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JUNGLE HUNT

T.M.

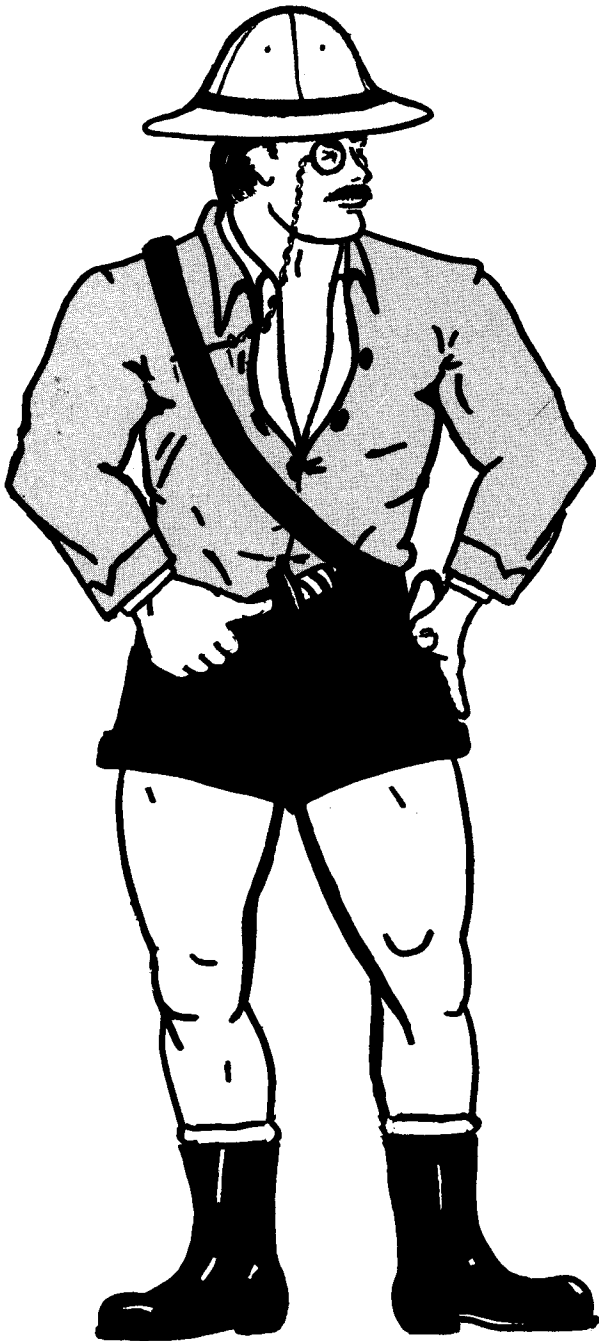


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"JUNGLE HUNT"™ UPRIGHT

1. GAME SET-UP A. INTRODUCTION

"JUNGLE HUNT"™ TAITO AMERICA CORPORATION'S "JUNGLE HUNT" game takes you deep into the jungle as "Jungle Hunter" leaps from rope to rope, swims through a crocodile infested river, dodges falling boulders to save a beautiful girl who has been captured by barbarians.

As the ropes swing from left to right, time the swinging movements and push the Button to jump from rope to rope. Be careful of the monkeys that try to hamper your progress.

Swing from the last rope and dive into the crocodile infested river. Push the Button to destroy the crocodiles with your knife and earn bonus points. Watch your air supply or your Jungle Hunter will drown when the meter reaches "0".

Make it through the river safely - now run up the hill and jump over or duck under the falling boulders and find the beautiful Jungle Princess who is guarded by hostile barbarians.

Use the Joystick Control and Button to jump over the barbarians and save the beautiful girl from her dangerous captors.

An extra Jungle Hunter will be awarded when scoring 10,000 (adjustable) points. The game ends when all Jungle Hunters are lost or the game timer reaches "0".

B. GAME INSPECTION

TAITO AMERICA CORPORATION'S "JUNGLE HUNT"™ 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 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 (72-00025-001).

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 "JUNGLE HUNT"™ 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 receptacle, 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 "JUNGLE HUNT"™ upright game provides the following option switches. See Figure 1. These option switches can be found on the CPU Board (99KNN00004).

DIP SWITCH A

| Setting | Position | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------------|-------------------------|-----|-----|---|-----|-----|-----|-----|-----|
| Last | No Bonus | OFF | OFF | | | | | | |
| Frame | Timer Remaining Fig x 1 | ON | OFF | | | | | | |
| Clearing | Timer Remaining Fig x 2 | OFF | ON | | | | | | |
| Bonus | Timer Remaining Fig x 3 | ON | ON | | | | | | |
| Number of Jungle Hunters | 3 | | | | OFF | OFF | | | |
| | 4 | | | | ON | OFF | | | |
| | 5 | | | | OFF | ON | | | |
| | 6 | | | | ON | ON | | | |
| Test Mode | Normal | | | | | | OFF | | |
| | Test | | | | | | ON | | |
| Screen | 2-P | | | | | | | OFF | |
| Inversion | 1-P | | | | | | | ON | |
| Game | TT | | | | | | | | OFF |
| Style | Upright | | | | | | | | ON |

DIP SWITCH B

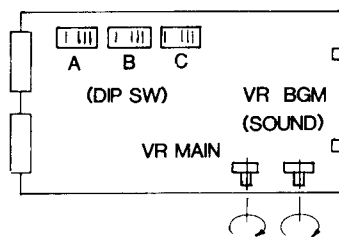
| Setting | Position | 1 Way | | | | 2 Ways | | | |
|------------------|----------|-------|-----|----|-----|--------|-----|----|-----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 Coin - 1 Play | | ON | ON | ON | ON | ON | ON | ON | ON |
| 1 Coin - 2 Plays | | OFF | ON | ON | ON | OFF | ON | ON | ON |
| 1 Coin - 3 Plays | | ON | OFF | ON | ON | ON | OFF | ON | ON |
| 2 Coins - 1 Play | | ON | ON | ON | OFF | ON | ON | ON | OFF |
| 3 Coins - 1 Play | | OFF | ON | ON | OFF | OFF | ON | ON | OFF |
| 4 Coins - 1 Play | | ON | OFF | ON | OFF | ON | OFF | ON | OFF |

DIP SWITCH C

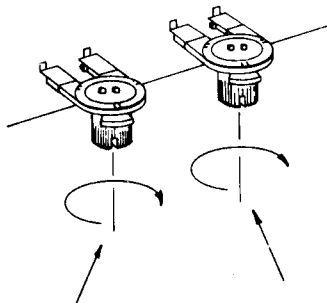
| Setting | Position | 1 | 2 | 6 | 7 | 8 |
|---|-------------|-----|-----|-----|-----|-----|
| Bonus Points For Additional Jungle Hunter | (Not Added) | OFF | OFF | | | |
| | 10,000 Pts. | ON | OFF | | | |
| | 20,000 Pts. | OFF | ON | | | |
| Year Display "1982" | Display | | | OFF | | |
| | Not Display | | | ON | | |
| No Hit Of Player | Normal | | | | OFF | |
| | No Hit | | | | ON | |
| Coinage | 2 Ways | | | | | OFF |
| | 1 Way | | | | | ON |

Note: The Positions 3, 4, and 5 are not used in this game.

OPTION SWITCHES FIGURE 1



VOLUME CONTROL LOCATIONS FIGURE 2



VOLUME CONTROL SETTING

The Volume increases by turning the potentiometer as indicated in Figure 2.

E. TEST MODE

The following will be seen on the CRT screen while testing.

| | |
|--|---|
| Normal Blue Background White Letters | 'RAM TEST NO RAM FAILURE' |
| No Letters Blue Background | IC14, 56 on bottom of CPU board |
| Letters On Background will be strange colors | IC104 thru 109 Center of Video Board |

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.

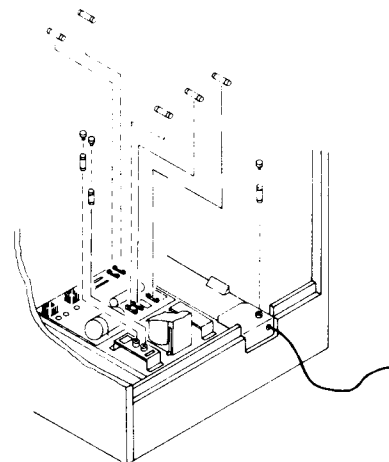
A. CLEANING

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 contains 8 fuses. Seven of these fuses can be found on the Power Supply Assembly, five (5) are on the PCB and two (2) are on the Power Supply Bracket. One (1) is located at the bracket where the AC line cord comes into the cabinet. See Figure (4) for location of these fuses.

FUSE REPLACEMENT FIGURE 3



C. VIDEO MONITOR REMOVAL

If you need to remove the Video Monitor, follow the Instructions listed below.

CAUTION

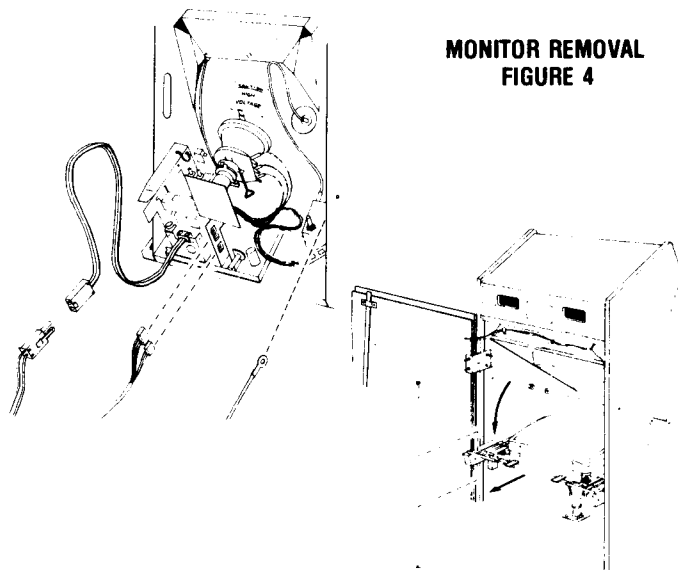
It is recommended the game be left disconnected for at least one hour before removing the Video Monitor. This will probably discharge the Video Tube but **EXTREME CAUTION** is still necessary.

- * Disconnect 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 in order to lower the monitor.
- * 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.

MONITOR REMOVAL FIGURE 4



D. VIDEO MONITOR ADJUSTMENTS

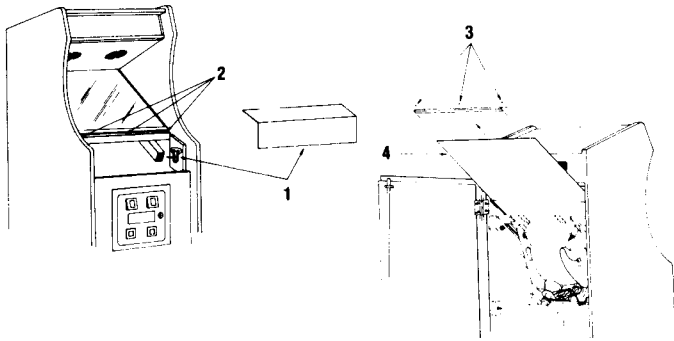
TAITO AMERICA CORPORATION presently uses either a Wells-Gardner or an Electrohome 19" color monitor in the "JUNGLE HUNT"™ game. Refer to Monitor Manual (72-00025-001) for your specific Video Monitor. Be sure to heed all the WARNINGS AND CAUTION INSTRUCTIONS provided before repairing or replacing your Video Monitor.

E. COVER GLASS REMOVAL

To remove the Cover Glass follow the Instructions listed below:

1. Remove the control Panel.
2. Loosen three (3) screws on the Cover Glass, front bracket.
3. Open Service Door and remove the (Rear) Cover Glass Bracket.
4. Slide glass up and out through the Service Door.

**COVER GLASS REMOVAL
FIGURE 5**



F. PRINTED CIRCUIT BOARD REPLACEMENT

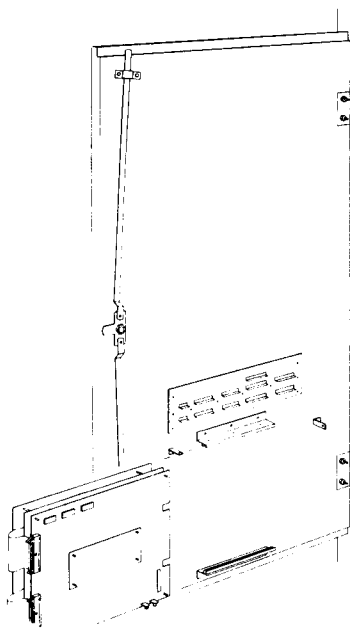
You may wish to remove the "JUNGLE HUNT"™ Printed Circuit Boards for servicing. Refer to Figure 6.

The "JUNGLE HUNT" Printed Circuit Boards are located on the inside of the Rear Service Door for easy access.

To remove the boards the following steps should be followed:

1. Open the rear service door, the power will automatically be removed by the Interlock Switch located on the inside of the door frame.
2. Disconnect the connector G, H, and T from the boards.
3. Loosen and turn the Stop Bracket and pull the boards toward you out of the board guides.

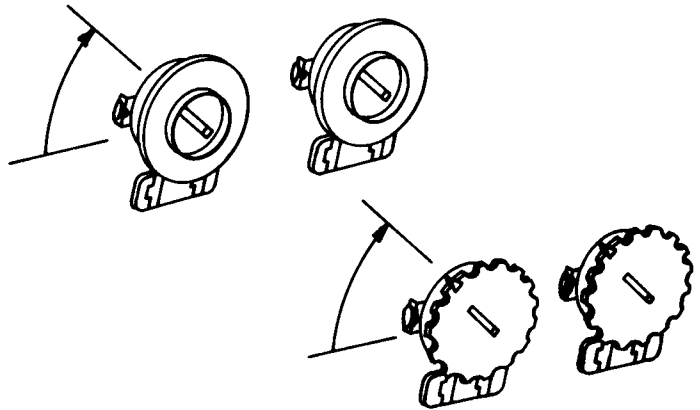
**PRINTED CIRCUIT BOARD REPLACEMENT
FIGURE 6**



G. POWER SUPPLY ADJUSTMENTS

VOLTAGE Adjust voltages on +5V and +12V for +5.00V to +5.05V and +12.00V to +12.05V.

CURRENT LIMIT Adjust control (5I and 12I) counterclockwise until voltage just changes, then turn control clockwise until voltage goes back to original value with pointer, mark position of arrow on potentiometer then turn control until beginning of 1st notch is aligned with the pointer. On the controls with the Blue Disk turn approximately 30°.



**CURRENT LIMIT ADJUSTMENT
FIGURE 7**

NOTE: If Voltage adjustment will not bring voltage up, set current limit adjustment to 1/2 value.

CMOS RAM

If when powering the game up, it will not coin up because the battery is low. The following Procedure should be followed. Open the Back Door of the game, pull W1 out on the Video Board (Blue jumper). Wait 2 minutes, power back on and insert W1 back in. Open the Coin Door and pull out bottom Interlock Switch. If the Language Select frame does not come on the CRT, power down, remove W1 again. Short pins 18 and 9 on U85, power back on and insert W1 back in. Leave the game on for 12 hours. If this Procedure does not work when you turn the game back on the battery may need to be replaced.

3. POWER SUPPLY

The Power Supply produces all the necessary game voltage requirements.

A. AC INPUT

The AC Input Voltage is applied to the main Power Supply via the AC Line Cords, Line Filter, Line Fuse, Power Switch and Interlock Switch. Different Line Cords are used for 120V and for 240V. The Line Fuse is located on the Line Cord Assembly near the Strain Relief. A Voltage Programming Block is located on the primary side of the Transformer to compensate for high/low voltage conditions. The following line voltages may be inserting the appropriate Programming Plug.

| Line Voltage | | Line Fuse |
|-------------------|---------|-----------|
| 100 VAC \pm 10% | 50/60Hz | 3 AMP |
| 120 VAC \pm 10% | 50/60Hz | 3 AMP |
| 200 VAC \pm 10% | 50/60Hz | 1.5 AMP |
| 220 VAC \pm 10% | 50/60Hz | 1.5 AMP |
| 240 VAC \pm 10% | 50/60Hz | 1.5 AMP |

TABLE 3-1 LINE VOLTAGE

CAUTION

For continuous protection against fire hazard, replace only with a fuse of the same type having the same electrical rating.

There are five secondary sources. Three go to the Regulator PCB providing +5VDC, +12VDC, -12VDC, and -5VDC. The other two are fused 6.3VAC used for the incandescent lighting and fused 120VAC used for the monitor, and in certain models for a fluorescent lamp and fan. These secondary fuses are located on the bracket adjacent to the Power Transformer.

| Circuit | Secondary Fuse |
|---------|----------------|
| 120VAC | 2.0AMP SLO-BLO |
| 6.3VAC | 2.5AMP |

TABLE 3-2 SECONDARY FUSES

B. -5VDC AND -12VDC REGULATORS

The AC Input for the negative voltages comes into the Regulator PCB on J1-5 and J1-6 from the transformer. Fuse F3 protects against short circuits. The AC voltage is then full wave rectified by BR3 and filtered by C16. The raw DC is then applied to Reg 1, a three terminal -12V Regulator. The output of this Regulator is the -12VDC output for the system and is also the input voltage for Reg 2, a -5V Regulator. The output of this Regulator is the -5VDC for the system.

Capacitors C17, C18, C19 are to improve the transient response and stability of the minus voltage regulator. Diodes D8 and D9 provide protection against C18 and C19 being shorted through the Regulator.

Resistors R34 and R35 provide current limiting for LED'S 3 and 4 which will light when there is voltage present at the regulation outputs.

C. +5VDC REGULATOR

The AC Input for the +5VDC Regulator circuit comes in on J1-4 and J1-2, via F1 into BR1. BR1 full wave rectifies the AC Input. This raw DC is applied to the collectors of (2) series pass transistors, mounted on the Heat Sink Assembly. The regulation is done by U3, which is a voltage regulator whose output controls the gain of Q5, which in turn controls the gain of the series pass transistors. The emitter of the series pass transistor return to the Regulators PCB and through R11 and R12, which serve to force current sharing between the series pass devices. The voltage at the output of R11 and R12 are the +5VDC for the system. R11 and R12 are voltage set and current foldback adjustments respectively. These are factory adjusted to $5V \pm .25V$. at 7AMPS.

Q8, D3 and R20 comprise a SCR-Type Crowbar Circuit which will trigger when the DC output voltages rise above 5.8V. Once the SCR fires, the Power Supply has to be turned off to reset the device. R19 is a current limiter for the voltage indicator LED 1. R16 is used to set the output voltage of the Regulator.

C8, D2, R13 and Q4 delay the start-up of the 5V Regulator to allow the -5VDC Regulator to stabilize first.

D. +12VDC REGULATOR

This circuit is essentially the same as the 5V Regulator described above. The AC current comes in on J1-3 and J1-4, via fuse F2 into BR2. The AC is rectified by BR2 and filtered by C9. The raw DC is fed to a single series pass transistor on the Heat Sink Assembly and also powers the +12V and +5V Regulator. R28 and R25 are voltage set and current foldback and factory adjusted to 12 Volts $\pm .25V$ at 4 AMPS. D7, Q9, and R31 are SCR Crowbar Circuits which trigger at 13VDC output which causes supply to go into current foldback. There is an RC delay as in the 5V circuit to delay the +12V rise time.

E. RESET CIRCUIT

The reset circuit will output a 2sec active low MRST pulse at J3-14 J4-14 when the power is first turned ON and whenever power fails for more than 35ms.

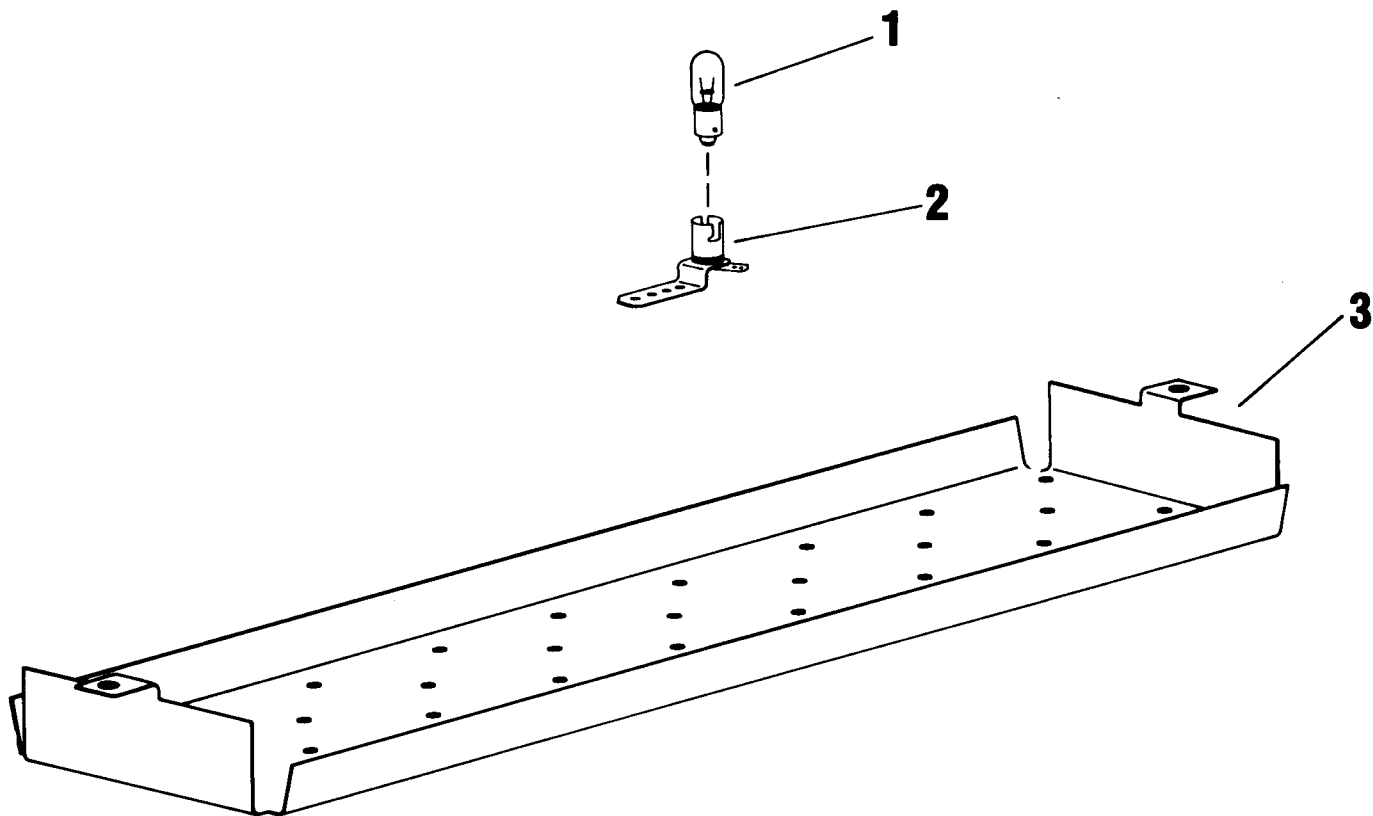
The reset circuitry is comprised of a Dual Timer (556) and a fullwave type optical coupler across an AC secondary. The output of U1 is the input to one half of the 556 which is configured as a missing pulse detector. C1 and R3 determine the time before the output goes active. This is set for about 35ms. When two or more cycles are missing, the output of the first timer triggers the second timer which drives the MRST low for about 2 seconds. The timer constant for the second timer is set by R4 and C6.

Power on reset is generated by C4, and R39 and D12 on the trigger input of the second timer. Q3 inverts the signal out of the 556 so it is active low. R7 insures MRST is low while the power is rising.

INCANDESCENT PANEL

FIGURE 8

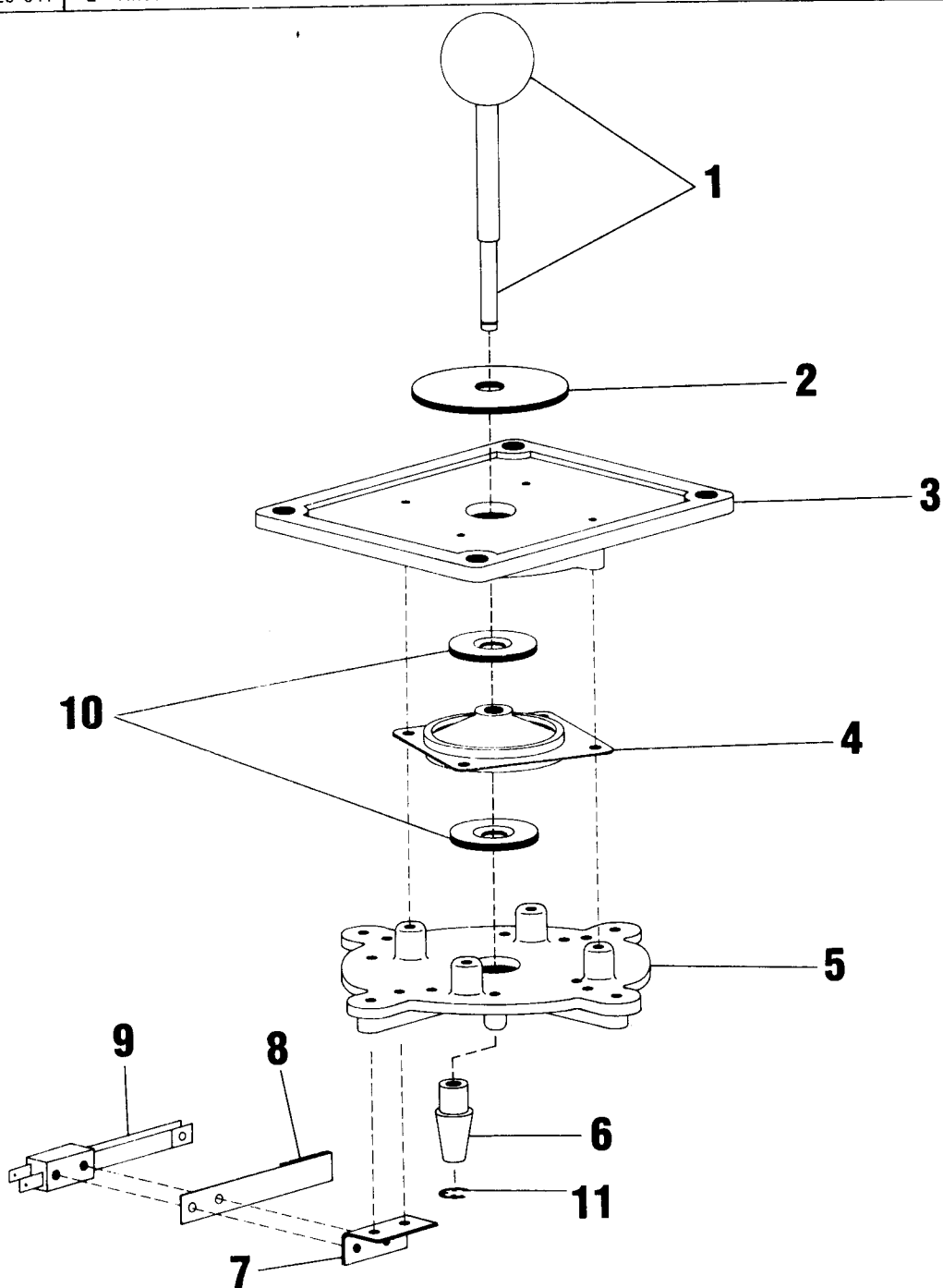
| ITEM | TAITO PART NO. | DESCRIPTION |
|------|----------------|------------------------|
| 1 | 27-00006-001 | LAMP #47 |
| 2 | 26B00009-001 | BAYONET BASE SOCKET |
| 3 | 61D00112-001 | MARQUEE LIGHTING PLATE |



8-WAY JOYSTICK

FIGURE 9

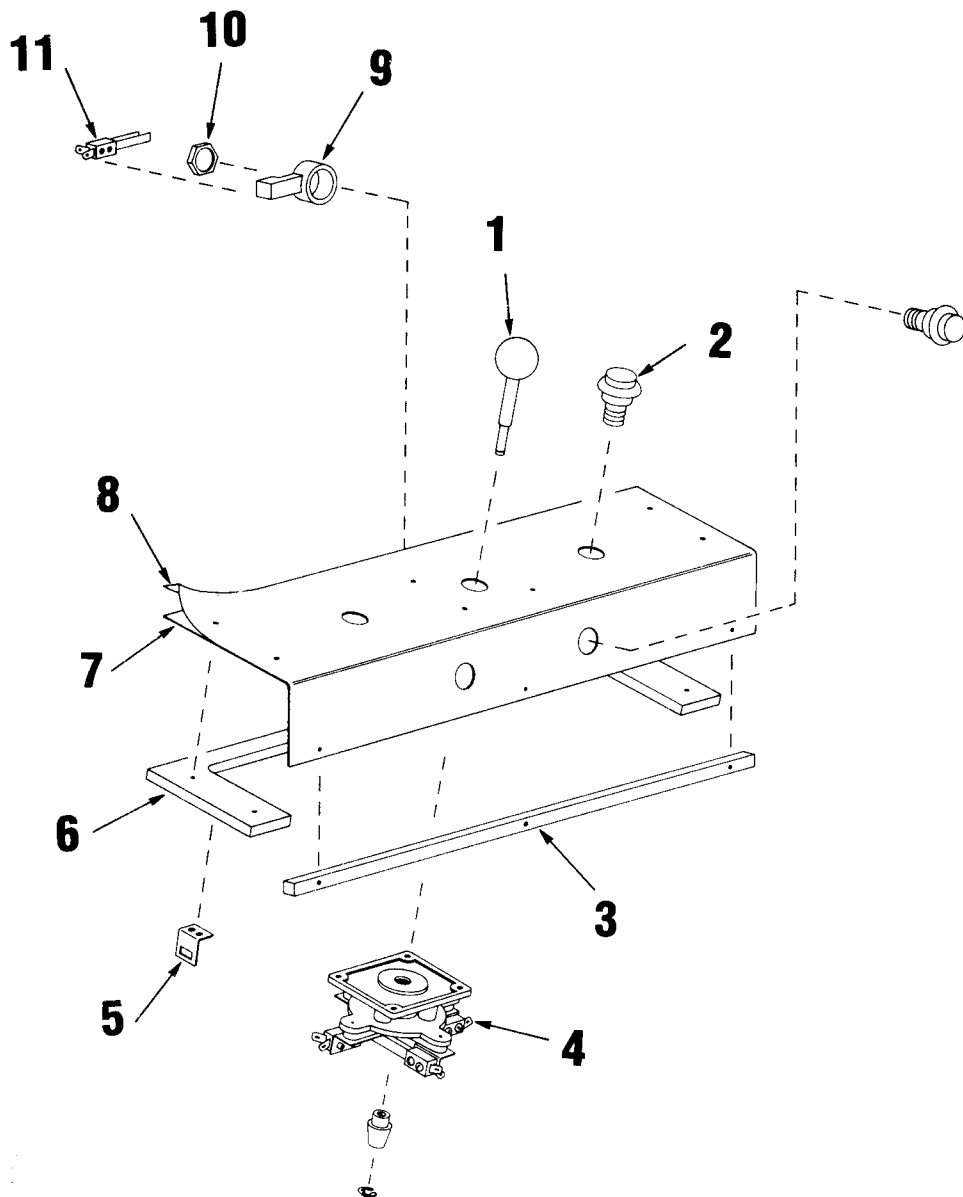
| ITEM | TAITO PART NO. | DESCRIPTION |
|------|----------------|-----------------|
| 1 | 63B00031-001 | BALL & SHAFT |
| 2 | 63A00033-001 | MASK |
| 3 | 63C00027-001 | MOUNTING PLATE |
| 4 | 62A00002-001 | SHOCK MOUNT PAD |
| 5 | 63A00028-001 | SWITCH PLATE |
| 6 | 62A00030-001 | ACTUATOR |
| 7 | 61A00078-001 | "L" BRACKET |
| 8 | 63A00026-001 | SWITCH SPACER |
| 9 | 29B00016-002 | LEAF SWITCH |
| 10 | 63A00029-001 | SPACER |
| 11 | 59B00020-017 | "E" RING |



CONTROL PANEL

FIGURE 10

| ITEM | TAITO PART NO. | DESCRIPTION |
|------|----------------|----------------------|
| 1 | 63B00031-001 | BALL & SHAFT |
| 2 | 63B00024-001 | PUSH BUTTON, WHITE |
| 3 | 42B00108-001 | CLEAT, WOOD |
| 4 | 63D00032-006 | 8-WAY CONTROL |
| 5 | 61A00015-001 | STRIKE HOOK |
| 6 | 42D00017-001 | CONTROL PANEL, WOOD |
| 7 | 61D00251-001 | CONTROL PANEL, METAL |
| 8 | 63D00096-001 | LEXAN DECAL |
| 9 | 63-00025-001 | SWITCH SUPPORT |
| 10 | 54A07001-008 | NUT, STAMPED 5/8-11 |
| 11 | 29B00016-001 | LEAF SWITCH |



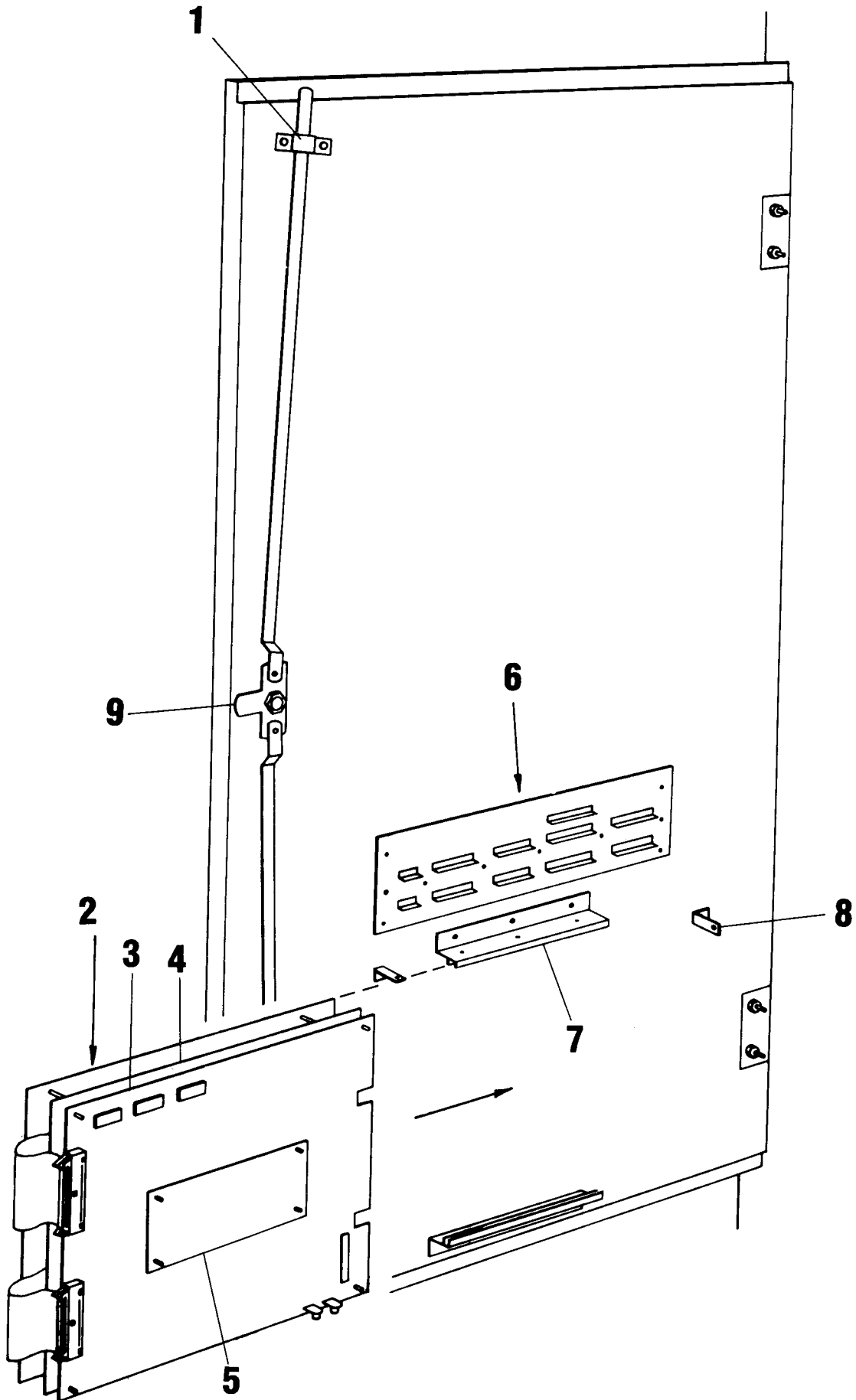
DOOR ASSEMBLY**FIGURE 11**

| ITEM | TAITO PART NO. | DESCRIPTION |
|-------------|---------------------------|----------------------------------|
| 1 | 61A00111-001 | BRACKET, LOCK ROD |
| 2 | 99KNN00003 | GAME P.C.B. |
| 3 | 99KNN00004 | CPU P.C.B. |
| 4 | 99WW00002 | VIDEO P.C.B. |
| 5 | 99KNN00005 | ROM P.C.B. |
| 6 | 08-00017-001 | FILTER P.C.B. |
| 7 | 07-00131-001 | P.C. GUIDE ASSEMBLY |
| 8 | 61A00014-001 | "L" BRACKET |
| 9 | 61-00142-001 | LOCK ROD ASSEMBLY |
| *10 | 08-00053-001 | BOARD SET CONTAINS ITEMS 2,3,4,5 |

*Item not shown on drawing

DOOR ASSEMBLY

FIGURE 11



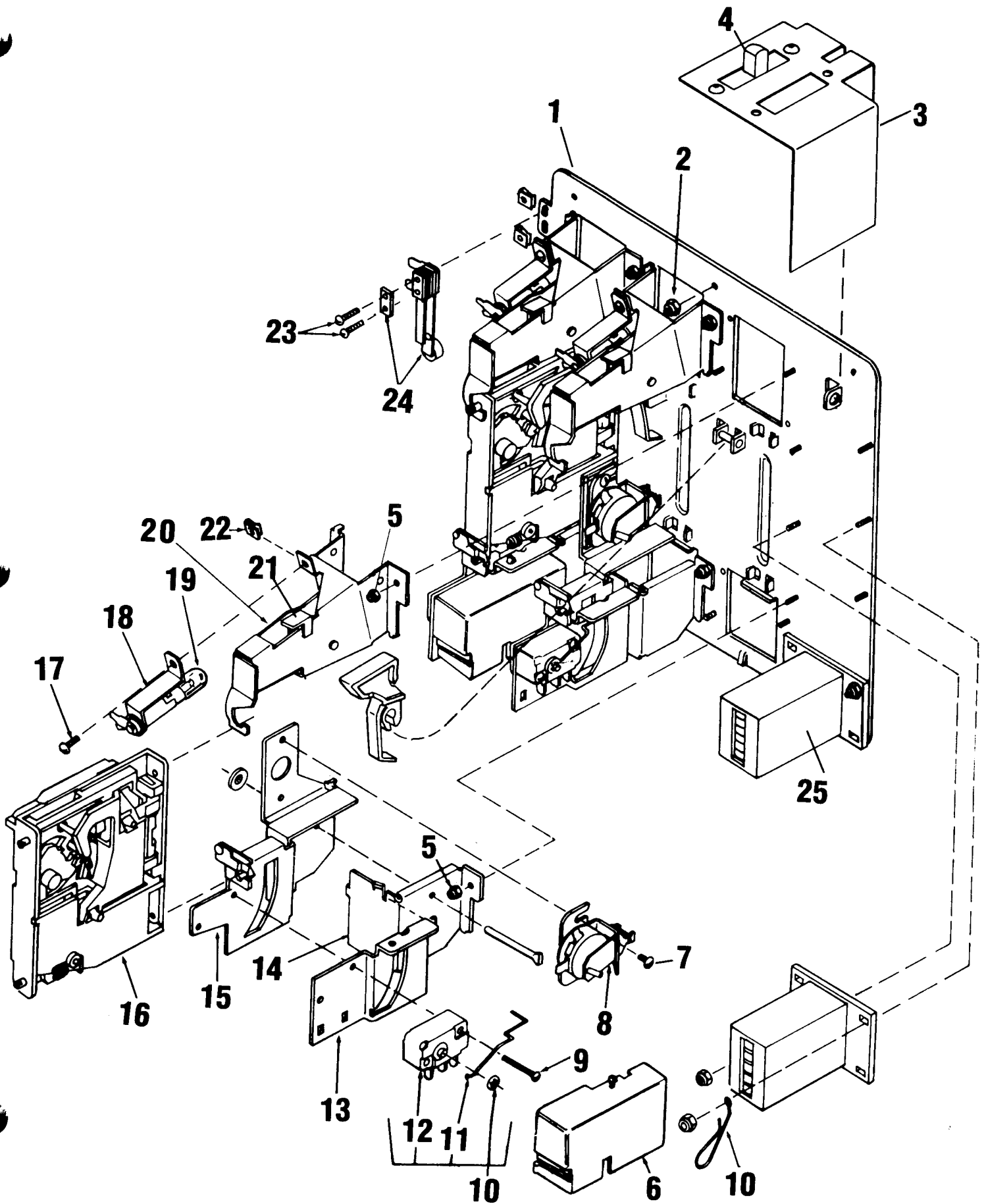
COIN DOOR**FIGURE 12**

| ITEM | TAITO PART NO. | DESCRIPTION |
|-------------|-----------------------|--------------------------------------|
| 1 | 07-00027-001 | INNER PANEL WITH LEVERS SUB ASSEMBLY |
| 2 | 54-03013-001 | NUT #8-32 |
| * | 09-00017-001 | CUSTOM HARNESS ASSEMBLY (SHL) |
| * | 09-00017-002 | CUSTOM HARNESS ASSEMBLY (DUAL) |
| 3 | 61b00113-001 | SERVICE SWITCH BRACKET |
| 4 | 29-00022-001 | SERVICE SWITCH |
| 5 | 54-03011-001 | NUT #4-40 |
| 6 | 63-00014-001 | SWITCH COVER |
| 7 | 51-02052-001 | SCREW #6-32 x 3/16 SS PH |
| 8 | 23-00001-001 | C.R.E.M. COIL ASSEMBLY |
| 9 | 51-02052-001 | SCREW #6-32 X 3/16 SS PH |
| 10 | 59-00019-001 | RETAINER |
| 11 | 28-00029-001 | SILVER SWITCH WIRE FOR U.S. .25 |
| 12 | 29-00007-001 | SWITCH |
| 13 | 61-00044-001 | COIN CHUTE |
| 14 | 61-00045-001 | COIN RETURN BOX |
| 15 | 61-00025-001 | SWITCH & C.R.E.M. COIL BRACKET |
| 16 | 59-00018-001 | .25 ACCEPTOR |
| 17 | 51-02051-006 | SCREW 4-40 X 3/8 SS PH |
| 18 | 27-00003-001 | MINATURE BAYONET BASE LAMP |
| 19 | 27-00008-001 | #815 LAMP |
| 20 | 61-0048-001 | COIN INLET CHUTE |
| 21 | 61-00047-001 | RIGHT HALF OF COIN INLET CHUTE |
| 22 | 54-00001-001 | "U" TYPE FASTENER |
| 23 | 51-02051-006 | SCREW 4-40 X 1/2 SS PH |
| 24 | 29-00006-001 | SLAM SWITCH ASSEMBLY |
| 25 | 998325 | COIN METER |

*Item not shown on drawing.

COIN DOOR

FIGURE 12

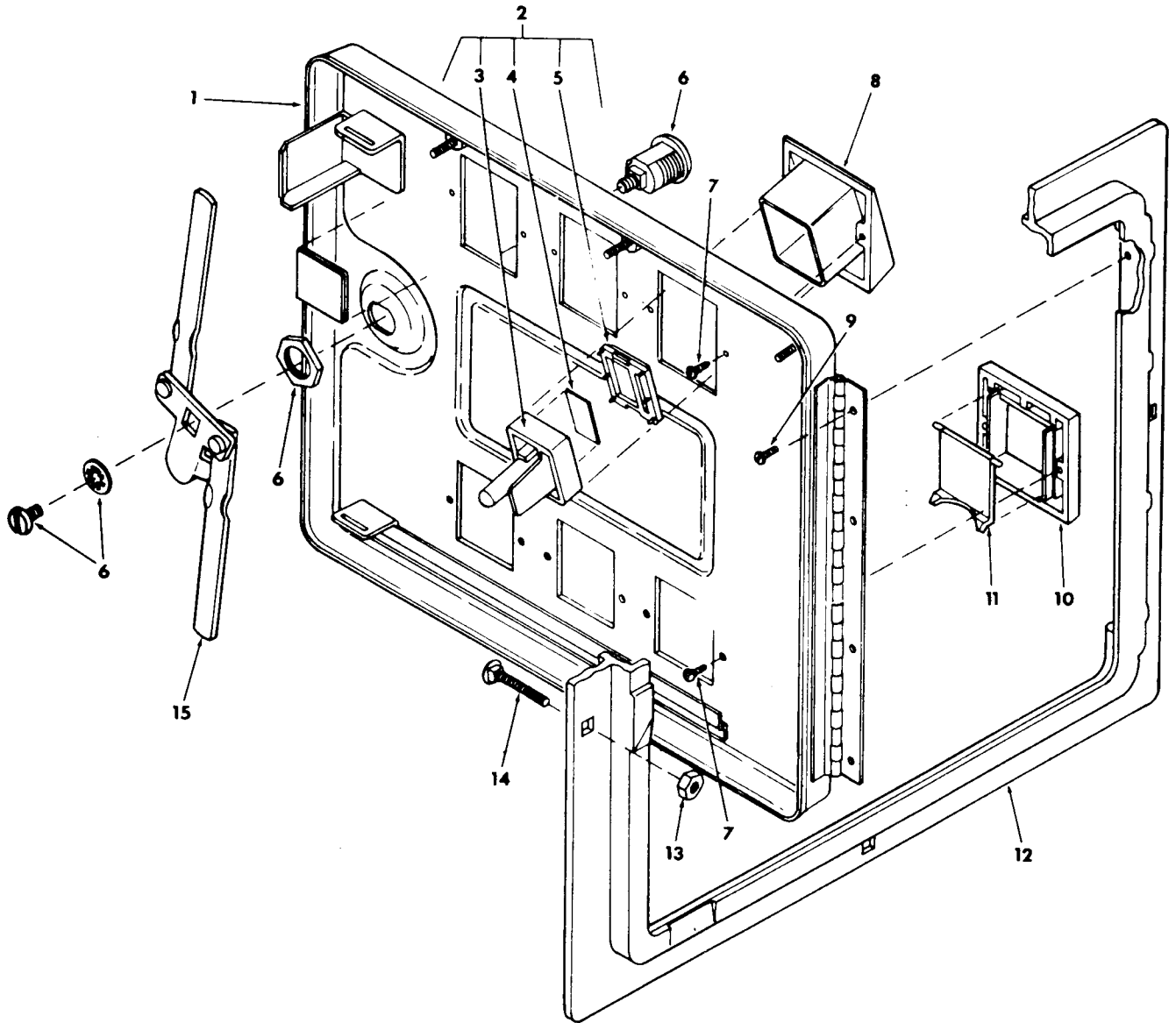


COIN DOOR**FIGURE 13**

| ITEM | TAITO PART NO. | DESCRIPTION |
|-------------|---------------------------|---|
| 1 | 61-00042-001 | COIN DOOR ONLY (2 COIN) |
| 2 | 07-00023-001 | COIN RETURN BUTTON ASSEMBLY FOR U.S. .25 COIN |
| 3 | 63-00015-001 | COIN RETURN BUTTON |
| 4 | 79-50004-001 | U.S. .25 PRICE DECAL |
| 5 | 63-00016-001 | COIN RETURN BUTTON COVER FOR U.S. .25 COIN |
| 6 | 07-00025-001 | LOCK ASSEMBLY |
| 6A | 07-00025-001 | LOCK ASSEMBLY |
| 7 | 51-01051-003 | SCREW #4 X 5/16 SL PH TYPE B |
| 7A | 51-01051-003 | SCREW #4 X 5/16 SL PH TYPE B |
| 8 | 63-00011-001 | COIN BUTTON HOUSING |
| 9 | 51-02051-002 | SCREW #4-40 X 1/4 SL PH |
| 10 | 63-00012-001 | COIN RETURN BEZEL |
| 11 | 63-00013-001 | COIN RETURN COVER |
| 12 | 61-00040-001 | COIN RETURN FRAME 11 5/8 X 13 3/8 MOUNTS IN A 10 3/8 X 12 3/16 OPENING |
| 13 | 54-01005-001 | HEX NUT 1/4 - 20 |
| 14 | 51A03003-113 | CARRIAGE BOLT |
| 15 | 07-00026-001 | LOCK ARM ASSEMBLY |

COIN DOOR

FIGURE 13



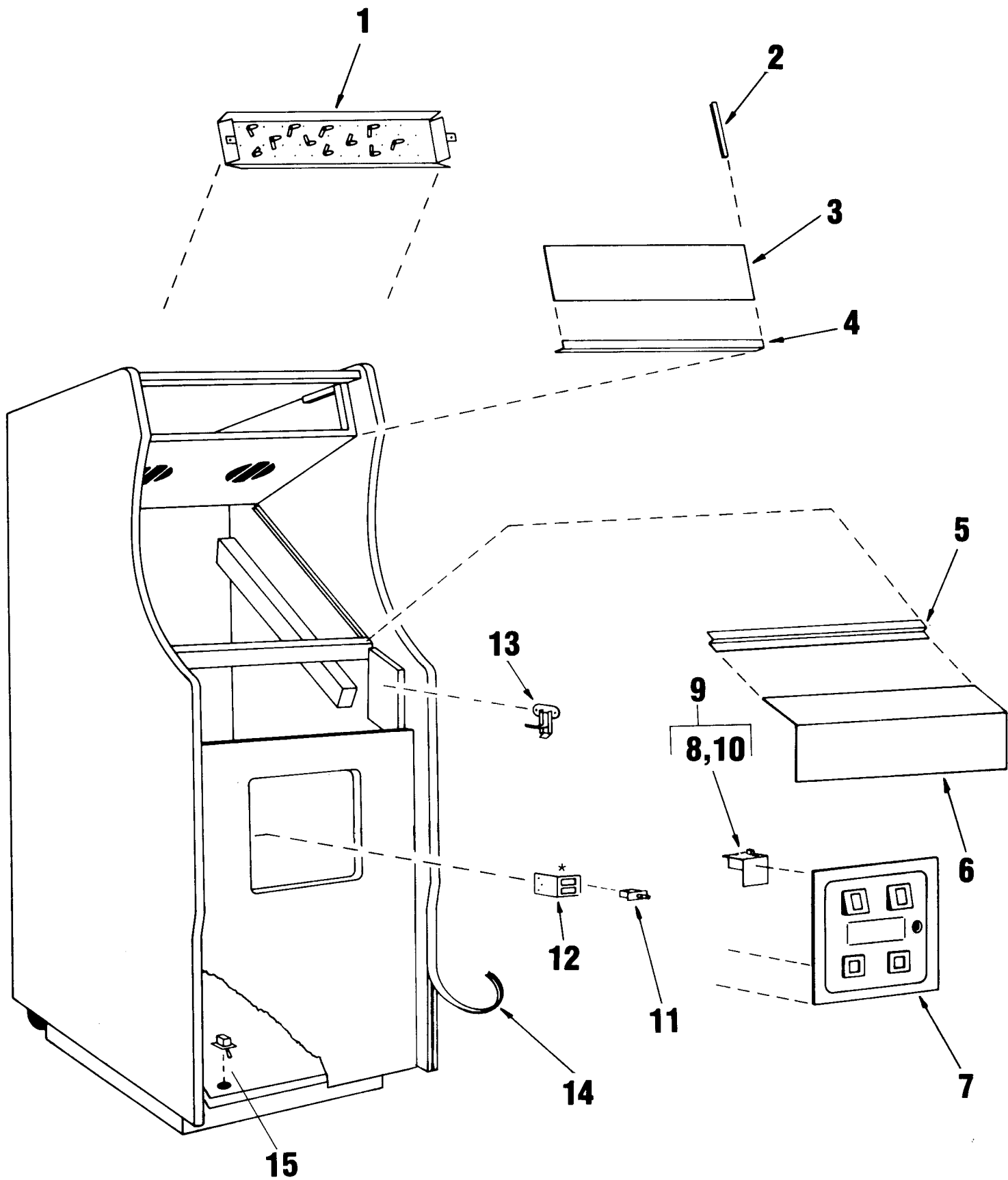
CABINET ASSEMBLY FRONT VIEW**FIGURE 14**

| ITEM | TAITO PART NO. | DESCRIPTION |
|-------------|---------------------------|-----------------------------|
| 1 | 07M00055-002 | INCANDESCENT PANEL |
| 2 | 63B00006-003 | "U" CHANNEL BRACKET |
| 3 | 47-00012-012 | MARQUEE |
| 4 | 61C00115-001 | MARQUEE RETAINING BRACKET |
| 5 | 61D00012-001 | LOWER COVERGLASS BRACKET |
| 6 | 07-00217-001 | CONTROL PANEL ASSEMBLY |
| 7 | 07-00114-001 | COIN DOOR |
| 8 | 61B00113-001 | SWITCH BRACKET |
| 9 | 07-00118-001 | SERVICE SWITCH ASSEMBLY |
| 10 | 29-00022-001 | SLIDE, CENTER RETURN SWITCH |
| 11 | 29B00015-001 | INTERLOCK SWITCH |
| 12 | 61B00114-001 | INTERLOCK SWITCH BRACKET |
| 13 | 59-00008-001 | LATCHING CLAMP |
| 14 | 63B00002-004 | "T" MOLDING |
| 15 | 29A00023-001 | POWER ON/OFF SWITCH |
| * | 09-00227-001 | MAIN HARNESS CABLE |
| * | 09-00043-001 | SPEAKER CABLE |
| * | 59-00046-001 | SWITCH BARRIER |

*Item not shown on drawing.

CABINET ASSEMBLY FRONT VIEW

FIGURE 14



CABINET ASSEMBLY REAR VIEW

FIGURE 15

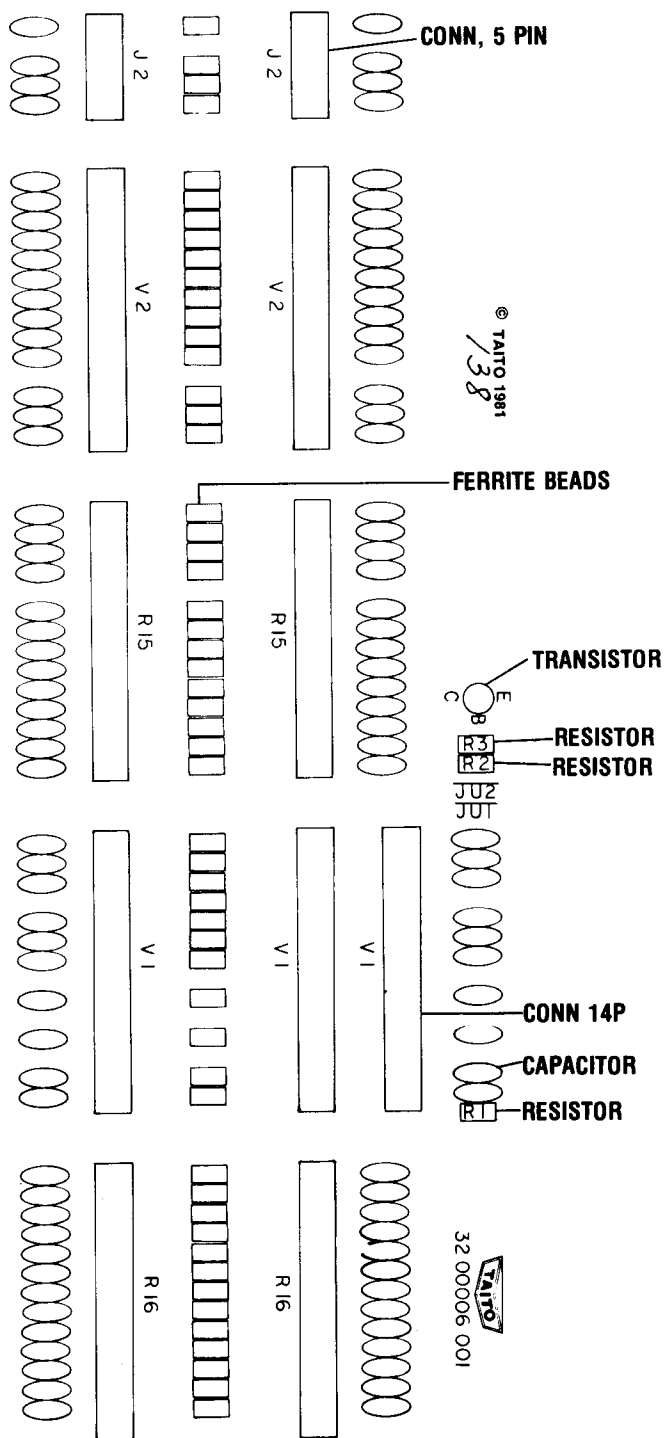
| ITEM | TAITO PART NO. | DESCRIPTION |
|------|----------------|--------------------------|
| 1 | 07-00083-001 | SPEAKER |
| 2 | 61B00038-001 | SPEAKER GRILL |
| 3 | 41-00015-007 | FINISHED CABINET |
| 4 | 63C00005-004 | "L" MOLDING |
| 5 | 07M00042-001 | A/C LINE CORD ASSEMBLY |
| *5A | 22-00001-001 | LINE FILTER |
| 6 | 63C00005-002 | "L" MOLDING |
| 7 | 61B00030-002 | INTERLOCK BRACKET |
| 8 | 29B00015-001 | INTERLOCK SWITCH |
| 9 | 07M00039-001 | POWER SUPPLY |
| *9A | 18-00003-001 | TRANSFORMER |
| *9B | 08-00007-001 | BOARD |
| *9C | 07-00041-001 | HEAT SINK ASSEMBLY |
| 10 | 61C00054-001 | CASH BOX LID |
| 11 | 61D00060-001 | CASH BOX |
| 12 | 07M00054-001 | CASH TRAY ASSEMBLY |
| 13 | 63R00010-001 | CASH TRAY (ONLY) |
| 14 | 63-00019-001 | CASH TRAY SEPARATOR |
| 15 | 61B00039-001 | CASH TRAY HANDLE |
| 16 | 42C00013-001 | MONITOR SUPPORT CLEAT |
| 17 | 61D00208-001 | CRT SUPPORT FRAME |
| 18 | 31-00013-001 | 19" COLOR MONITOR |
| 19 | 26B00008-001 | SOCKET LAMP |
| 20 | 27-00006-001 | #47 BULB |
| 21 | 47-00016-004 | COVERGLASS |
| 22 | 63D00053-001 | MONITOR SHROUD |
| 23 | 61C00006-001 | UPPER COVERGLASS BRACKET |
| 24 | 61-00142-001 | LOCK ROD ASSEMBLY |
| 25 | 04-00037-002 | LOCK ASSEMBLY |
| 26 | 44C00001-001 | WHEELS |
| * | 59-00045-001 | SWITCH BARRIER |

*Item not shown on drawing

FILTER BOARD

FIGURE 16

| ITEM | TAITO PART NO. | DESCRIPTION | QUANTITY |
|------|----------------|-----------------------------|----------|
| 1 | 12-10003-471 | Cap, 470pf ± 10% Axial Lead | 74 |
| 2 | 17-00001-001 | Ferrite Bead Assembly | 42 |
| 3 | 25-00002-014 | Connector 14P | 9 |
| 4 | 25-00002-005 | Connector 5P | 2 |
| 5 | 14-23904-001 | Transistor NPN 2N3904 | 1 |
| 6 | 11-00001-102 | Resistor 1K ohm ¼W | 1 |
| 7 | 11-00001-332 | Resistor 3.3F ohm ¼W | 2 |
| 8 | 63B00068-001 | Stand Off | 6 |



POWER SUPPLY

FIGURE 17

| SYM | TAITO PART NO. | DESCRIPTION |
|-----|----------------|-------------------------------|
| R1 | 11-00001-102 | Resistor 1.0K 5% ¼W 5% |
| R2 | 11-00001-512 | Resistor 5.1K ¼W 5% |
| R3 | 11-00001-183 | Resistor 18K ¼W 5% |
| R4 | 11-00001-224 | Resistor 220K ¼W 5% |
| R5 | 11-00001-472 | Resistor 4.7K ¼W 5% |
| R6 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R7 | 11-10001-101 | Resistor 100 ¼W 5% |
| R8 | 11-00001-102 | Resistor 10K ¼W 5% |
| R9 | 11-00001-472 | Resistor 4.7K,¼W 5% |
| R10 | 11-10001-101 | Resistor 100 ½W 5% |
| R11 | 11-30001-015 | Resistor .15 4W 5% |
| R12 | 11-30001-015 | Resistor .15 4W 5% |
| R13 | 11-00001-472 | Resistor 4.7K ¼W 5% |
| R14 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R15 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R16 | 11-60001-252 | Pot 2.5K ¼W 20% |
| R17 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R18 | 11-60001-102 | Pot 1.0K ¼W 20% |
| R19 | 11-00001-511 | Resistor 510 ¼W 5% |
| R20 | 11-10001-470 | Resistor 47 ½W 5% |
| R21 | 11-00001-162 | Resistor 1.6K ¼W 5% |
| R22 | 11-00001-103 | Resistor 10K ¼W 5% |
| R23 | 11-00001-472 | Resistor 4.7K ¼W 34 |
| R24 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R25 | 11-60001-102 | Pot 1.0K ¼W 5% |
| R26 | 11-00001-472 | Resistor 407K ¼W 5% |
| R27 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R28 | 11-60001-252 | Pot 2.5K ¼W 20% |
| R29 | 11-00001-472 | Resistor 4.7K ¼W 5% |
| R30 | 11-00001-122 | Resistor 1.2K ¼W 5% |
| R31 | 11-10001-470 | Resistor 47 ¼W 5% |
| R32 | 11-30001-015 | Resistor .15 4W 5% |
| R33 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R34 | 11-00001-122 | Resistor 1.2K ¼W 5% |
| R35 | 11-00001-511 | Resistor 510 ¼W 5% |
| R36 | 11-00001-222 | Resistor 2.2K ¼W 5% |
| R37 | 11-00001-104 | Resistor 100K |
| R38 | 11-00001-103 | Resistor 10K ¼W 5% |
| R39 | 11-00001-224 | Resistor 220L ¼W 5% |
| C1 | 12-30001-225 | Capacitor, Tantalum 2.2uf 25V |
| C2 | 12-10004-103 | Capacitor, Ceramic .01uf |
| C3 | 12-10004-103 | Capacitor, Ceramic .01uf |
| C4 | 12-30001-105 | Capacitor, Tantalum 1.uf 35V |

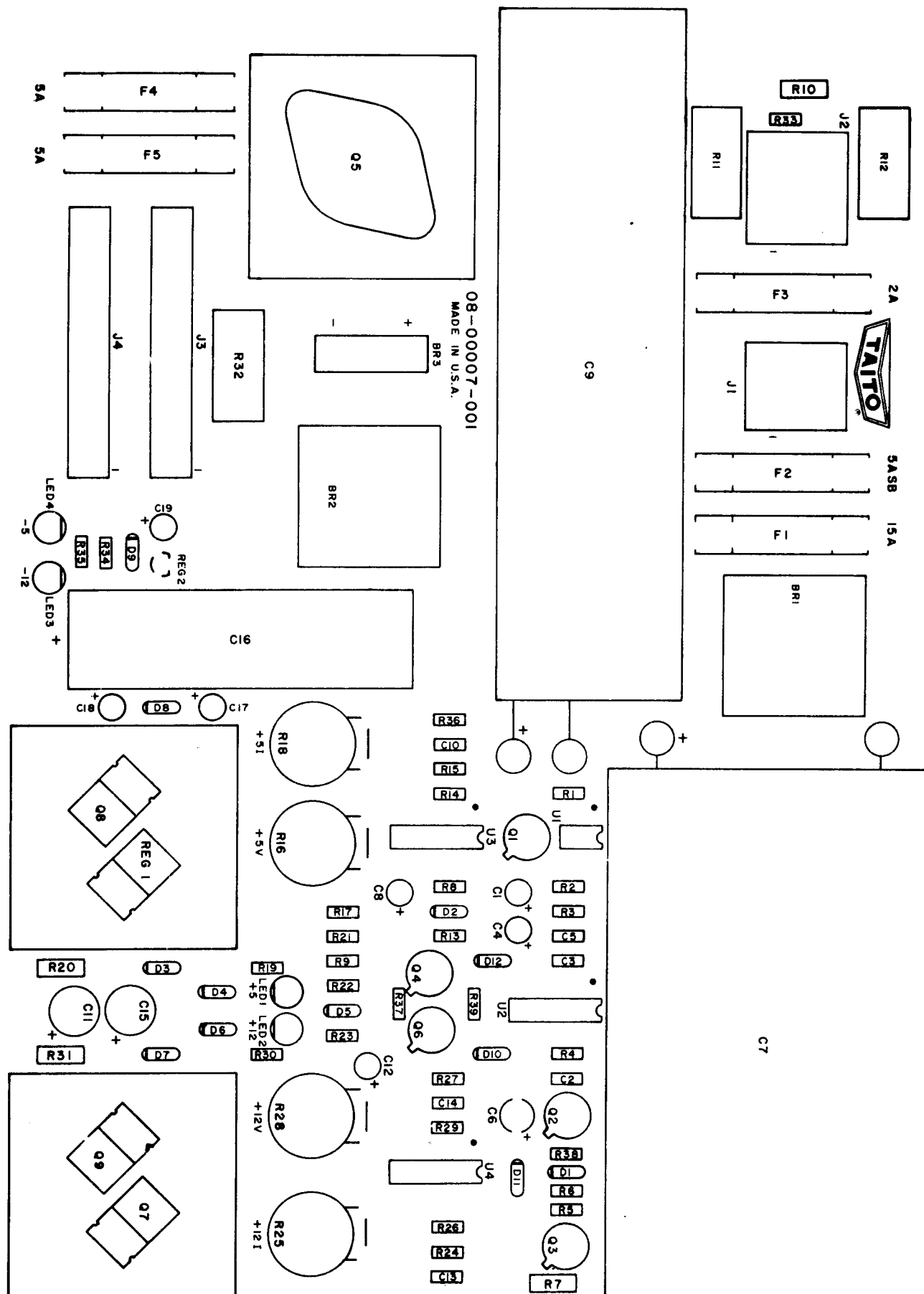
| SYM | TAITO PART NO. | DESCRIPTION |
|------|----------------|----------------------------------|
| C5 | 12-10001-102 | Capacitor, .001uf |
| C6 | 12-30001-106 | Capacitor, Tantalum 10uf |
| C7 | 12-20003-509 | Capacitor, Electrolytic 50,000uf |
| C8 | 12-30001-105 | Capacitor, Tantalum 1.uf 35V |
| C9 | 12-20003-209 | Capacitor, Electrolytic 20,000uf |
| C10 | 12-10001-332 | Capacitor, Ceramic .0033uf |
| C11 | 12-30001-476 | Capacitor, Tantalum 47uf |
| C12 | 12-30001-105 | Capacitor, Tantalum 1.uf 35V |
| C13 | 12-10004-103 | Capacitor, Ceramic .01uf |
| C14 | 12-10001-102 | Capacitor, .001uf |
| C15 | 12-30001-476 | Capacitor, Tantalum 47uf |
| C16 | 12-20002-108 | Capacitor, Electrolytic 1,000uf |
| C17 | 12-30001-225 | Capacitor, Tantalum 2.2uf 25V |
| C18 | 12-30001-225 | Capacitor, Tantalum 2.2uf 25V |
| C19 | 12-30001-105 | Capacitor, Tantalum 1.uf 35V |
| F1 | 24-00003-010 | 10A Fuse |
| F2 | 24-00003-010 | 10A Fuse |
| F3 | 24-00003-003 | Fuse, 2A |
| F4 | 24-00003-004 | Fuse, 4A |
| F5 | 24-00003-004 | Fuse, 4A |
| BR1 | 13-00100-025 | Diode Bridge 25A, 100V |
| BR2 | 13-00100-012 | Diode Bridge 12A, 100V |
| BR3 | 13-00100-002 | Diode Bridge 2A, 100V |
| D1 | 13-14002-001 | Diode IN4002 |
| D2 | 13-14002-001 | Diode IN4002 |
| D3 | 13-10752-001 | Diode, Zener IN752 |
| D4 | 13-14002-001 | Diode IN4002 |
| D5 | 13-14002-001 | Diode IN4002 |
| D6 | 13-14002-001 | Diode IN4002 |
| D7 | 13-10964-001 | Diode, Zener IN964 |
| D8 | 13-14002-001 | Diode IN4002 |
| D9 | 13-14002-001 | Diode IN4002 |
| D10 | 13-14002-001 | Diode IN4002 |
| D11 | 13-14002-001 | Diode IN4002 |
| D12 | 13-14002-001 | Diode IN4002 |
| LED1 | 13-00001-001 | LED (Red) |
| LED2 | 13-00001-001 | LED (Red) |
| LED3 | 13-00001-001 | LED (Red) |
| LED4 | 13-00001-001 | LED (Red) |
| U1 | 15-62500-001 | Opto Coupler H11AA2 |
| U2 | 15-50556-001 | Timer (Dual) 556 |
| U3 | 15-50723-001 | Voltage Regulator 723 |
| U4 | 15-50723-001 | Voltage Regulator 723 |

POWER SUPPLY**FIGURE 17**

| SYM | TAITO PART NO. | DESCRIPTION |
|------------|---------------------------|-----------------------------|
| REG1 | 15-57912-001 | Voltage Regulator 7912 |
| REG2 | 15-57905-001 | Voltage Regulator 79L05 |
| Q1 | 14-22905-001 | Transistor 2N2905 |
| Q2 | 14-22905-001 | Transistor 2N2905 |
| Q3 | 14-22905-001 | Transistor 2N2905 |
| Q4 | 14-22905-001 | Transistor 2N2905 |
| Q5 | 14-23055-001 | Transistor 2N3055 |
| Q6 | 14-22905-001 | Transistor 2N2905 |
| Q7 | 14-20030-001 | Transistor TIP-30A |
| Q8 | 14-26401-001 | SCR 2N6401 |
| Q9 | 14-26401-001 | SCR 2N6401 |
| J1 | 25-00022-006 | Connector, 1-380999-0 6Pin |
| J2 | 25-00022-008 | Connector, 350212-1 8Pin |
| J3 | 25-00002-014 | Connector, 09-60-1141 14Pin |
| J4 | 25-00002-014 | Connector, 09-60-1140 14Pin |
| | 24-10001-001 | Fuse Clips |
| | 30-00220-002 | Heat Sink Dual To-220 |
| | 30-00003-001 | Heat Sink Single To-3 |

POWER SUPPLY COMPONENT LAYOUT

FIGURE 17

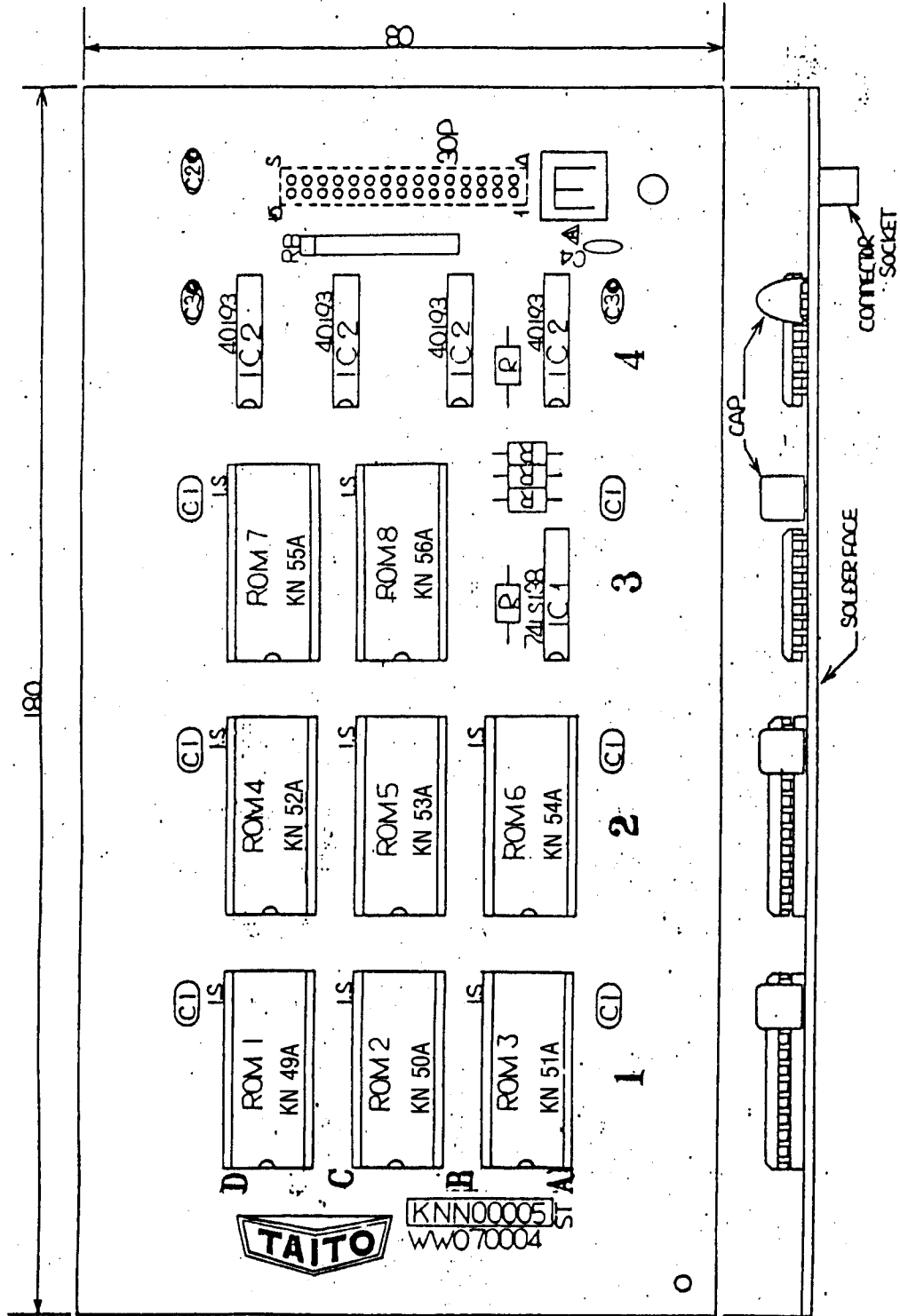


ROM BOARD**FIGURE 18**

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|-------|----------------|----------------------------|
| 1 | | 99-WW070004 | ROM PC BOARD |
| 2 | | | NOT USED |
| 3 | 30P | 99-AA055161 | CONNECTOR SOCKET HKP-30FD |
| 4 | 1S | 99-AA055787 | IC - SOCKET 24P |
| 5 | ST | 99-KN070205 | P.C.B. STICKER KNN0005 |
| 6 | IC1 | 99-AAT33096 | LS - IC 74LS138 |
| 7 | IC2 | 99-AAT36071 | CMOS 40193 |
| 8 | ROM 1 | 16-00025-049 | PROM (2732) KN49A |
| 9 | ROM 2 | 16-00025-050 | PROM (2732) KN50A |
| 10 | ROM 3 | 16-00025-051 | PROM (2732) KN51A |
| 11 | ROM 4 | 16-00025-052 | PROM (2732) KN52A |
| 12 | ROM 5 | 16-00025-053 | PROM (2732) KN53A |
| 13 | ROM 6 | 16-00025-054 | PROM (2732) KN54A |
| 14 | ROM 7 | 99-KN090435 | PROM (2732) KN55 |
| 15 | ROM 8 | 16-00025-056 | PROM (2732) KN56A |
| 16 | | | NOT USED |
| 17 | C1 | 99-AAT41244 | CAP, FILM TDY-1H-104 |
| 18 | C2 | 99-AAT41430 | CAP, TANTALUM SSG25-10F |
| 19 | C3 | 99-AAT41436 | CAP, TANTALUM SSG35-1F |
| 20 | R | 99-AAT51765 | RES, CARBON 1 KOHM 1/4W 5% |
| 21 | RB | 99-AAT55048 | TINNED COPPER WIRE 10 |
| 22 | C4 | 99-AAT41324 | CAP, CERAMIC 180P 50V |

ROM BOARD COMPONENT LAYOUT

FIGURE 18



CPU BOARD

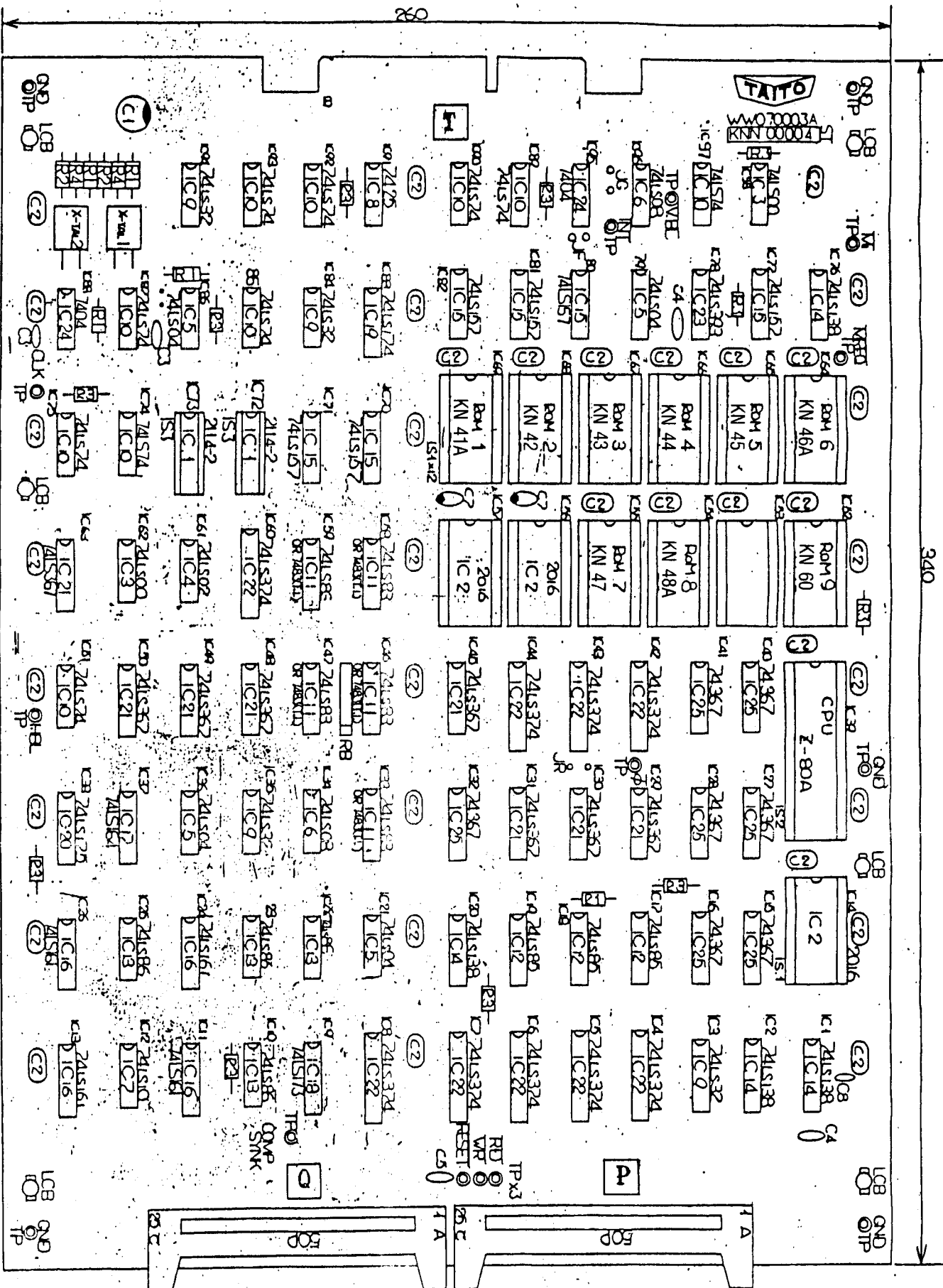
FIGURE 19

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|--------|----------------|-------------------------------|
| 1 | | 99-KNN00004 | CPU BOARD |
| 2 | ST | 99-KNN00004 | PC BOARD STICKER |
| 3 | 50P | 99-AA055310 | ANGLE PIN HEADER FC-50A |
| 4 | 1S1 | 99-AA055787 | IC - SOCKET 24P |
| 5 | 1S2 | 99-AA055812 | IC - SOCKET 40P |
| 6 | TP | 99-AA056551 | TEST POINT |
| 7 | XTAL 2 | 99-AA069605 | X-TAL 12MHZ |
| 8 | XTAL 1 | 99-AA069608 | X-TAL 8MHZ |
| 9 | 1S3 | 99-AA055103 | IC - SOCKET 18P |
| 10 | CB | 99-AA069557 | LOCKING CIRCUIT BOARD SUPPORT |
| 11 | IC1 | 99-AAT32163 | STATIC RAM 2114-7 |
| 12 | IC2 | 99-AAT32178 | STATIC RAM TMM2016P |
| 13 | IC3 | 99-AAT33001 | LS-IC 74LS00 |
| 14 | IC4 | 99-AAT33003 | LS-IC 74LS02 |
| 15 | IC5 | 99-AAT33005 | LS-IC 74LS04 |
| 16 | IC6 | 99-AAT33009 | LS-IC 74LS08 |
| 17 | IC7 | 99-AAT33011 | LS-IC 74LS10 |
| 18 | IC8 | 99-AAT32006 | TTL-IC 7425 |
| 19 | IC9 | 99-AAT33027 | LS-IC 74LS32 |
| 20 | IC10 | 99-AAT33051 | LS-IC 74LS74 |
| 21 | IC11 | 99-AAT33059 | LS-IC 74LS83 |
| 22 | IC12 | 99-AAT33061 | LS-IC 74LS85 |
| 23 | IC13 | 99-AAT33062 | LS-IC 74LS86 |
| 24 | IC14 | 99-AAT33096 | LS-IC 74LS138 |
| 25 | IC15 | 99-AAT33112 | LS-IC 74LS157 |
| 26 | IC16 | 99-AAT33116 | LS-IC 74LS161 |
| 27 | IC17 | 99-AAT33119 | LS-IC 74LS164 |
| 28 | IC18 | 99-AAT33126 | LS-IC 74LS173 |
| 29 | IC19 | 99-AAT33127 | LS-IC 74LS174 |
| 30 | IC20 | 99-AAT33128 | LS-IC 74LS175 |
| 31 | IC21 | 99-AAT33203 | LS-IC 74LS367 |

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|-------|----------------|---------------------------------|
| 32 | IC22 | 99-AAT33209 | LS-IC 74LS374 |
| 33 | IC23 | 99-AAT33220 | LS-IC 74LS393 |
| 34 | CPU | 99-AAT34008 | CPU 7-80A |
| 35 | IC24 | 99-AAT32003 | TTL-IC 7404 |
| 36 | IC25 | 99-AAT32099 | TTL-IC 74367 |
| 37 | C1 | 99-AAT41023 | CAP, ELECTROLYTIC 16VB220 |
| 38 | C2 | 99-AAT41244 | CAP, FILM TDY-1H-104 |
| 39 | C3 | 99-AAT41302 | CAP, CERAMIC 22PF50V |
| 40 | C4 | 99-AAT41324 | CAP, CERAMIC 180PF50V |
| 41 | C5 | 99-AAT41330 | CAP, CERAMIC 330PF50V |
| 42 | | | NOT USED |
| 43 | C7 | 99-AAT41436 | CAP, TANTALUM SSG35-1F |
| 44 | R1 | 99-AAT51749 | RES, CARBON 220 OHM 1/4W 5% |
| 45 | R2 | 99-AAT51759 | RES, CARBON 560 OHM 1/4W 5% |
| 46 | R3 | 99-AAT51265 | RES, CARBON 1 K OHM 1/4W 5% |
| 47 | R4 | 99-AAT51771 | RES, CARBON 1.8K |
| 48 | ROM 1 | 16-00025-041 | PROM (2732) KN41A |
| 49 | ROM 2 | 99-KN090422 | PROM (2732) KN42 |
| 50 | ROM 3 | 99-KN090423 | PROM (2732) KN43 |
| 51 | ROM 4 | 99-KN090424 | PROM (2732) KN44 |
| 52 | ROM 5 | 99-KN090425 | PROM (2732) KN45 |
| 53 | ROM 6 | 16-00025-046 | PROM (2732) KN46A |
| 54 | ROM 7 | 99-KN090427 | PROM (2732) KN47 |
| 55 | ROM 8 | 16-00025-048 | PROM (2732) KN48A |
| 56 | ROM 9 | 99-KN090440 | PROM (2732) KN60 |
| 57 | | | NOT USED |
| 58 | | | NOT USED |
| 59 | | | NOT USED |
| 60 | | | NOT USED |
| 61 | C8 | 99-AAT41318 | CAP, CERAMIC DT-201 100pf 50V |
| 62 | RB | 99-AAT55038 | RESISTOR BLOCK 1 OHM 8 ELEMENTS |

CPU BOARD COMPONENT LAYOUT

FIGURE 19



VIDEO BOARD

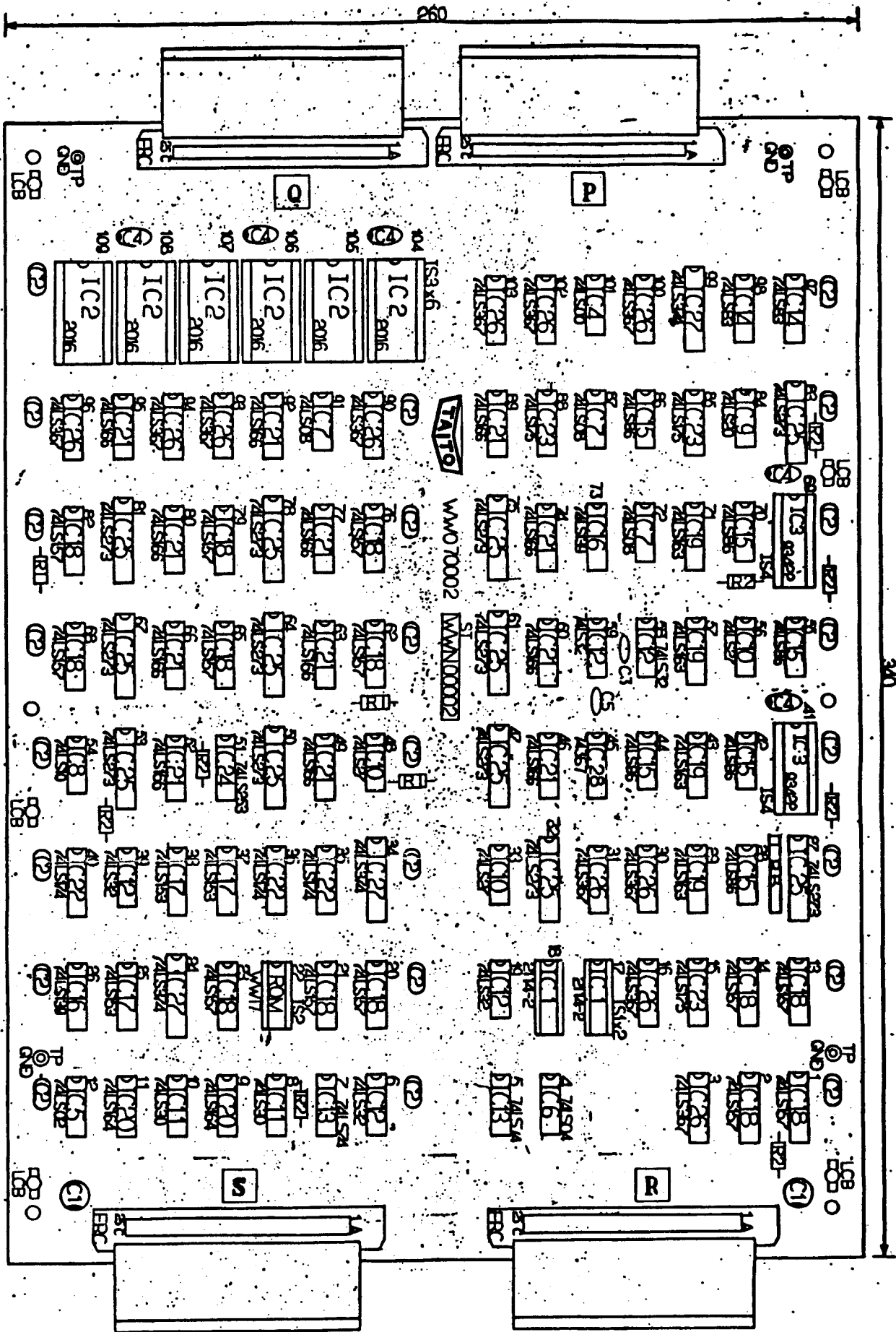
FIGURE 20

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|------|----------------|-------------------------------|
| 1 | | 99-WW070002 | VIDEO PC BOARD |
| 2 | | | NOT USED |
| 3 | FRC | 99-AAS00262 | FRC HARNESS ASSY 50P |
| 4 | IS1 | 99-AA055103 | IC SOCKET 18P |
| 5 | IS2 | 99-AA055786 | IC SOCKET 16P |
| 6 | IS3 | 99-AA055787 | IC SOCKET 24P |
| 7 | IS4 | 99-AA055999 | IC SOCKET 22P |
| 8 | TP | 99-AA056551 | TEST POINT CHIP |
| 9 | CB | 99-AA069589 | LOCKING CIRCUIT BOARD SUPPORT |
| 10 | IC1 | 99-AAT32163 | STATIC RAM 2114-2 |
| 11 | IC2 | 99-AAT32178 | STATIC RAM TMM2016P |
| 12 | IC3 | 99-AAT32180 | TTL-RAM 93422 |
| 13 | IC4 | 99-AAT33001 | LS-IC 74LS00 |
| 14 | IC5 | 99-AAT33003 | LS-IC 74LS02 |
| 15 | IC6 | 99-AAT33005 | LS-IC 74LS04 |
| 16 | IC7 | 99-AAT33009 | LS-IC 74LS08 |
| 17 | IC8 | 99-AAT33011 | LS-IC 74LS10 |
| 18 | IC9 | 99-AAT33019 | LS-IC 74LS20 |
| 19 | IC10 | 99-AAT33024 | LS-IC 74LS27 |
| 20 | IC11 | 99-AAT33026 | LS-IC 74LS30 |
| 21 | IC12 | 99-AAT33027 | LS-IC 74LS32 |
| 22 | IC13 | 99-AAT33051 | LS-IC 74LS74 |
| 23 | IC14 | 99-AAT33059 | LS-IC 74LS83 |
| 24 | IC15 | 99-AAT33062 | LS-IC 74LS86 |

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|------|----------------|----------------------------------|
| 25 | IC16 | 99-AAT33097 | LS-IC 74LS139 |
| 26 | IC17 | 99-AAT33108 | LS-IC 74LS153 |
| 27 | IC18 | 99-AAT33112 | LS-IC 74LS157 |
| 28 | IC19 | 99-AAT33118 | LS-IC 74LS163 |
| 29 | IC20 | 99-AAT33119 | LS-IC 74LS164 |
| 30 | IC21 | 99-AAT33121 | LS-IC 74LS166 |
| 31 | IC22 | 99-AAT33127 | LS-IC 74LS174 |
| 32 | IC23 | 99-AAT33128 | LS-IC 74LS175 |
| 33 | IC24 | 99-AAT33163 | LS-IC 74LS253 |
| 34 | IC25 | 99-AAT33170 | LS-IC 74LS273 |
| 35 | IC26 | 99-AAT33203 | LS-IC 74LS367 |
| 36 | IC27 | 99-AAT33209 | LS-IC 74LS374 |
| 37 | IC28 | 99-AAT32099 | LS-IC 74LS367 |
| 38 | ROM | 99-AAT90417 | ROM (745287) WW17 |
| 39 | | | NOT USED |
| 40 | C1 | 99-AAT41023 | CAP, ELECTROLYTIC 16VB220 |
| 41 | C2 | 99-AAT41244 | CAP, FILM TDY-1H-104 |
| 42 | C3 | 99-AAT41324 | CAP, CERAMIC DT-203-180P |
| 43 | C4 | 99-AAT41436 | CAP, TANTALUM SSG35-1F |
| 44 | R1 | 99-AAT51757 | RES, CARBON 470 OHM 1/4W 5% |
| 45 | R2 | 99-AAT51765 | RES, CARBON 1 OHM 1/4W 5% |
| 46 | RB | 99-AAT55036 | RESISTOR BLOCK 1K OHM 8 ELEMENTS |
| 47 | ST | 99-WW070202 | P C BOARD STICKER WWN00002 |
| 48 | C5 | 99-AAT41318 | CAP, CERAMIC DT20 100P |

VIDEO BOARD COMPONENT LAYOUT

FIGURE 20



GAME BOARD

FIGURE 21

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|------|----------------|-------------------------------|
| 1 | | 99-KNN00003 | GAME PCB |
| 2 | IS5 | 99-AA055103 | IC SOCKET 18P |
| 3 | DS | 99-AA052566 | DIP SWITCH |
| 4 | 12P | 99-AA055115 | SL56 POST HEADER 12P |
| 5 | 30P | 99-AA055160 | CONNECTOR PLUG HKP-30M |
| 6 | IS1 | 99-AA055169 | IC SOCKET 28P |
| 7 | 50P | 99-AA055310 | ANGLE PIN HEADER PS-50PA |
| 8 | IS2 | 99-AA055787 | IC SOCKET 24P |
| 9 | IS3 | 99-AA055817 | IC SOCKET 40P |
| 10 | IS4 | 99-AA055815 | IC SOCKET 20P |
| 11 | TP | 99-AA056551 | TEST POINT |
| 12 | ICB | 99-AA060557 | LOCKING CIRCUIT BOARD SUPPORT |
| 13 | TR1 | 99-AAT11040 | TRANSISTOR 25A423 |
| 14 | | | PAN HD SCREW M3X6 |
| 15 | | | NUT M3 |
| 16 | TR7 | 99-AAT11070 | TRANSISTOR 25D635 |
| 17 | | | PAN HD SCREW M3X6 |
| 18 | | | NUT M3 |
| 19 | OP1 | 99-AAT31011 | OP AMPLIFIER 1M3000 |
| 20 | OP2 | 99-AAT31050 | OP AMPLIFIER MR3230 |
| 21 | | | PAN HD SCREW M3X8 |
| 22 | | | NUT M3 |
| 23 | IC1 | 99-AAT32033 | TTL-IC 7416 |
| 24 | IC2 | 99-AAT32049 | TTL-IC 7417 |
| 25 | IC3 | 99-AAT32163 | STATIC RAM 2114.2 |
| 26 | IC4 | 99-AAT32165 | SOUND IC AY38910 |
| 27 | IC5 | 99-AAT32179 | TTL - RAM 93410 |
| 28 | IC6 | 99-AAT33001 | LS-IC 74LS00 |
| 29 | IC7 | 99-AAT33003 | LS-IC 74LS02 |
| 30 | IC8 | 99-AAT33005 | LS-IC 74LS04 |
| 31 | IC9 | 99-AAT33008 | LS-IC 74LS08 |
| 32 | IC10 | 99-AAT33027 | TI (ONLY) 74LS37 |
| 33 | IC11 | 99-AAT33051 | LS-IC 74LS74 |
| 34 | IC12 | 99-AAT33020 | LS-IC 74LS96 |
| 35 | IC13 | 99-AAT33096 | LS-IC 74LS138 |
| 36 | | | NOT USED |
| 37 | IC15 | 99-AAT33108 | LS-IC 74LS153 |
| 38 | IC16 | 99-AAT33110 | LS-IC 74LS155 |
| 39 | IC17 | 99-AAT33163 | LS-IC 74LS253 |
| 40 | IC18 | 99-AAT33164 | LS-IC 74LS257 |
| 41 | IC19 | 99-AAT33166 | LS-IC 74LS259 |
| 42 | IC20 | 99-AAT33127 | LS-IC 74LS174 |
| 43 | IC21 | 99-AAT33203 | LS-IC 74LS367 |
| 44 | IC22 | 99-AAT33209 | LS-IC 74LS374 |
| 45 | IC23 | 99-AAT33220 | LS-IC 74LS393 |
| 46 | CPU | 99-AAT34008 | CPU Z-80A |

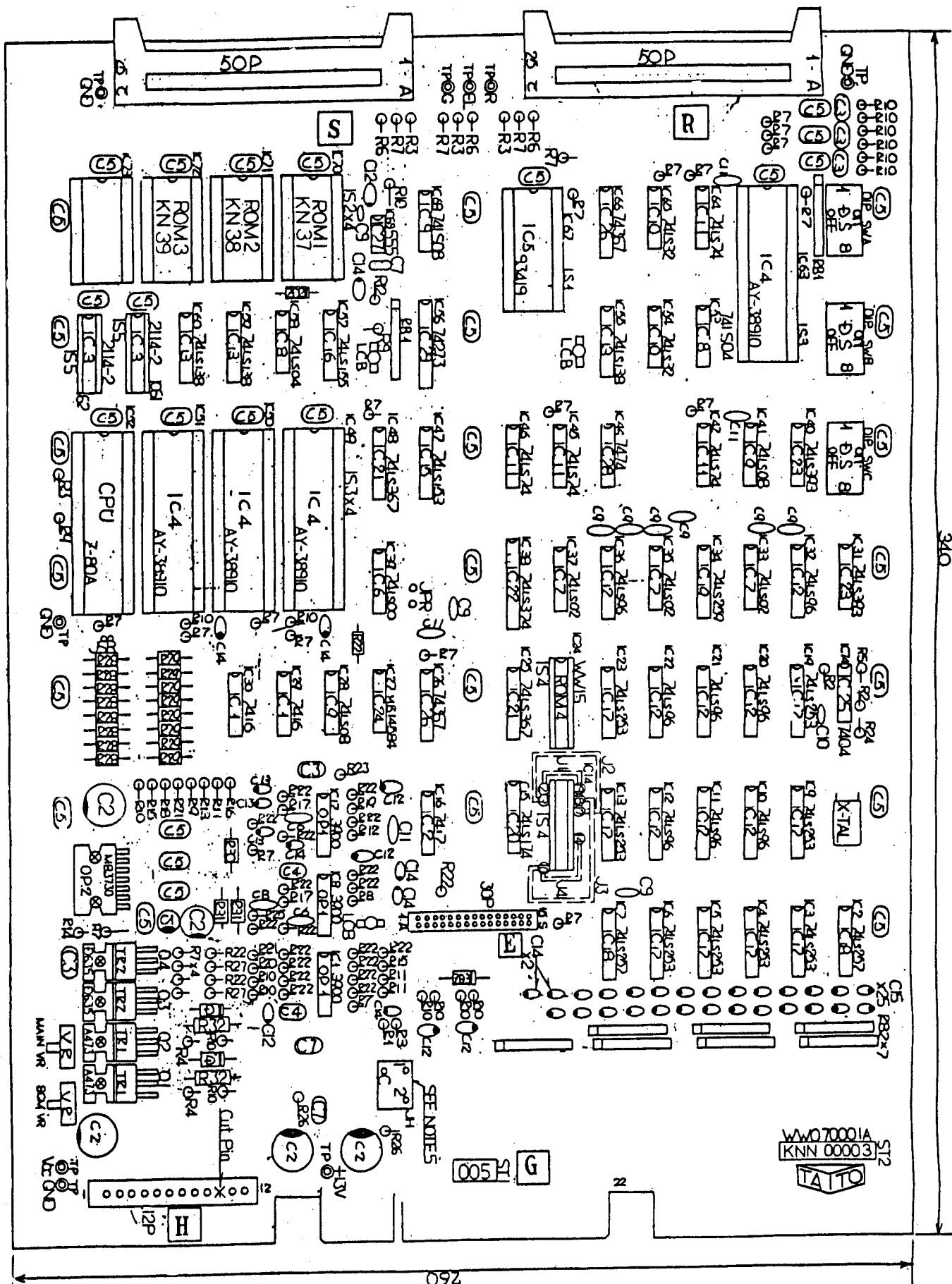
| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|------|------|----------------|------------------------------|
| 47 | IC24 | 99-AAT36105 | CMOS MB14584 |
| 48 | IC25 | 99-AAT32003 | TTL-IC 7404 |
| 49 | IC26 | 99-AAT32099 | TTL IC 74367 |
| 50 | IC27 | 99-AAT32019 | TTL IC 7404 |
| 51 | IC28 | 99-AAT32011 | TTL IC 7474 |
| 52 | IC29 | 99-AAT32151 | TTL IC 74273 |
| 53 | | | NOT USED |
| 54 | C1 | 99-AAT41019 | CAP, ELECTROLYTIC 16VB220 MF |
| 55 | C2 | 99-AAT41023 | CAP, ELECTROLYTIC 16VB220 |
| 56 | C3 | 99-AAT41238 | CAP, FILM TDY-1M-103 |
| 57 | C4 | 99-AAT41740 | CAP, FILM TDY-1H-223 |
| 58 | C5 | 99-AAT41244 | CAP, FILM TDY-1H-104 |
| 59 | C6 | 99-AAT41310 | CAP, CERAMIC 47PF 50V |
| 60 | C7 | 99-AAT41242 | CAP, FILM |
| 61 | C8 | 99-AAT41322 | CAP, CERAMIC 150PF 50V |
| 62 | C9 | 99-AAT41374 | CAP, CERAMIC 180PF 50V |
| 63 | C10 | 99-AAT41302 | CAP, CERAMIC 22pf 50V |
| 64 | C11 | 99-AAT41334 | CAP, CERAMIC 470PF 50V |
| 65 | C12 | 99-AAT41430 | CAP, TANTALUM SSG25-10F |
| 66 | C13 | 99-AAT41431 | CAP, TANTALUM SSG35-OR1F |
| 67 | C14 | 99-AAT41436 | CAP, TANTALUM SSG35-1F |
| 68 | C15 | 99-AAT41432 | CAP, TANTALUM SSG35 7R2F |
| 69 | R1 | 99-AAT51741 | RES, CARBON 100 OHM 1/2W 5% |
| 70 | R2 | 99-AAT51749 | RES, CARBON 220 OHM 1/4W 5% |
| 71 | R3 | 99-AAT51751 | RES, CARBON 270 OHM 1/4W 5% |
| 72 | R4 | 99-AAT51753 | RES, CARBON 330 OHM 1/4W 5% |
| 73 | R5 | 99-AAT51759 | RES, CARBON 560 OHM 1/4W 5% |
| 74 | R6 | 99-AAT51757 | RES, CARBON 470 OHM 1/4W 5% |
| 75 | R7 | 99-AAT51765 | RES, CARBON 1K |
| 76 | R8 | 99-AAT51779 | RES, CARBON 3.9K 1/4W 5% |
| 77 | R9 | 99-AAT51781 | RES, CARBON 4.7K OHM 1/4W 5% |
| 78 | R10 | 99-AAT51789 | RES, CARBON 10K 1/4W 5% |
| 79 | R11 | 99-AAT51796 | RES, CARBON 20K OHM 1/4W 5% |
| 80 | R12 | 99-AAT51797 | RES, CARBON 22K OHM 1/4W 5% |
| 81 | R13 | 99-AAT51803 | RES, CARBON 39K OHM 1/4W 5% |
| 82 | R14 | 99-AAT51775 | RES, CARBON 82K OHM 1/4W 5% |
| 83 | R15 | 99-AAT51811 | RES, CARBON 82K OHM 1/4W 5% |
| 84 | R16 | 99-AAT51812 | RES, CARBON 100K 1/4 W 5% |
| 85 | R17 | 99-AAT51823 | RES, CARBON 270K 1/4W 5% |
| 86 | R18 | 99-AAT51825 | RES, CARBON 330K 1/4W 5% |
| 87 | R19 | 99-AAT51827 | RES, CARBON 390K 1/4W 5% |
| 88 | R20 | 99-AAT51829 | RES, CARBON 470K 1/4W 5% |
| 89 | R21 | 99-AAT51833 | RES, CARBON 680K 1/4W 5% |
| 90 | R22 | 99-AAT51837 | RES, CARBON 1M OHM 1/4W 5% |
| 91 | R23 | 99-AAT51733 | RES, CARBON 47 OHM 1/4W 5% |
| 92 | R24 | 99-AAT51771 | RES, CARBON 47 OHM 1/2W 5% |

GAME BOARD**FIGURE 21**

| ITEM | SYM | TAITO PART NO. | DESCRIPTION |
|-------------|------------|---------------------------|-------------------------------------|
| 93 | R25 | 99-AAT51845 | RES, CARBON 22M OHM 1/4W 5% |
| 94 | R26 | 99-AAT51847 | RES, CARBON 22M OHM 1/2W 5% |
| 95 | R27 | 99-AAT51772 | RES, CARBON 2K OHM 1/4W 5% |
| 96 | R28 | 99-AAT51068 | RES, CARBON 15 OHM 1/4W 5% |
| 97 | R29 | 99-AAT51969 | RES, CARBON 30K OHM 1/4W 5% |
| 98 | R30 | 99-AAT51971 | RES, CARBON 1M OHM 1/4W 5% |
| 99 | R31 | 99-AAT51982 | RES, CARBON 1 OHM 1/4W 5% |
| 100 | VR | 99-AAT53041 | RES, VARIABLE RESISTOR B-50K |
| 101 | RB1 | 99-AAT55036 | RESISTOR BLOCK 1K OHM 8 ELEMENTS |
| 102 | RB2 | 99-AAT55061 | RESISTOR BLOCK 10K+100 OHM 108 |
| 109 | R32 | 99-AAT55033 | WINDING RESISTOR 6 OHM 2W 10% |
| 104 | | | NOT USED |
| 105 | ZD2 | 99-AAT13042 | FENNER DIODE RD2 7FBF |
| 106 | ZD3 | 99-AAT13028 | FENNER DIODE RD9A-M |
| 107 | ST | 99-EE070004 | HARNESS STICKER |
| 108 | ST2 | 99-KN070203 | PCB STICKER KN00003 |
| 110 | ROM 1 | 99-KN090437 | PROM (2732) KN37 |
| 111 | ROM 2 | 99-KN090438 | PROM (2732) KN38 |
| 112 | ROM 3 | 99-KN090439 | PROM (2732) KN39 |
| 113 | | | NOT USED |
| 114 | | | NOT USED |
| 115 | X-TAL | 99-AA069593 | X-TAL 6MHz |
| 116 | | 99-AA062644 | JUMPER WIRE |

GAME BOARD COMPONENT LAYOUT

FIGURE 21

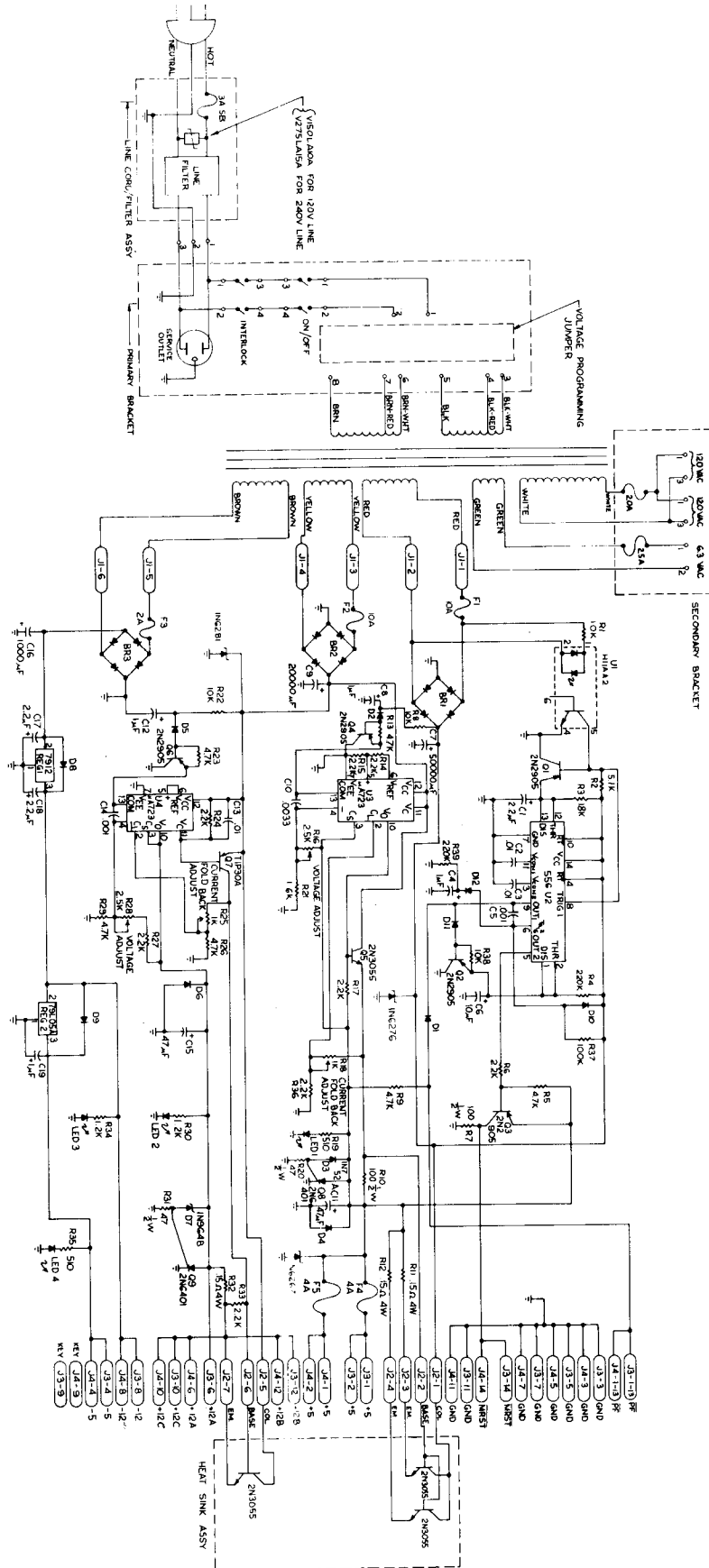


260

340

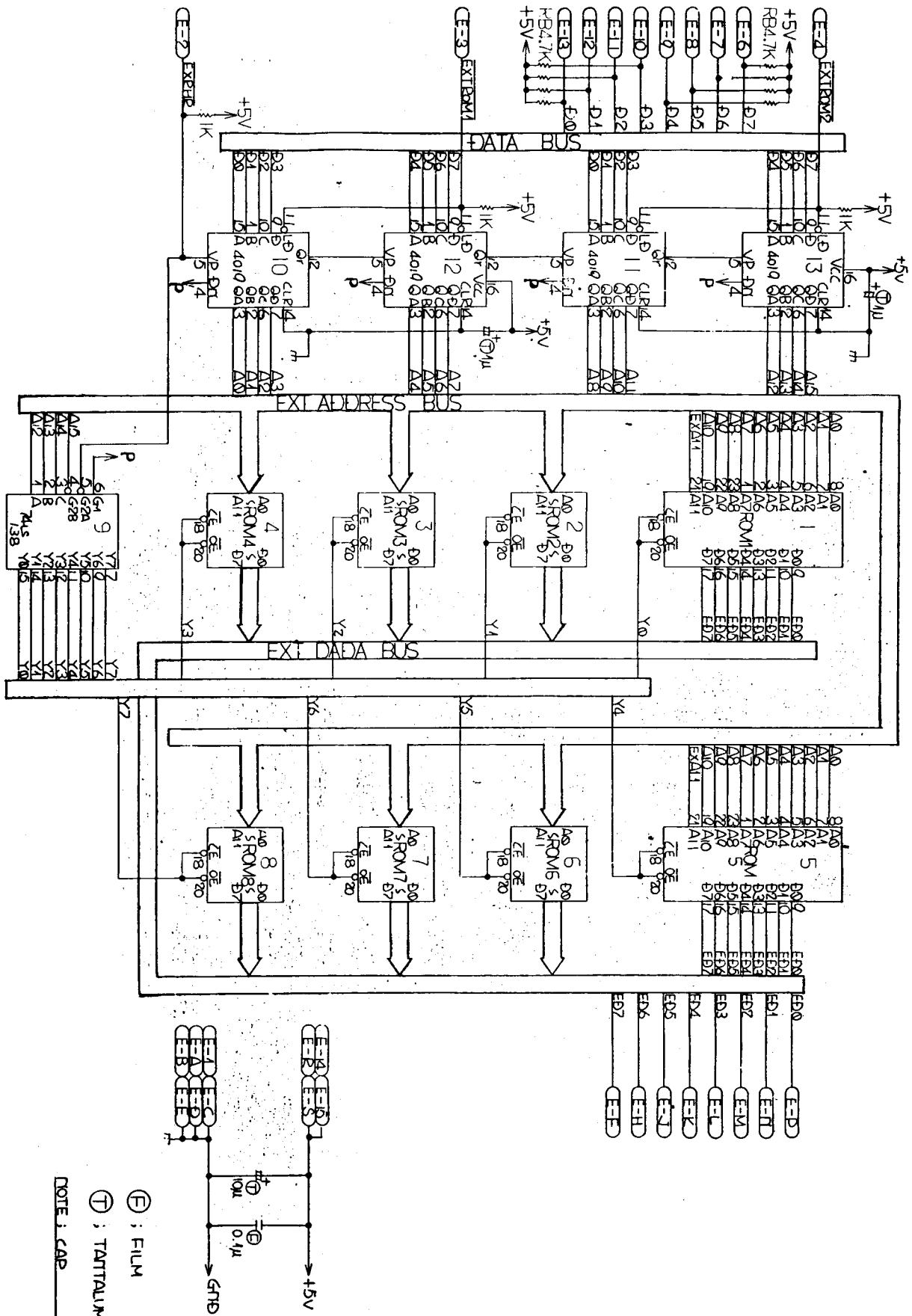
POWER SUPPLY SCHEMATIC 1 of 1

FIGURE 22



ROM PC BOARD SCHEMATIC 1 of 1

FIGURE 23



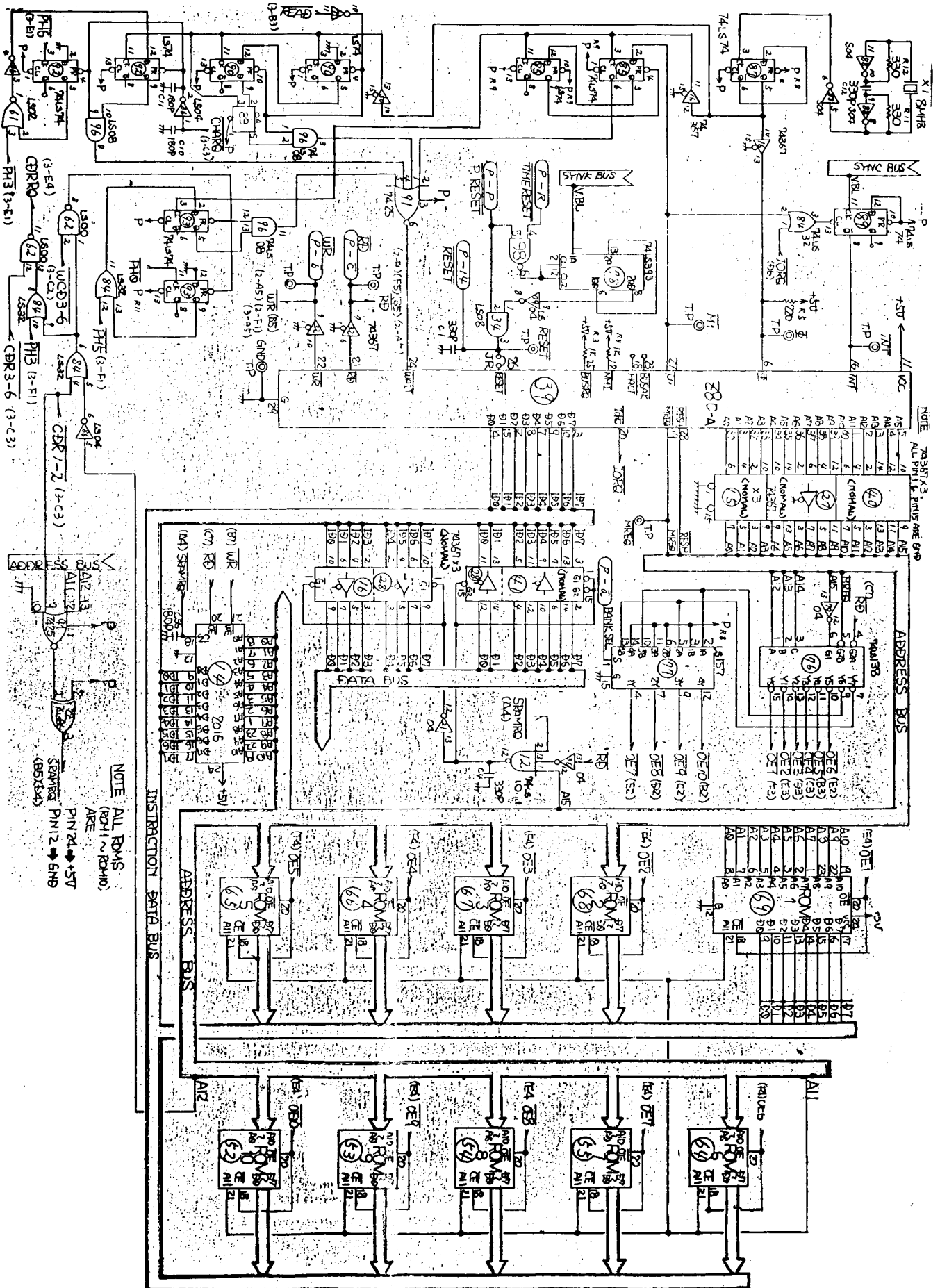
ⓔ : FILM

ⓧ : TANTALUM

NOTE 1: CAP

CPU PC BOARD SCHEMATIC 1 of 3

FIGURE 24



NOTE: ALL ROMS (2011 ~ 2010), PIN 24 → +5V
 (2014 ~ 2010), ARE
 SEPARATE PIN 12 → GND
 (2015 ~ 2010)

NOTE: 74LS13, 74LS15, 74LS17, 74LS19, 74LS21, 74LS23, 74LS25, 74LS27, 74LS29, 74LS31, 74LS33, 74LS35, 74LS37, 74LS39, 74LS41, 74LS43, 74LS45, 74LS47, 74LS49, 74LS51, 74LS53, 74LS55, 74LS57, 74LS59, 74LS61, 74LS63, 74LS65, 74LS67, 74LS69, 74LS71, 74LS73, 74LS75, 74LS77, 74LS79, 74LS81, 74LS83, 74LS85, 74LS87, 74LS89, 74LS91, 74LS93, 74LS95, 74LS97, 74LS99, 74LS100

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | | | | | | | | | | | | |
| 1A | 1B | 1C | 1D | 1E | 1F | 1G | 1H | 1I | 1J | 1K | 1L | 1M | 1N | 1O | 1P | 1Q | 1R | 1S | 1T | 1U | 1V | 1W | 1X | 1Y | 1Z | 2A | 2B | 2C | 2D | 2E | 2F | 2G | 2H | 2I | 2J | 2K | 2L | 2M | 2N | 2O | 2P | 2Q | 2R | 2S | 2T | 2U | 2V | 2W | 2X | 2Y | 2Z |

FIGURE 25

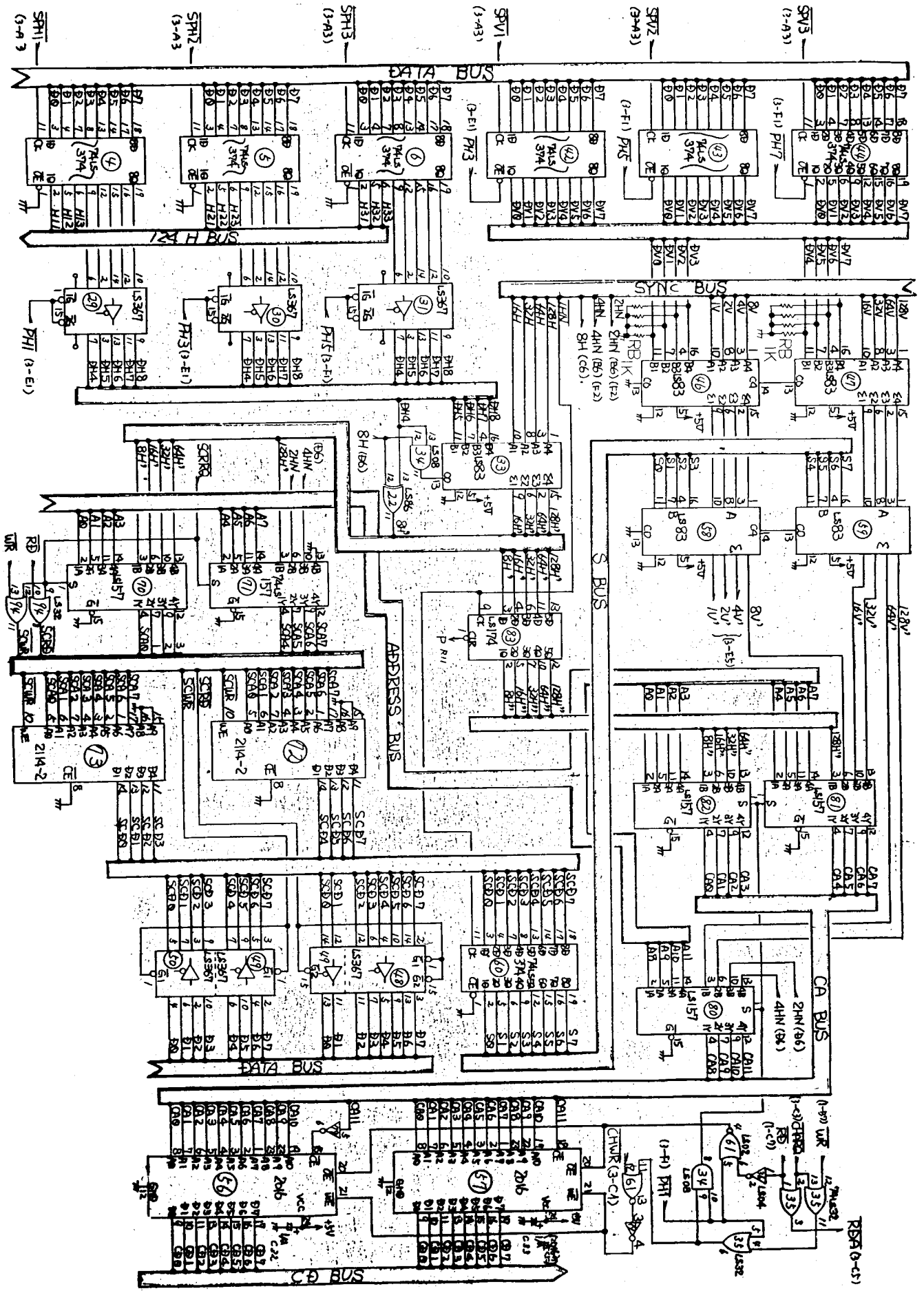
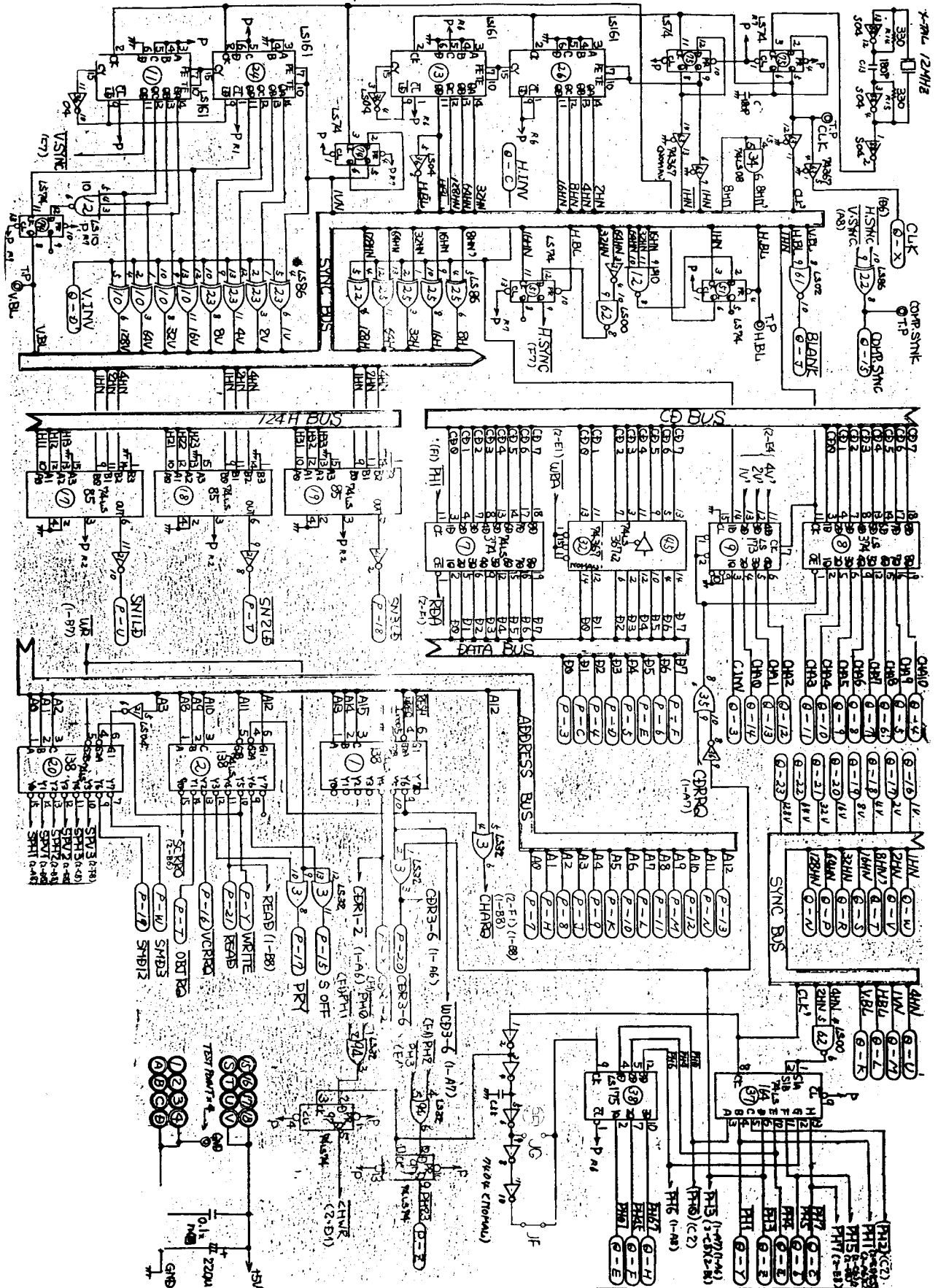


FIGURE 26



VIDEO PC BOARD SCHEMATIC 1 of 5

FIGURE 27

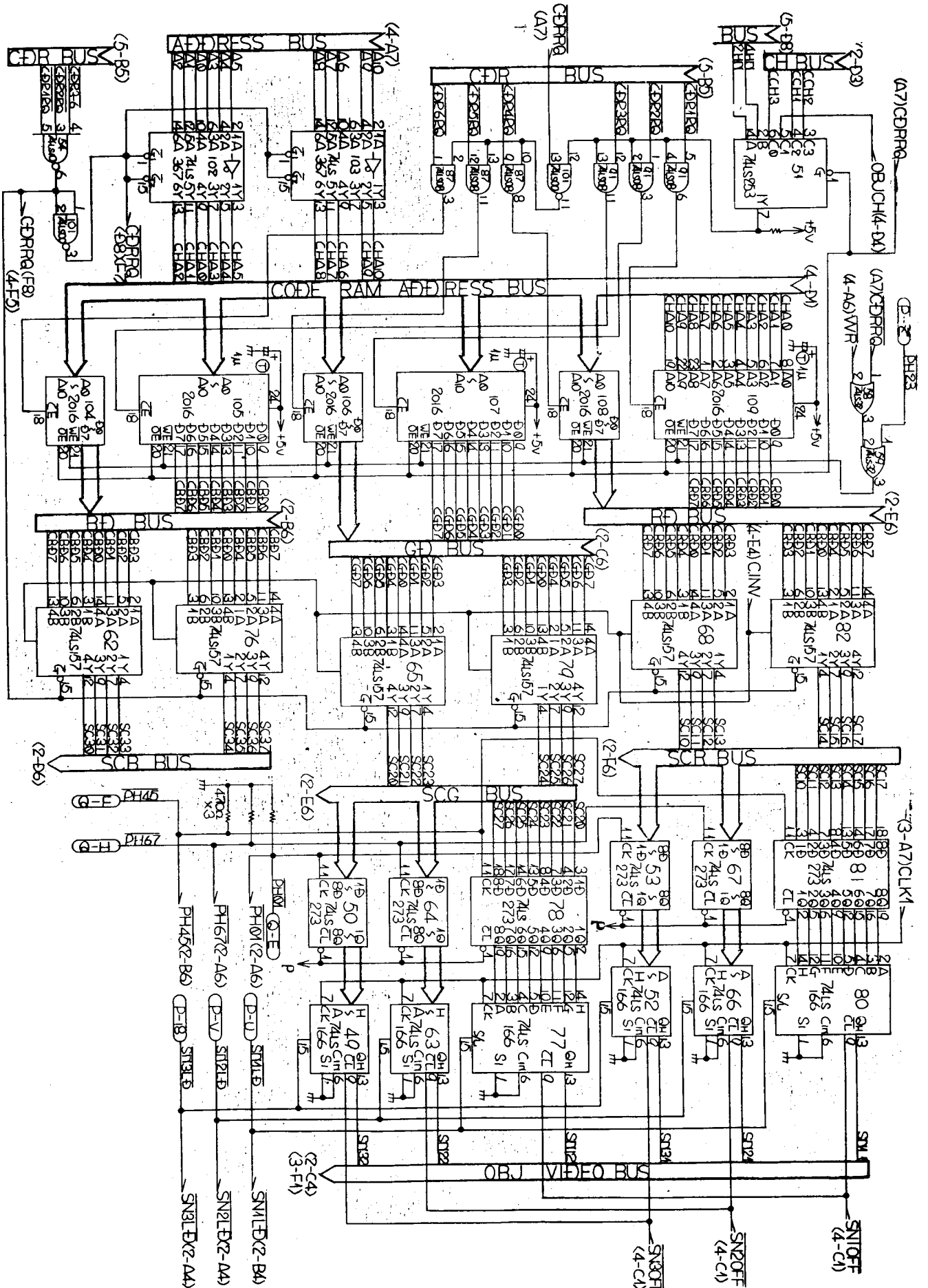
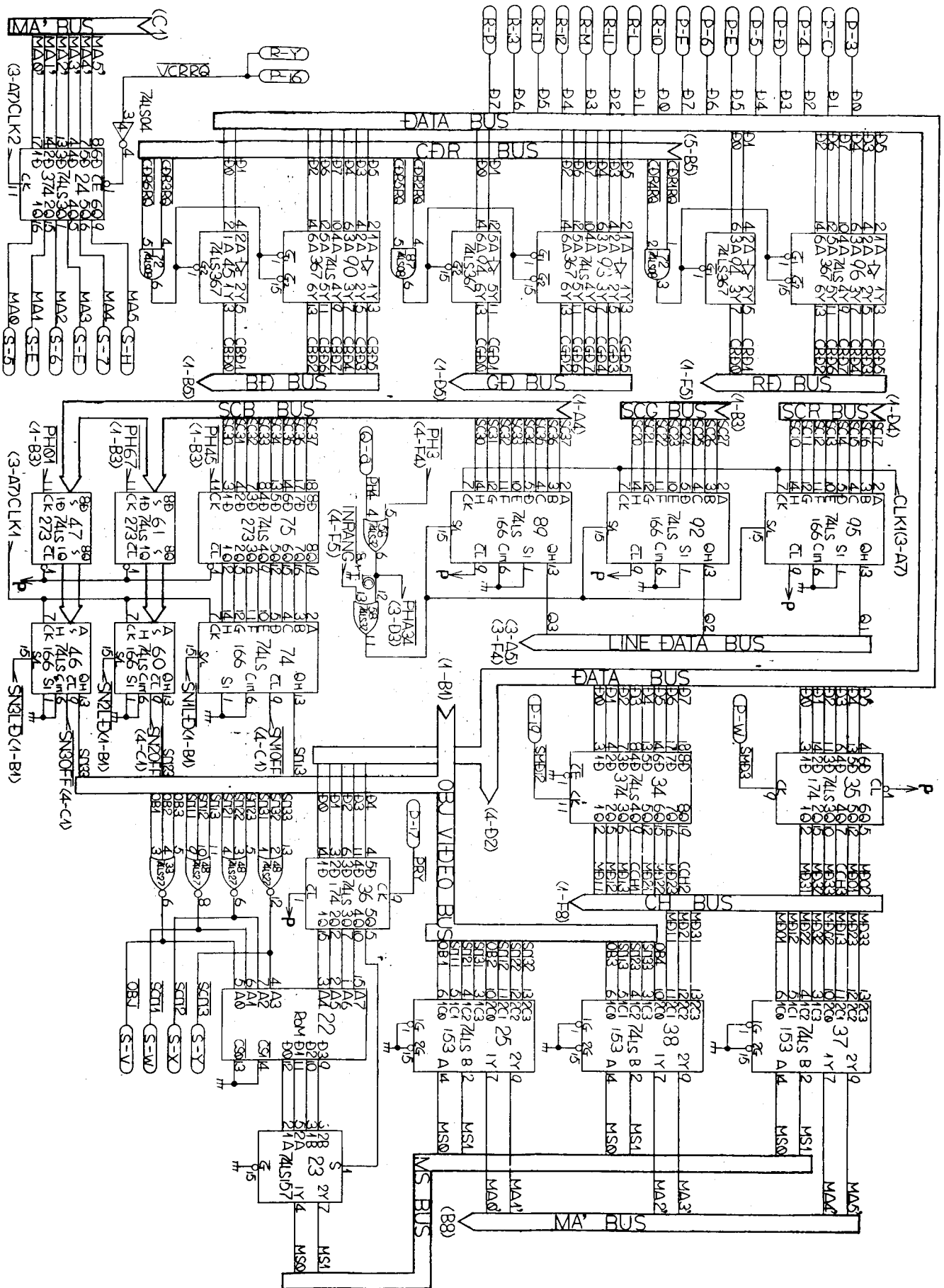


FIGURE 28



VIDEO PC BOARD SCHEMATIC 3 of 5

FIGURE 29

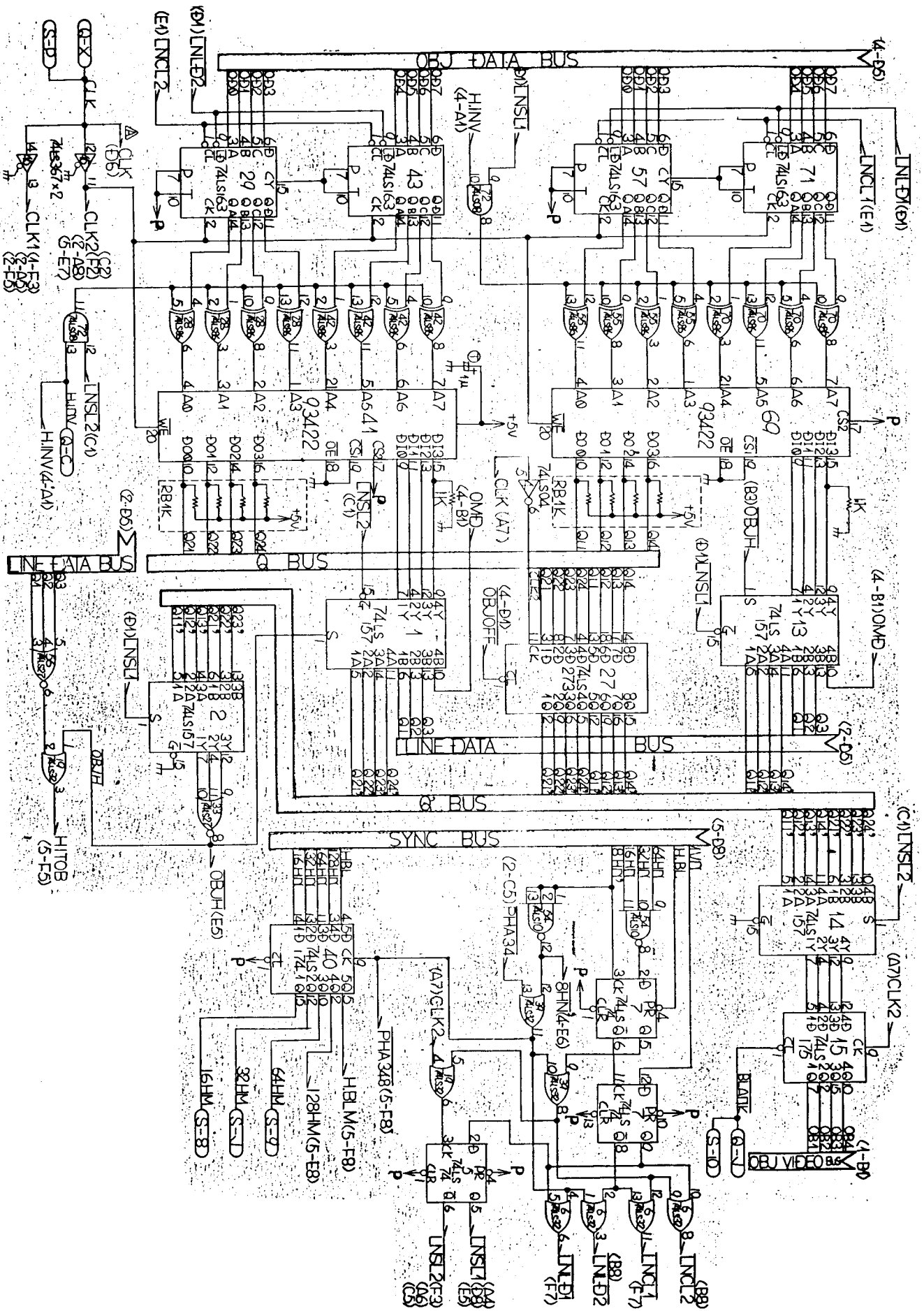


FIGURE 30

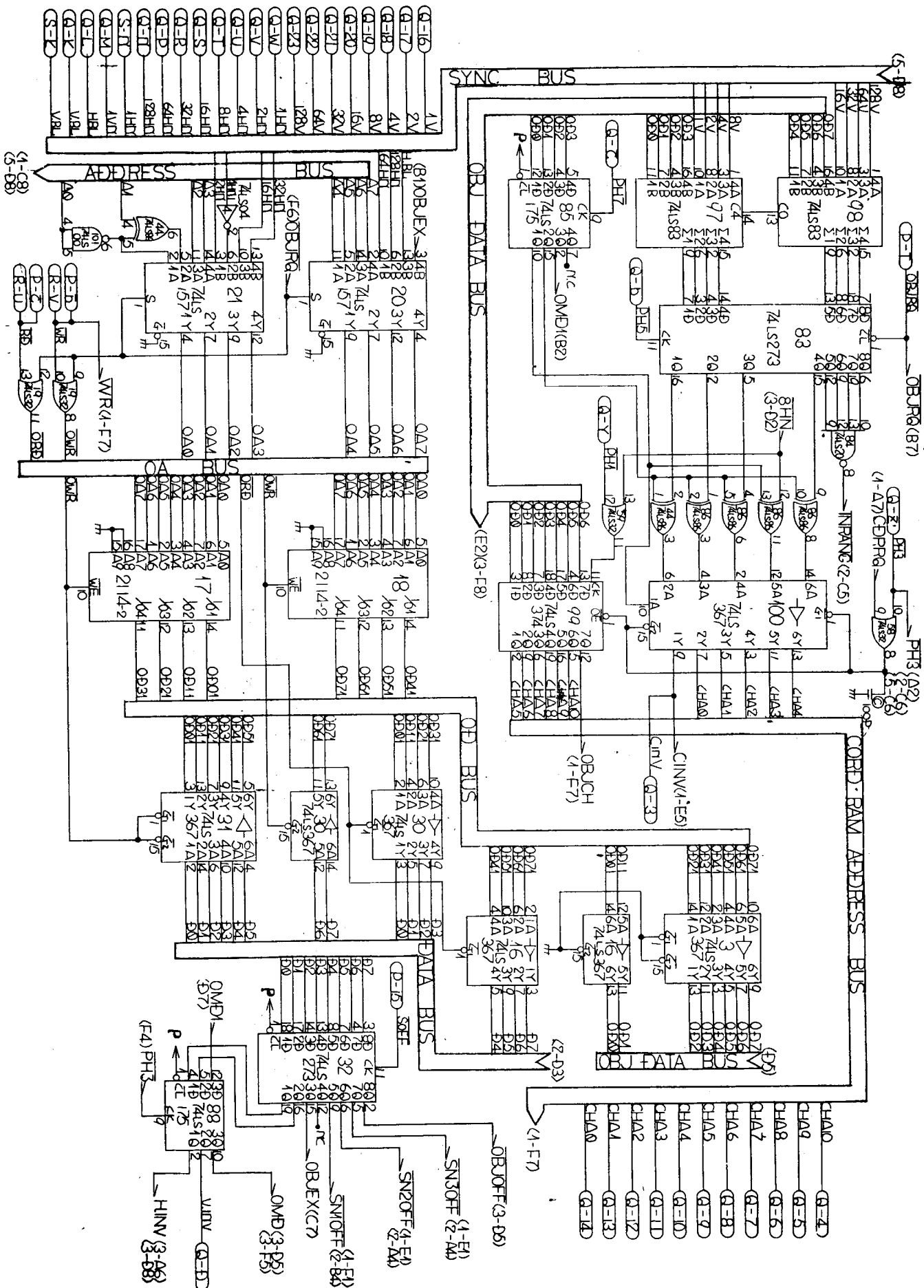
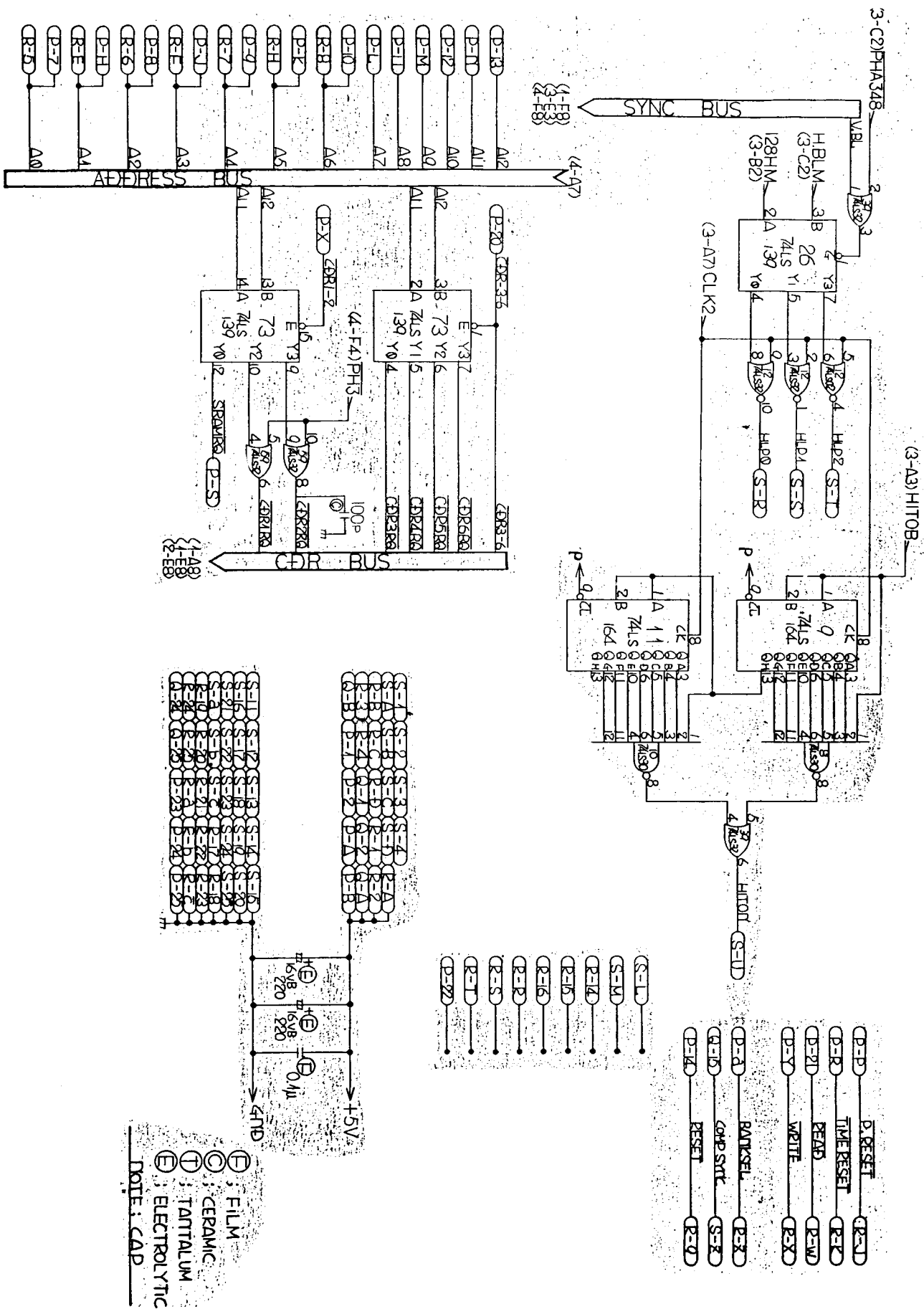


FIGURE 31



(E) FILM
 (T) CERAMIC
 (H) TANTALUM
 (D) ELECTROLYTIC
 NOTE: CAP

FIGURE 32

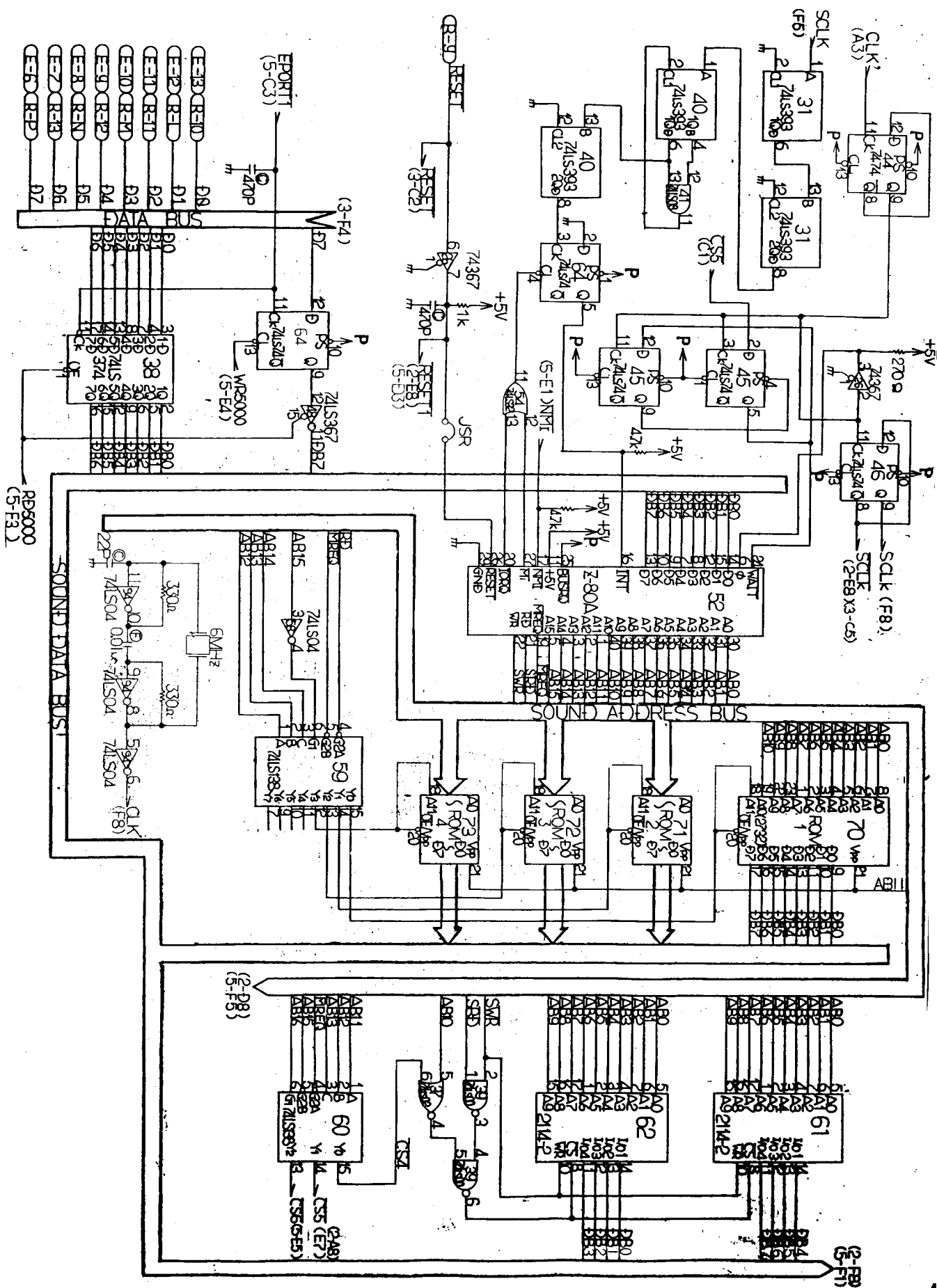


FIGURE 33

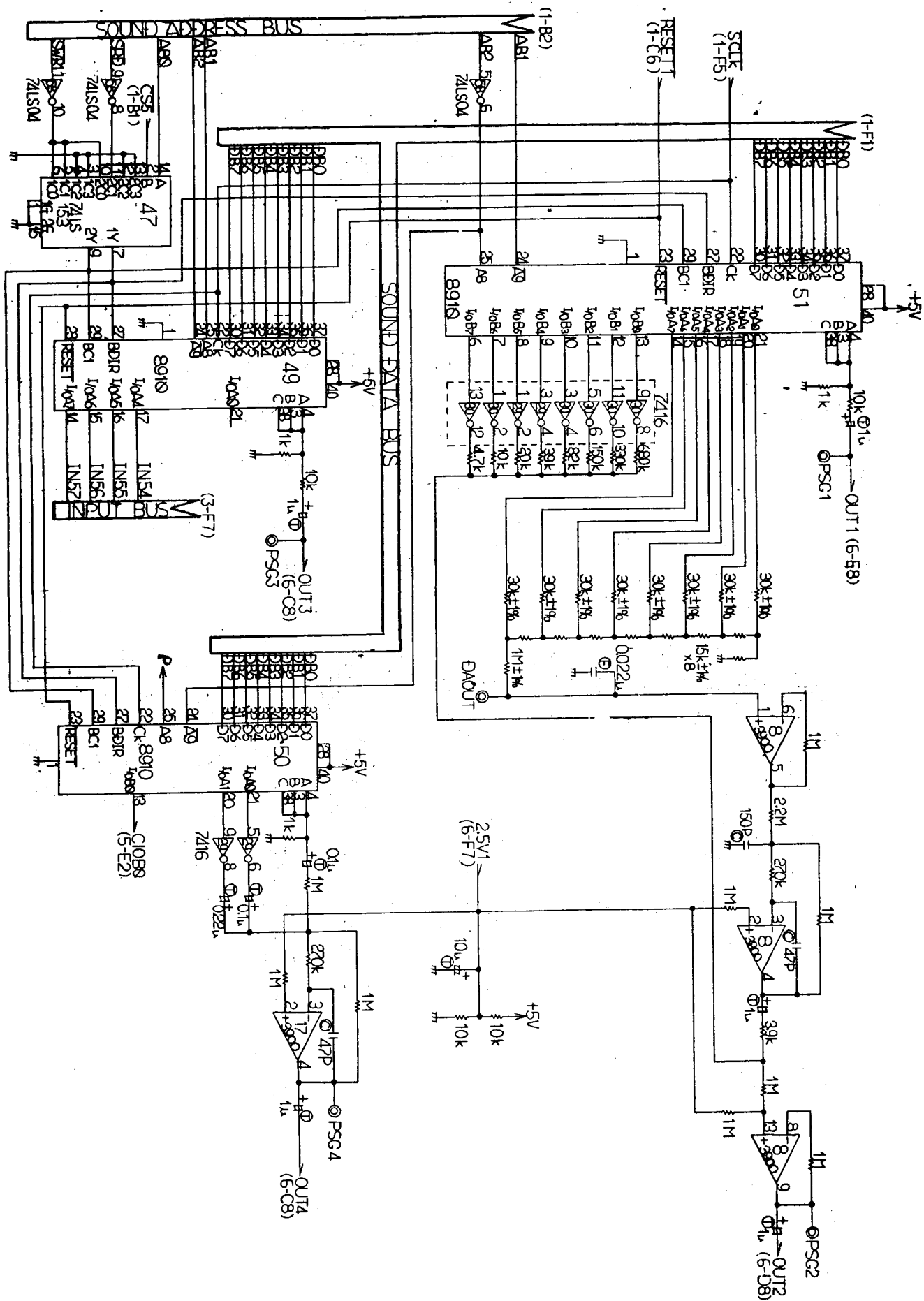


FIGURE 34

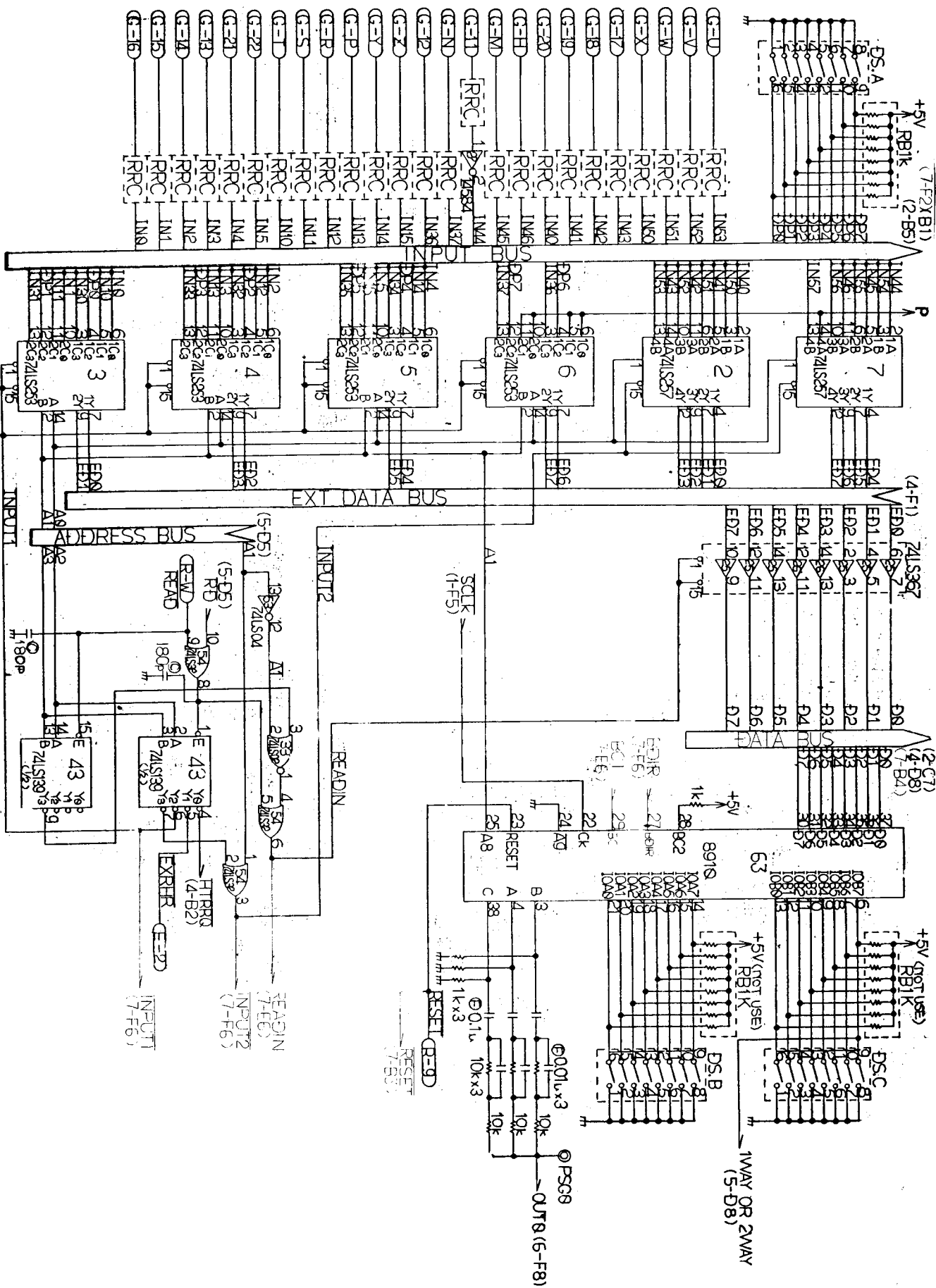
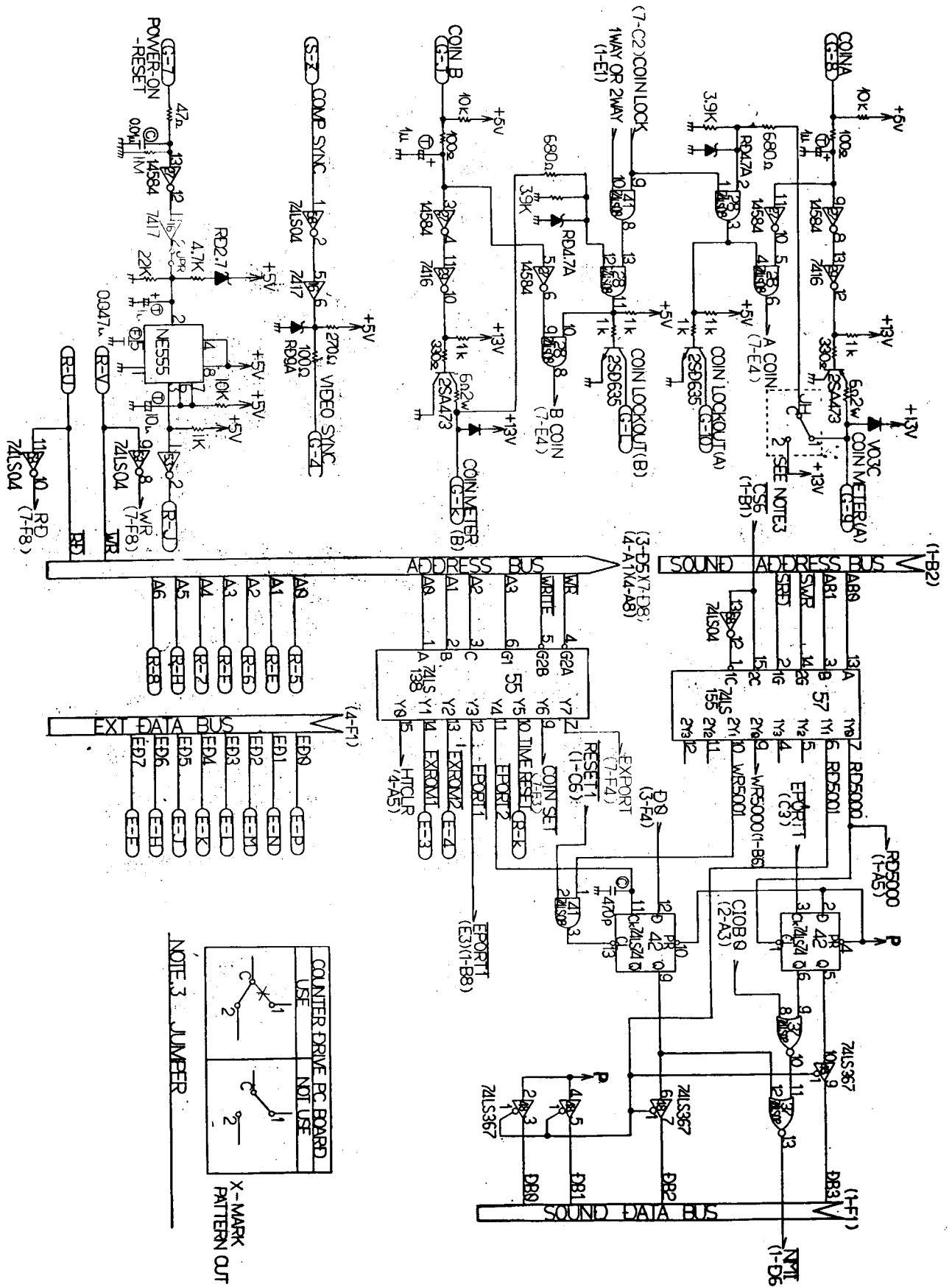


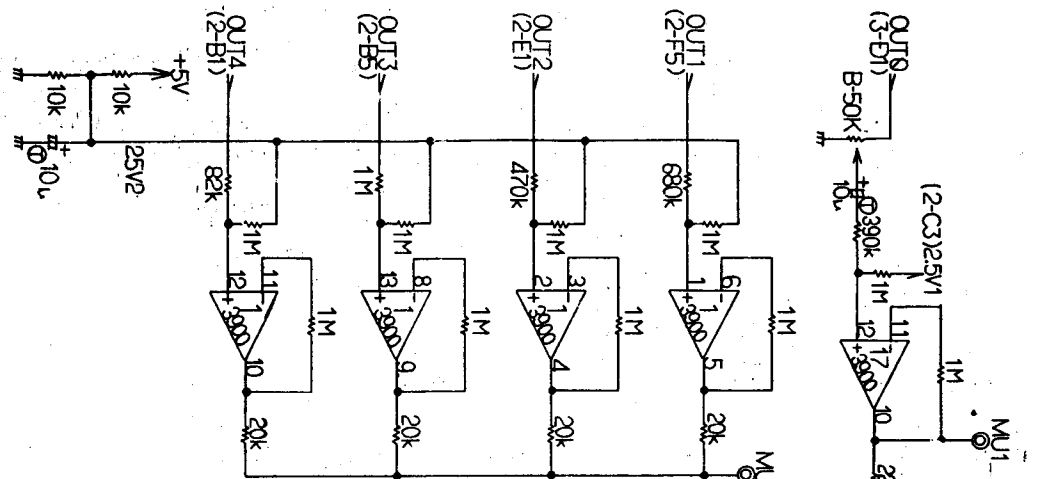
FIGURE 36



| COUNTER DRIVE PC BOARD | |
|------------------------|---------|
| USE | NOT USE |
| | |
| | |

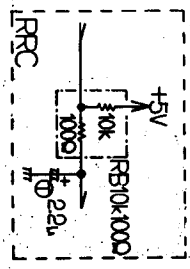
NOTE 3. JUMPER
X-MARK
PATTERN OUT

FIGURE 37



- Ⓜ FILM
- Ⓢ CERAMIC
- Ⓣ TANTALUM
- ⓔ ELECTROLYTIC

NOTE 1 CAP.



NOTE 2 RRC

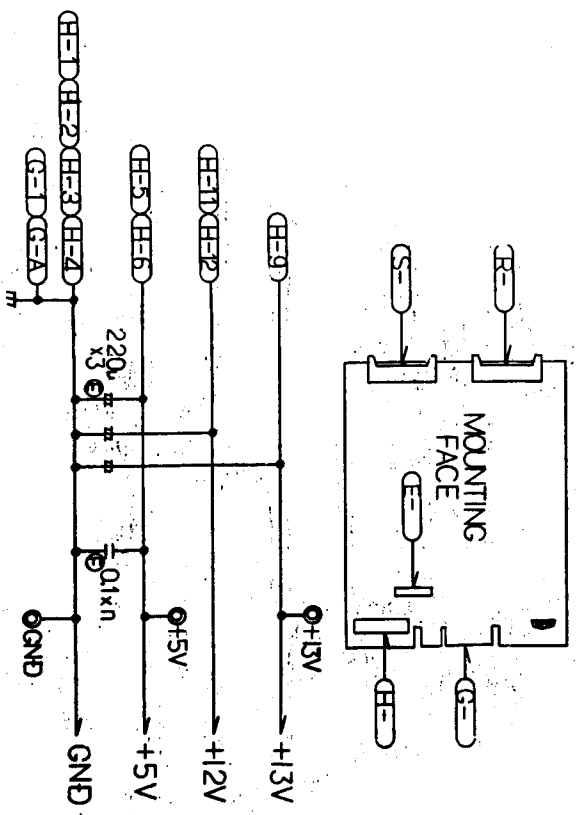
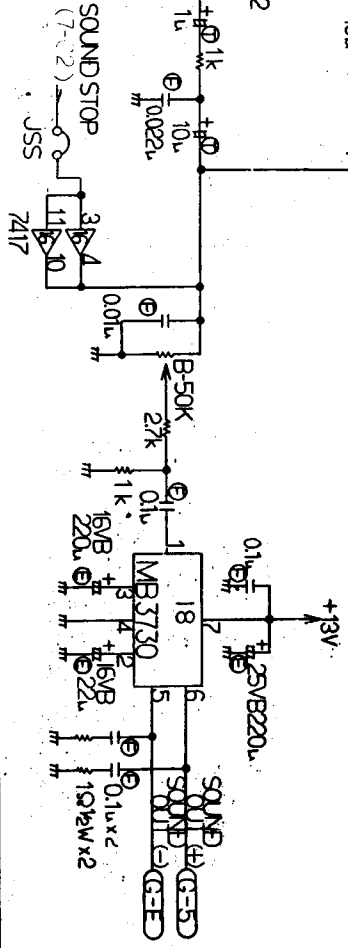
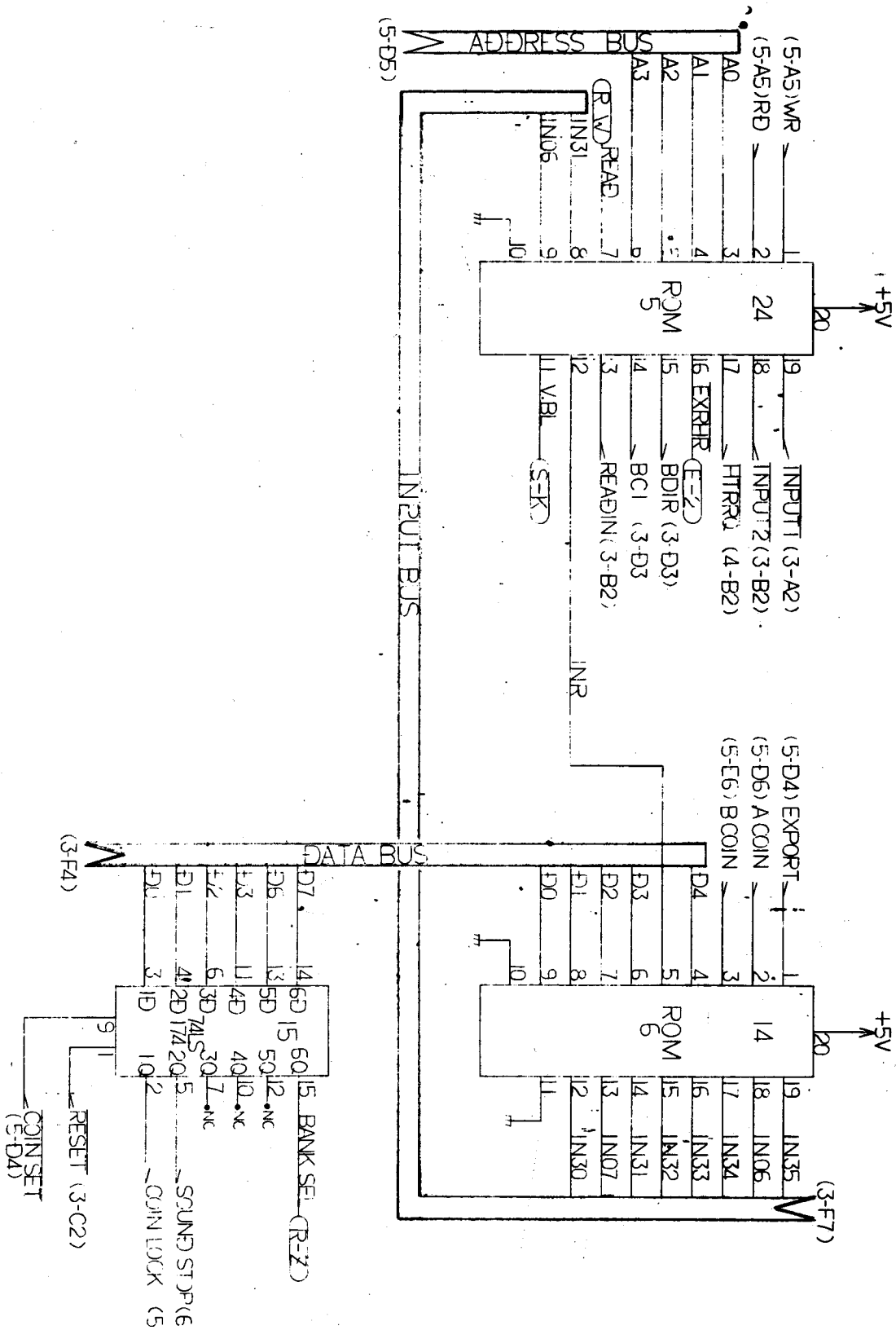
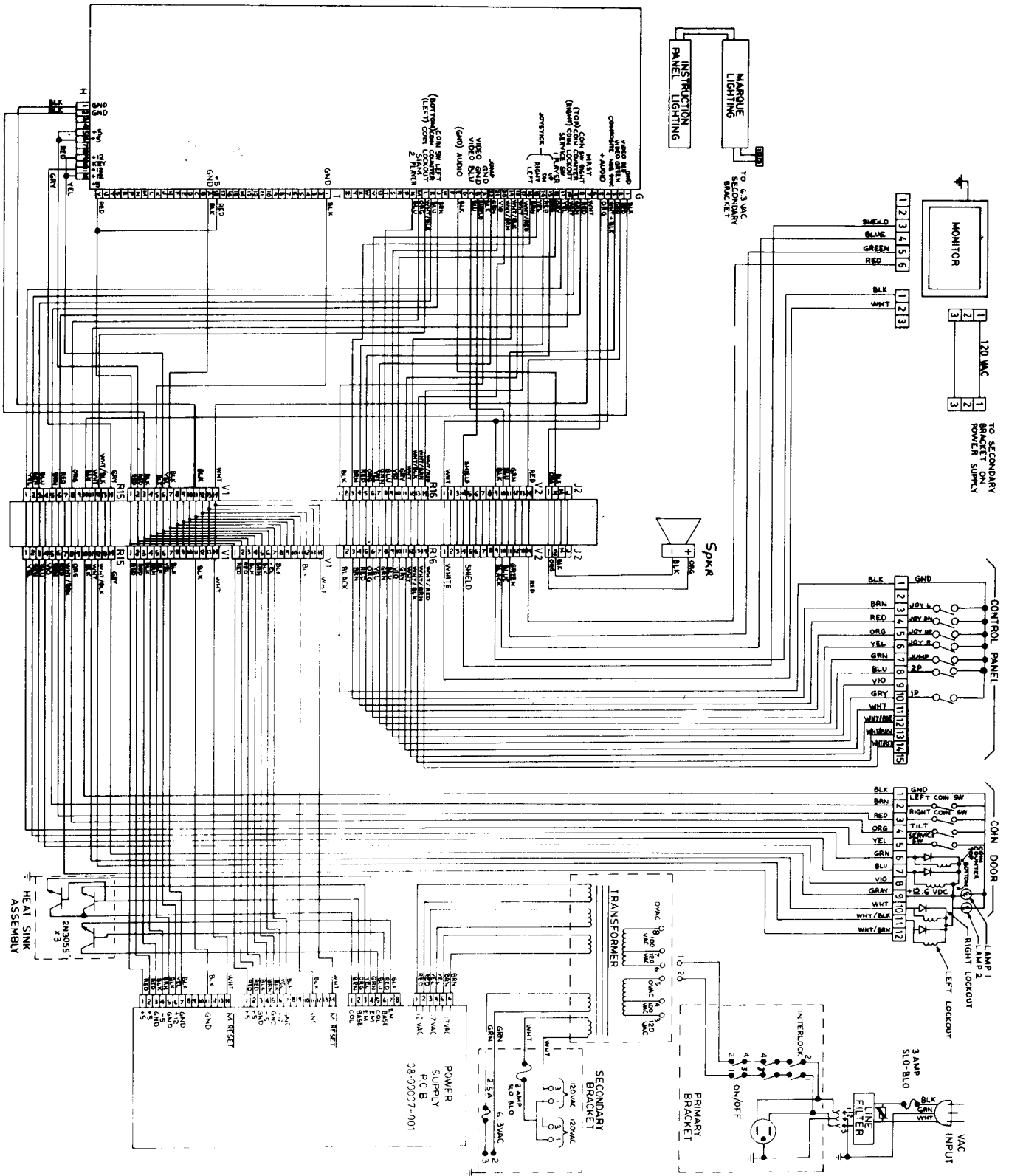


FIGURE 38



WIRING DIAGRAM

FIGURE 39





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