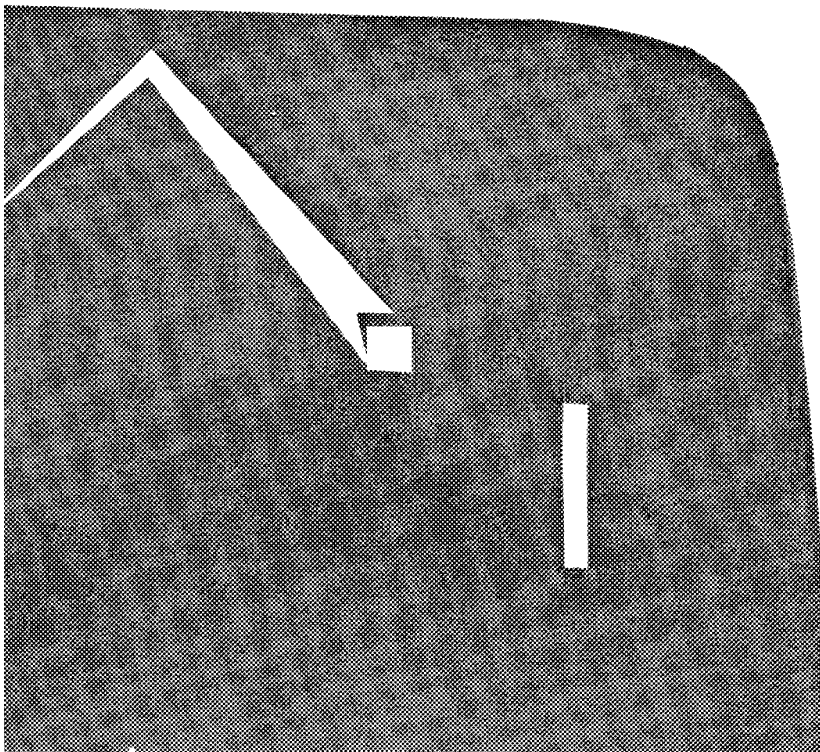
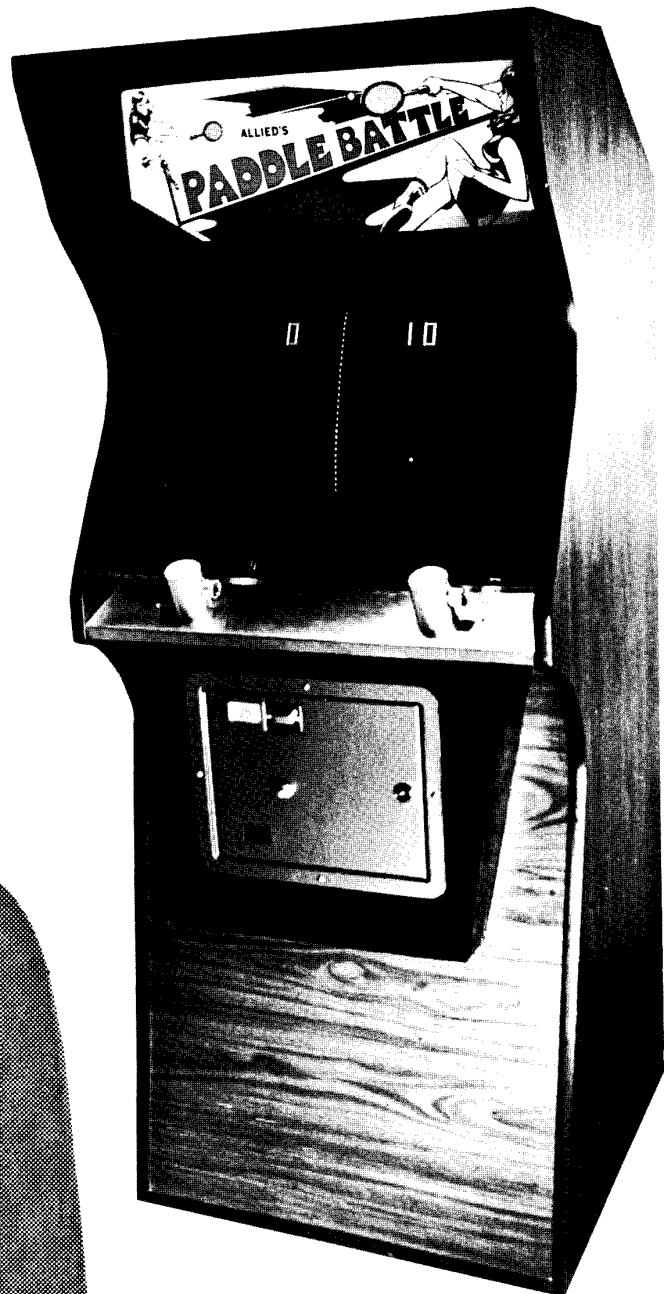
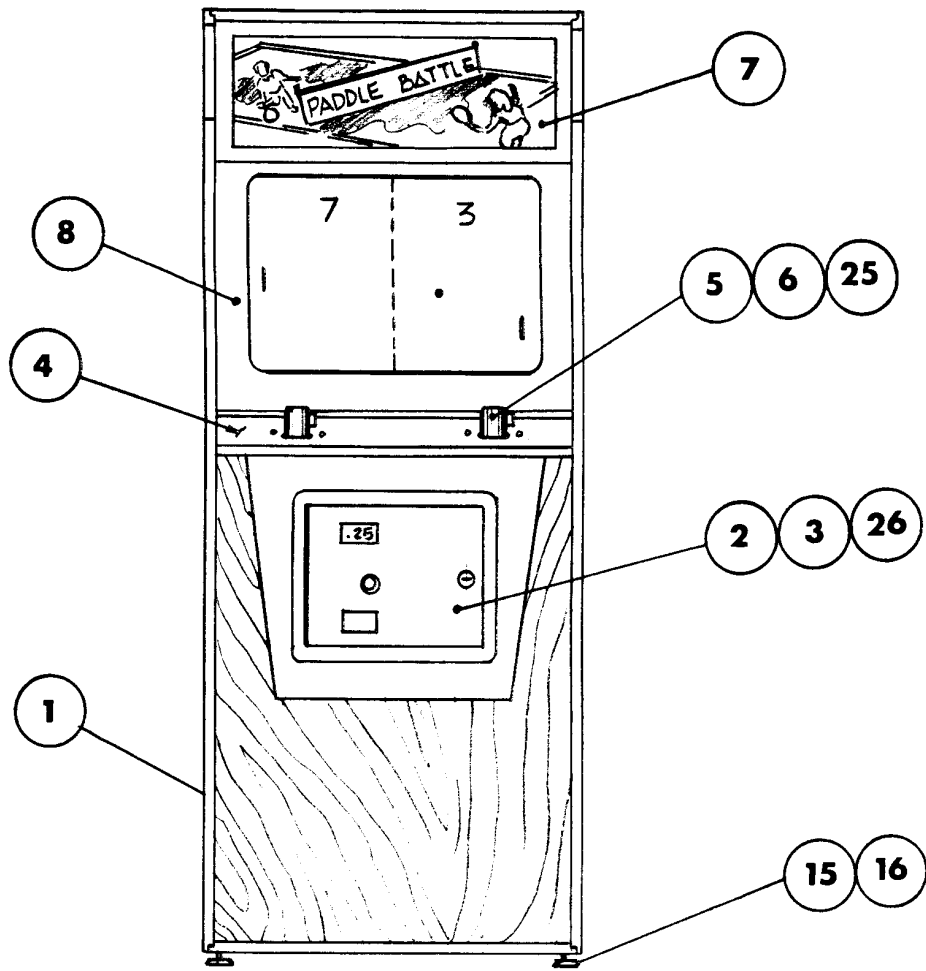


Allied's
PADDLE BATTLE

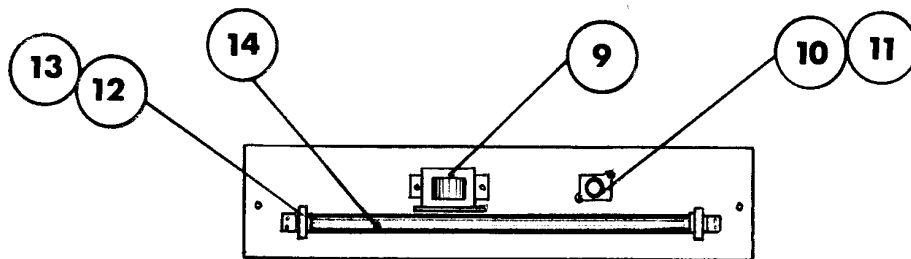
***Parts &
Wiring
Catalog***



ALLIED LEISURE INDUSTRIES INC.
245 WEST 74TH PLACE
HIALEAH, FLORIDA 33010



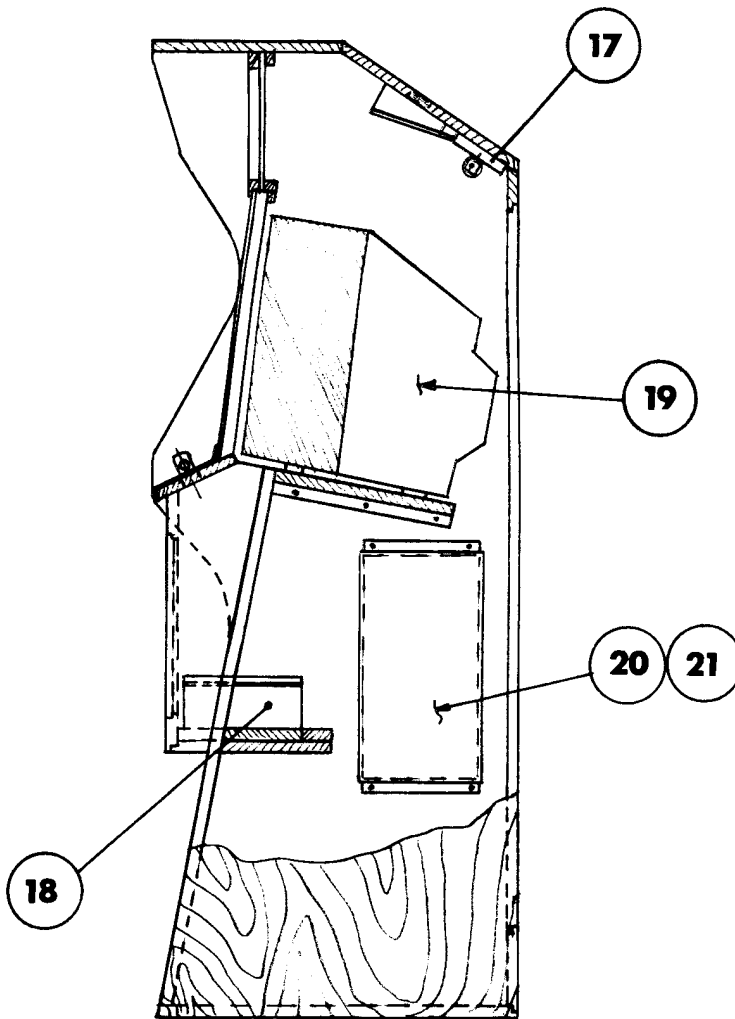
FRONT VIEW - CABINET



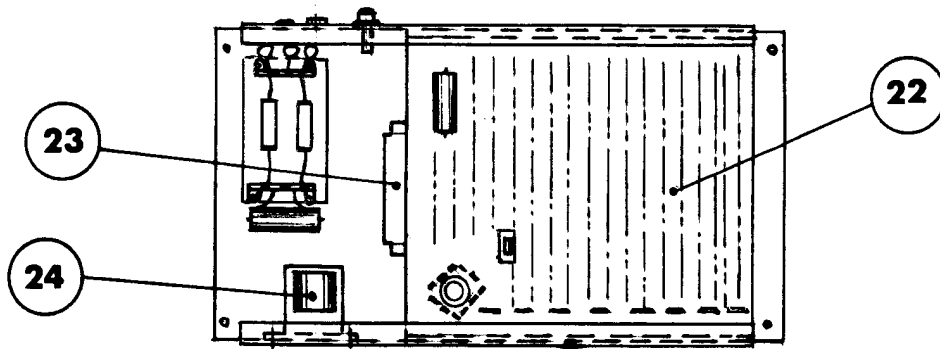
TOP LAMP ASS'Y

PADDLE BATTLE

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	244-1-1 244-1-6	Paddle Battle Cabinet for Hitachi TV Paddle Battle Cabinet for Sylv & GE
2	240-1-500	Coin Door Assy Single Acceptor
3	240-1-504	Coin Door Frame Assembly
4	244-3-4	Deck Control Cover
5	244-3-5	"Pot" Holder
6	244-9-8	5M ohm linear potentiometer
7	244-6-1	Top Glass - Paddle Battle
8	244-6-2	Smoked Grey glass (screen)
9	240-9-81	Transformer (ballast coil)
10	240-9-82	Starter Socket
11	240-9-83	Fluorescent Lamp starter
12	240-9-84	Fluorescent Lamp socket
13	240-3-45	Sky Lamp Bracket
14	242-9-53	Fluorescent Lamp
15	240-3-46	Leg Leveler Tap Plate
16	240-8-9	Leg Leveler
17	244-1-2	Top Lamp Ass'y
18	240-1-507	Cash Box Weldm't
19	244-9-1	Portable TV
20	244-1-5	Chassis Ass'y
21	244-3-11	Cover P.C.B. Chassis
22	244-9-2	P.C.B. #039 Video Control
23	244-9-12	22 Pin PCB Edge Connector
24	244-9-13	Transformer
25	244-2-1	Button control (knob)
26	244-71-2	Slam Switch

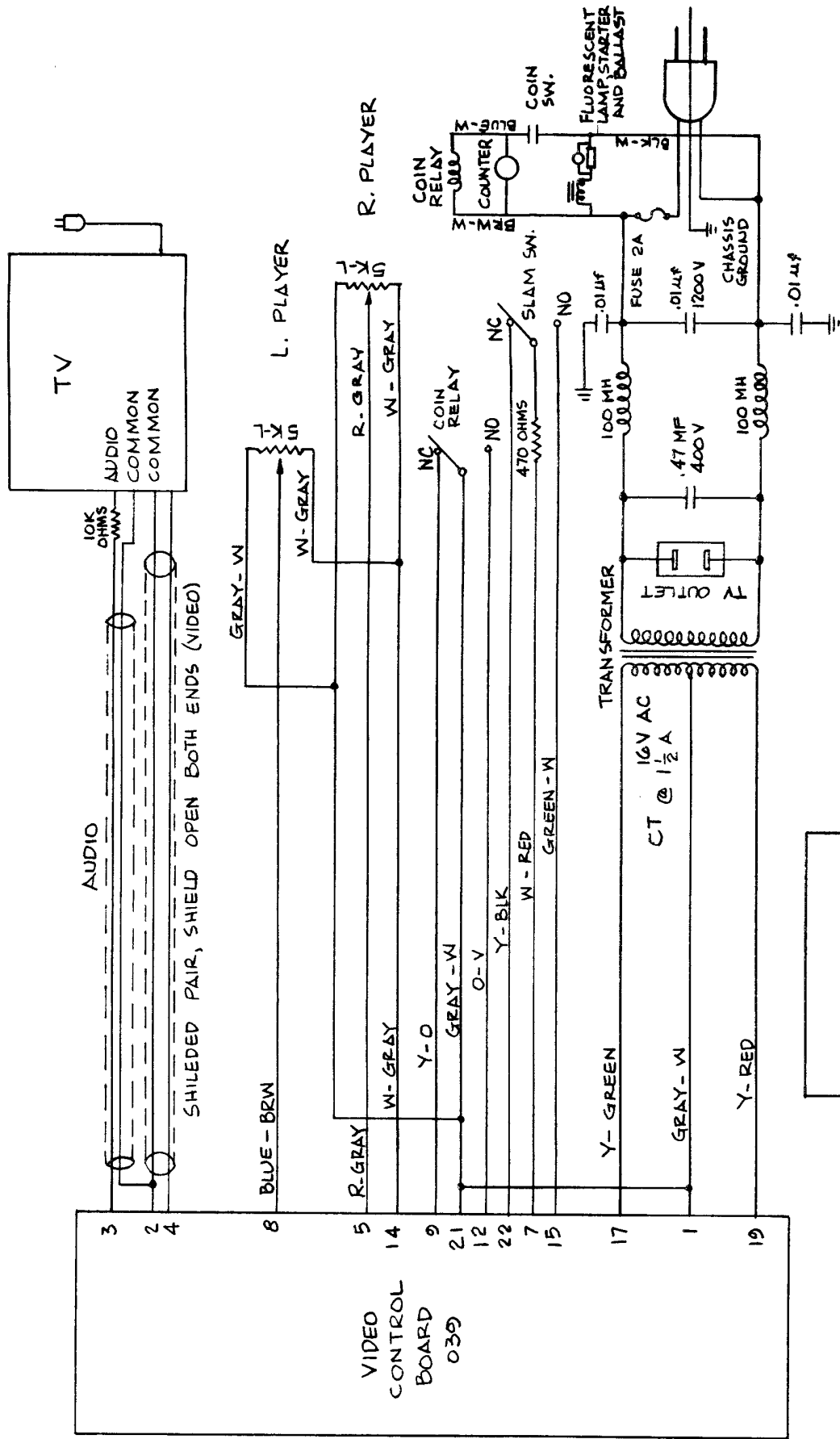


SIDE VIEW - CABINET

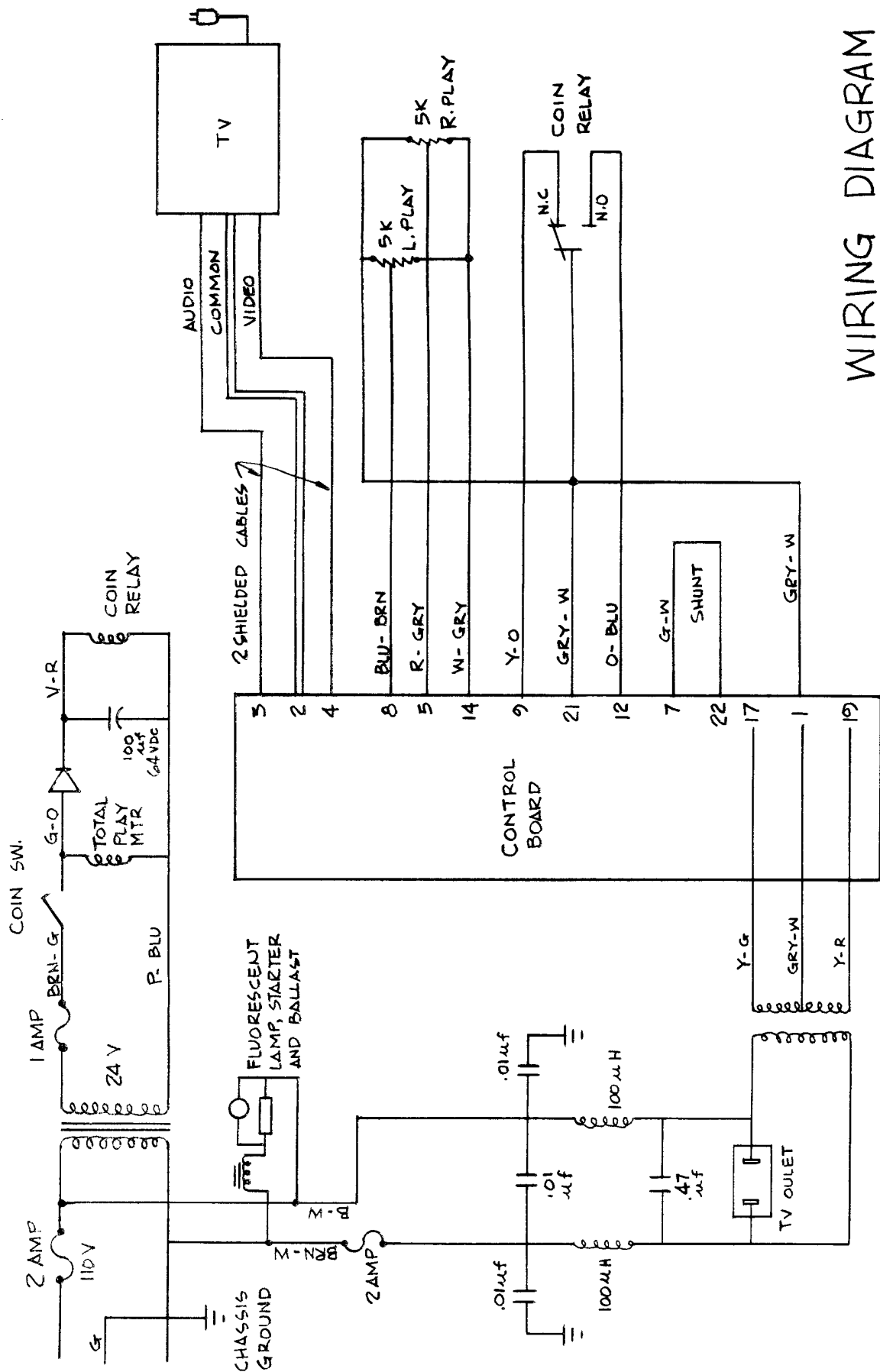


P.C.B. CHASSIS ASS'Y

WIRING DIAGRAM



NOTE:
 1- NOTCH AT PIN 6 AND 13
 2- 10KΩ RESISTOR ADDED TO AUDIO CIRCUIT INSIDE TV CABINET.



WIRING DIAGRAM

S/N'S 907 UP

TROUBLESHOOTING GUIDE

<u>Symptom</u>	<u>Problem</u>
1. No video or sound	Coin switch stuck down PC board edge connector loose Television input or power line disconnected Television or control PC board bad
2. Sound but no video	Open video line (untaped shielded cable) Television out of adjustment (see set up procedure) Television or control board bad
3. Video but no sound	Same as No. 2 except audio shielded line open (taped shielded cable) (See set up procedure for access to television controls)
4. Picture distorted or out of center	See set up procedure
5. Right or left paddle moves irratically	Potentiometer dirty or worn out
6. Game shuts off before 11 or 15 setting	Slam switch not enough tension on normally closed contacts. Capacitor lead on chassis filter assembly open. Lead on slam switch wires open.

Note: Remove front panel for access to Television controls

Maintenance and Adjustment procedure:

1. Television connections and controls

1. Plug power cord into control chassis and connect the shielded input wires.
2. Activate coin switch and adjust game per the following:
(Note: Remove front panel for access to television controls)
 - A. Volume - adjust to desired level, approximately 3/4 full for normal location.
 - B. Brightness - turn from bright until background light disappears.
 - C. Contrast - adjust to maximum without distorting numbers on screen.

The following are preset at Allied Leisure

- D. Vertical size adjust until net clears top and bottom by 1/4 to 1/2 inch.
- E. Vertical linearity adjust for equal spacing of dot segments.
- F. Horizontal position - adjust to center and back off until picture holds when television is cycled off and on.

11. Control Chassis

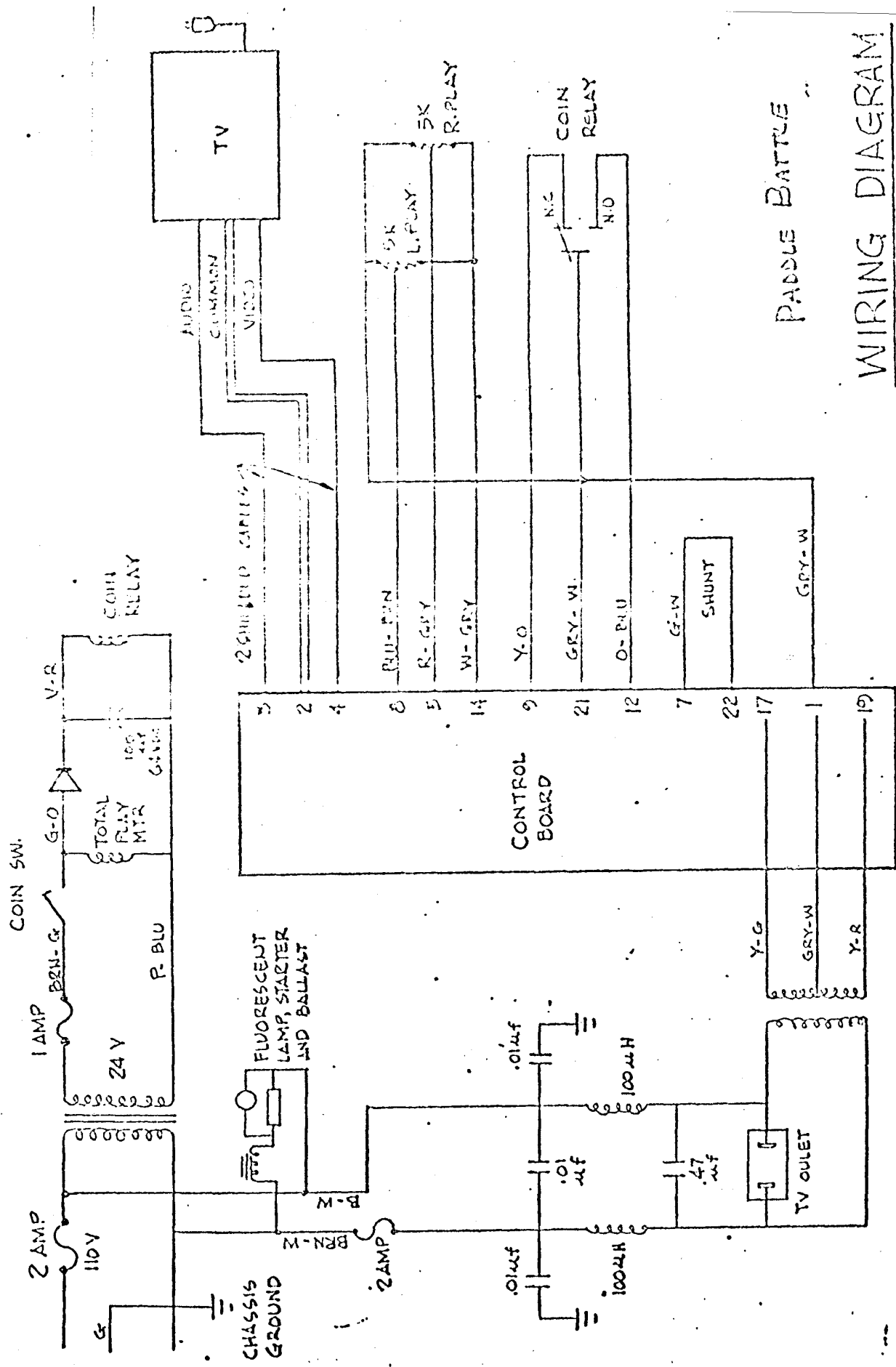
1. Paddle adjustment-turn front panel knobs to full down position. Adjust trimmers (located on top of control PC board) to move paddles to bottom of screen. Back off until full paddle length is in view.
2. 11-15 adjustment - set switch on control PC board as desired.
3. Replacing video board - insert board, connector end first with component side showing. Connect the two 3-pin plugs matching wire colors. 22-pin PC board edge connector is keyed with pin 1 on the right side as viewed in game cabinet.

111. Front Panel

1. Potentiometer front glass replacement - open cash door and remove the two wing nuts holding front panel in place.
 2. Remove and replace potentiometers as required.
 3. Touch tape to bottom of front glass and pull out for removal.

NOTE: TO AVOID DAMAGE TO TELEVISION, DISCONNECT 3-WIRE CONNECTOR

(LOCATED ON BOTTOM OF TELEVISION) BEFORE REMOVING TELEVISION FOR SERVICING.



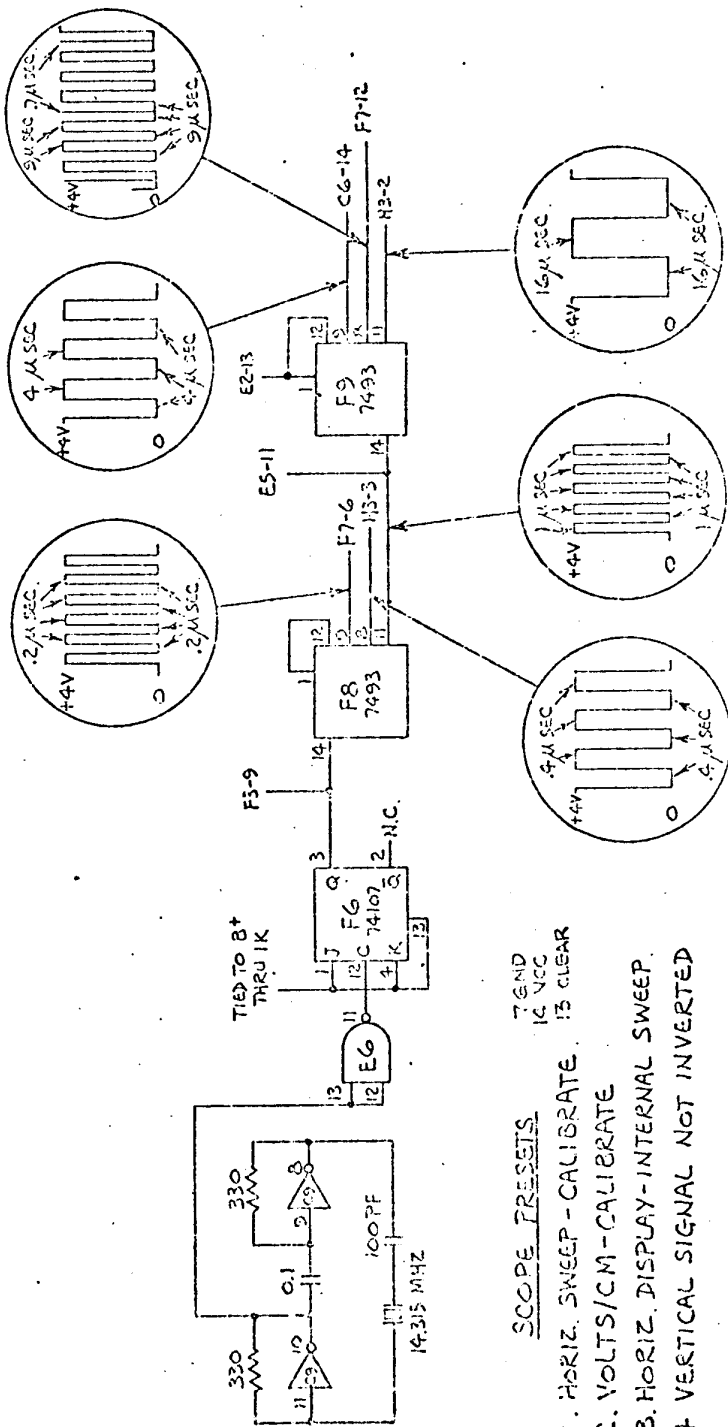
PADDLE BATTLE

WIRING DIAGRAM

S/N'S 907 UP

REVISIONS

REV. LETTER	ITEM NO.	DESCRIPTION	DISPOSITION OF EXISTING PARTS	APPROV'D
			RE-SCRAP WORK	

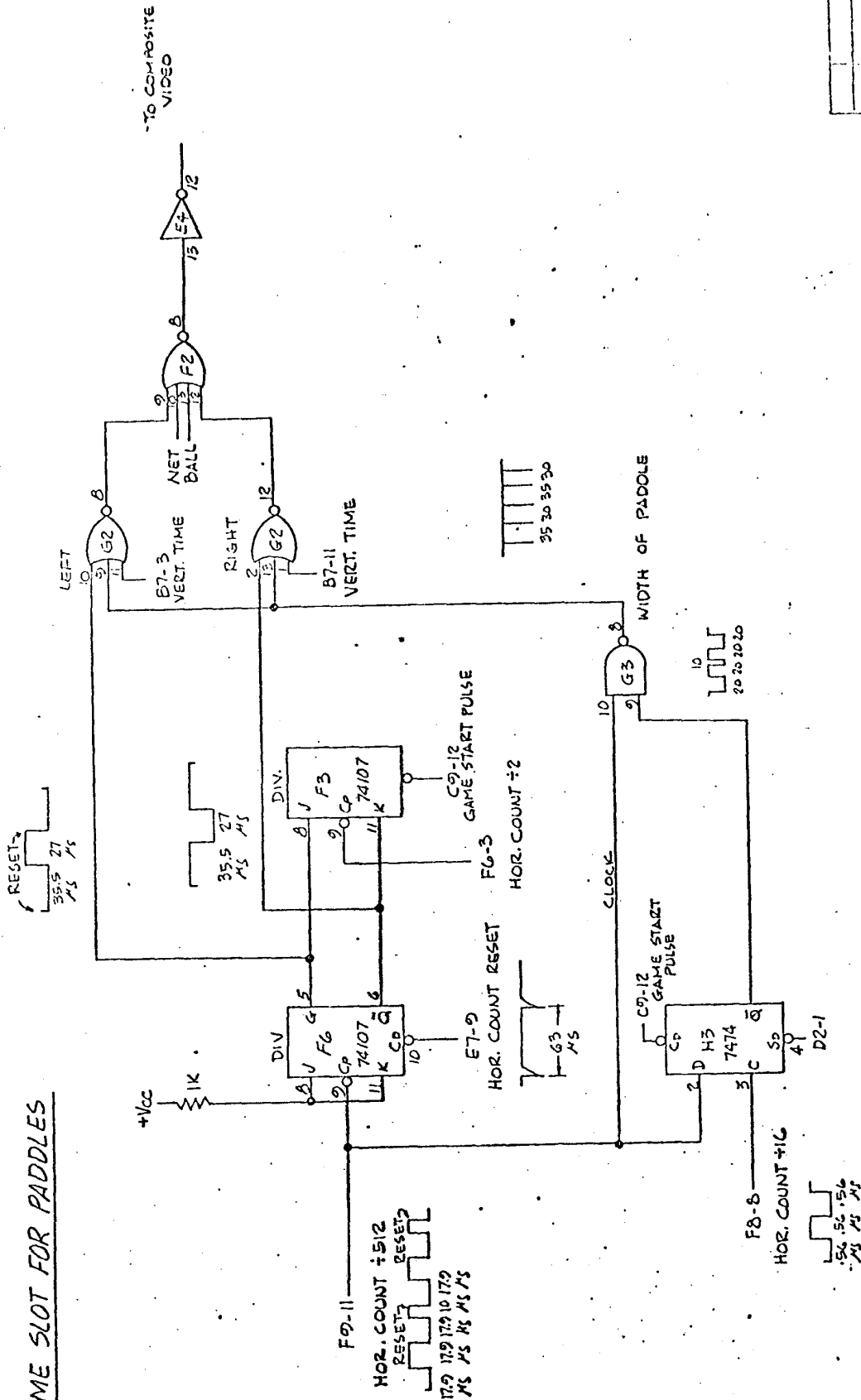


SCOPE PRESETS

1. HORIZ. SWEEP - CALIBRATE.
2. VOLTS/CM - CALIBRATE
3. HORIZ. DISPLAY-INTERNAL SWEEP.
- 4 VERTICAL SIGNAL NOT INVERTED

QTY PER ASSY/DWG NO.	NOMENCLATURE	MATERIAL OR COMM'L PART NO.	STOCK SIZE	FINISH	PROCESSING/TEST												
TOLERANCES UNLESS OTHERWISE SPECIFIED																	
FRACTIONS ± 1/32																	
DECIMALS ± .010																	
HOLES ± .000																	
ANGLES ± 1/2°																	
NEXT ASSEMBLY																	
<table border="0"> <tr> <td>OWN</td> <td>APPR'D.</td> <td>DATE</td> <td>SCALE</td> <td>LONG NO.</td> <td>REV.</td> </tr> <tr> <td>A CHU</td> <td>[Signature]</td> <td>5/15/73</td> <td>~</td> <td>PN 255-9-15</td> <td></td> </tr> </table>						OWN	APPR'D.	DATE	SCALE	LONG NO.	REV.	A CHU	[Signature]	5/15/73	~	PN 255-9-15	
OWN	APPR'D.	DATE	SCALE	LONG NO.	REV.												
A CHU	[Signature]	5/15/73	~	PN 255-9-15													
TITLE: MASTER FREQUENCY GENERATOR 1780 W. 4th AVENUE HIALEAH, FLORIDA 33010 ALLIED LEISURE INDUSTRIES INC.																	

HORIZONTAL TIME SLOT FOR PADDLES



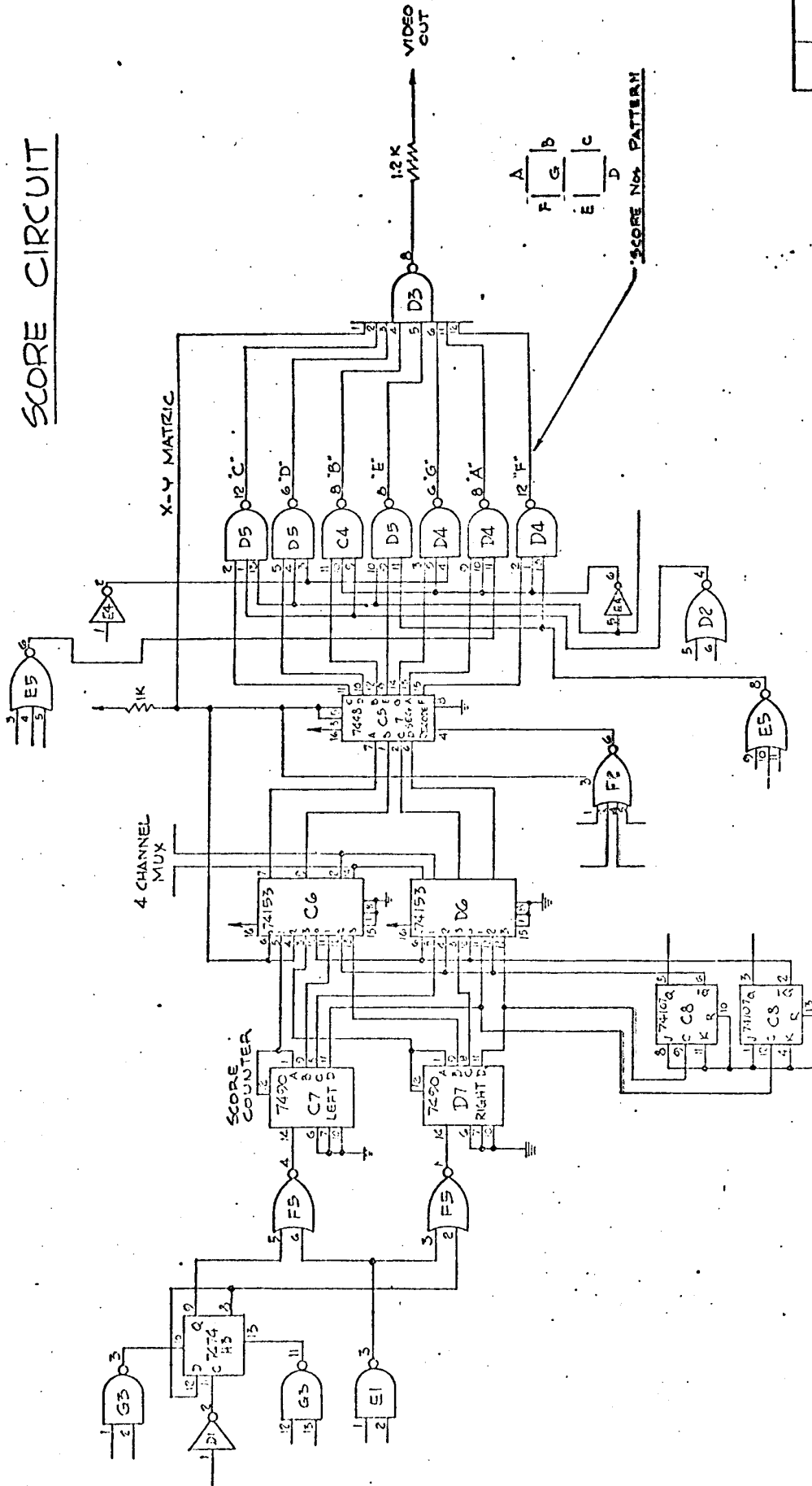
-PADDLE BATTLE-

D		C		B		A		REVISION LETTER		BY		REVISION	

TOLERANCES UNLESS OTHERWISE SPECIFIED	
FRACTIONS	= 1/64
DECIMALS	= .01
DECIMALS	= .005
HOLES	= .002
ANGLES	= 1/2°

ALLIED LEISURE INDUSTRIES INC.		DALENT, FLORIDA 33013	
NAME	HORIZONTAL TIME SLOT FOR PADDLE	DATE	7-25-72
PLAT TREAT.		SCALE	1"
FINISH		PART NO.	
APP. D.	GET		

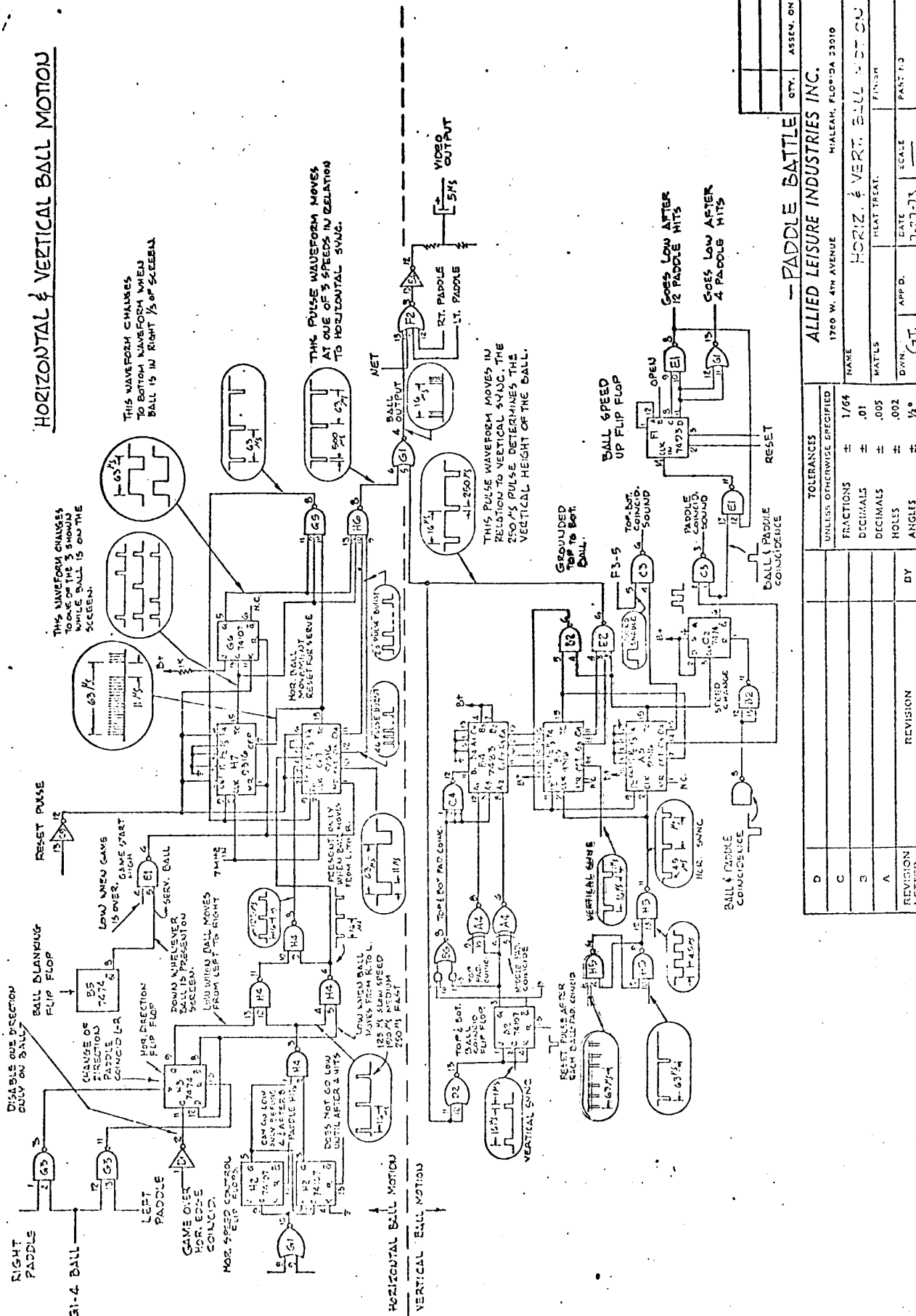
SCORE CIRCUIT



- PADDLE BATTLE -

TOLERANCES		UNLESS OTHERWISE SPECIFIED	
FRACTIONS	=	1/64	
DECIMALS	=	.01	
DECIMALS	=	.005	
HOLES	=	.002	
ANGLES	=	1/4°	
D			
C			
B			
A			
REVISION LETTER		REVISION	BY
ALLIED LEISURE INDUSTRIES INC.		MILBAM, FLORIDA 33010	
1700 W. 4TH AVENUE			
NAME	SCORE CIRCUIT-	HEAT TREAT.	FINISH
MATLS		DATE	SCALE
DWR.	GT	APP.D.	1-26-73
QTY.	ASSEM. C	PART NO.	

HORIZONTAL & VERTICAL BALL MOTION



RIGHT PADDLE
 LEFT PADDLE
 BALL BLANKING FLIP FLOP
 CHANGE OF DIRECTION PADDLE
 FOR DIRECTION FLIP FLOP
 DOWN WHENEVER BALL IS PRESENT ON SCREEN.
 LOW WHEN BALL MOVES FROM LEFT TO RIGHT
 HIGH WHEN BALL MOVES FROM RIGHT TO LEFT
 125% SLOW SPEED
 100% MEDIUM SPEED
 75% FAST SPEED
 HORIZ. SPEED CONTROL FLIP FLOP
 GAME OVER FOR EDGE CONTACT
 HORIZ. SPEED CONTROL FLIP FLOP
 GOES LOW AFTER 12 PADDLE HITS
 GOES LOW AFTER 4 PADDLE HITS
 NET
 BALL OUTPUT
 VIDEO OUTPUT 5MS
 RT. PADDLE
 LT. PADDLE
 THIS WAVEFORM CHANGES TO ONE OF THE 3 SHOWN WHILE BALL IS ON THE SCREEN.
 THIS WAVEFORM CHANGES TO BOTTOM WAVEFORM WHEN BALL IS IN RIGHT 1/5 OF SCREEN.
 THIS PULSE WAVEFORM MOVES IN RELATION TO VERTICAL SYNC.
 THIS PULSE WAVEFORM MOVES IN RELATION TO VERTICAL SYNC. THE 750% PULSE DETERMINES THE VERTICAL HEIGHT OF THE BALL.
 BALL SPEED UP FLIP FLOP
 GROUNDED UP TO BALL BALL.
 F-3-5 TOP NOT SOUND
 PADDLE SOUND SOUND
 BALL PADDLE COMBINED
 BALL PADDLE COMBINED
 BALL PADDLE COMBINED
 BALL & PADDLE COMBINED
 HIGH SYNC
 RESET PULSE AFTER EACH BALL PADDLE CONTACT
 RESET PULSE AFTER EACH BALL PADDLE CONTACT

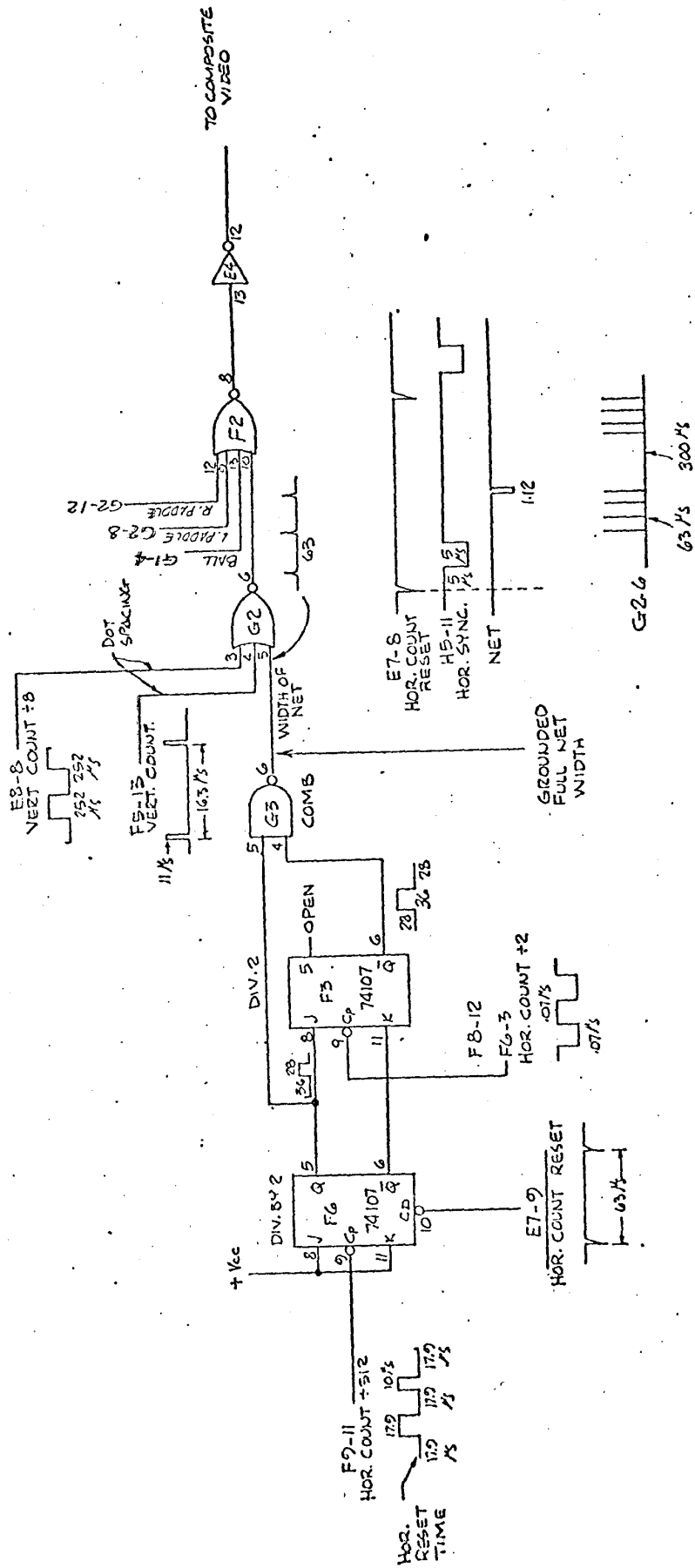
-- PADDLE BATTLE
 ALLIED LEISURE INDUSTRIES INC.
 1700 W. 4TH AVENUE
 MIAMI, FLORIDA 33109
 NAME
 HORIZ. & VERT. BALL MOTION
 MATLS
 FINISH
 DWN. CAT.
 APP. D. DATE
 7-27-73
 SCALE
 PART P.O.

D	C	S	A	TOLERANCES	
				UNLESS OTHERWISE SPECIFIED	FRACCTIONS ±
					± 1/64
					± .01
					± .005
					± .002
					± 1/2°

REVISION LETTER	REVISION	BY

DISABLING DIRECTION
 LOW WHEN GAMES
 IS OVER, GAME START
 HIGH
 SERVO BALL
 DOWN WHEN BALL MOVES
 FROM LEFT TO RIGHT
 THING
 HORIZ. BALL
 MONITOR
 RESET FOR SERVO
 40 PULSE BURST
 75 PULSE BURST
 BALL SPEED
 UP FLIP FLOP
 GROUNDED
 UP TO BALL
 BALL BALL
 F-3-5
 TOP NOT
 SOUND
 PADDLE
 SOUND
 SOUND
 BALL PADDLE
 COMBINED
 BALL PADDLE
 COMBINED
 BALL PADDLE
 COMBINED
 BALL & PADDLE
 COMBINED
 HIGH SYNC
 RESET PULSE AFTER
 EACH BALL PADDLE CONTACT
 RESET PULSE AFTER
 EACH BALL PADDLE CONTACT

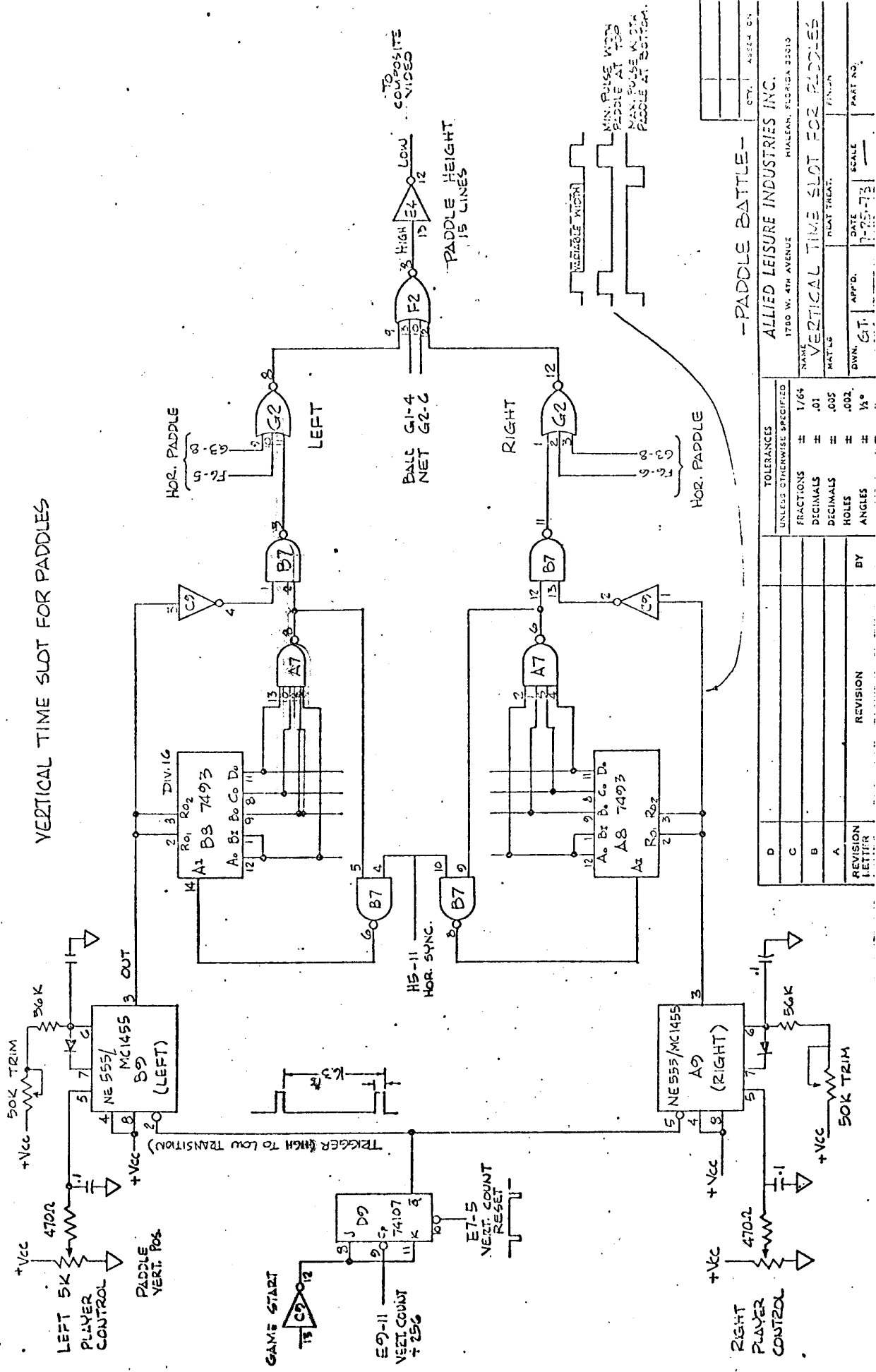
NET



- PADDLE BATTLE -

ALLIED LEISURE INDUSTRIES INC.		1700 W. 4TH AVENUE		MILWAUKEE, WISCONSIN 53213	
NAME	NET				
MATERIALS	HEAT TREAT.				
FINISH					
DATE	7-25-73				
SCALE	1:1				
PART NO.					
REV. CMT.					
BY					
REVISION LETTER					
D	TOLERANCES UNLESS OTHERWISE SPECIFIED				
C	FRACTIONS = 1/64				
D	DECIMALS = .01				
A	DECIMALS = .005				
	HOLES = .002				
	ANGLES = 1/2°				

VERTICAL TIME SLOT FOR PADDLES



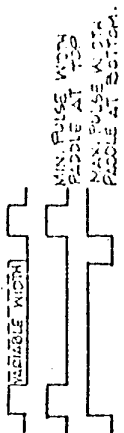
--PADDLE BATTLE--

ALLIED LEISURE INDUSTRIES INC.
 1700 W. 4TH AVENUE
 MIAMI, FLORIDA 33130

NAME: VERTICAL TIME SLOT FOR PADDLES
 MAT'L: FINISH: PART NO.:
 DWN: G.T. APP'D: DATE: 7-25-73 SCALE: 1:1

TOLERANCES UNLESS OTHERWISE SPECIFIED	
FRACTIONS	± 1/64
DECIMALS	± .01
DECIMALS	± .005
HOLE	± .002
ANGLES	± 1/2°

REVISION LETTER	REVISION	BY
D		
C		
B		
A		



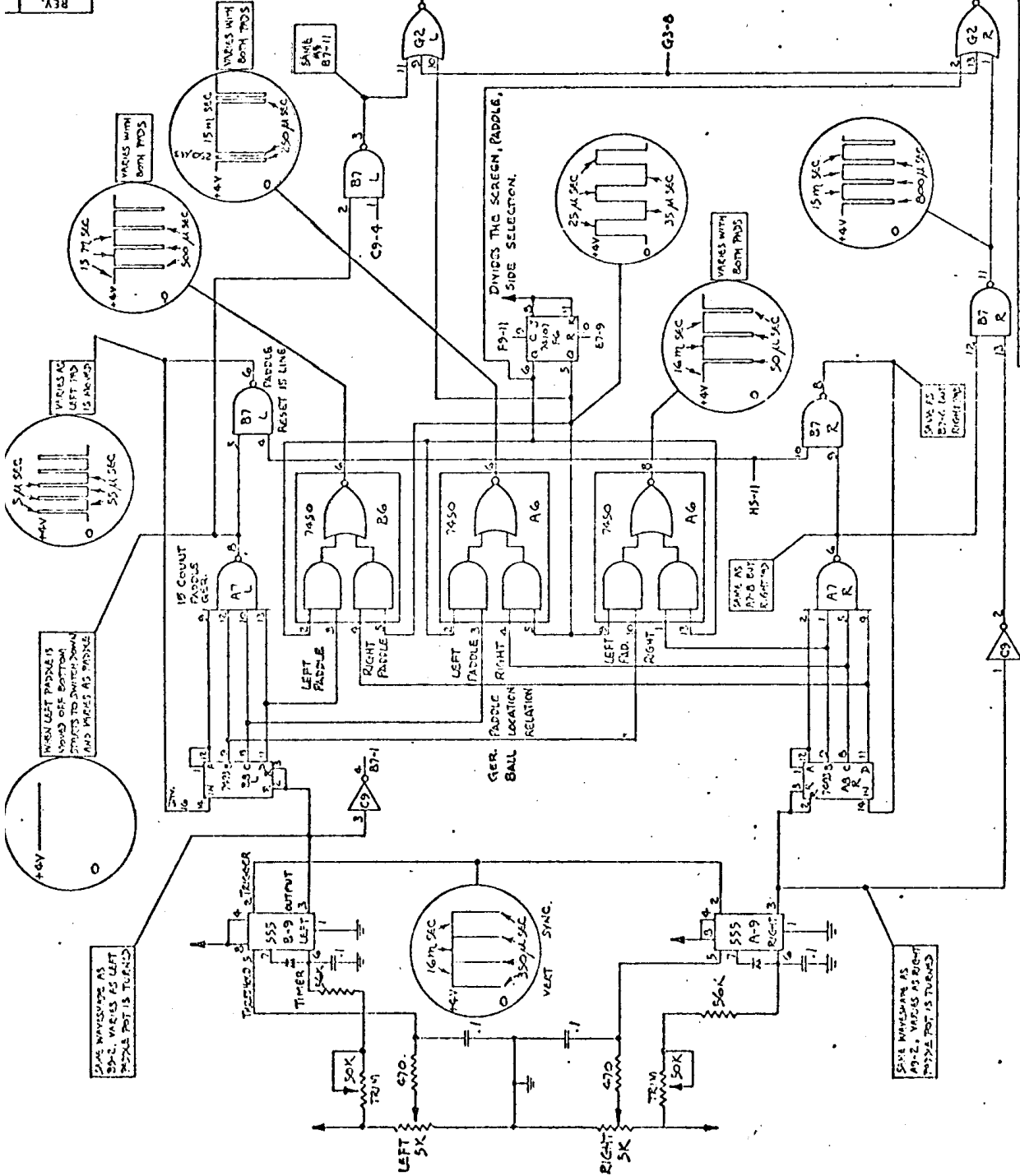
REV	ITEM NO	DESCRIPTION	DISPOSITION OF EXISTING PARTS	ENGR'S
			RE-SCRAP WORK	

GAME PRESETS

- BOTH PADDLES TO THE EXTREME DOWN POSITION; WHEN VARYING CONTROLS ALWAYS REMEMBER TO RETURN THE PADDLES TO THE BOTTOM.
- ADJUST PIN 3 OF EACH 555 TIMER (WITH THE TRIM POT) FOR MINIMUM DOWN TIME.
- SCORE SWITCH IN THE 15 POSITION.
- GAME DISABLED WITH 0-0 SCORE:

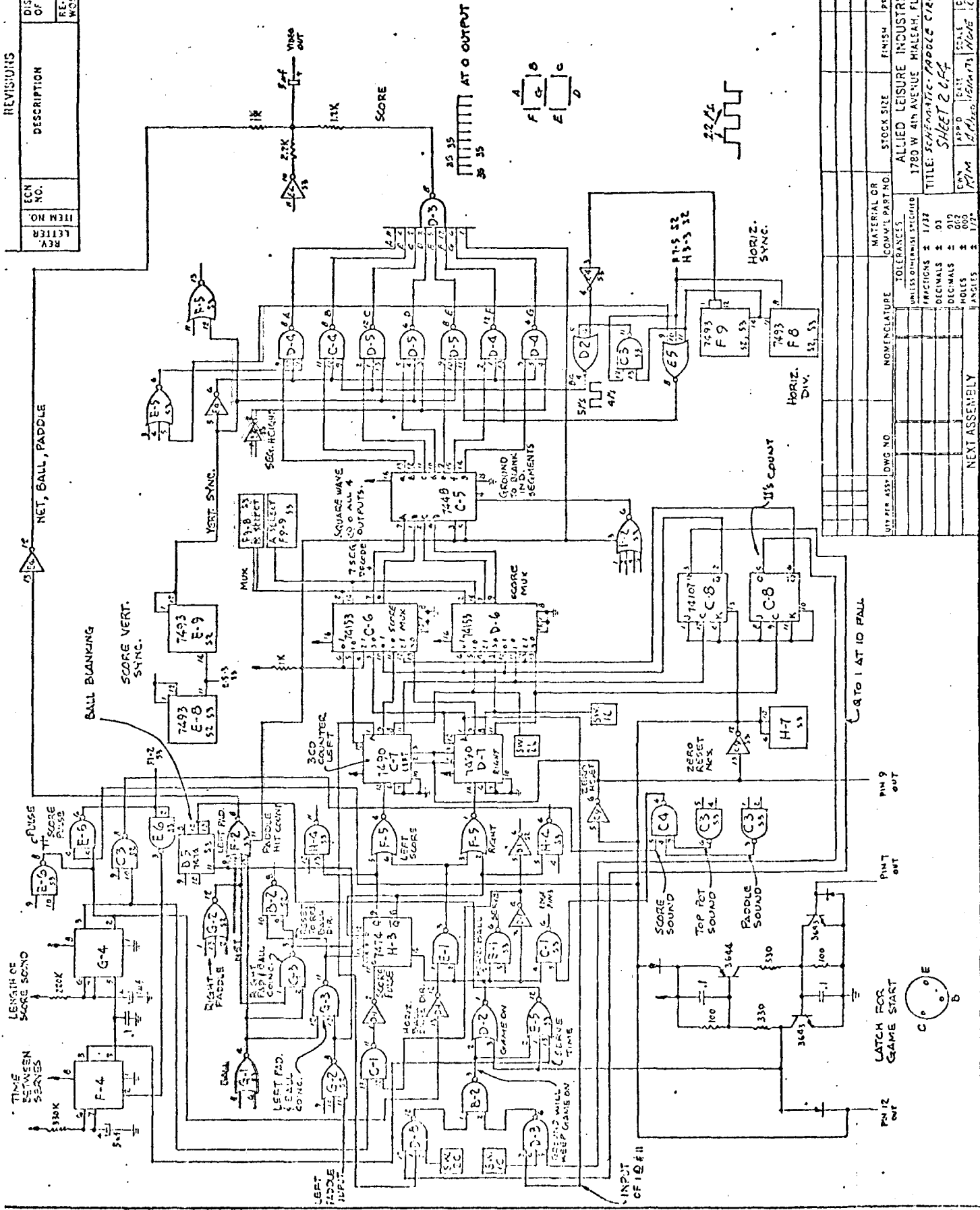
SCOPE PRESETS

- HORIZ. SWEEP - CAL.
- VOLTS/CM - CAL.
- HORIZ. DISPLAY - INT. SWEEP.
- VERT. SIGNAL - NOT INVERTED.

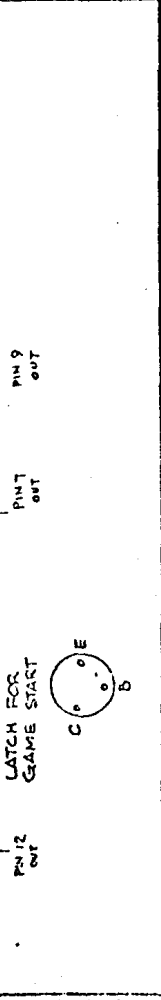


SYMBOL	DESCRIPTION	UNIT	VALUE	TOLERANCE
TELEPHONES				
NUMBERS OF PAGES	1/32			
FRACTIONS	0/1			
DECIMALS	0/1			
POLES	0/1			
ANGLES	0/1			
MATERIAL OR COMM. PART NO.		STOCK SIZE	FINISH	PROCESS
NEXT ASSEMBLY				
TITLE: PADDLE CIRCUIT 1 OF 2 DRAWN BY: J.A. CHU CHECKED BY: J.A. CHU SCALE: 1:1 DATE: 11/15/73 PROJECT: 9-2011 FILE: 11-11-73				

REV. LETTER		DESCRIPTION		DISPOSITION OF EXISTING PARTS		APPROVED
REV.	LETTER	ECN NO.	DESCRIPTION	REC. WORK	SCRAP	ENGRG.

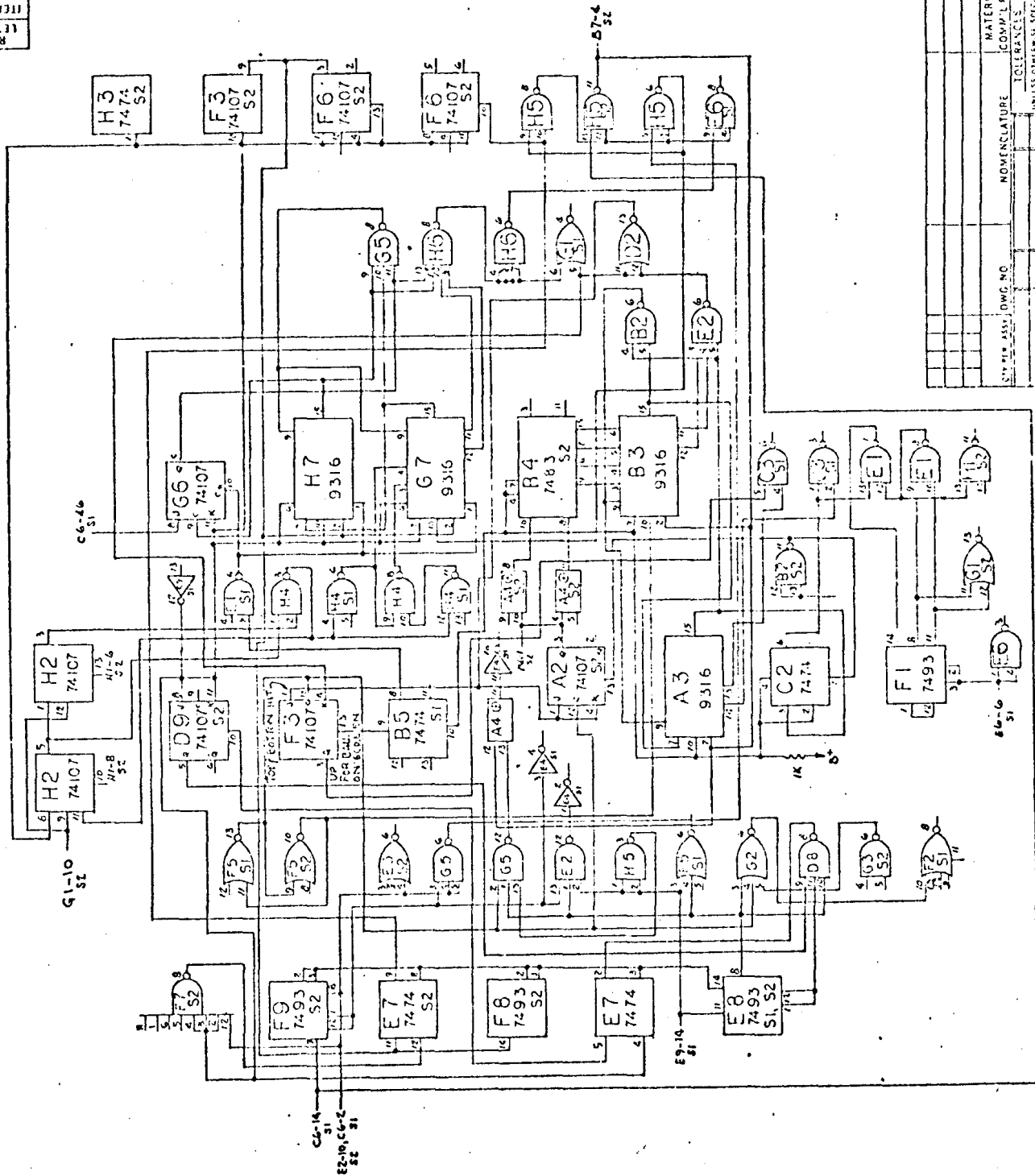


MATERIAL OR COMPOUND PART NO.	FINISH	PROCESS	REVISION
STOCK SIZE	ALLIED LEISURE INDUSTRIES, INC.	1780 W. 4th AVENUE	MIAMI, FLORIDA 33010
TOLERANCES	TITLE: SCHEMATIC - PADDLE CIRCUIT -		
UNLESS OTHERWISE SPECIFIED	DRAWN: [Signature]		
FRACTIONS ± 1/32	CHECKED: [Signature]		
DECIMALS ± .01	DATE: [Date]		
DECIMALS ± .010	SCALE: [Scale]		
HOLES ± .002	SHEET 2 OF 4		
ANGLES ± 1/2°	NEXT ASSEMBLY		

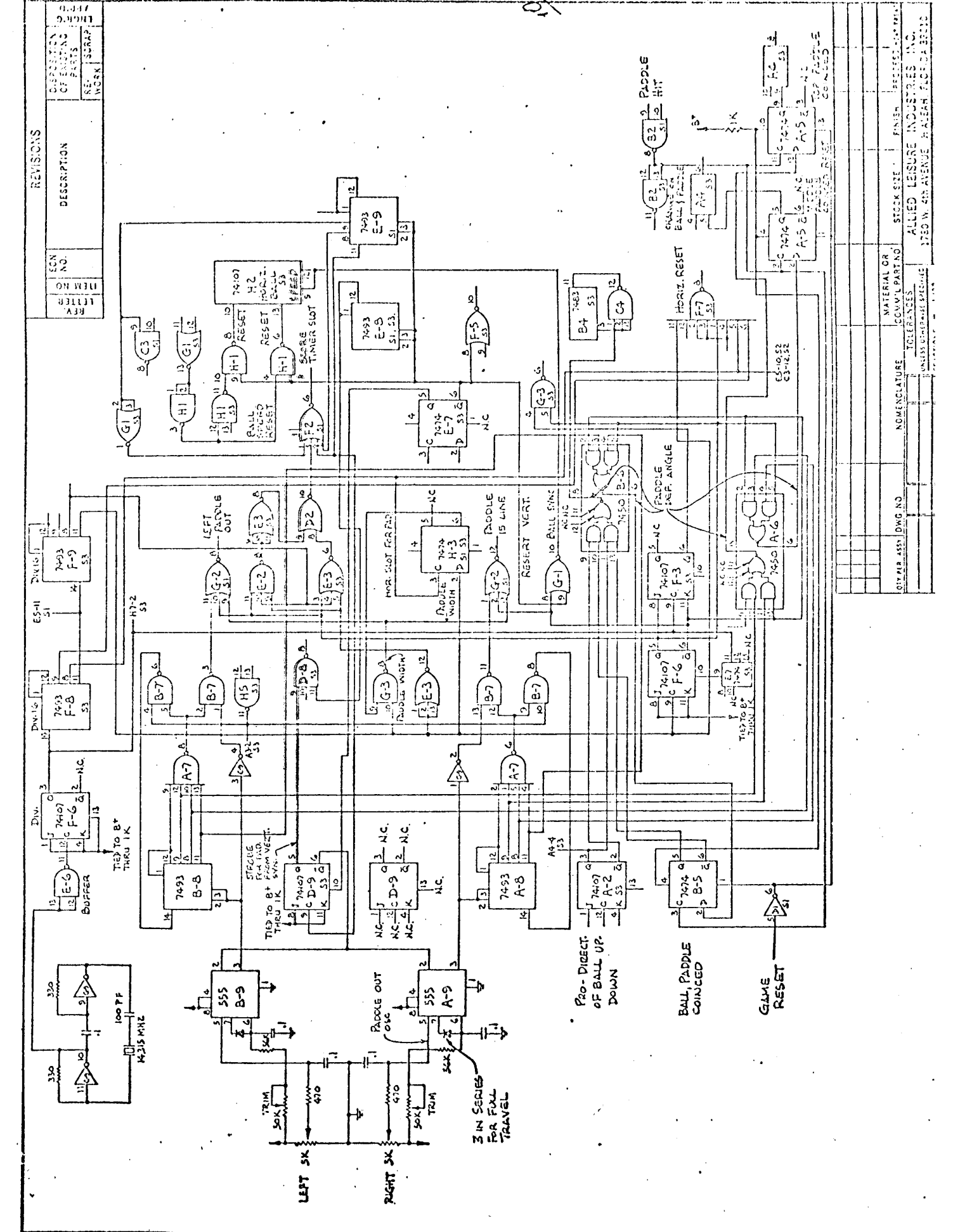


REVISIONS

REV LETTER	ITEM NO.	DESCRIPTION	DISPOSITION OF EXISTING PARTS	ENG'D
			REWORK	
			REPARTS	
			SCRAP	



SYNOPSIS ASSY. DWG. NO.	NOMENCLATURE	MATERIAL OR COMPT. PART NO.	STOCK S. SE.	FINISH	PROCESS
TOLERANCES					
UNLESS OTHERWISE SPECIFIED					
FRACTIONS ± 1/32					
DECIMALS ± .03					
HOLE ± .030					
ANGLES ± 1°					
NEXT ASSEMBLY					
ALLIED LEISURE INDUSTRIES, INC.					
1780 W. 4th AVENUE, WALKER, FLORIDA 33010					
TITLE: SEMI-AUTOMATIC-TRUSTEE CIRCUIT					
DATE	ISSUE	SCALE			
10/27/64	1	1/4"			
BY	APPROVED	DATE			



REVISIONS

REV. NO.	DESCRIPTION	DATE
1	DESIGN	9-1-63
2	CONSTRUCTION	10-1-63
3	REWORK	11-1-63
4	WORK	12-1-63

ITEM NO.	ITEM	QUANTITY	REVISION
1	7493 E-9	1	
2	74107 A-6	1	
3	74107 B-7	1	
4	74107 C-8	1	
5	74107 D-9	1	
6	74107 E-10	1	
7	74107 F-11	1	
8	74107 G-12	1	
9	74107 H-13	1	
10	74107 I-14	1	
11	74107 J-15	1	
12	74107 K-16	1	
13	74107 L-17	1	
14	74107 M-18	1	
15	74107 N-19	1	
16	74107 O-20	1	
17	74107 P-21	1	
18	74107 Q-22	1	
19	74107 R-23	1	
20	74107 S-24	1	
21	74107 T-25	1	
22	74107 U-26	1	
23	74107 V-27	1	
24	74107 W-28	1	
25	74107 X-29	1	
26	74107 Y-30	1	
27	74107 Z-31	1	
28	74107 AA-32	1	
29	74107 AB-33	1	
30	74107 AC-34	1	
31	74107 AD-35	1	
32	74107 AE-36	1	
33	74107 AF-37	1	
34	74107 AG-38	1	
35	74107 AH-39	1	
36	74107 AI-40	1	
37	74107 AJ-41	1	
38	74107 AK-42	1	
39	74107 AL-43	1	
40	74107 AM-44	1	
41	74107 AN-45	1	
42	74107 AO-46	1	
43	74107 AP-47	1	
44	74107 AQ-48	1	
45	74107 AR-49	1	
46	74107 AS-50	1	
47	74107 AT-51	1	
48	74107 AU-52	1	
49	74107 AV-53	1	
50	74107 AW-54	1	
51	74107 AX-55	1	
52	74107 AY-56	1	
53	74107 AZ-57	1	
54	74107 BA-58	1	
55	74107 BB-59	1	
56	74107 BC-60	1	
57	74107 BD-61	1	
58	74107 BE-62	1	
59	74107 BF-63	1	
60	74107 BG-64	1	
61	74107 BH-65	1	
62	74107 BI-66	1	
63	74107 BJ-67	1	
64	74107 BK-68	1	
65	74107 BL-69	1	
66	74107 BM-70	1	
67	74107 BN-71	1	
68	74107 BO-72	1	
69	74107 BP-73	1	
70	74107 BQ-74	1	
71	74107 BR-75	1	
72	74107 BS-76	1	
73	74107 BT-77	1	
74	74107 BU-78	1	
75	74107 BV-79	1	
76	74107 BW-80	1	
77	74107 BX-81	1	
78	74107 BY-82	1	
79	74107 BZ-83	1	
80	74107 CA-84	1	
81	74107 CB-85	1	
82	74107 CC-86	1	
83	74107 CD-87	1	
84	74107 CE-88	1	
85	74107 CF-89	1	
86	74107 CG-90	1	
87	74107 CH-91	1	
88	74107 CI-92	1	
89	74107 CJ-93	1	
90	74107 CK-94	1	
91	74107 CL-95	1	
92	74107 CM-96	1	
93	74107 CN-97	1	
94	74107 CO-98	1	
95	74107 CP-99	1	
96	74107 CQ-100	1	

ALLIED LEISURE INDUSTRIES, INC.
 1780 W. 40th AVENUE
 MIAMI, FLORIDA 33135