - cocktail  
*STAR SHOOTER* - cocktail  
*SUPER PICKER* - upright  
*TAKE FIVE* - cocktail  
*THUNDERBOLT* - upright

### SWITCH IDENTIFICATION

10	Drive coil - 100 points - advance left value
20	Drive coil - 100 points
30	Drive coil - 100 points - advance right value
40	Collect left value - advance bonus
60	Drive coil - 10 points
50	collect right value - advance bonus
70	Drive coil - 10 points
80	Outhole switch
140	Special when lit - advance bonus - 500 points
150	10 points
160	Ball in play switch
170	Raise drop target - 500 points - advance bonus - open gate
180	Raise drop target - 500 points - advance bonus
190	Close gate - 10 points
210	500 points
230	Raise drop target - 500 points
240	Extra ball when lit - 1000 points - advance bonus
250	Drop target down switch
260	Drop target down switch
270	Drop target down switch
280	Drop target down switch
310	Tilt switches
320	Credit switch
330	Slam switch
340	Coin switch #1 - left side
350	Coin switch #2 - right side
360	Coin switch #3 - center

### THUNDERBOLT uprights - early versions

Holding credit button in while ball was in "collect hole" causes game to lock up

Re-wire "Collect Right Value" and "Collect Left Value" switches to bulls-eye targets instead of outhole lickers.

## SLAM SWITCH/TILT MECHANISM

The SLAM SWITCH, which is located on the inside of the COIN TACTILE, is designed to allow the player to abort the game. SLAMMING THE MACHINE requires it to stop game play. The machine simply goes DEAD! A good safety device after which the ball is ejected. The SLAM SWITCH is factory-adjusted to approximately 1/2" gap between contacts. Decreasing the gap will make the switch more sensitive. Opening the gap will reduce sensitivity.

## TEST MODE INFO

NOTE: Always adjust the RECHARGED blade to attain the desired sensitivity.

### NOTE:

1. You MUST remove ball from outhole before starting TEST MODE.
2. When in the "stuck switch" test, all switches MUST BE OPEN or game will not proceed to next test mode.
3. Machine is programmed to ignore ALL switches if a stuck closed switch is detected during game play. The EXCEPTION is if a coil drive switch is stuck closed; the computer will ignore that switch and continue game play. If another coil drive switch is stuck closed, the 1st stuck switch will be reactivated and the 2nd switch will be ignored.
4. Game will not score if ball in play switch (ball shooter trough) does not make contact at start of each ball in play.

## HARDWARE REVISIONS

Some games had a "glitch" that would cause the machine to stop working and the lamps to flash. The following is a fix for this condition:

IC 28 Pin 13 - Add .001 mfd capacitor to ground.

IC 4 Pin 17 - Lift or cut pin off so it no longer connects.

IC 29 Pins 1 + 14 - add 1K ohm resistor to ground.

## THUNDERBOLT uprights - early versions

Holding credit button in while ball was in "collect hole" causes game to lock up.

Re-wire "Collect Right Value" and "Collect Left Value" switches to bulls-eye targets instead of outhole kickers.

Continuation

**RESET SIGNAL TEST :**

Momentarily turn power OFF and then ON . For approximately 3 seconds after the power is restored .

**SLAM/SWITCH/TILT MECHANISM**

The SLAM SWITCH, which is located on the inside of the COIN DOOR, is designed to discourage unnecessary abuse to the game. SLAMMING THE MACHINE results in loss of game or games . . . the machine simply goes DEAD! A short delay occurs, after which the GAME OVER lamp flashes indicating the end of game or games, whichever is being played.

The SLAM SWITCH is factory-adjusted to approximately 1/16" gap between contacts. Decreasing the gap will make the switch more sensitive. Opening the gap will reduce sensitivity.

**NOTE:** Always adjust the WEIGHTED blade to attain the desired sensitivity.

The game is equipped with a TILT mechanism designed to discourage the player from jolting or lifting the machine in an attempt to prolong play . . . Tilting the game causes the flippers to go dead. The thumper bumper and the rebound kicker lights go OUT. The FLIPPER SWITCHES cannot be activated. The TILT lamp located on the SCORE GLASS assembly flashes.

If one person is playing, the ball in play will advance. If two persons are playing, it will move to the next player. The OUT-HOLE KICKER propels the ball into the ALLEY, and the game returns to NORMAL. (The net effect of tilting the game is loss of a ball to the player who did the tilting.)

**NOTE:** Game will not tilt until ball rolls over BALL-IN-PLAY switch.

The TILT mechanism consists of one electrical circuit which can be activated by either of two mechanical assemblies:

The first assembly is called the ROLL-TILT, and is activated when the front of the machine is lifted, allowing the ball in illustration No. 2-D to roll down the bracket until it touches the ROLL-TILT switch. It can be adjusted by loosening screws "A," "B" and "C," and sliding the end of the bracket that is closer to the switch UP to decrease sensitivity, and DOWN to increase sensitivity.

The other TILT assembly is called the PENDULUM TILT, and is activated when the machine is jolted causing the weight to touch the pendulum bracket. Sensitivity can be decreased by sliding the weight and the clip UPWARD on the pendulum ROD. . . similarly sensitivity can be increased by sliding the weight and the clip DOWNWARD on the pendulum ROD.

Be sure that the pendulum rod and the pendulum weight are ALWAYS centered. If necessary, adjust the pendulum bracket by loosening screws "D" and "E" and then adjust accordingly.

1. Credit display shows 42 . . .
2. Score display 01 will show the number of any switch that is struck . . .



Continuation

RESET SIGNAL TEST :

Momentarily turn power to the game off and then on . For approximately 2 seconds after the power is reapplied .

1. Score units are extinguished .
2. Thumper bumper lamps are out .
3. Rebound kickers lamps are out .
4. Game over lamp is out .
5. Tilt lamp is on .

After 2 second have expired .

1. Score units relight and reset to 0's .
2. Game over lamp flashes .
3. Rebound kicker lamps are on .
4. Thumper bumper lamps are on .
5. Tilt lamp is off .

NOTE : No coils (solenoids) should energize at this time .

PROCEDURE :

To start the self diagnostic test press the 'test' switch located on the coin door .

NOTE : Once the self diagnostic test is initiated the only way it can be terminated is by removing power to the machine .

TEST MODE #1 :

Momentarily press the test switch located on the coin door . The credit and score display should sequence from 0 thru 9 and repeat .

Note: The first led on the right side of each score will always remain a '0' .

TEST MODE #2 :

- (A) Remove the ball from the out-hole.
- (B) Press the credit button for approximately 5 seconds .

1. Credit display shows 02 .
2. Score display #1 will show the number of any switch that is struck .

Continuation

TEST MODE #3 :

- (A) Press the test switch for approximately 2 seconds .
- (B) Credit display shows '03' .
- (C) Tap very lightly the surface of the playfield . If there are any switches not correctly adjusted (gap too close) the number of that switch will be displayed in score display #1 . Make the necessary adjustments , then press teh credit button to remove the number from the score display .

TEST MODE #4 :

- (A) Press the test switch fro approximately 2 seconds .
- (B) Credit display should show '04' .

NOTE: Ignore any numbers on the score display . The following lights should be lit .

1. Extra ball when lit .
2. Collect spades value 1,000 - 2,000 - 3,000 - 4,000 .
3. Collect hearts value 1,000 .
4. Special when lit .

NOTE : Ignore game over lamp .

TEST MODE #5 :

- (A) Press the credit button for approximately 1 second .
- (B) Credit display shows '05' . The following lamps should be lit .
  1. Collect hearts value 1,000 - 2,000 - 3,000 - 4,000 .
  2. 10,000 bonus lamp .
  3. Double bonus lamp .
  4. Triple bonus lamp .

TEST MODE #6 :

- (A) Press the credit button for approximately 1 second .
- (B) Credit display shows 06 .The following should be lit .
  1. Ball in play 1-2-3-4-& 5 . Same player shoots again .

TEST MODE #7 :

- (A) Press the credit switch for approximately 1 second .
- (B) The credit display shows 07 . In this mode the players leds are lit and the score display are extinguished .

TEST MODE #8 :

- (A) Press the credit switch for approximately 1 second .
- (B) The credit display show 08 . In this mode the bonus lamp count down from 9,000 to 1,000' after which the game over lamp flashes . Followed by the tilt lamp .

Continuation

TEST MODE #9 :

- (A) Press the credit switch for approximately 5 seconds .  
(B) The credit display shows 09 . The solenoids (coils) should energize in the following sequence .
1. Red sling shot and drop hearts drop target .
  2. Middle thumper bumper and spades drop target .
  3. Right sling shot .
  4. Left thumper bumper .
  5. Right thumper bumper .
  6. Out-hole kicker .
  7. 1,000 point chime (low tone) .
  8. 100 point chime (middle tone) .
  9. 10 point chime (high tone) .
  10. Replay knocker .
  11. Flag gate .

NOTE : Flipper button must be held in for coils to energize in this mode .

TEST MODE #10 :

This test is used primarily for burn-in testing procedure at the factory .  
But can also be used for "on location" testing of new or repaired logic boards .

- (A) Press credit switch for approximately 10 seconds .  
(B) Credit display shows 01 tests 4 thru 9 are automatically repeated until power to the game is removed .

TROUBLE - SHOOTING GUIDE :

Never EXPERIMENT with any mechanism ! Improper adjustment or makeshift repair will only cause either serious damage to other parts of the machine or repeated failure of the part .

To properly service / repair this machine in a minimum time , it is necessary to isolate the problem to a specific circuit . A system of logical elimination will reduce the number of possible trouble spots ... the self-diagnostic test built into this game are designed particularly to expedite location of problems .

In many situations , attempting to play the game and observing the results may be helpful...also , careful reasoning along with reference to the schematic may determine the cause of the problem .

A visual inspection of the components in a suspected area may often save time . Always look for a possible loose wire , a bad connection at a plug or socket , or a broken / unhooked spring .

## Continuation

### RE-SET CIRCUIT

Upon application of power to the game, LED #1 on the main computer board should momentarily light for approximately 2 seconds and then extinguish, thereby indicating a proper re-set condition. If this LED does not come on, or refuses to extinguish, check the 5 - volt power supply. If the computer board has 5 - volt across C-19 (the large capacitor in the lower right hand corner) and LED #1 is not functioning properly, then the malfunction is the re-set circuitry on the main board.

The 5 volt power supply is used to supply regulated 5 volt power to the computer board and the peripheral display boards. This circuit should regulate between 4.8 VDC and 5.2 VDC. This 5 volt can be measured across the 8,000 mfd output capacitor should have approximately 13-14 VDC.

The 5 volt may also be measured across C-19 the 2,200 mfd capacitor on the computer board.

### DISPLAYS:

ALWAYS DISCONNECT power BEFORE removing or replacing any printed circuit boards.

SCORE DISPLAY SEE

The best way to test for the proper score unit function is in the self-diagnostic test procedure. If a score unit is suspected, it can be inter-changed with another unit known to be good.

The following signals are necessary to light the score display :

1. 4.8 - 5.2 VDC .
2. 7.8 VDC
3. Proper score blanking (LED #4 on the main computer board should be momentarily flashing).
4. Proper data from the computer board (LED #3 should be momentarily flashing).
5. Proper score clock signal .

TO REMOVE THE SCORE or CREDIT displays, you should proceed as follows :

1. Remove the score glass .
2. Unscrew the respective mounting screws .
3. Separate the connectors and remove the unit .

### LAMPS:

The background lamps, such as ENTRANCE GATE lamps, with the exception of the REBOUND KICKER lamps, are in normal circuit operating on 6 VAC as shown in the schematic.

WARNING : DO NOT DO THIS UNLESS THE COMPUTER BOARD HAS BEEN COMPLETELY REMOVED FROM THE GAME !

Continuation

All lamps tested in the self-diagnostic mode are driven from the main computer board . All of these lamps have one side tied to +7.8 VDC .

The other side of each lamp is switched by the computer board to system ground .

If , during the self-diagnostics , a lamp is suspected , the socket should be checked with a known-good lamp .

If none of the lamps light during the self-diagnostic test , then trouble shoot the +7.8 VDC power supply .

If the main computer board is suspected , a quick test to check the continuity of a particular lamp circuit is as follows :

1. Remove game power .
2. Completely remove the main computer board .
3. Re-apply game power .

REMEMBER : The only function the computer board performs when turning on a lamp is to supply system ground . Thus , if you take a jumper from system ground to the output pin from the computer board which connects to the lamp , the lamp should light if the harness and power supply are working properly .

WARNING : DO NOT do this unless the computer board is removed !

Refer to the game schematic to get proper pin connections . If the suspected circuit functions properly , then the fault is on the computer board .

The GAME OVER , TILT and REBOUND KICKER lamps all have one side tied to +7.8 VDC . The other side of the lamp is switched to system through a circuit similar to that which drives the coils... if suspected , these lamps can be tested in the same manner as above .

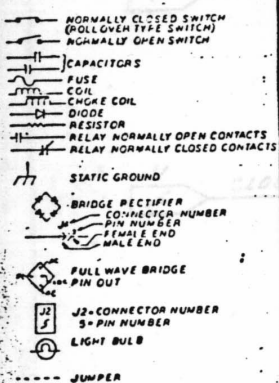
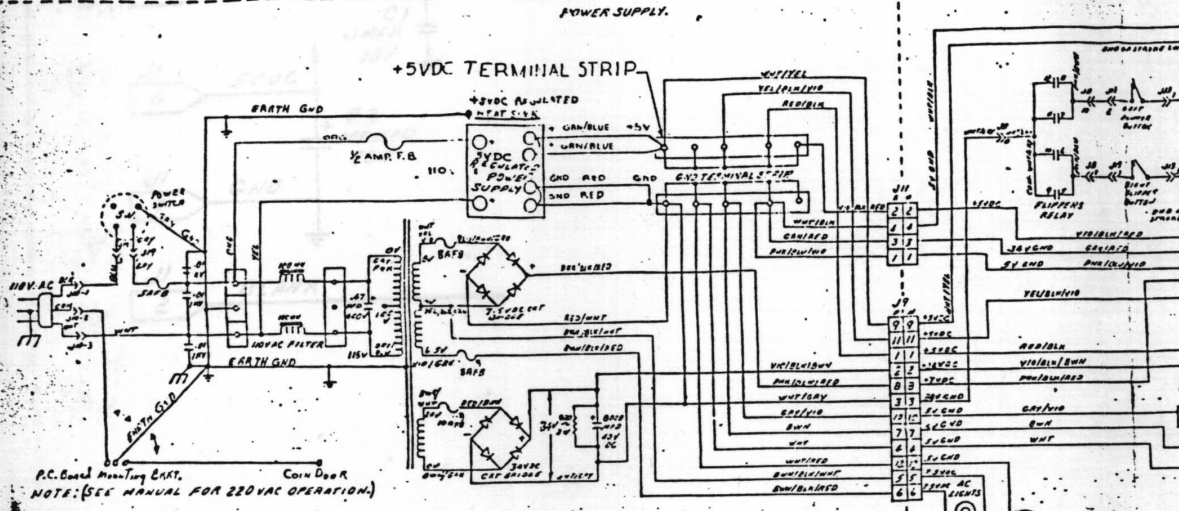
All of the coils in the game (including the FLIPPER power relay located on the ROLL / TILT assembly) have one side tied to +32 VDC. The computer board switches these coils to system ground to complete the circuit thus energizing the coil .

If a coil driver on the computer board is suspected , a quick test of the remaining circuitry is performed as follows :

1. Remove system power .
2. Completely remove main computer board .
3. Re-apply power .

REMEMBER : The only function the computer board performs when turning on a coil is to supply system ground . Thus , if you take a jumper from system ground to the output pin from the computer board which connects to the coil , the coil should energize if the circuit is working properly .

WARNING : DO NOT DO THIS UNLESS THE COMPUTER BOARD HAS BEEN COMPLETELY REMOVED FROM THE GAME !



**WORD ABBREVIATIONS**

M/L = MATE AND LOCK  
 MFD = MICROFARAD  
 REG = REGULATOR  
 AFB = AMP FAST BLOW  
 ASB = AMP SLOW BLOW  
 WVDC = WORKING VOLTS DC  
 MM = MILLIMETER FOR COILS  
 Ω = OHMS  
 W = WATTS  
 LT = LIGHT  
 SW = SWITCH  
 PCB = PRINTED CIRCUIT BOARD  
 N/O = NORMALLY OPEN  
 P.T. = POINTS  
 F = FEMALE CONNECTOR  
 M = MALE CONNECTOR  
 THUMPER B = THUMPER BLMPER

**COLOR ABBREVIATIONS**

WHT = WHITE  
 BLK = BLACK  
 BLU = BLUE  
 ORG = ORANGE  
 GRN = GREEN  
 BRN = BROWN  
 GRY = GRAY  
 PNK = PINK  
 YEL = YELLOW  
 VIO = VIOLET

EXAMPLE:  
 Pnk/Blu/Vio = PINK, BLUE & VIOLET

**HARNES CONNECTORS**

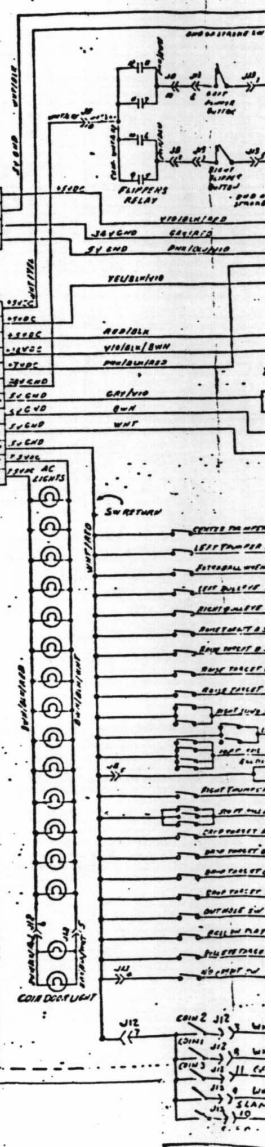
J1	MAIN PCB 50 PIN DOUBLE EDGE CONNECTOR
J2	" " " " " " " "
J3	" " " " " " " "
J4	" " " " " " " "
J5	" " " " " " " "
J6	" " " " " " " "
J7	CHIME UNIT 6 " " " " " "
J8	TYLASSIC 12 " " " " " "
J9	POWER SURT 2 " " " " " "
J10	POW LINE 3 " " " " " "
J11	POW SUP 6 " " " " " "
J12	COIN DCR 12 " " " " " "
J13	CREDIT FLIPPER BUTTONS 12 PIN MNL ORG CONNECTOR

**SCORE ASS'Y HARNES CONNECTORS**

J14	SCORE 2 15 PIN MALE MNL RED CONNECTOR
J15	SCORE 1 15 " " " " " "
J16	CREDIT DISR 6 " " " " " "
J17	FAN 3 " " " " " "
J18	SV REG 3 " " " " " "
J19	ON OFF SW 3 " " " " " "
J20	TYLASSIC OVER LIGHTS 3 PIN MALE FEM MNL BLU CONNECTOR. ALL LIGHT BULBS USED ARE #44

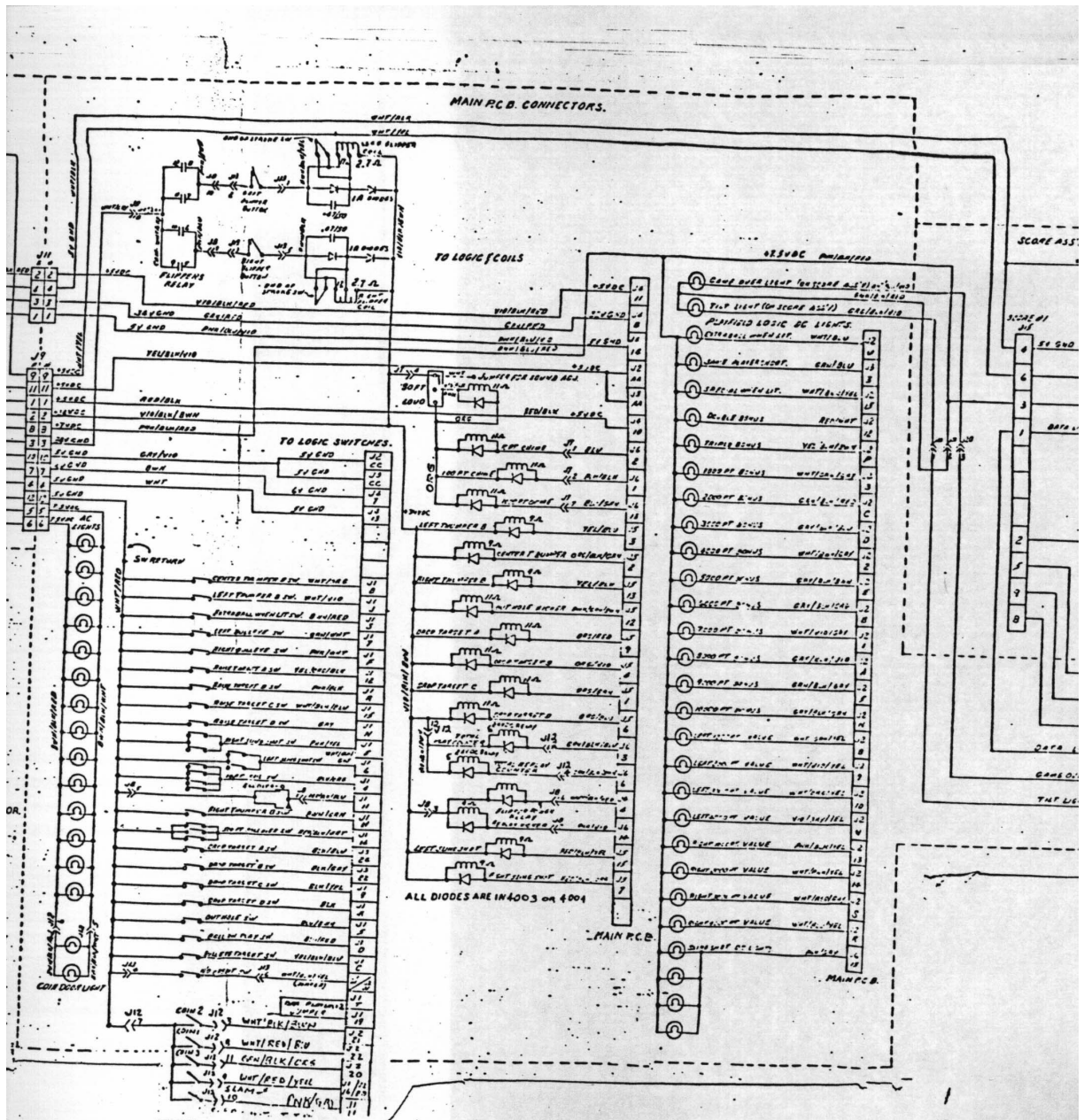
**LIGHT BULB USED**

GAME OVER  
 TILT AND  
 ALL OTHERS - G644'S



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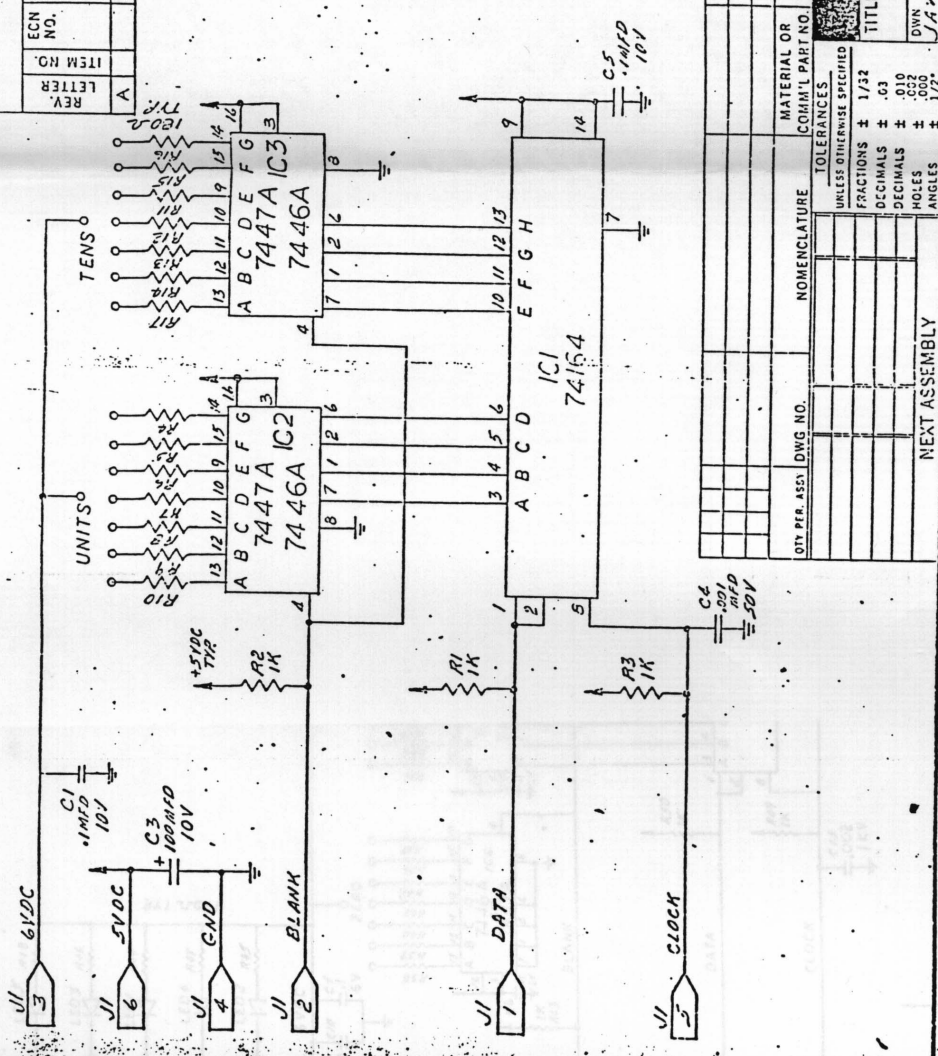


1  
3  
12



REVISIONS

REV. LETTER	ITEM NO.	DESCRIPTION	DISPOSITION OF EXISTING PARTS
A		DISCONNECTED PINS (IC2, IC3) FROM PIN B (CONNECTED TO PIN 1C)	REWORK SCRAP



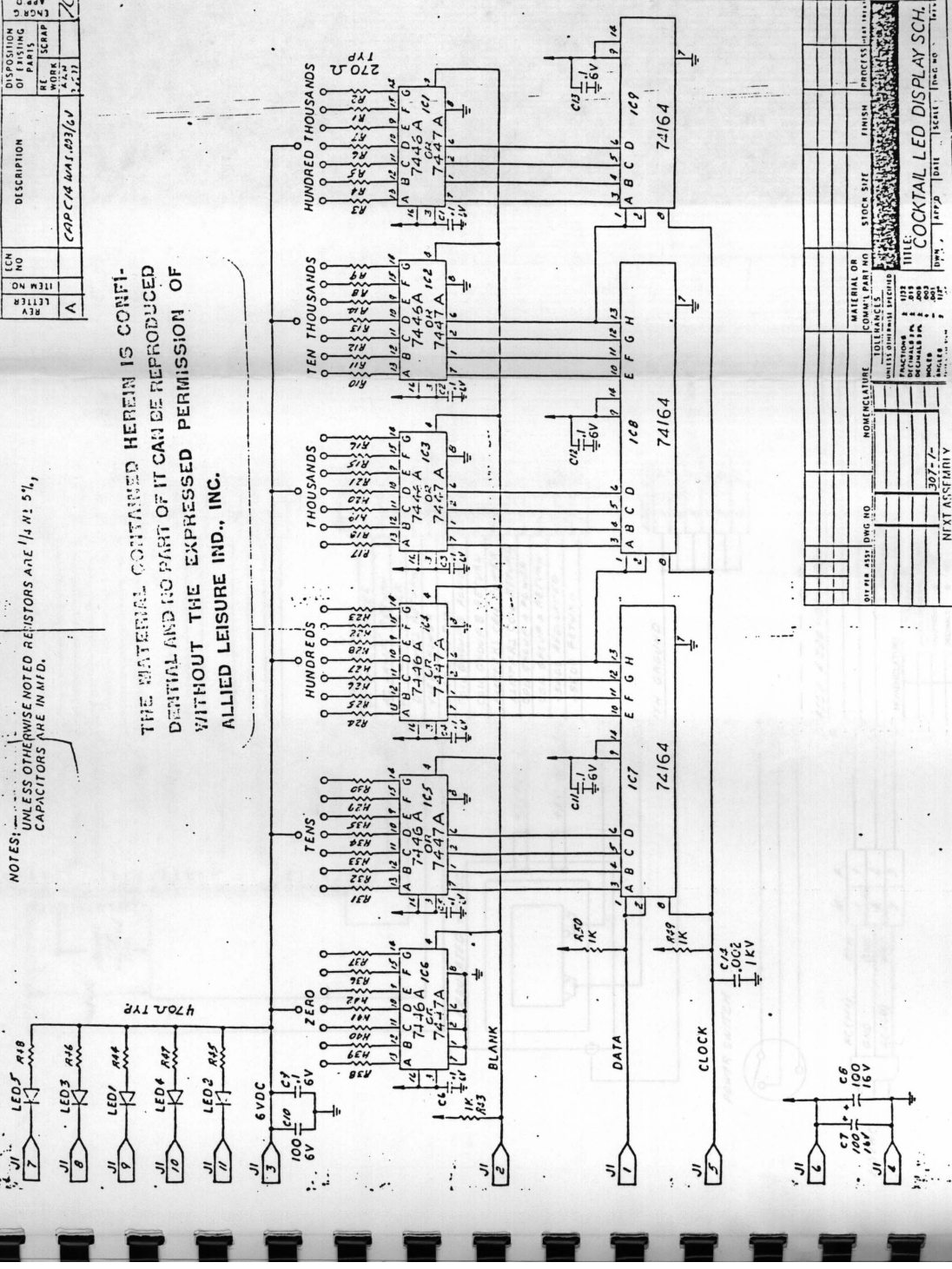
QTY PER ASSY	DWG NO.	NOMENCLATURE	MATERIAL OR COMM'L PART NO.	STOCK SIZE	FINISH	PROCESS	REV. TO
<p>TOLERANCES UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS ± 1/32            DECIMALS ± .03            DECIMALS ± .010            HOLES ± .002            ANGLES ± 1/2°</p>							
<p>TITLE: LED CREDIT DISPLAY SCH.</p> <p>DWN JAY APP'D DATE 11-5-76 SCALE DWG NO. 288-10-201</p>							
<p>NEXT ASSEMBLY</p>							

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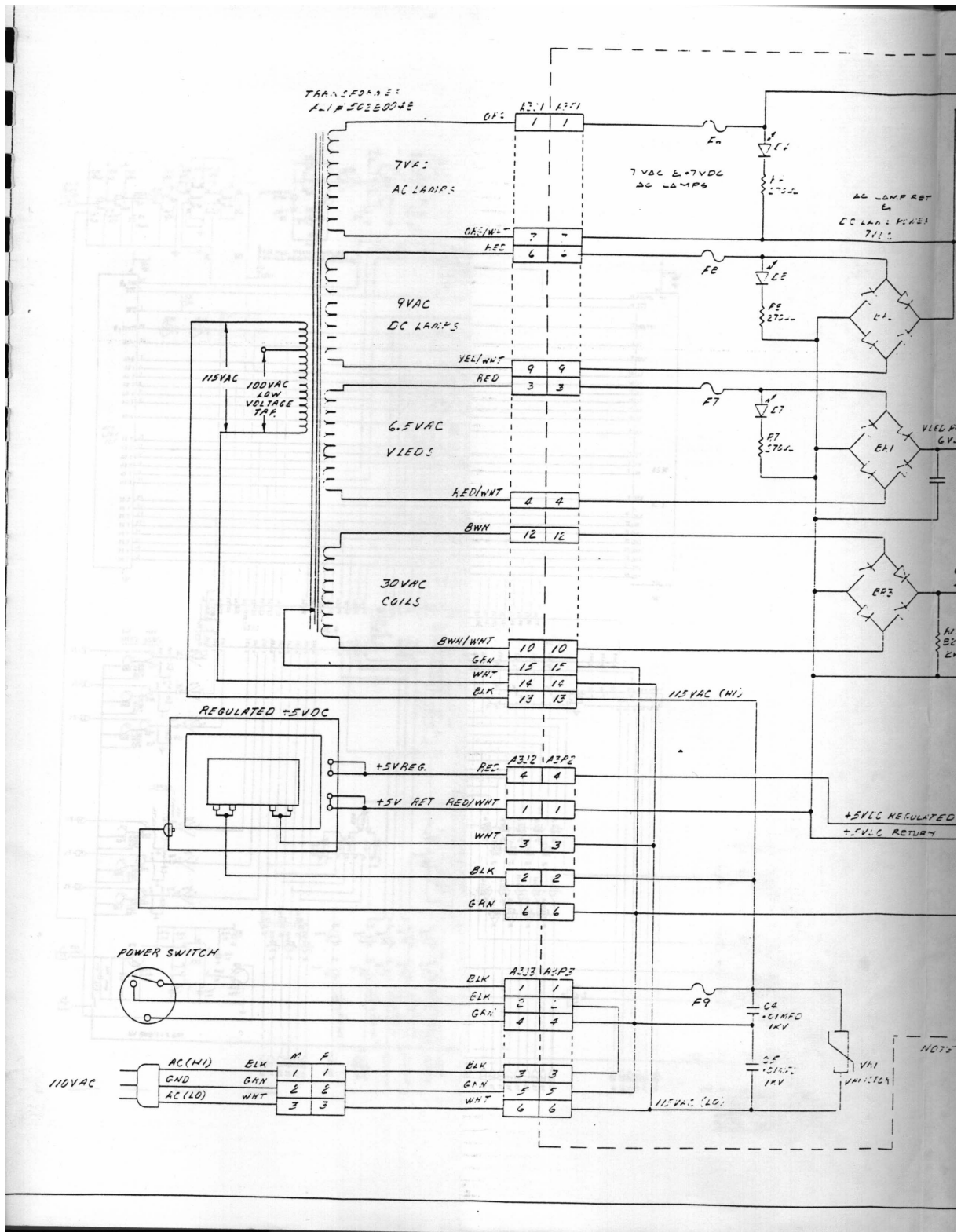
REV LETTER	A	DESCRIPTION	CFPPCA NAI.03/6V
ITEM NO			
LEN NO			
DISPOSITION OF EXISTING			
RE WORK			
SCRAP			
DATE	7-2-77		

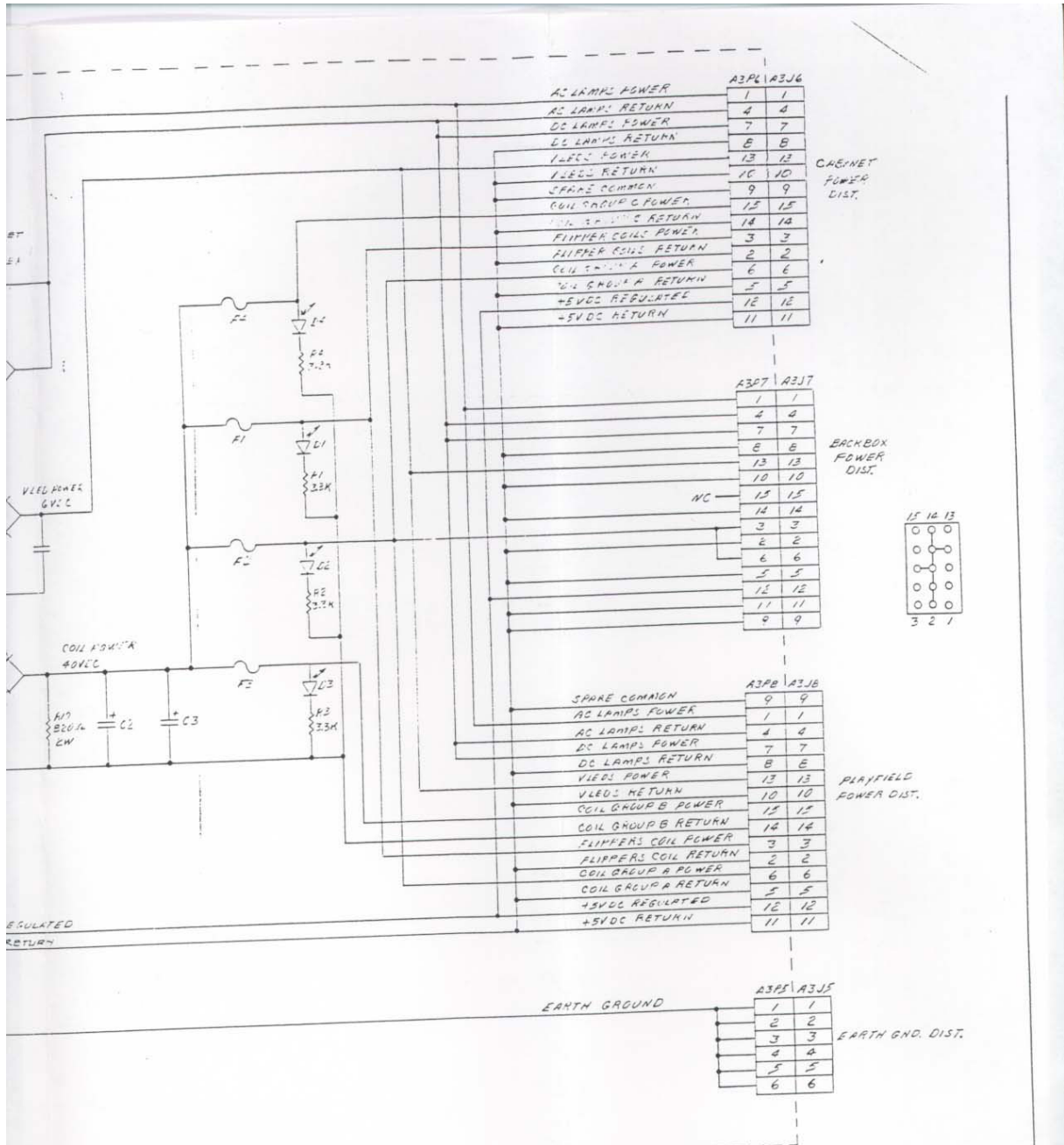
NOTES: UNLESS OTHERWISE NOTED RESISTORS ARE 1/4 W. 5%, CAPACITORS ARE IN MFD.

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SUPPLY ASSY. DWG. NO.		NONNOMENCLATURE		STOCK SITE		FINISH		PROCESS	
MATERIAL OR COMPN. PART NO.		UNIT OF MEASURE							
FRACCTIONS TO BE USED									
DECIMALS TO BE USED									
TOLERANCES TO BE USED									
ANGLES									
TITLE: COCKTAIL LED DISPLAY SCH.									
PART: 100000 DATE: 7/2/77									
NEXT ASSEMBLY									





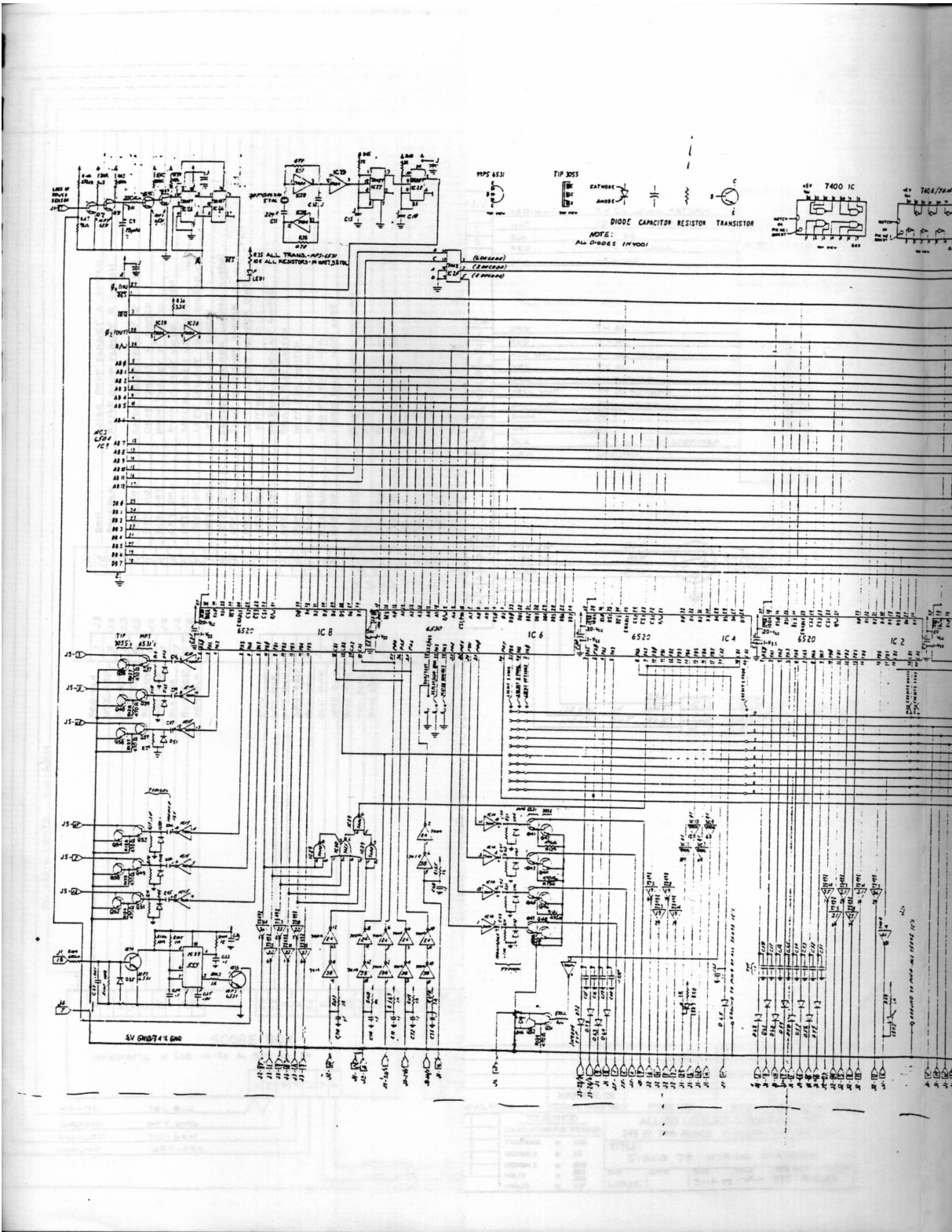
NOTES: LETTERS LINE ENCL. # 12, 12L41

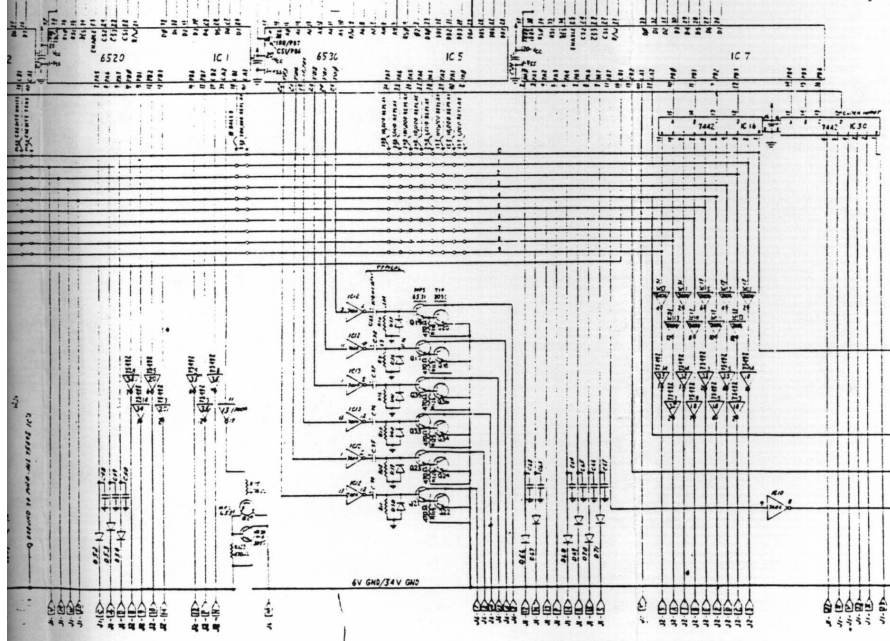
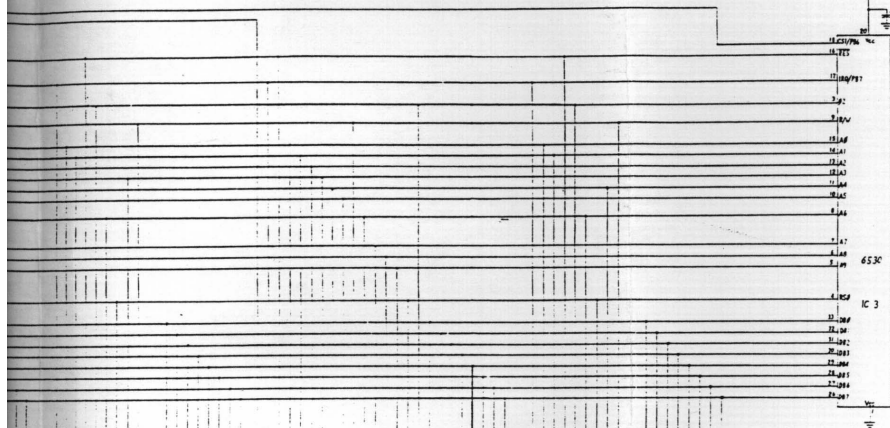
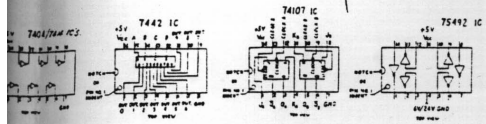
ASSY # 324-01-1001

QTY PER ASSY	DWG NO.	NOMENCLATURE	MATERIAL OR COMM'L PART NO.	STOCK SIZE	FINISH	PROCESS	INLET TREAT
			ALLIED LEISURE INDUSTRIES INC 245 W. 74th PLACE HIALEAH, FLORIDA 33014				
			TITLE: A3 PCB 5021381 DINGALL POWER SUPPLY SCH.				
			TOL. UNLESS OTHERWISE SPECIFIED: FRACTIONS = 1/32 DECIMALS = .01 DECIMALS = .010 HOLES = .001 ANGLES = 1/2"	DRAWN: JAV CHECKED: HBI DATE: 1/12/79 SCALE: 1:1 DWG NO.: 324-17-1001			

NEXT ASSEMBLY

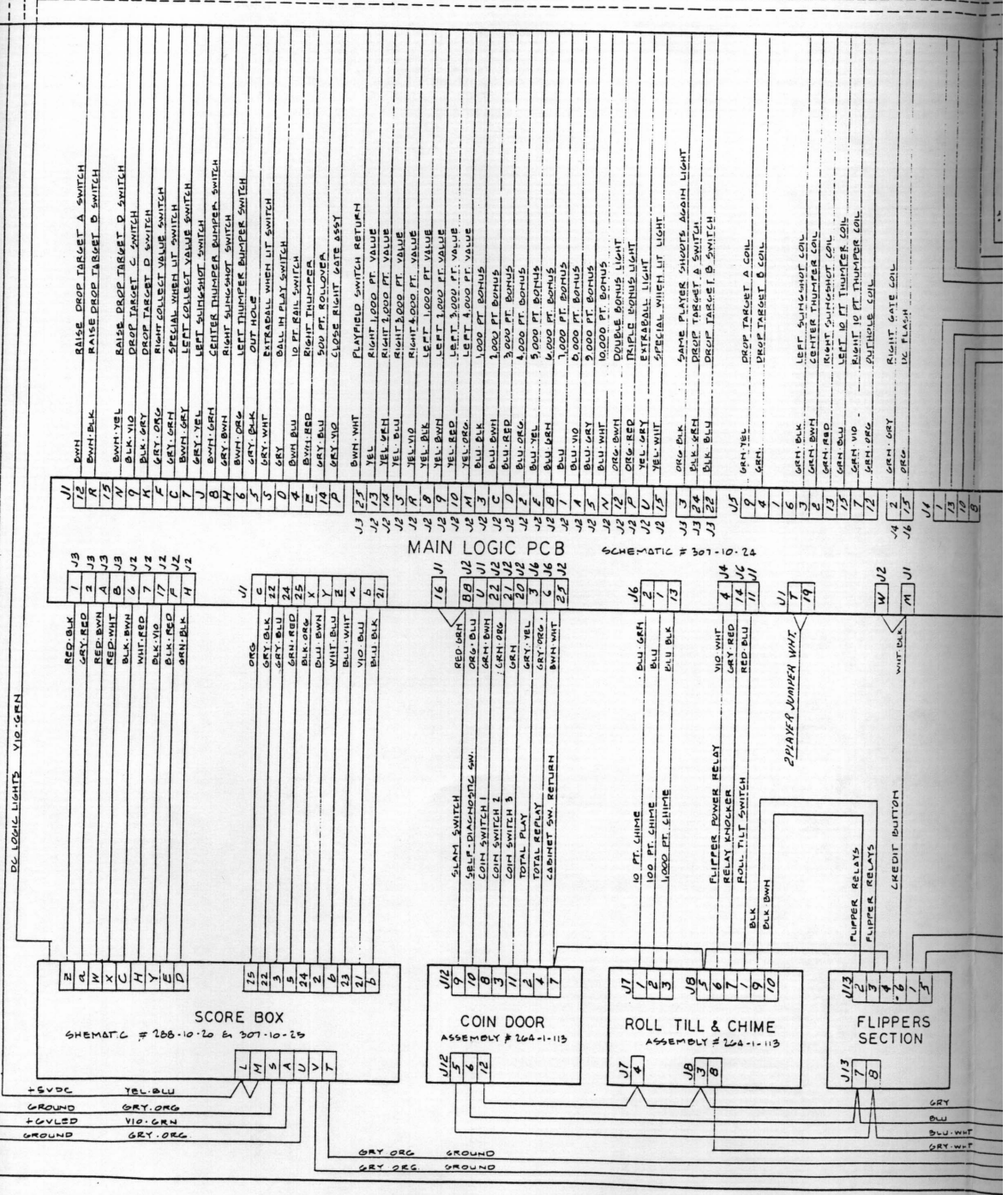






THIS DRAWING IS MADE FROM DATA SHEET 7492-1-80  
 ALLEN LITTON INDUSTRIES INC.  
 FEDERAL CONTROL COMPANY INC.  
 10000 10000 10000 10000

PLAYFIELD



DE LOGIC LIGHTS - VIO-GRN

J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

MAIN LOGIC BOARD

J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

SCHEMATIC # 266-10-20 & 207-10-15

SCORE BOX

COIN DOOR ASSEMBLY # 264-1-13

ROLL TILL & CHIME ASSEMBLY # 264-1-13

FLIPPERS SECTION

DE LOGIC LIGHTS

RAISE DROP TARGET A SWITCH

RAISE DROP TARGET B SWITCH

RAISE DROP TARGET C SWITCH

RAISE DROP TARGET D SWITCH

RIGHT COLLECT VALUE SWITCH

SPECIAL WHEN HIT SWITCH

LEFT COLLECT VALUE SWITCH

LEFT SHOTS SWITCH

CENTER THUMPER BUMPER SWITCH

RIGHT THUMPER BUMPER SWITCH

LEFT THUMPER BUMPER SWITCH

OUT HOLE

EXTREBALL WHEN HIT SWITCH

10 FT. CHIME

100 FT. CHIME

1000 FT. CHIME

FLIPPER BUMPER RELAY

RELAY KNOCKER

ROLL TILL SWITCH

FLIPPER RELAYS

FLIPPER RELAYS

CREDIT BUTTON

10 FT. CHIME

100 FT. CHIME

1000 FT. CHIME

FLIPPER BUMPER RELAY

RELAY KNOCKER

ROLL TILL SWITCH

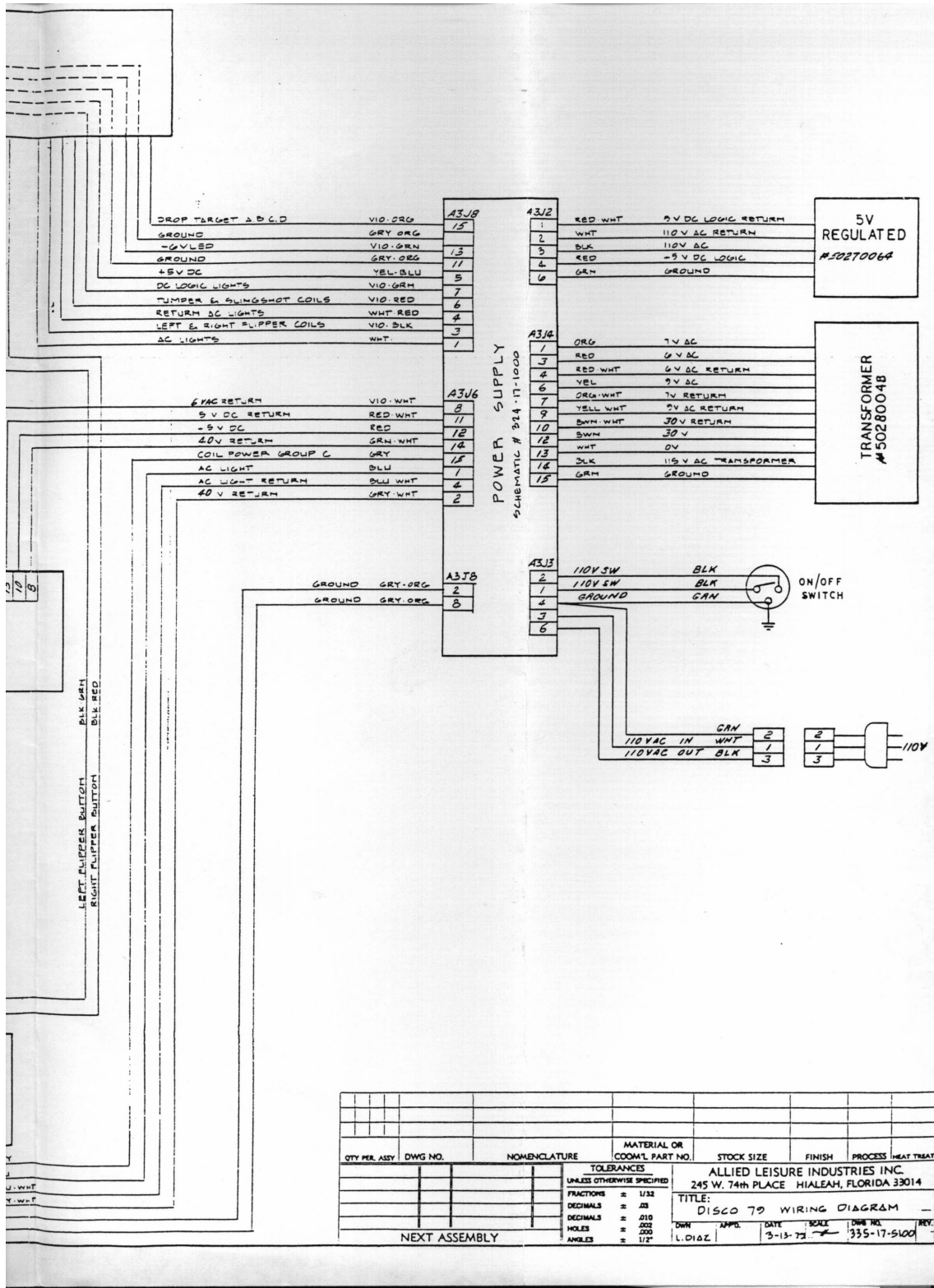
FLIPPER RELAYS

FLIPPER RELAYS

CREDIT BUTTON

2 PLAYER JUMPER WMT





QTY PER ASSY	DWG NO.	NOMENCLATURE	MATERIAL OR CDMO/L PART NO.	STOCK SIZE	FINISH	PROCESS	HEAT TREAT
			<b>TOLERANCES</b>				
			UNLESS OTHERWISE SPECIFIED				
			FRACTIONS	=	1/32		
			DECIMALS	=	.05		
			DECIMALS	=	.010		
			HOLE	=	.002		
			HOLE	=	.003		
			ANGLES	=	1/2°		
NEXT ASSEMBLY			ALLIED LEISURE INDUSTRIES INC. 245 W. 74th PLACE HIALEAH, FLORIDA 33014				
			TITLE: DISCO 79 WIRING DIAGRAM				
			DWN	APPL	DATE	SCALE	DWG NO.
			L. D. R.		3-13-72		335-17-5100