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72-00005-001

"COLONY 7"™ UPRIGHT

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1. GAME SET-UP

A. INTRODUCTION

TAITO AMERICA'S CORPORATION'S "COLONY 7"™ upright game is a skill-based video action game, designed for one or two players.

The object of the game is to defend "COLONY 7"™ which is the most distant earth deep space colony, and IT'S UNDER ATTACK. The colony consists of 3 fuel bases, a space port, laboratories, and a colony housing area. It is defended by 2 anti-matter cannons able to be aimed by the player on its computer generated sites.

"COLONY 7"™ is protected by an ion shield. This shield is blasted away in random chunks enemy fire. A bonus colony is awarded at one of two adjustable score levels.

When the player presses the "FIRE BUTTON" both cannons ignite into fiery anti-matter beams, these converge on the location defined by the site where the cannons were fired. The cannons beam moves rapidly across the screen to explode at the target.

The first wave of incoming ships consist of a fighter squadrom which accompanies a small mobile scout, an Advisor Ship, and the Cannon Bummer. When the scout is out additional fighters are continuously added. The scout remains high in the sky, has no weapons and a low point value. Bonuses will be accumulated upon defeat of a squadron. Bonuses are also awarded for remaining structures in the colony. Point values will increase with each subsequent squadron.

The fighters are equipped with plasma rockets, which they use to attack the colony. Their rockets have a limited range allowing the player to concentrate on the lowest fighter.

The player is aided by a deep space scanner capable of determining the number of remaining fighter in the squadron.

One "Eradicator" rocket will be provided as part of each colony. By using the "Eradicator Button" all the enemies on the screen at the time will be destroyed. Eradicators can be destroyed by the fire and will take with them adjacent gantry, which would have a score value if defended.

The "Cannon Bummer" will fly along the top of the screen randomly. If not destroyed, it drops bombs targeting at either cannon.

The "Advisor" ships will appear in all squadrons, randomly and only for a few seconds. The "Advisor" ships will score higher point value at the expense of the players defense.

Three Mega-Blasters will be provided as part of the colony. The Mega-Blaster Button fires one shot at a time from the cannon. When it reaches the target cross it splits into 32 bombs which destroy all enemies within a limited range. Each Mega-Blaster relies on a fuel base which can be destroyed by enemy fire.

EXTENDED WEAPONRY

When extended weaponry is desired additional coin(s) are required. Extended weaponry gives the players weapons a greater area of destruction.

B. GAME INSPECTION

TAITO AMERICA'S CORPORATION'S "COLONY 7"™ upright game is ready to play when received. However, careful inspection is necessary to insure your game is in perfect condition. Please verify the following before turning the game on.

- * Examine external parts for chips, dents, or broken parts.
- * Open the service door and examine the following:
 - * Plug-in connectors to make sure they are firmly seated.
 - * Speaker
 - * Player controls
 - * Printed circuit boards making sure there is no damage to the components.
 - * Check for loose foreign objects especially metal objects which may cause electrical problems.
 - * Fuses, making sure they are firmly seated in the holders.
 - * Coin Mechanisms

The Video Monitor is properly adjusted before shipping. If there are any adjustments necessary refer to our Video Monitor Manual (72-00003-001).

If problems occur or technical assistance is required, contact our Customer Service Department HOT LINE Toll Free 800-323-0666 (except Illinois). Illinois phone 312 981-1000 X215.

POWER REQUIREMENTS

TAITO AMERICA CORPORATION'S "COLONY 7"™ upright game is shipped ready for operation at 120VAC, 60Hz with a power consumption of approximately 250 Watts.

CAUTION

For safe operation it is recommended the cabinet be grounded. This game is equipped with a three conductor power cable. The third conductor is the ground conductor and when the cable is plugged into an appropriate receptable, the game is grounded. The offset pin on the power cable's three-prong connector is the ground connection.

LOCATION SPACE REQUIREMENTS

Depth - 35" (87.5cm)
Width - 24" (61cm)
Height - 68" (171cm)
Weight - 300 lbs.
Packaged Weight

C. GAME INSTALLATION

The following precautions should be followed when installing the game.

- * Avoid rough handling of the game, the picture tube is fragile.
- * Install the game on a level surface.
- * Avoid installing the game where it may receive excessive sunlight or heat, to prevent the game from rising internal temperature.
- * Do not install in a damp or dusty location.
- * For a short time after connecting the power to the game, the picture may be temporarily distorted.

D. DIP SWITCH AND VOLUME CONTROL SETTINGS

DIP SWITCHES

TAITO AMERICA CORPORATION'S "COLONY 7"™ upright game provides the following option switches. See Figure 1. These option switches can be found on the Option Board, which is located on the inside wall of the cabinet.

- SW1 - Sets the initial number of colonies. The OFF position provides 2 colonies, the ON position provides 3 colonies.
- *SW2 - Sets the bonus level. The OFF position provides a low bonus level, ON provides a high bonus level. See Figure 1.
- SW3 - NOT USED
- SW4 - NOT USED

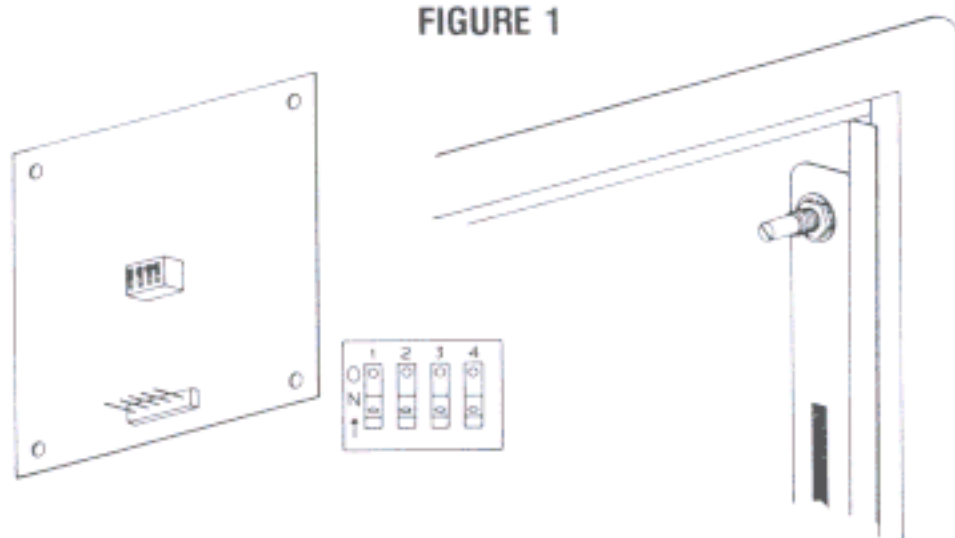
*NOTE TABLE 1 indicates the extended mode of operation which provides an increase in the power of the weaponry. When set for the extended mode of operation an additional coin must be deposited.

	2 COLONYS		3 COLONYS
Low Bonus Level	Norm.	20,000	30,000
	Ext.	40,000	50,000
High Bonus Level	Norm.	30,000	40,000
	Ext.	50,000	70,000

Table 1 Normal and Extended Bonus Levels

OPTION SWITCH & VOLUME CONTROL LOCATIONS

FIGURE 1



VOLUME CONTROL SETTING

The Volume Control is located on the inside frame of the coin door. See Figure 1. Volume increases when turned counterclockwise as indicated.

2. MAINTENANCE

All games require a certain amount of maintenance to keep them in good condition. A periodic check of mechanical controls would be beneficial to guarantee your game will be profitable.

A. CLEANING

The exterior of the game, all metal parts and all plastic parts can be cleaned with a non-abrasive cleanser. Caution should be used when cleaning the plastic, a dry cloth can cause scratches and result in a foggy appearance.

B. FUSE REPLACEMENT

This game uses six fuses, 5 are located on the Switching Regulator. See Figure 2 for size and part number of fuses. One fuse is located on the Power Supply itself.

C. VIDEO MONITOR REMOVAL

If you need to remove the video monitor, follow the instructions listed below:

CAUTION

It is recommended the game be left disconnected for at least one hour before removing the video monitor. This will probably discharge the video tube but EXTREME CAUTION is still necessary.

- * Remove power from the line voltage.
- * Disconnect the monitor cable connector.
- * Remove the wire cable clamp.
- * Take out the two side bolts, one on each side of the cabinet.
- * Remove the four mounting bolts and disconnect the green ground wire.
- * Slide the monitor out by pulling the monitor toward you.

CAUTION

Use extreme caution and do not touch electrical parts of the monitor yoke area with your hands or with any metal object in your hands! High voltages may exist in any monitor, even with power disconnected.

D. VIDEO MONITOR ADJUSTMENTS

TAITO AMERICA CORPORATION presently uses either a Wells-Gardner Corporation or Electrohome 19" color Video Monitor in the "COLONY 7"™ upright game. Refer to the Monitor Manual (72-00003-001) for your specific video monitor. Be sure to heed all the WARNINGS and CAUTION INSTRUCTIONS provided before repairing or replacing your Video Monitor.

E. FLUORESCENT TUBE REPLACEMENT

CAUTION

If you drop a fluorescent tube and it breaks, it will explode! PLEASE USE CARE WHEN REPLACING. See Figure 3.

- * Remove the three screws from the marquee bracket, being sure to hold the glass while removing the screws.
- * Remove the marquee glass and the fluorescent bulb is accessible.
- * With both hands turn the bulb toward you, carefully pull the lamp out of the lamp socket.

F. PRINTED CIRCUIT BOARD REPLACEMENT

You may wish to remove the "COLONY 7"™ upright printed circuit boards for replacement or service. See Figure 4 to remove the "COLONY 7"™ upright board set, unclip the top of the set, held in place by 3 small clips and lift the boards out of the wooden cleat at the bottom of the board set.

WARNING

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. As temporarily permitted by regulation it has not been tested for compliance pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

SWITCHING REGULATOR

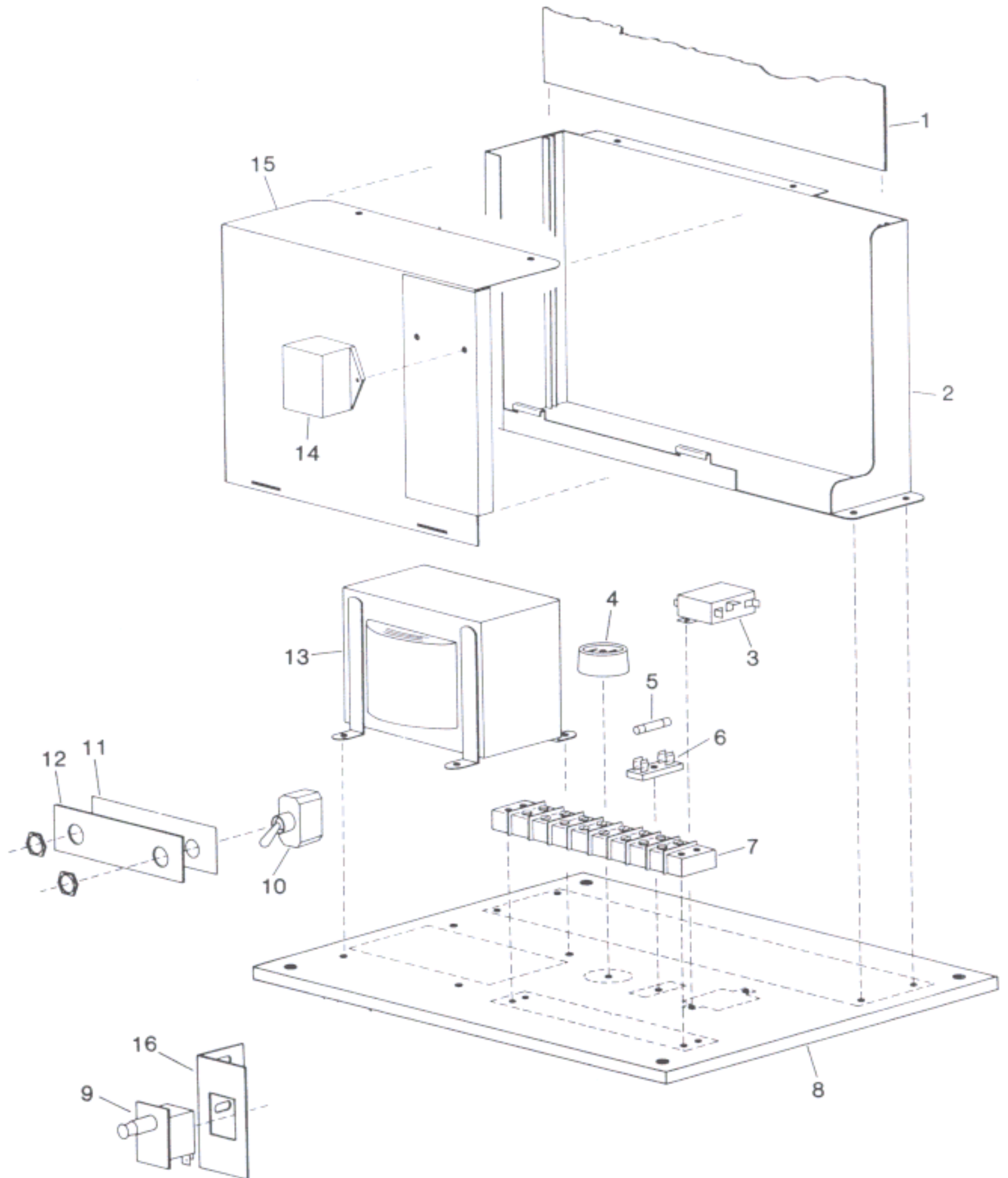
FIGURE 2

ITEM	TAITO PART NO.	DESCRIPTION
1	800010	Switching Regulator
2	998702	Shield Box
3	22B00001-001	Line Filter
4	26-00003-001	Service Outlet
5	24-00002-001	Fuse, 3 AMP, 3AG, Slo-Blo
6	24-00001-001	Fuse Holder
7	35-00001-001	Barrier Strip - 8 Position
8	42C00034-001	Power Mounting Board
9	29B00005-001	Interlock Switch
10	29B00004-001	Toggle Power Switch
11	35A00004-001	Insulator
12	61A00029-001	Toggle Switch Bracket
13	18A00001-001	Isolation Transformer
14	019501	Noise Filter
15	998703	Shield Cover
16	61B00030-001	Interlock Switch Bracket
*	35B00002-001	Insulating Shield
*	850005	Switching Regulator Assembly

* Note: Item is not shown on drawing

SWITCHING REGULATOR

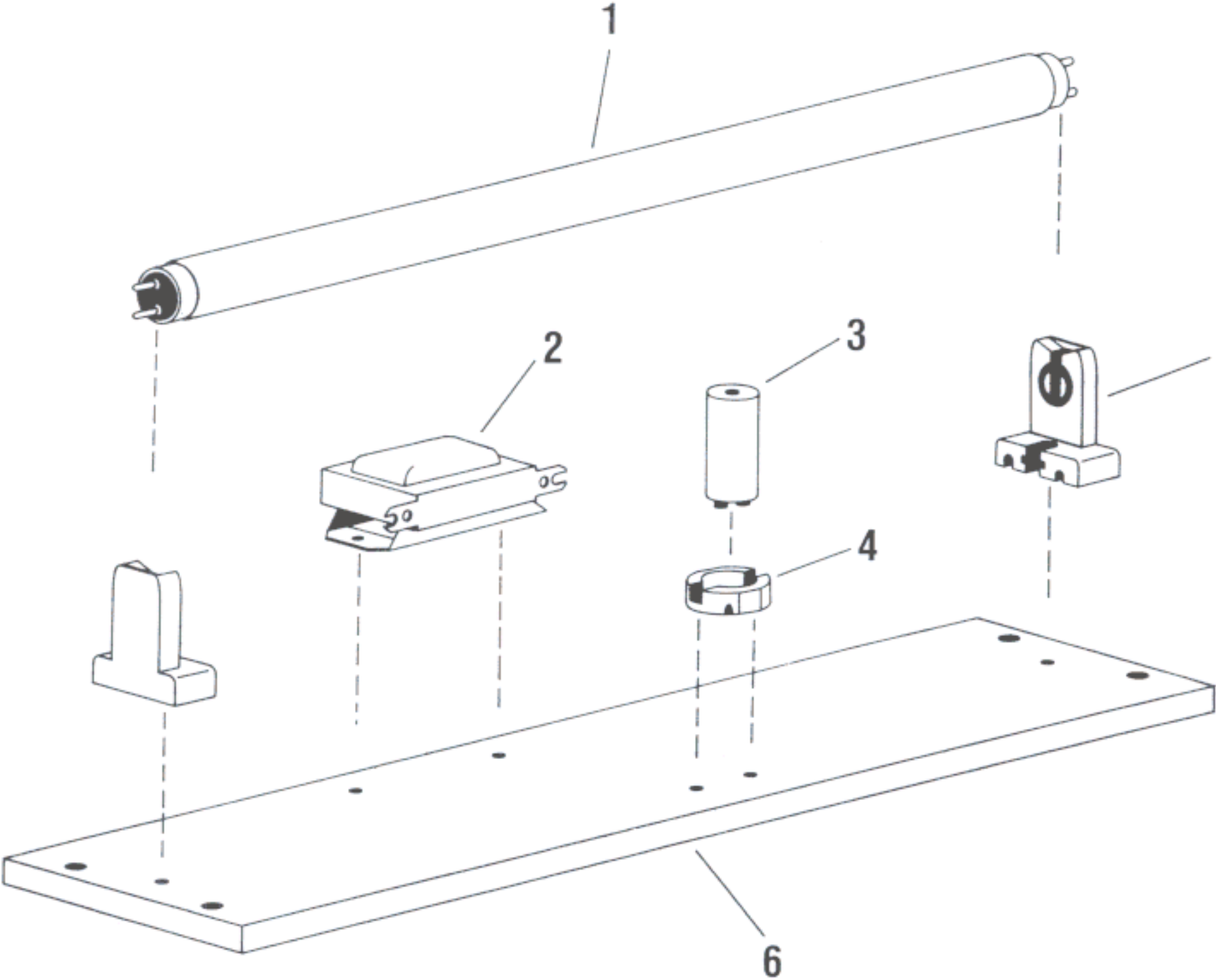
FIGURE 2



FLOURESCENT BULB PANEL

FIGURE 3

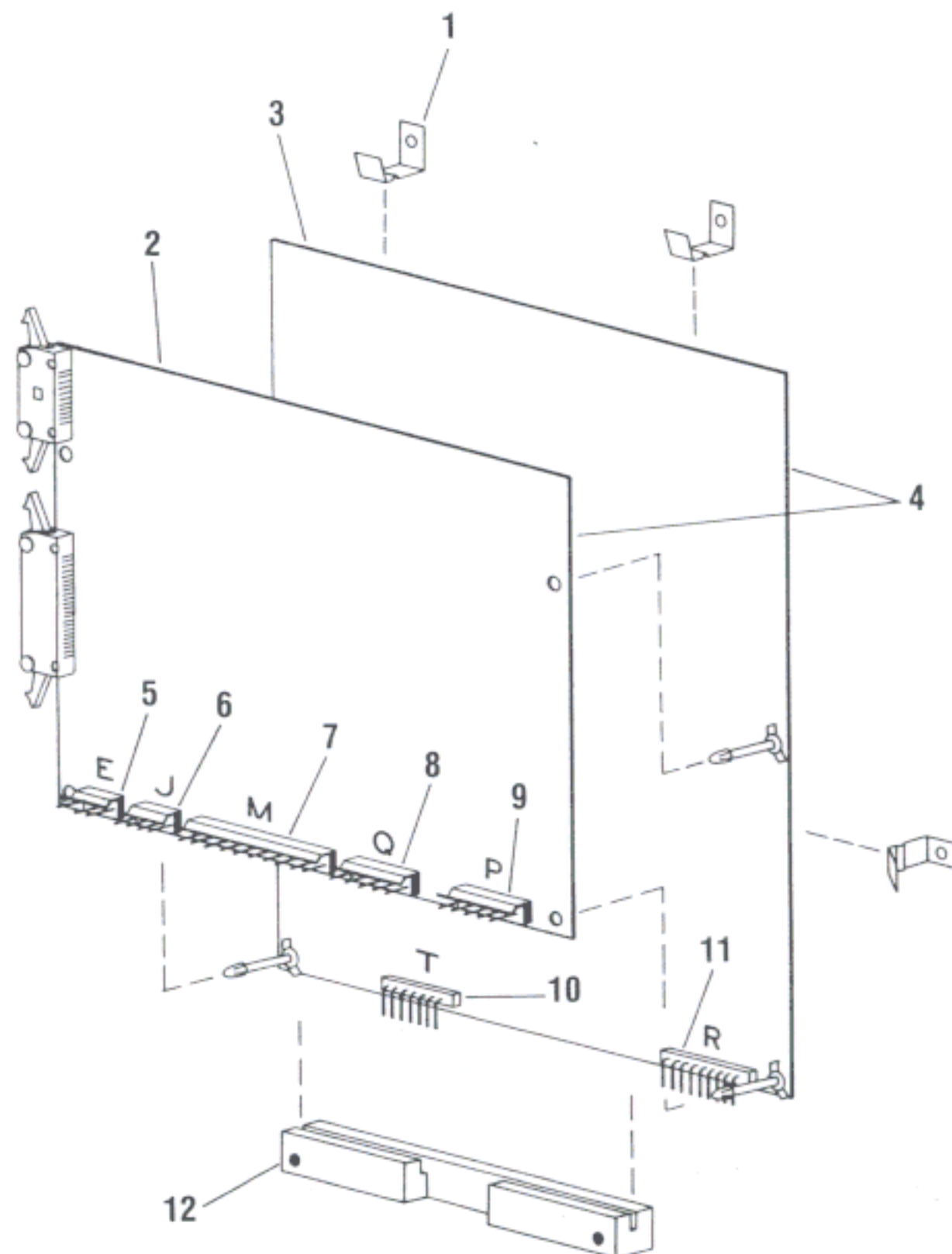
ITEM	TAITO PART NO.	DESCRIPTION
1	27-00001-001	Flourescent Tube, STD 15 W
2	18-00002-001	Ballast Transformer (120V, 60 Hz)
3	29-00003-001	Starter
4	26-00005-001	Starter Socket
5	26-00004-001	Lamp Socket
6	42B00057-001	Flourescent Lamp Panel



PCB MOUNTING ASSEMBLY

FIGURE 4

ITEM	TAITO PART NO.	DESCRIPTION
1	59B00030-001	PCB Clips
2	998841	"COLONY 7"™ Game Board
3	998842	"COLONY 7"™ CPU Board
4	08-00008-001	"COLONY 7"™ Board Set
5	25-00025-004	Connector "E" 4 Pos.
6	25-00025-004	Connector "J" 4 Pos.
7	25-00025-020	Connector "M" 20 Pos.
8	25-00025-010	Connector "Q" 9 Pos.
9	25-00025-009	Connector "P" 7 Pos.
10	25-00023-007	Connector "T" 7 Pos.
11	25-00025-009	Connector "R" 9 Pos.
12	42B00085-001	Wood Mounting Cleat



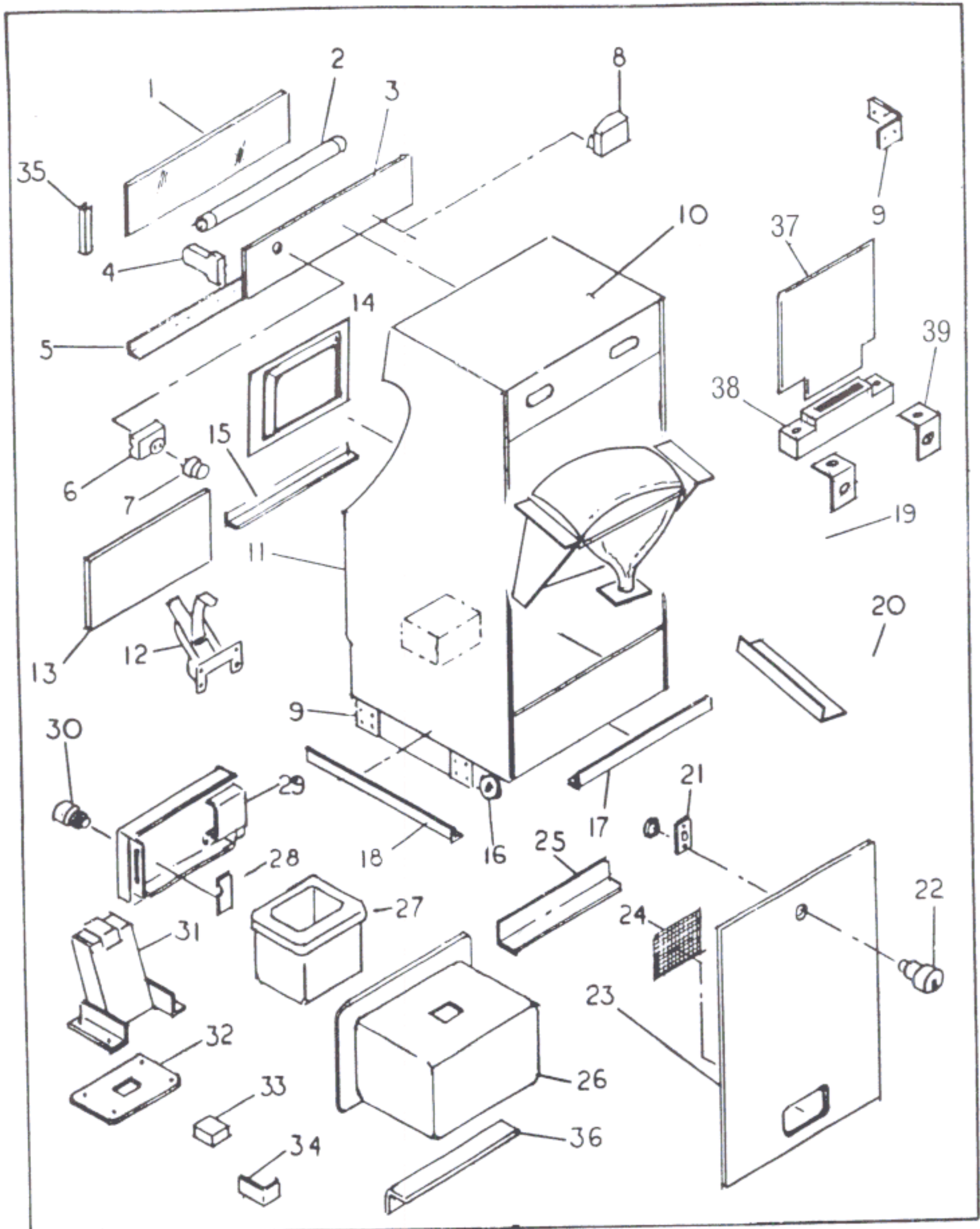
VIDEO & CABINET ASSEMBLY

FIGURE 5

ITEM	TAITO PART NO.	DESCRIPTION	REFERENCE
1	47C00001-001	Screened Marquee	
2	27-00001-001	Fluorescent Tube, Std., 15W	
3	42B00057-001	Fluorescent Lamp Panel	140006
4	26-00004-001	Lamp Socket	113000
5	61C00007-001	Marquee Retainer	500024
6	26-00005-001	Starter Socket	114001
7	29-00003-001	Starter	114000
8	18-00002-001	Ballast Transformer	
9	61B00011-001	"L" Bracket	
10	41B00002-003	Cabinet	
11	63-00002-001	"T" Molding	400007
12	59-00008-001	Clamp Fastener	390002
13	47D00002-003	Screen Cover Glass	
14	63C00003-001	Monitor Shroud	400005
15	61C00016-001	Glass Retaining Bracket	500022
16	44C00001-001	Wheel Assembly	520000
17	63B00005-002	"L" Molding, Black, 22½" Long	400031-A
18	63B00005-003	"L" Molding, Black, 3¾" Long	400031-A
19	31-00001-002	Electrohome Monitor, 19" Color	620007
20	61C00080-001	Video Mounting Bracket	
21	45-00001-001	Anchor Plate	600005-C
22	45-00001-001	Lock & Key	600005
23	42C-00035-001	Cabinet Back	143003
24	61B-00027-001	Grill	500074
25	500086	Mounting Bracket Top	AA013580
26	500088	Cash Box	AA028507
27	400050	Cash Case	AA028506
28	600007	Lock Plate	AA013593
29	500089	Cash Box Door	AA026512
30	600006	Lock (Cash Box) & Key	AA016545
31	500060	Coin Funnel	AA025510
32	500061	Coin Funnel Plate	AA013690
33	115000	Counter, 6V DC	AA013608
34	500091	Counter Bracket	
35	63B-00006-004	U Channel	400025
36	500087	Bottom Bracket	
37	36-00005-001	Counter Drive Credit Board	800011
38	25-00014-001	10 Position Edge Connector	
39	61A00014-001	Credit Board Bracket	
*40	08M00008-001	PCB Set "COLONY 7"	
*41	998841	Game Board	
*42	998842	CPU Board	
*43	42C00013-001	Monitor Cleat	
*44	59B00030-001	PCB Clip	
*45	59B00016-002	Spacer	
*46	32B00005-001	P.C. Board (Option)	
*47	61C00086-001	Corner Bracket (Monitor Mounting)	
*48	07-00005-001	Speaker	

VIDEO & CABNET ASSEMBLY

FIGURE 5



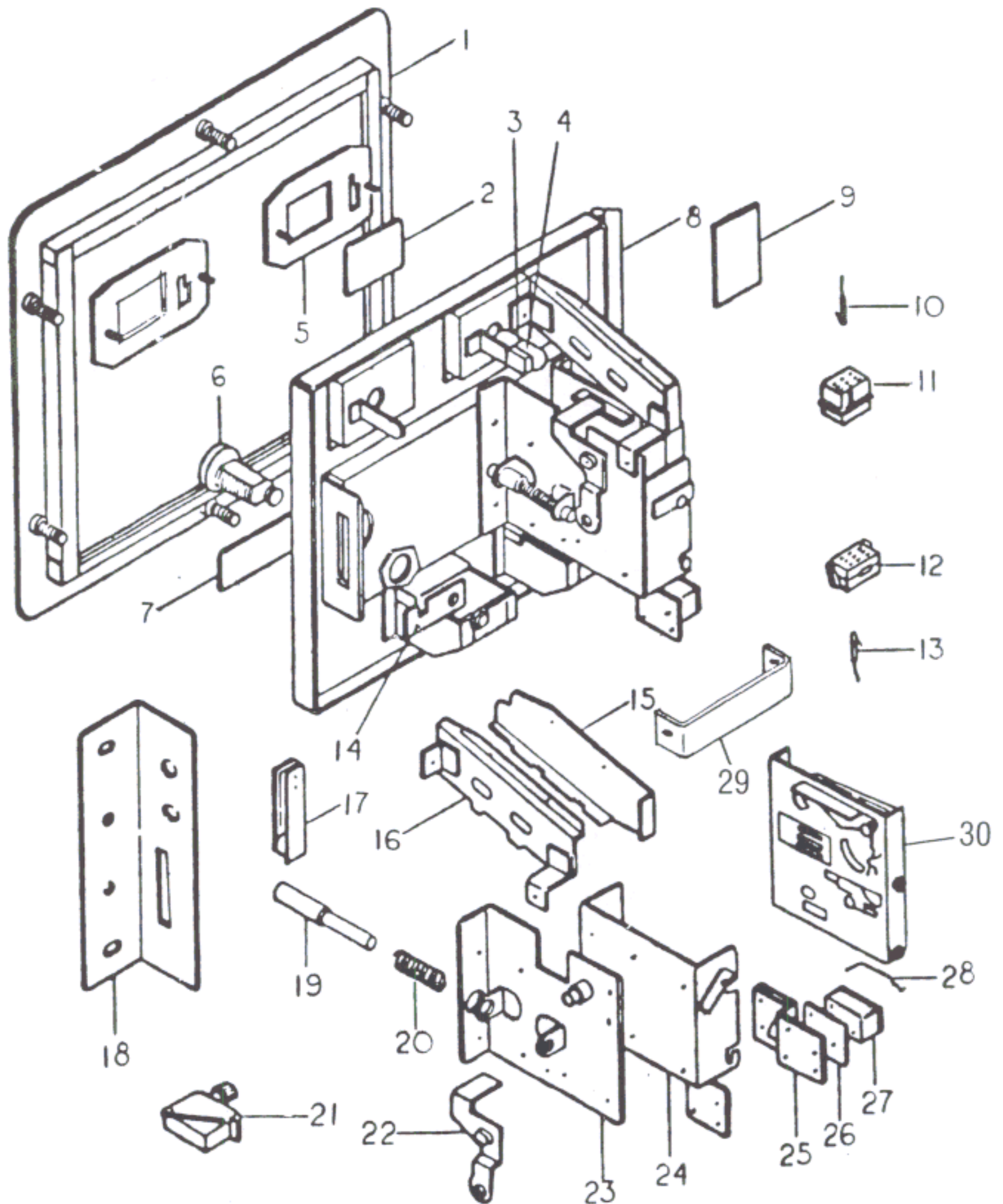
COIN MECHANISMS AND FRONT DOOR ASSEMBLY

FIGURE 6

ITEM	TAITO PART NO.	DESCRIPTION	REFERENCE
1	500010	Door Frame	AA026510
2	79-50005-001	Price Card U.S. 25¢	
3	27-00002-001	Pilot Lamp, 12V, 150Ma	
4	113001	Vinyl Socket	AA055698
5	61A00051-001	Coin Entry Plate for 25¢	AA021536
6	600006	Service Lock & Key No. 7900	AA016558
7	79A00016-001	TAITO Name Tag	AF9A0016-001
8	500009	Coin Rejection Door	AA026511
9	500021-E	Cover Plate	AA019522
0	104000	Mate-N-Loc Pin A	AA055789
1	103007	Mate-N-Loc Housing 9 Pin	AA055581
2	103008	Mate-N-Loc Housing 9 Pin	AA055582
3	104001	Mate-N-Loc Pin 1 B	AA055790
4	500021-1	Lock Plate	AA013578
5	500021-G	Coin Guide (B)	AA025508
6	500021-H	Coin Guide (A)	AA025507
7	500021-J	Tilt Switch	AA068717
8	61-00041-001	Lock Guard	
9	500021-K	Rejection Button	AA027504
0	500021-L	Spring Cancel Holder	AA015504
1	020501	Service Switch	
2	500021-M	Cancel Lever	AA013557
3	500021-N	Rejector Bracket	AA013554
4	500021-P	Rejector Holder	AA023501
5	500054	Coin Guide	AA025503
6	199005	Insulator	AA019502
7	29-00007-001	Micro Switch	
8	370002	Actuator	AA053501
9	500021-R	Rejector Lever Connector	
0	07-00038-001	Coin Acceptor	

COIN MECHANISMS AND FRONT DOOR ASSEMBLY

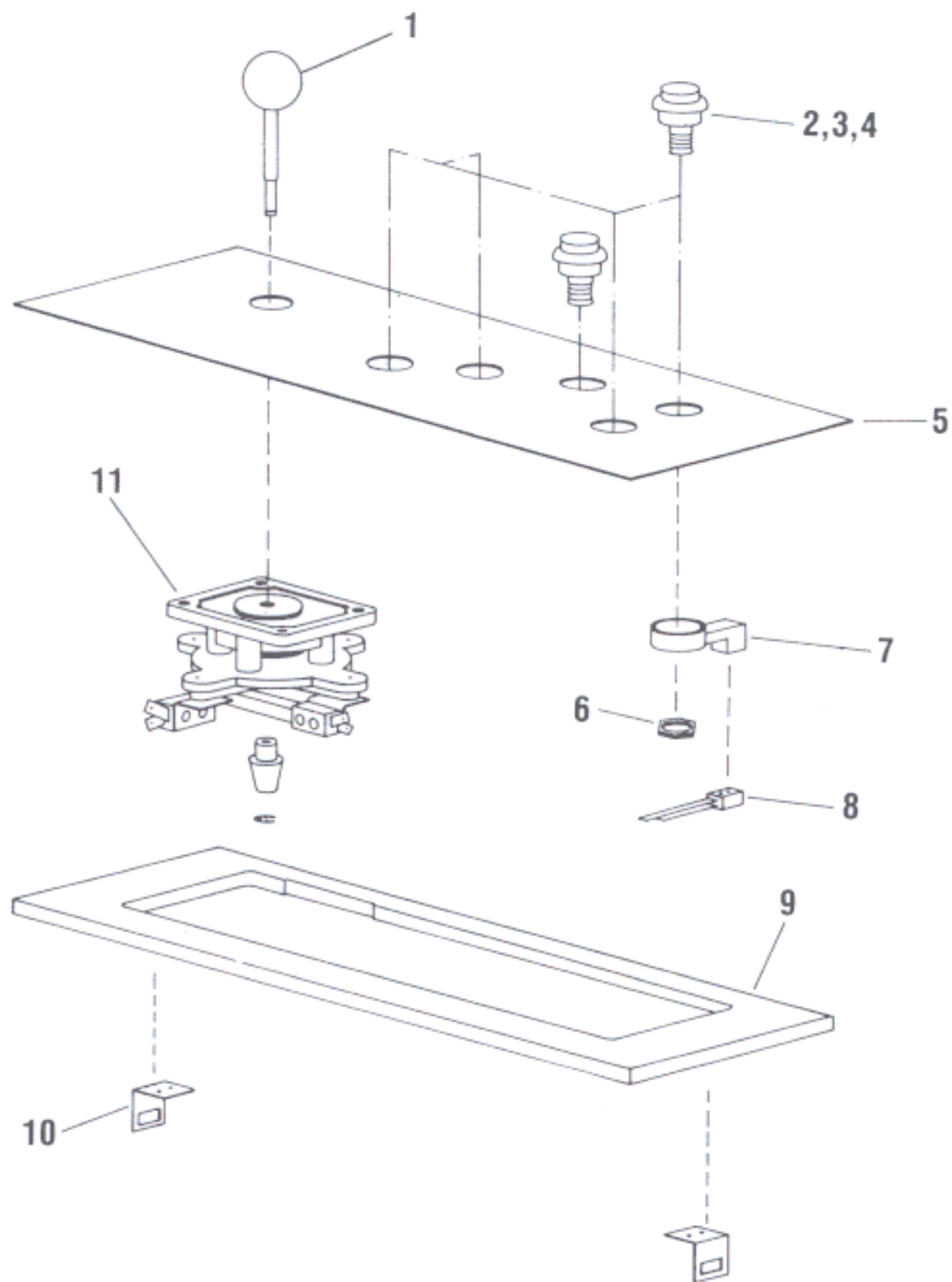
FIGURE 6



CONTROL PANEL

FIGURE 7

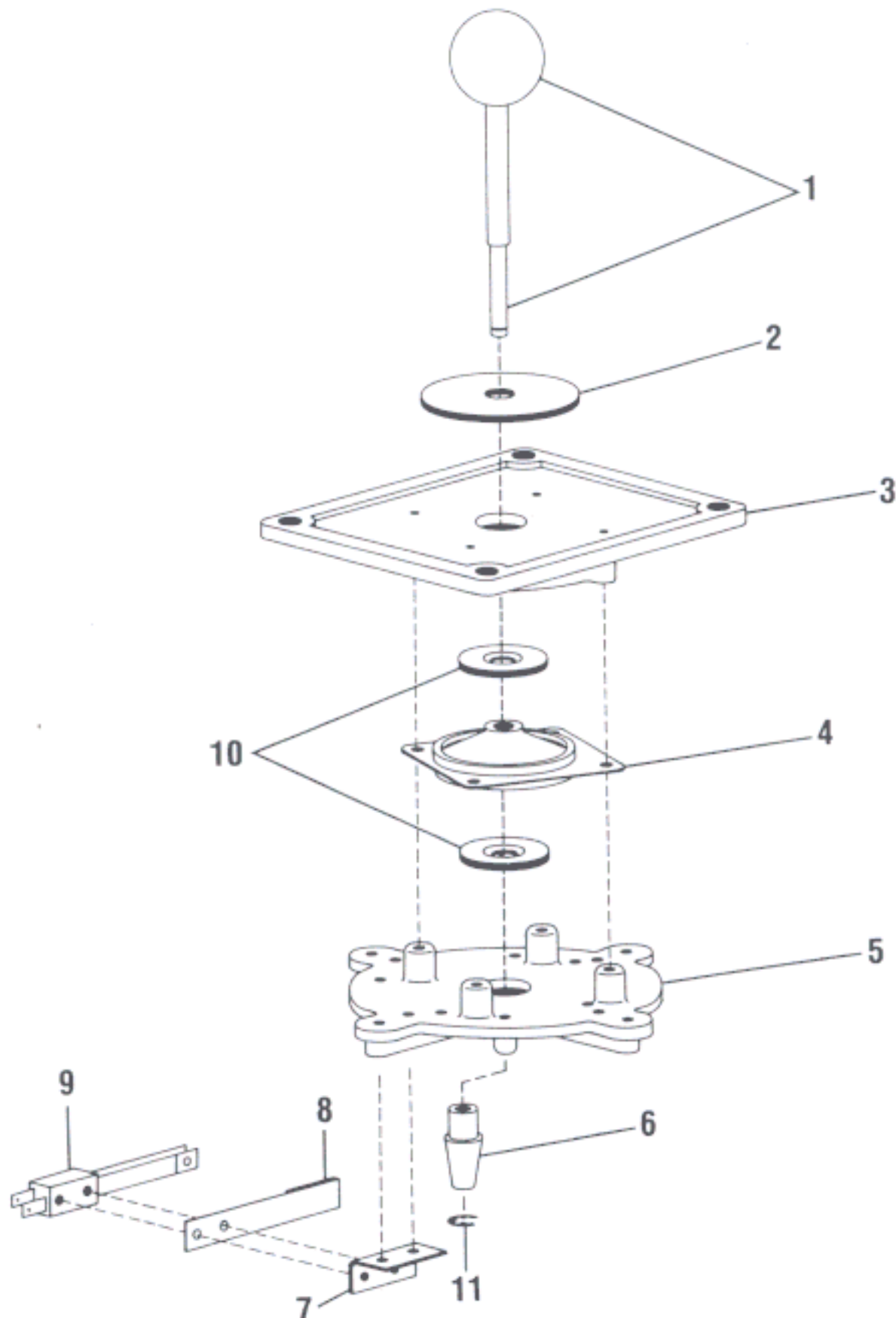
ITEM	TAITO PART NO.	DESCRIPTION
1	04M00032-001	Ball/Shaft Kit
2	63B00024-001	Push Button (White)
3	63B00024-002	Push Button (Red)
4	63B00024-004	Push Button (Black)
5	47D00009-001	Dash Panel
6	54A01001-001	Nut $\frac{5}{8}$ -11
7	63C00025-001	Switch Support
8	29B00016-001	Switch & Leaf
9	42D00087-001	Control Panel (Wood)
10	61A00015-001	Strike Hook
11	63D00032-006	Control Assembly (8-Way)



8-WAY JOYSTICK

FIGURE 8

ITEM	TAITO PART NO.	DESCRIPTION
1	63A00031-001	Ball & Shaft
2	63A00033-001	Mask
3	63C00027-002	Mounting Plate
4	62A00002-001	Shock Mount Pad
5	63C00028-002	Switch Plate
6	63A00030-001	Actuator
7	61A00018-001	"L" Bracket
8	63A00026-001	Switch Spacer
9	29B00016-002	Leaf Switch
10	63A00029-001	Spacer
11	59B00020-017	"E" Ring



CPU PC BOARD LAYOUT

FIGURE 9

SYM	TAITO PART NO.	DESCRIPTION
DF0	70001	CS CPU PC Board
20P	DF090014	Flat Pin Header
40P	DF090013	Flat Pin Header
4P	DR090016	Friction Lock Wafer
7P	DR090017	Friction Lock Wafer
9P	DR090018	Friction Lock Wafer
BC	DR090023	Alkaline Battery Cover
AB	DR090024	Alkaline Battery Cover
TS	AA052578	Tact Switch
IS1	AA055786	IC Socket, 16P
IS2	AA055787	IC Socket, 24P
IS3	AA055812	IC Socket, 40P
X-TAL	AA069605	X-TAL 12, 000MHZ
TR1	AAT11034	Transistor 2SC509-Y
TR2	AAT11037	Transistor 2SC509-O
D1	AAT12025	Diode 1S1588
D2	AAT12048	Diode 1N5817
ZD1	AAT13038	Zenner Diode 05Z-6.8V
IC1	AAT32001	TTL-IC 7400
IC2	AAT32002	TTL-IC 7402
IC3	AAT32003	TTL-IC 7404
IC4	AAT32004	TTL-IC 7410
IC5	AAT32005	TTL-IC 7420
IC6	AAT32007	TTL-IC 7427
IC7	AAT32011	TTL-IC 7474
IC8	AAT32013	TTL-IC 7486
IC9	AAT32017	TTL-IC 74153
IC10	AAT32021	TTL-IC 7432
IC11	AAT32023	TTL-IC 7408
IC12	AAT32064	TTL-IC 74165
IC13	AAT32105	TTL-IC 9316
IC14	AAT32166	TTL-IC 7411
IC15	AAT32168	Dynamic Ram 4116-20
IC16	AAT32175	TTL-IC 7421
IC17	AAT32176	Ram 74LS89
IC18	AAT33005	LS-IC 74LS04
IC19	AAT33051	LS-IC 74LS74
IC20	AAT33076	LS-IC 74LS107
IC21	AAT33094	LS-IC 74LS133
IC22	AAT33097	LS-IC 74LS139
IC23	AAT33157	LS-IC 74LS245

SYM	TAITO PART NO.	DESCRIPTION
IC24	AAT33164	LS-IC 74LS257
IC25	AAT33203	LS-IC 74LS367
IC26	AAT33209	LS-IC 74LS374
IC27	AAT33220	LS-IC 74LS393
CPU	AAT34019	CPU 6809E
IC28	AAT36073	C-MOS RAM 5101
IC29	AAT36074	C-MOS IC 4071-B
ROM1	16M00003-009	P-ROM (7641) CS09
ROM2	16M00003-010	P-ROM (7641) CS10
C1	AAT41036	CAP, Electrolytic 25VB-100
C2	AAT41302	CAP, Ceramic
C3	AAT41244	CAP, Film TDY 1-H-104
C4	AAT41334	CAP, Ceramic 470PF-50V
C5	AAT41449	CAP, Tantalum SSG10-22F
C6	AAT41672	CAP, Ceramic 100000PF 50V
R1	AAT51717	RES, Carbon 10 OHM 1/4W $\pm 5\%$
R2	AAT51737	RES, Carbon 68 OHM 1/4W $\pm 5\%$
R3	AAT51741	RES, Carbon 100 OHM 1/4W $\pm 5\%$
R4	AAT51745	RES, Carbon 150 OHM 1/4W $\pm 5\%$
R5	AAT51751	RES, Carbon 270 OHM 1/4W $\pm 5\%$
R6	AAT51753	RES, Carbon 330 OHM 1/4W $\pm 5\%$
R7	AAT51757	RES, Carbon 470 OHM 1/4W $\pm 5\%$
R8	AAT51759	RES, Carbon 560 OHM 1/4W $\pm 5\%$
R9	AAT51765	RES, Carbon 1K OHM 1/4W $\pm 5\%$
R10	AAT51767	RES, Carbon 12K OHM 1/4W $\pm 5\%$
R11	AAT51773	RES, Carbon 22K OHM 1/4W $\pm 5\%$
R12	AAT51775	RES, Carbon 27K OHM 1/4W $\pm 5\%$
R13	AAT51777	RES, Carbon 33K OHM 1/4W $\pm 5\%$
R14	AAT51781	RES, Carbon 47K OHM 1/4W $\pm 5\%$
R15	AAT51789	RES, Carbon 10K OHM 1/4W $\pm 5\%$
R16	AAT51797	RES, Carbon 22K OHM 1/4W $\pm 5\%$
R17	AAT51801	RES, Carbon 33K OHM 1/4W $\pm 5\%$
R18	AAT51805	RES, Carbon 47K OHM 1/4W $\pm 5\%$
R19	AAT51825	RES, Carbon 330K OHM 1/4W $\pm 5\%$
J	AA069536	Jumper Wire
SH		Sub-Harness Assembly
CV	AA069534	Convex
7P	DF090037	SL156 Post Header, 7P Side Type
9P	DF090038	SL156 Post Header, 9P Side Type
20P	DF090023	Angle Pin Header, 20P
40P	DF090024	Angle Pin Header, 40P

FIGURE 9



PC GAME BOARD

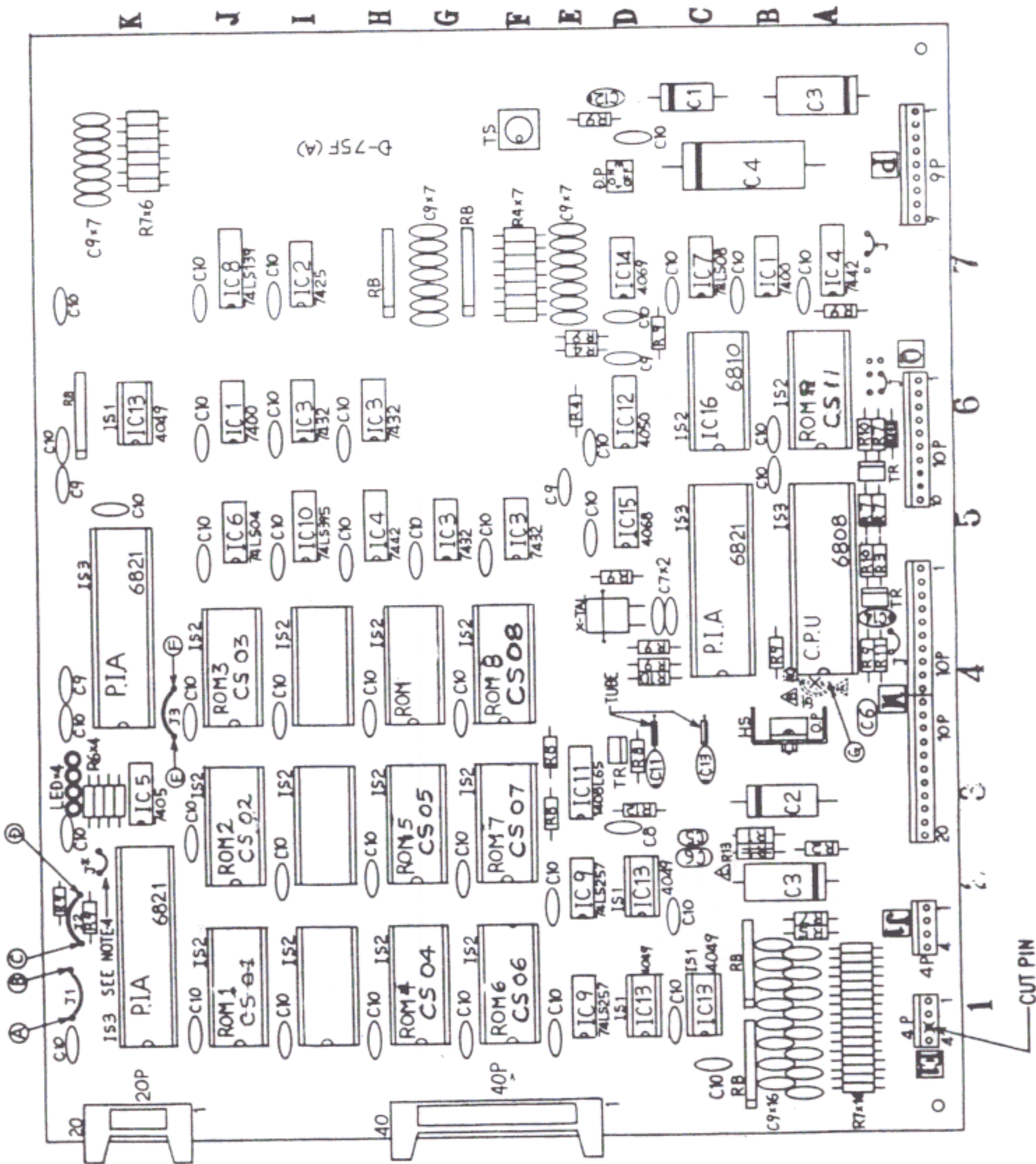
FIGURE 10

SYM	TAITO PART NO.	DESCRIPTION
	DF070016	GAME PC BOARD
4P	DR090016	Friction Lock Wafer, 4P
9P	DR090018	Friction Lock Wafer, 9P
10P	DR090019	Friction Lock Wafer, 10P
20P	DF090023	Angle Pin Header, 20P
40P	DF090024	Angle Pin Header, 40P
E1	AA017627	Connector Sticker, E1
J1	AA017639	Connector Sticker, J1
M	AA017647	Connector Sticker, M
P	AA017653	Connector Sticker, P
Q	AA017656	Connector Sticker, Q
D.P.	AA052575	Dip Switch, DSS3
T.S.	AA052578	Tact Switch
IS1	AA055786	IC-Socket, 16P
IS2	AA055787	IC-Socket, 24P
IS3	AA055812	IC-Socket, 40P
X-TAL	AA069606	X-TAL, 358 MHZ.
T.R.	AAT11034	Transistor, 2SC509-Y
L.E.D.	AAT12022	L.E.D. TLR102
ZD	AAT13039	Zener Diode, 05Z-6.8V
OP	AAT31060	IO Amplifier, LM383
HS	DR040001	Heat Synk TMM6030 Pan Head Screw, M3 x 6 Nut, M3
IC1	AAT32001	TTL-IC, 7400
IC2	AAT32006	TTL-IC, 7425
IC3	AAT32021	TTL-IC, 7432
IC4	AAT32039	TTL-IC, 7442
IC5	AAT32084	TTL-IC, 7405
IC6	AAT33005	KS-IC, 74LS04
IC7	AAT33009	LS-IC, 74LS08
IC8	AAT33097	LS-IC, 74LS139
IC9	AAT33164	LS-IC, 74LS257
IC10	AAT33221	LS-IC, 74LS395
PIA	AAT34014	PIA, 6821
CPU	AAT34018	CPU, 6808
IC11	AAT35016	D-A Converter, 1408L6S
IC12	AAT36051	C-MOS-IC, 4050B
IC13	AAT36068	C-MOS-IC, 4049
IC14	AAT36069	C-MOS-IC, 4069B
IC15	AAT36075	C-MOS-IC, 4068B

SYM	TAITO PART NO.	DESCRIPTION
IC16	AAT32144	Dynamic Ram, 6810
ROM1	16M00003-001	P-ROM (2532) CS01
ROM2	16M00003-002	P-ROM (2532) CS02
ROM3	16M00003-003	P-ROM (2532) CS03
ROM4	16M00003-004	P-ROM (2716) CS04
ROM5	16M00003-005	P-ROM (2716) CS05
ROM6	16M00003-006	P-ROM (2716) CS06
ROM7	16M00003-007	P-ROM (2716) CS07
ROM8	16M00003-008	P-ROM (2716) CS08
ROM11	16M00003-001	P-ROM (2716) CS11
C1	AAT41095	Cap, Electrolytic, 16T100
C2	AAT41098	Cap, Electrolytic, 16T470
C3	AAT41099	Cap, Electrolytic, 16T100
C4	AAT41102	Cap, Electrolytic, 16T4700
C5	AAT41232	Cap, Film TDY-1H-102
C6	AAT41244	Cap, Film TDY-1H-104
C7	AAT41306	Cap, Ceramic, 33PF 50V
C8	AAT41310	Cap, Ceramic, 47PF 50V
C9	AAT41334	Cap, Ceramic, 470PF 50V
C10	AAT41411	Cap, Ceramic, 10000PF 50V
C11	AAT41430	Cap, Tantalum, SSG25-10F
C12	AAT41431	Cap, Tantalum, SSG35-OR1F
C13	AAT41436	Cap, Tantalum, SSG35-1F
C14	AAT41437	Cap, Tantalum, SSG35-2R2F
R1	AAT51049	Res, Carbon 220 OHM ¼W ±5%
R2	AAT51703	Res, Carbon 2.7 OHM ½W ±5%
R3	AAT51717	Res, Carbon 10 OHM ¼W ±5%
R4	AAT51741	Res, Carbon 100 OHM ¼W ±5%
R5	AAT51749	Res, Carbon 220 OHM ¼W ±5%
R6	AAT51753	Res, Carbon 330 OHM ¼W ±5%
R7	AAT51765	Res, Carbon 1K OHM ¼W ±5%
R8	AAT51777	Res, Carbon 33K OHM ¼W ±5%
R9	AAT51781	Res, Carbon 47K OHM ¼W ±5%
R10	AAT51789	Res, Carbon 10K OHM ¼W ±5%
R11	AAT51805	Res, Carbon 47K OHM ¼W ±5%
R12	AAT51849	Res, Carbon 3.3M OHM ¼W ±5%
RB	AAT55048	Resistor Block, 47K OHM 8 Elements Pinned Copper Wire Jumper Wire
R13	AAT51982	Res, Carbon 10 OHM ½W ±5%

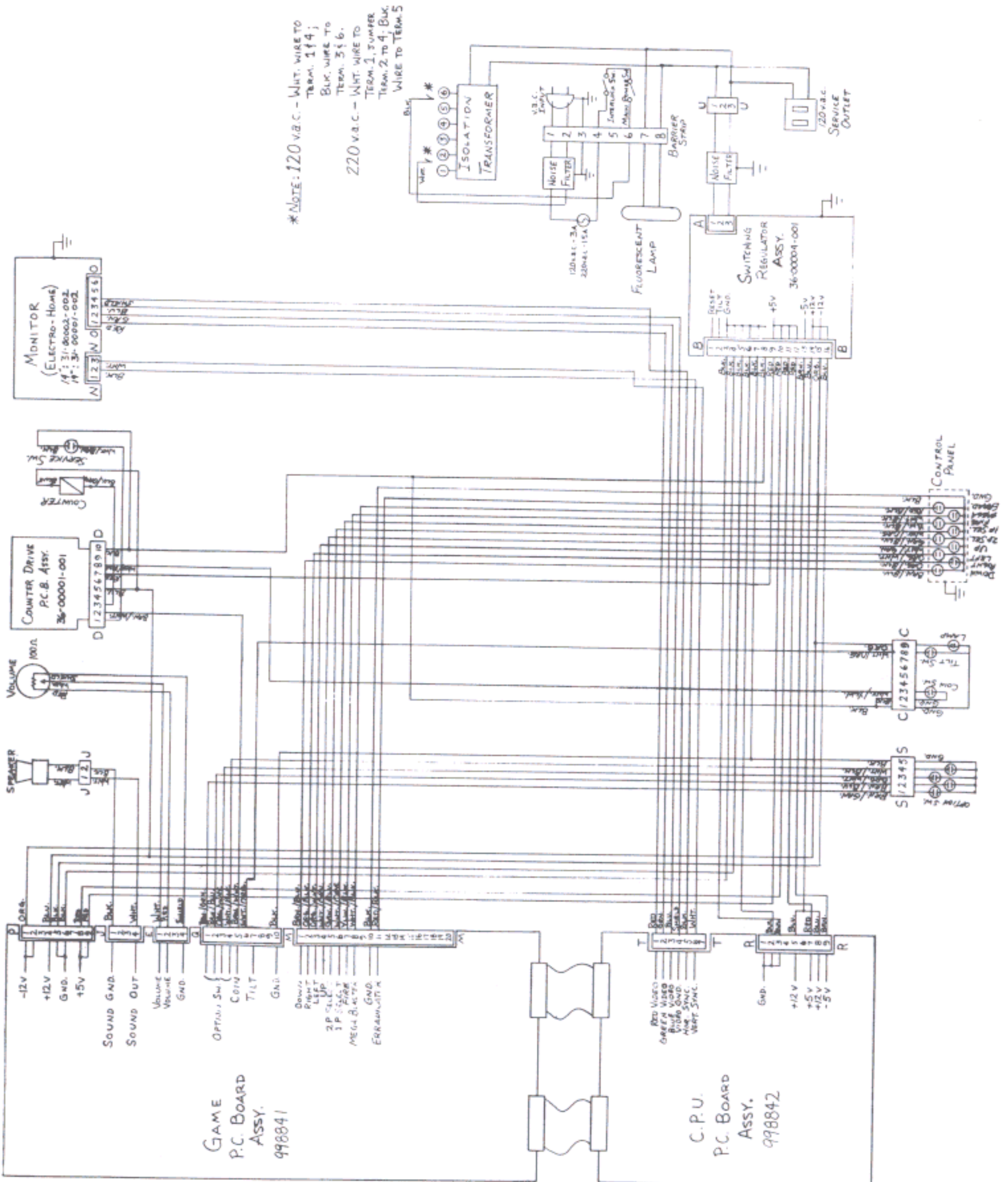
PC GAME BOARD

FIGURE 10



WIRING DIAGRAM

FIGURE 11



GAME BOARD SCHEMATIC

FIGURE 12-1

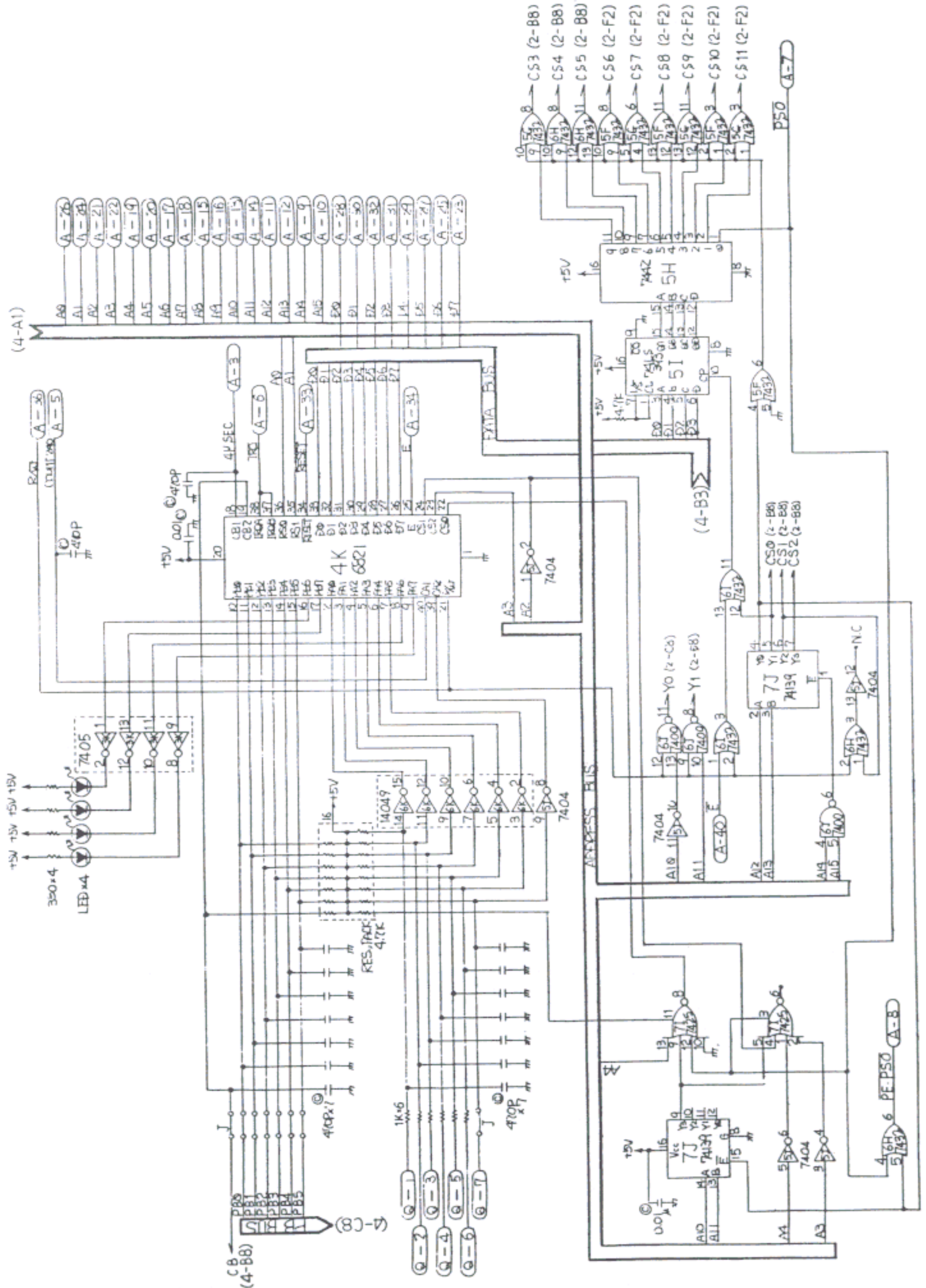


FIGURE 12-2

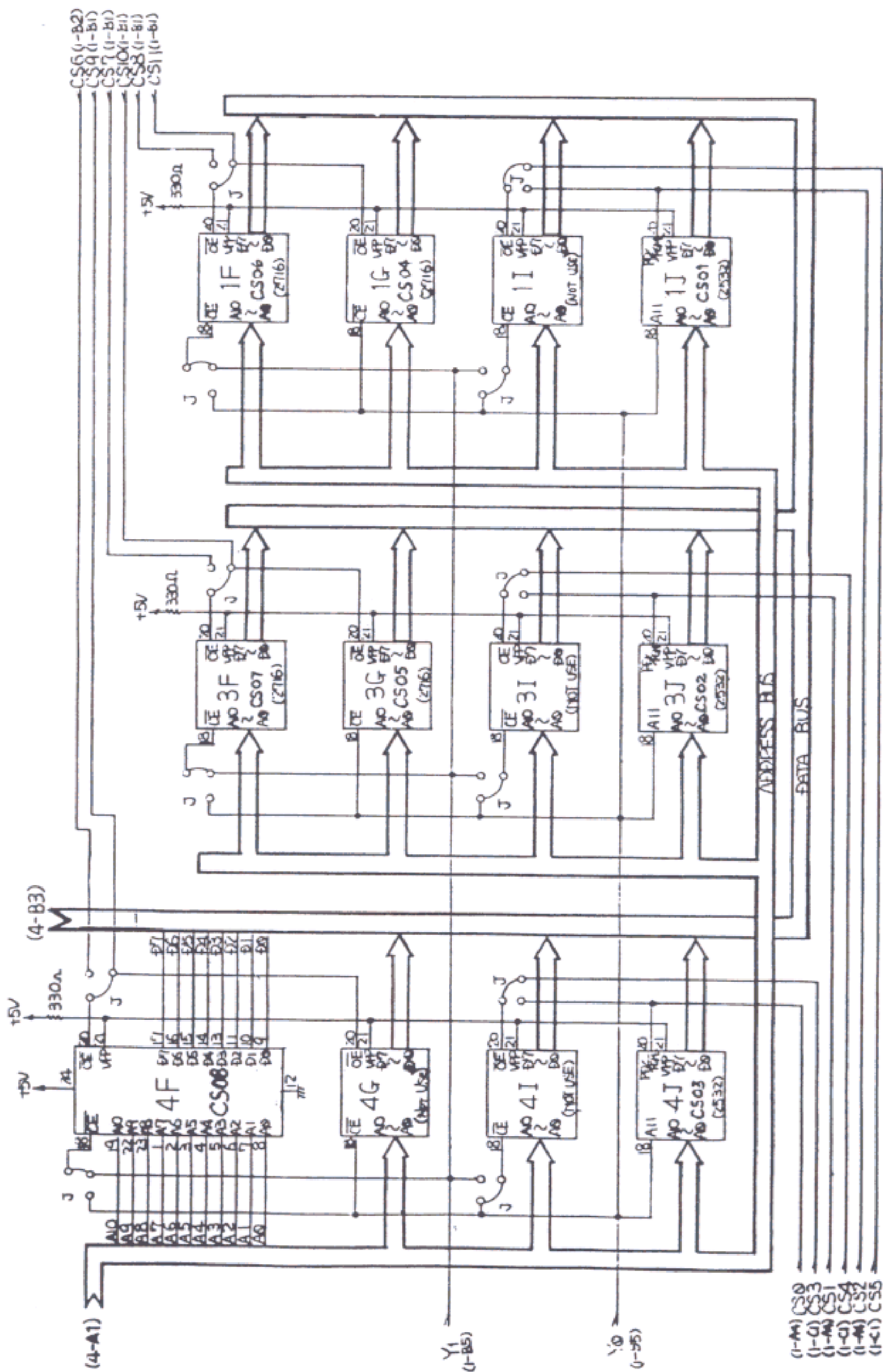
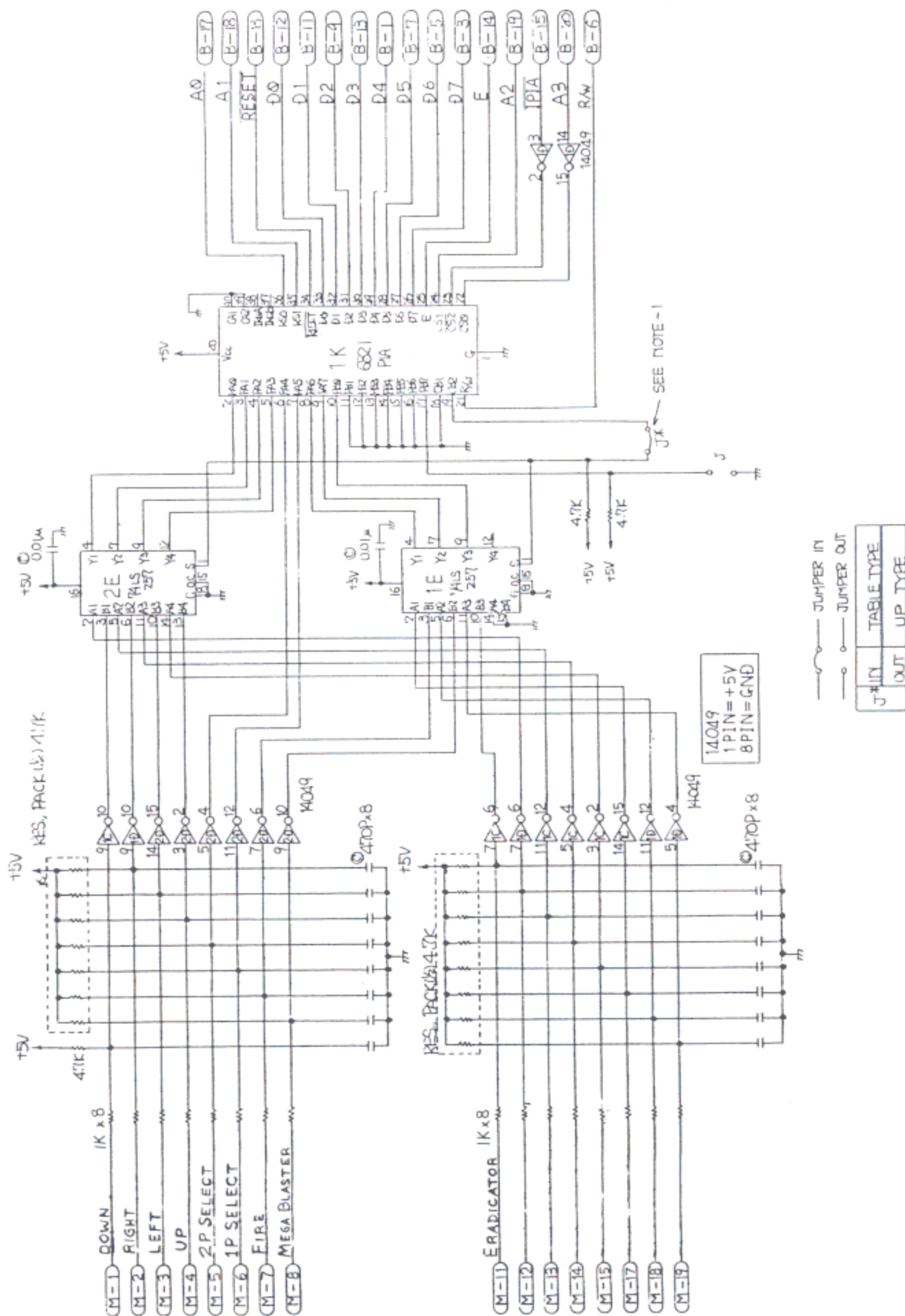


FIGURE 12-3



GAME BOARD SCHEMATIC

FIGURE 12-4

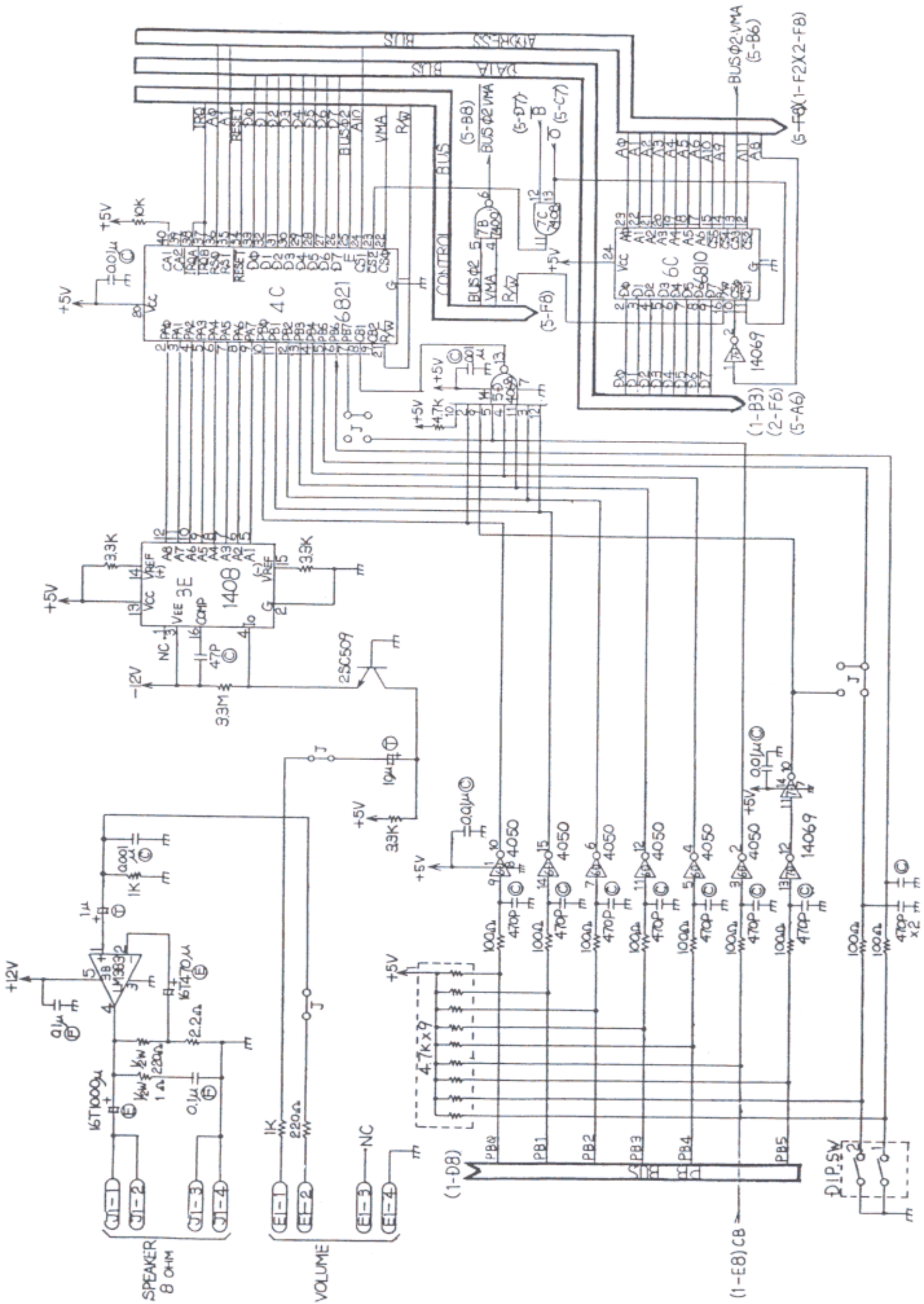


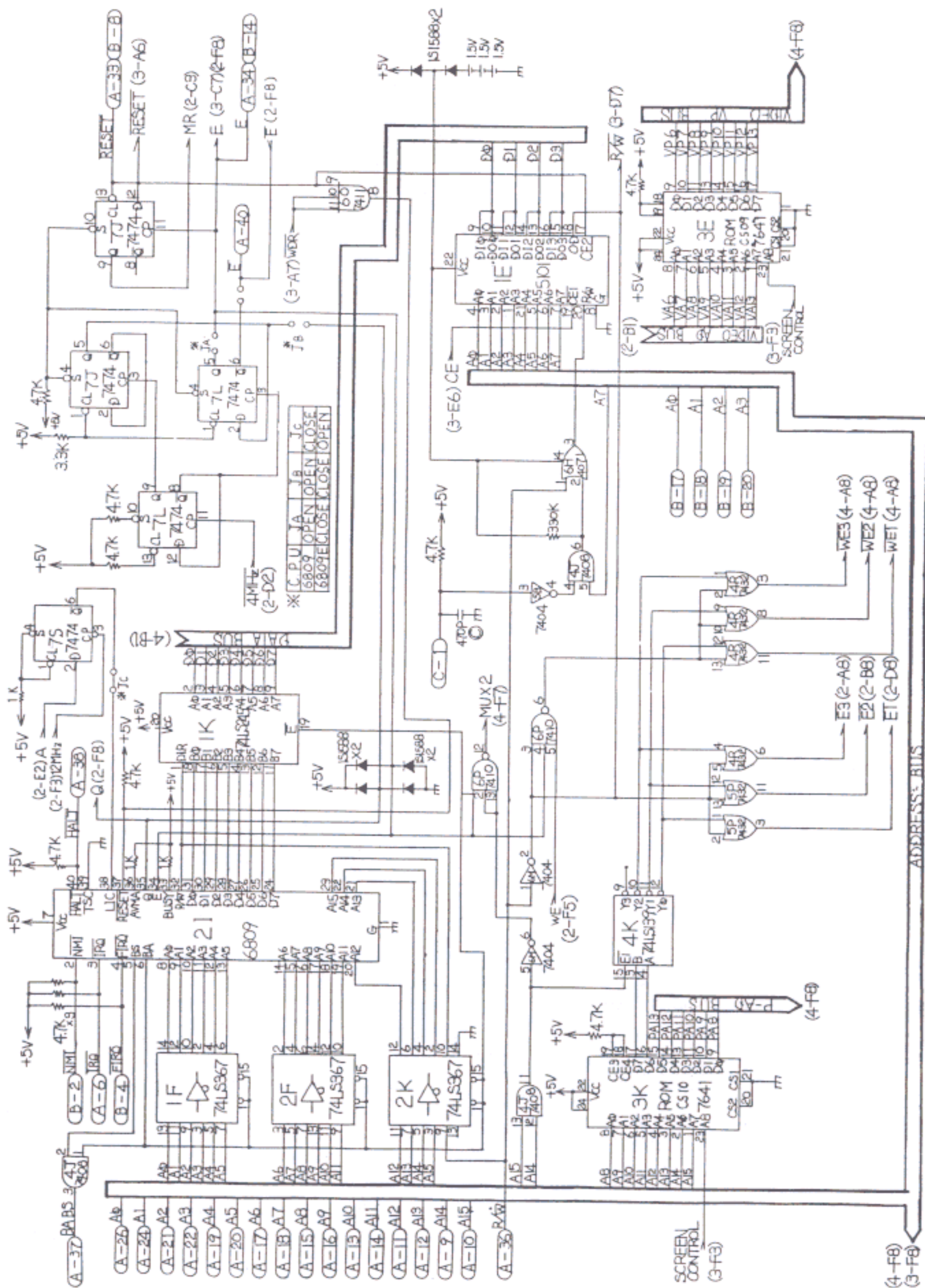
FIGURE 12-5



NOTE-2. SYMBOL. MARK

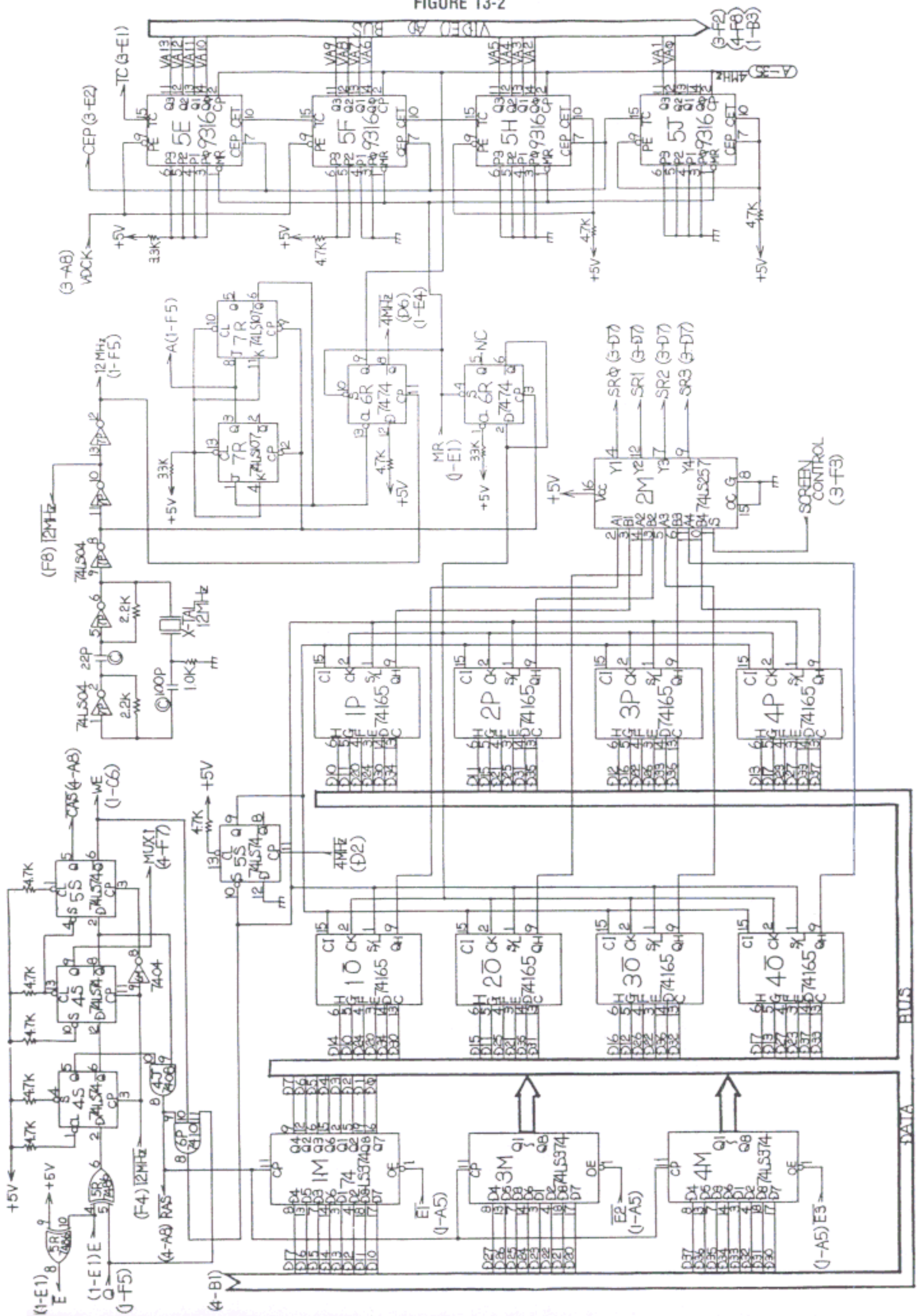
CPU BOARD SCHEMATIC

FIGURE 13-1



CPU BOARD SCHEMATIC

FIGURE 13-2



CPU BOARD SCHEMATIC

FIGURE 13-3

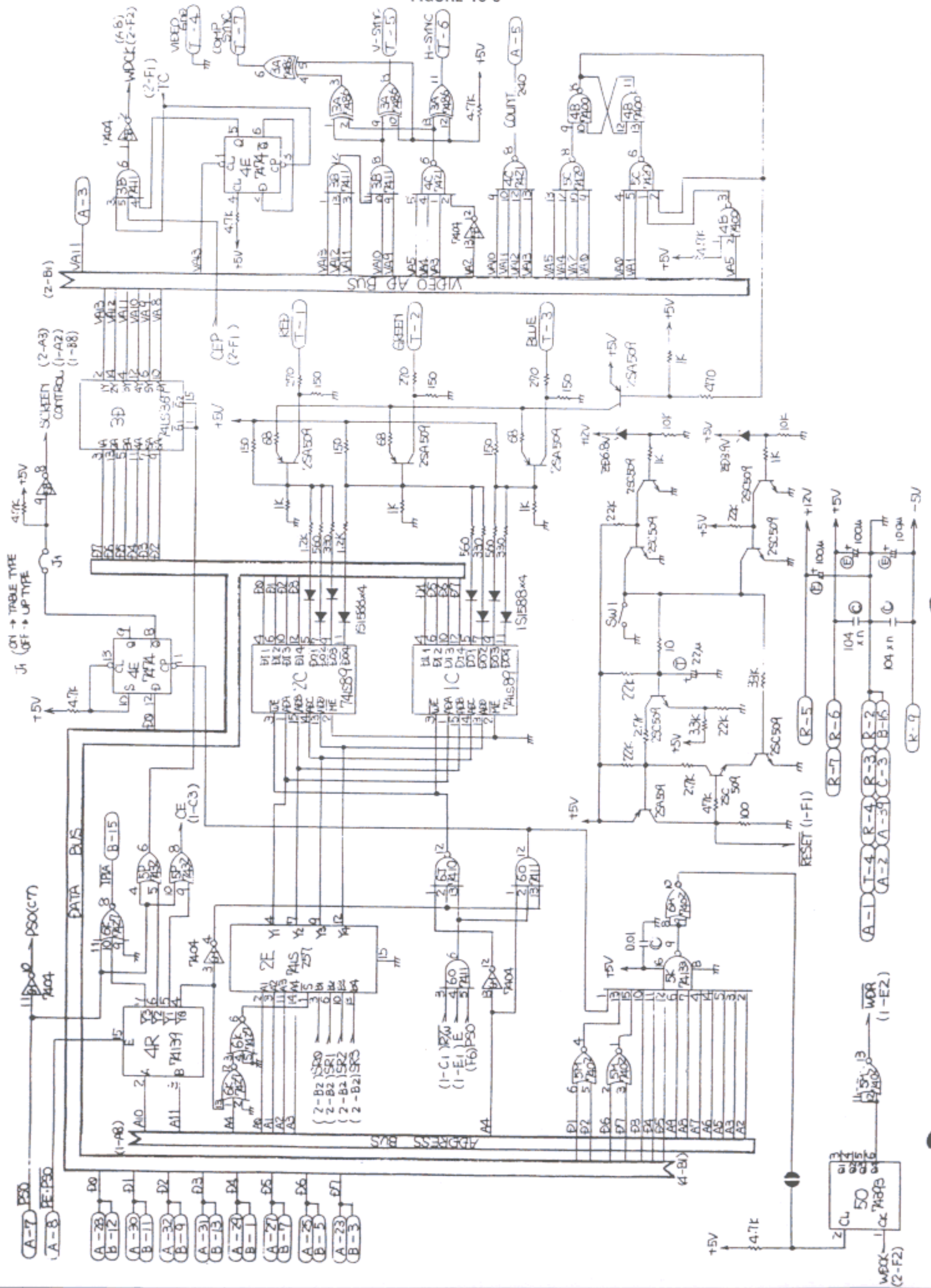


FIGURE 13-4





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