

SPACE WARRIORS

T.M.

TRIMLINE^{T.M.}



T.M.



Trade Marks of Taito America Corporation

SPACE INVADERS - BLACK & WHITE

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1. SPACE INVADERS SET-UP

A. INTRODUCTION

TAITO AMERICA'S "SPACE INVADERS"™ TRIMLINE™ is a skill-based video game designed for one or two players. During the game 55 Invaders appear in 5 rows of 11 across. These Invaders are constantly moving either to the left or right of the 13" black and white video monitor, which has a multi-colored transparent plastic overlay.

The object of the game is to destroy as many Invaders as possible. Invaders advance step by step against the laser base as they move left and right. Fortresses are gradually destroyed by the attack of the Invaders and by the laser. As the number of Invaders decrease they move faster.

The point value of the Invaders is 10 points for the first two rows, 20 points for the middle row and 30 points for the top two rows. When all the Invaders are destroyed, the total point value per screen is 990 points. Additional points may be scored by hitting the UFO, which gains a mystery score of 50, 100, 150 or 300 points. When the score reaches 1,500 points (adjustable) a bonus laser base appears with a beep sound.

B. GAME INSPECTION

TAITO AMERICA'S SPACE INVADERS™ game is ready to play when received. However, careful visual inspection is needed to insure your game is in good condition. Please verify the following instructions before turning on the game.

- * Examine external parts for dents, chips or broken parts.
- * Open the service door and examine the following:
 - o Plug-in connectors, making sure they are firmly seated.
 - o Speaker
 - o Printed circuit boards, making sure there is no damage to the components.
 - o Check for loose foreign objects, especially metal objects which may cause electrical problems.
 - o Fuses, making sure they are firmly in the holders.
 - o Transformer.
 - o Coin mechanism.
 - o Make sure harness wires are not disconnected.

If any problems occur or technical assistance is needed contact our Customer Service Department TOLL FREE 800-323-0666 (except Illinois).

Finally, turn on the game and look at the screen. The Video monitor is properly adjusted before shipping and there should be no need for adjustments. If an adjustment is necessary refer to Maintenance, Section D.

C. GAME INSTALLATION

POWER REQUIREMENTS

TAITO AMERICA'S SPACE INVADERS™ game is shipped ready for operation at 120 VAC, 60HZ or 220 VAC, 50HZ which has a power consumption of approximately 250 watts. Both versions are shipped from the factory ready for operation. Operators should verify that the line voltage at his facility matches the game's requirements before installing.

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

Physical Dimensions
 Depth - 24" (61cm)
 Width - 20" (51cm)
 Height - 54" (138cm)
 Weight - 190 lbs. (86kg.)
 (Package weight)
 Temperature Range
 32° - 100°F

INSTALLATION PRECAUTIONS

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 rising internal temperatures.
- * Do not install in a damp or dusty location.

ROUTINE MAINTENANCE

Due to the solid-state circuitry, this game should require very little maintenance and only occasional adjustments if the above precautions are taken to insure it's operation.

D. OPTION SETTINGS

1. DIP SWITCH AND VOLUME CONTROL SETTINGS

TAITO AMERICA'S SPACE INVADERS™ game provides the following option switches (See Table 1 & 2). These settings are made on the Game and Sound P.C.B. (CVN00002). Carefully turn the potentiometers as in Figure 1.

- * SW 1, SW 2
 Switches 1 and 2 are used for adjusting the number of laser bases desired. These adjustments are preset at the factory for 3 laser bases.

| LASER BASES | SW 1 | SW 2 |
|-------------|------|------|
| 3 | ON | ON |
| 4 | OFF | ON |
| 5 | ON | OFF |
| 6 | OFF | OFF |

TABLE 2 LASER BASE OPTION

- * SW 3
 Switch 3 is not used. Normally, this switch is kept in the OFF position.
- * SW 4
 Switch 4 is used for adjusting the bonus points that can be scored. This adjustment is preset at the factory at 1500 points.

| SCORE | SW 4 | LASER BASE |
|-------|------|------------|
| 1500 | ON | 1 |
| 1000 | OFF | 1 |

TABLE 1 BONUS OPTION

- * SW 5, SW 6 & SW 7.
 Switches 5, 6 and 7 are factory adjusted and must be set to the ON position.
- * SW 8.
 Switch 8 is adjusted for pricing displayed on the screen. When SW 8 is set in the ON position, the play pricing is displayed on the screen as follows:
 1 coin - 1 player 2 coins - 2 players

When SW 8 is set to OFF position the screen will appear blank. These settings are made on the Game and Sound P.C.B. (CVN00002).

VOLUME CONTROL SETTINGS

- * VR 1 - Adjusts the volume of the UFO.
- * VR 2 - Adjusts the volume of the laser base when firing.
- * VR 3 - Adjusts the volume of laser base when being destroyed.
- * VR 4 - Adjusts volume of Invaders when being destroyed.
- * VR 5 - Adjusts the volume of BEEP when a bonus is being awarded.
- * VR 6 - Adjusts the volume of Invaders when advancing.
- * VR 7 - Adjusts the volume of UFO when being destroyed.
- * VR 8 - Adjusts the overall volume of SPACE INVADERS™ game.

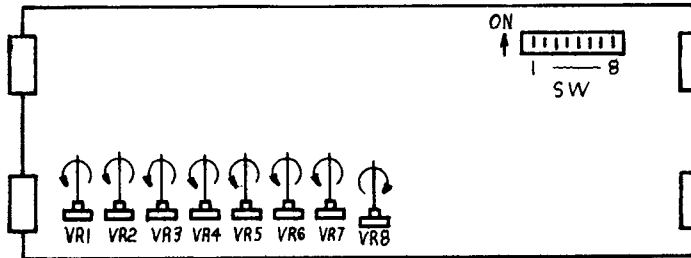


FIGURE 1 OPTION SETTING AND VOLUME CONTROL LOCATIONS

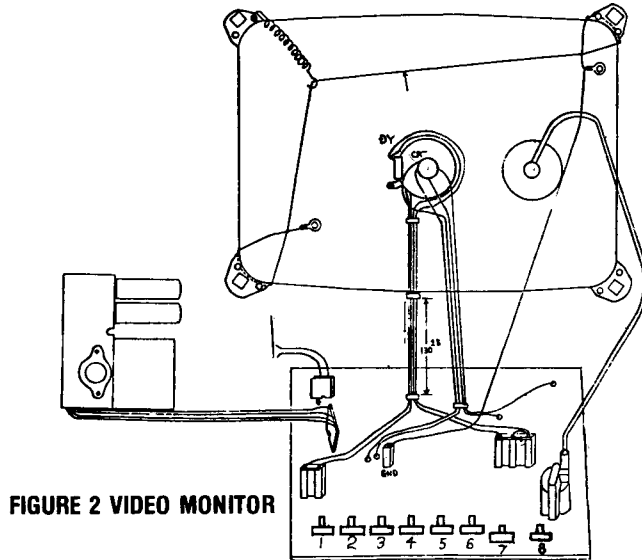


FIGURE 2 VIDEO MONITOR

2. MAINTENANCE

All games require a certain amount of maintenance to keep them in good condition. A periodic check of the 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. One fuse is located on the Power Supply itself and would depend on whether the game was operating at 220VAC, 50HZ or 120VAC, 60HZ. See Figure 4, Page 7.

C. Monitor Removal

If you should need to remove the monitor follow the directions listed below. See Figure 2, Page 3.

CAUTION

It is recommended the game be left disconnected for at least one hour before removing the monitor. This will discharge the video monitor tube.

- Remove the control panel by releasing two spring loaded latches. These latches can be accessed through the coin door.
- Disconnect the wiring by separating connector K and all wires to the CRT.
- Remove the (3) screws from the "Z" bracket which leaves the cover glass free to be removed.
- Remove the (4) screws at each corner of the monitor and lift the monitor up and out of the cabinet.

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

Refer to Figure 2 on Page 3 while reading the following description.

The video monitor is properly adjusted before shipping, however, if necessary, readjust the following controls on the monitor board.

- 1 **Vertical Linearity Control** is adjusted to obtain a symmetrical picture or pattern from top to bottom of the screen.
- 2 **Vertical Size Control** is used to obtain the correct vertical size of the displayed picture on the CRT screen.
- 3 **Vertical Hold Control** when adjusted correctly will lock the picture vertically, misadjustment will cause rolling of displayed picture.
- 4 **Brightness Control** is used to adjust the brightness level without going out of focus.
- 5 **Contrast Control** is used to adjust the brightness level without the picture going out of focus.
- 6 **Horizontal Place Control** is a visual adjustment used to center the picture in the viewing area of the picture tube.
- 7 **Horizontal Hold Control** when misadjusted will show diagonal lines across the CRT screen. Use this control to lock the horizontal sync back into place.
- 8 **Focus Control** adjustment is made at a normal brightness level and should be adjusted to obtain well defined scan lines.

NOTE:

The Monitor is mounted into the Space Invaders™ Trimline™ cabinet vertically. When adjusting the screen the vertical adjustments will seem to be horizontal adjustments.

E. Fluorescent Tube Replacement

CAUTION

If you drop a fluorescent tube and it breaks it will explode! Please use care when replacing.

To replace the fluorescent bulb the control panel must be removed. With both hands turn the bulb toward you and carefully pull out of the lamp sockets.

F. Printed Circuit Board Replacement

You may wish to remove the Space Invaders™ printed circuit boards for replacement or service. To do so refer to Figure 3 on Page 5 and the following:

To remove the "A" board, "B" board, or the Game board, loosen the wing screw located on top of the PCB chassis. Then slide the stop bracket to the side and slide the PCB board to be removed out of the guides.

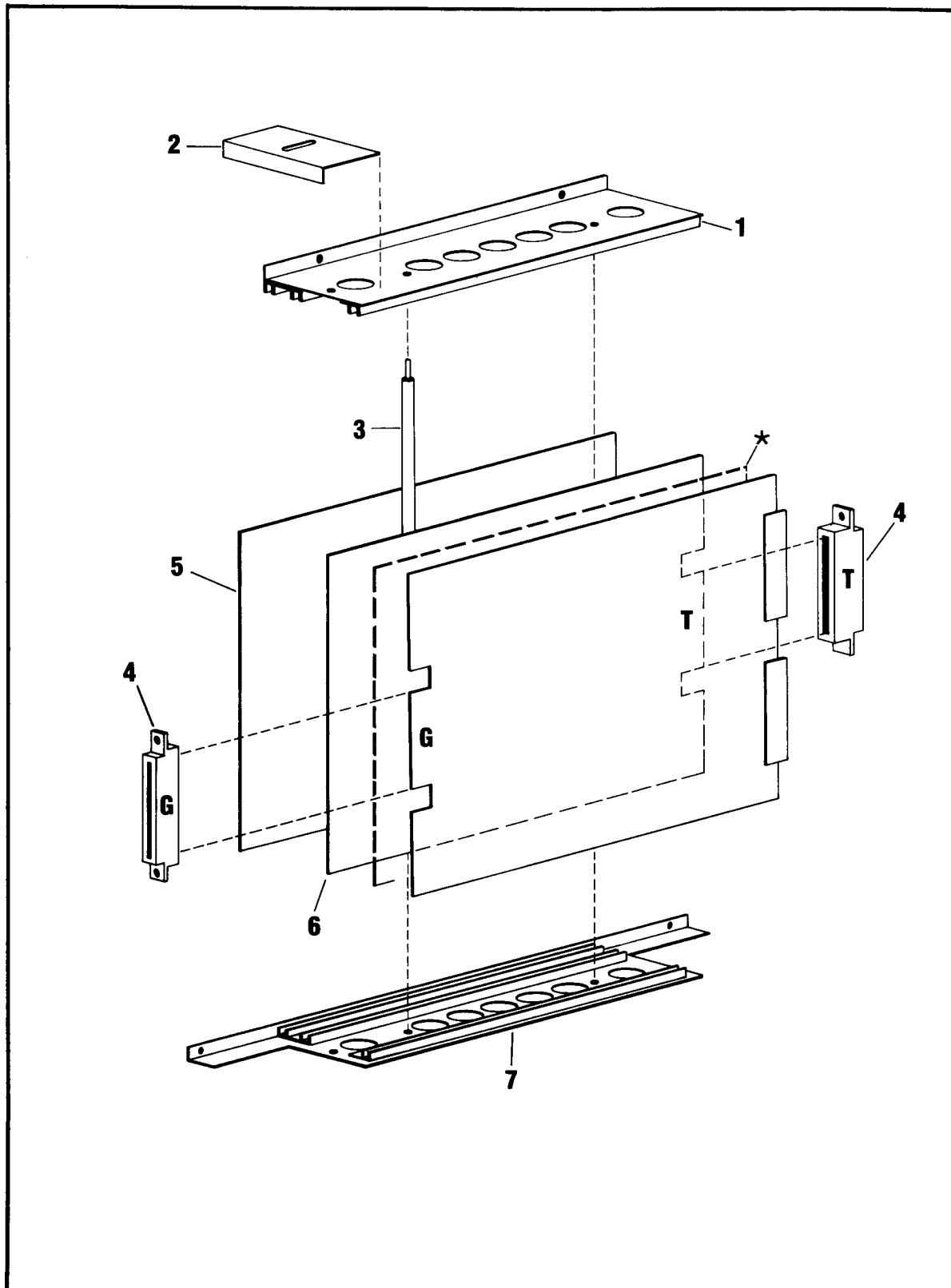
Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. As temporarily permitted by regulation it has not been tested for compliance pursuant to Subpart J of 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."

MOUNTING CHASSIS ASSEMBLY

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|----------------|-------------------------------|-----------|
| 1 | 850007 | P.C. Board Guide "B" | WTO 90008 |
| 2 | 500057 | Stop Bracket | CVO 30023 |
| 3 | 500059 | Shaft P.C. Chassis | TVO 20001 |
| 4 | 100034 | 50 Position Housing Connector | |

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|----------------------------------|----------------|----------------------|-----------|
| 5 | 500055 | Plate Shield | CVO 30023 |
| 6 | 850081 | Overall Board Set | |
| 7 | 850006 | P.C. Board Guide "A" | AAO 19547 |
| * Item 6 may be 2 or 3 board set | | | |

FIGURE 3



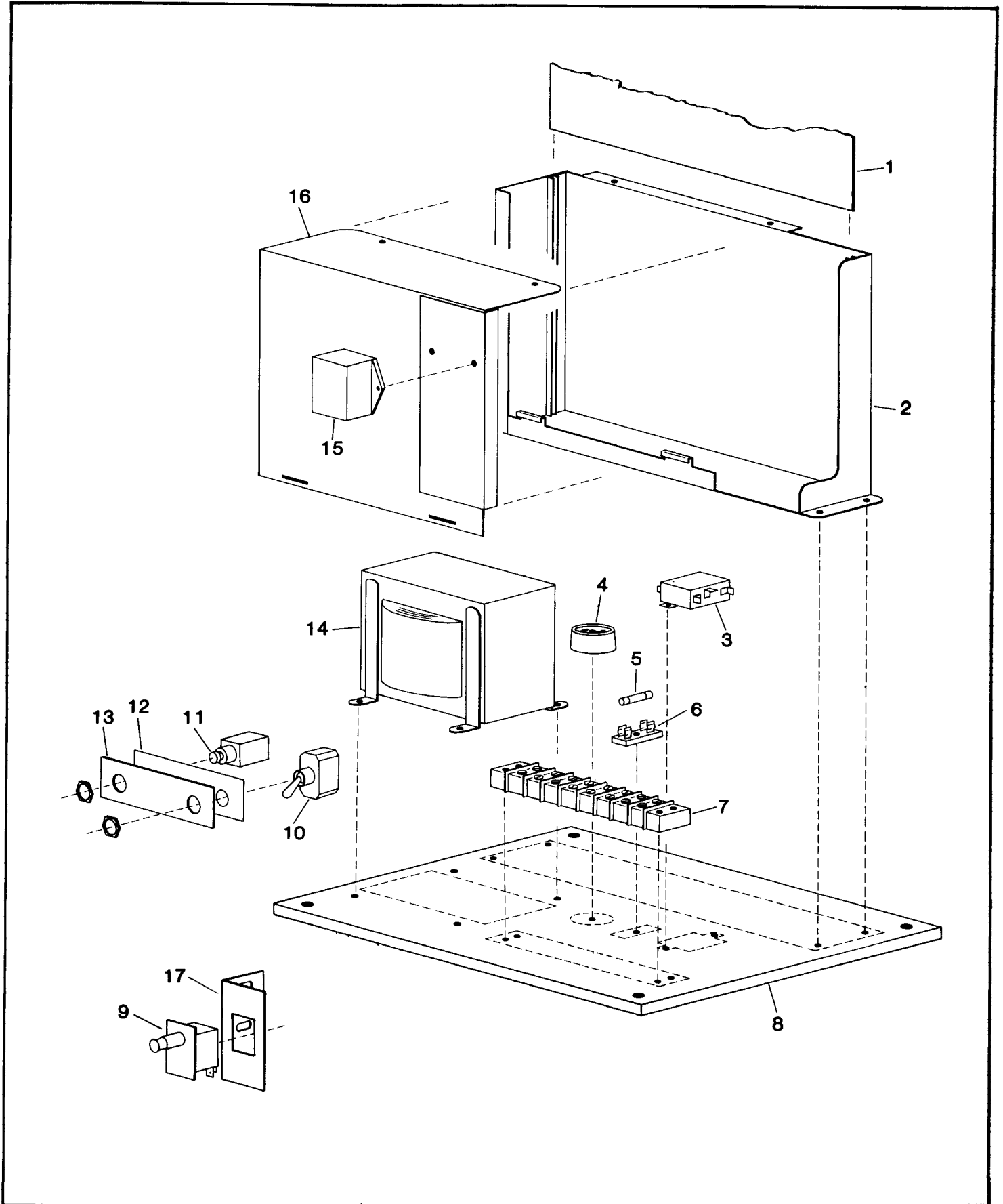
SWITCHING REGULATOR (POWER SUPPLY) & CABINET PARTS

FIGURE 4

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|----------------|---------------------------------|-------------|
| 1 | 800010 | Switching Regulator PCB Assy. | AAM 60009 |
| 2 | 998702 | Shield Box | AAO 13613 |
| 3 | 195004 | Power Line Filter | |
| 4 | 021000 | Service Outlet | |
| 5 | 170005 | Fuse, 3 AMP, 3AG, Slo-Blo, 250V | |
| 5A | 170006 | Fuse, 1.5AMP,3AG, Slo-Blo, 250V | |
| 6 | 171000 | Fuse Holder | |
| 7 | 100027 | Barrier Strip, 8 position | |
| 8 | 850071 | Power Board | |
| 9 | 024001 | Switch Interlock | |
| 10 | 021500 | Toggle Power Switch | |
| 11 | 024501 | Momentary Switch,Hi-Score Erase | Some Models |
| 12 | 199015 | Insulating Shield | Some Models |
| 13 | 500025 | Toggle Switch Bracket | |
| 14 | 010002 | Isolation Transformer | |
| 15 | 019501 | Noise Filter | AAT 61017 |
| 16 | 998703 | Shield Cover | AAO 13614 |
| 17 | 500064 | Bracket - Interlock Switch | |

SWITCHING REGULATOR (POWER SUPPLY) & CABINET PARTS

FIGURE 4



GAME BOARD

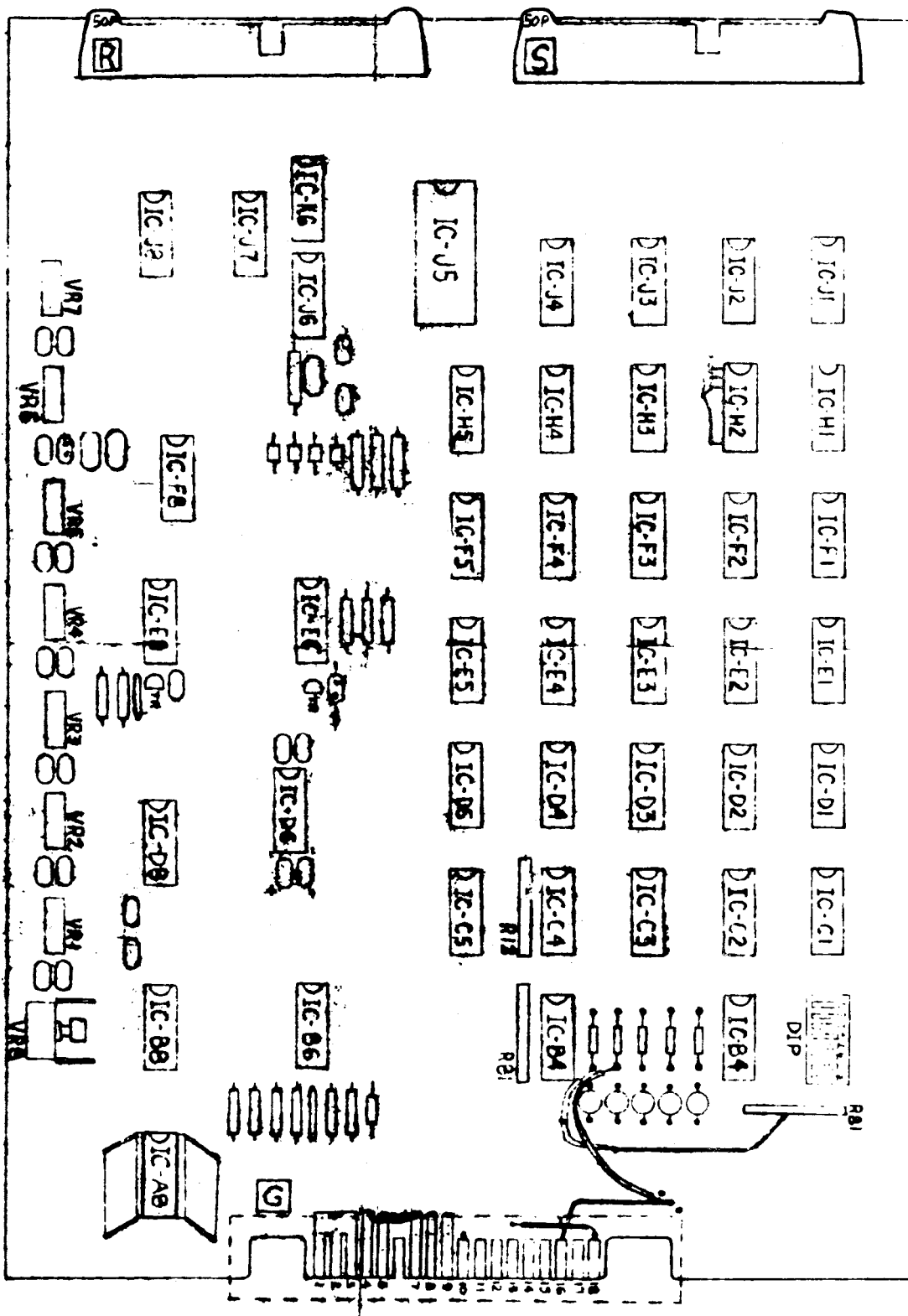
FIGURE 5

| ITEM | SYMBOL | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|--|----------------|---------------------------------|-----------|
| 1 | | 802006 | Printed Circuit Board | CVO 70005 |
| 2 | | 100000 | Angle Pin Header P050 50 Pin | AAO 55154 |
| 3 | | 160015 | Variable Res 50K | AAT 53041 |
| 4 | | 150015 | Variable Res 50K(VR8) | AAT 53047 |
| 5 | | 006067 | Res,Block,1K (8 element) | AAT 55036 |
| 6 | | 006072 | Res,Block,1.5K (8 element) | AAT 55038 |
| 7 | DIP (B-1) | 020006 | Dip Switch D SS-8 | |
| 8 | | 030265 | Cap,Lytic 100uf,16V | AAT 41022 |
| 9 | | 030758 | Cap,Lytic 10uf,25V | AAT 41107 |
| 10 | | 025022 | Cap,Ceramic 330pf,50V | AAT 41330 |
| 11 | | 025024 | Cap,Ceramic 470pf,50V | AAT 41334 |
| 12 | | 036000 | Cap,Tantalum,1uf,35V | AAT 41431 |
| 13 | | 036004 | Cap,Tantalum,.22uf,35V | AAT 41432 |
| 14 | | 036008 | Cap,Tantalum,.47uf,35V | AAT 41434 |
| 15 | | 036012 | Cap,Tantalum,1uf,35V | AAT 41436 |
| 16 | | 036016 | Cap,Tantalum,2.2uf,35V | AAT 41437 |
| 17 | | 036020 | Cap,Tantalum,4.7uf,35V | AAT 41439 |
| 18 | | 036024 | Cap,Tantalum,10uf,35V | AAT 41606 |
| 19 | | 040535 | Cap,Mylar,.001uf,100V | AAT 41232 |
| 20 | | 040500 | Cap,Mylar,.01uf,100V | AAT 41238 |
| 21 | | 040512 | Cap,Mylar,.1uf,100V | AAT 41244 |
| 22 | | 054000 | Diode Zener | AAT 13028 |
| 23 | | 052001 | Diode | AAT 12025 |
| 24 | | 050001 | Transistor 2SC 372-0 (9014) | AAT 11020 |
| 25 | BC-6, BC-8 | 079000 | IC, Amplifier LM 3900 (9014) | AAT 31011 |
| 26 | D-6,D-8, EF-6,EF-8 FH-80,A-8 | 079008 | IC, Amplifier LM 377 | AAT 31032 |
| 27 | J-6 | 080015 | IC Timer NE556 | AAT 31028 |
| 28 | F-5 | 075000 | IC TTL 7400 | AAT 32001 |
| 29 | H-2, E-5 | 075004 | IC TTL 7404 | AAT 32003 |
| 30 | D-5 | 075024 | IC TTL 7432 | AAT 32021 |
| 31 | C-5 | 075014 | IC TTL 7416 | AAT 32033 |
| 32 | H-4, F-4 | 075015 | IC TTL 7417 | AAT 32049 |
| 33 | K-6 | 075173 | IC TTL 7411 | AAT 32121 |
| 34 | JK-5 | 083004 | IC TTL 76477 | AAT 32141 |
| 35 | H-5 | 075045 | IC TTL 7474 | AAT 32011 |
| 36 | H-1,F-1 | 075100 | IC TTL 74161 | AAT 32018 |
| 37 | B-2,B-4 | 076010 | IC LS 74LS14 | AAT 33015 |
| 38 | F-2 | 076024 | IC LS 74LS42 | AAT 33032 |
| 39 | J-1, J-2, | 076144 | IC LS 74LS151 | AAT 33106 |
| 40 | J-3, J-4, D-1,D-2, D-3,D-4 C-1,C-2, | 076157 | IC LS 74LS153 | AAT 33108 |

| ITEM | SYMBOL | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|---------------------|----------------|----------------------------|-----------|
| 41 | C-3,C-4 H-3,F-3, | 076172 | IC LS 74LS174 | AAT 33127 |
| 42 | E-3,E-4 E-1,E-2 | 076173 | IC LS 74LS175 | AAT 33128 |
| 43 | K-7 | 076500 | C-Mos CD 4006A | AAT 36007 |
| 44 | K-8 | 076503 | C-Mos CD 4030A | AAT 36031 |
| 45 | | 000039 | Res, 68ohm 1/4W | |
| 46 | | 000043 | Res, 100ohm 1/4W | |
| 47 | | 000053 | Res, 270ohm 1/4W | |
| 48 | | 000061 | Res, 560ohm 1/4W | |
| 49 | | 000067 | Res, 1K ohm 1/4W | |
| 50 | | 000074 | Res, 2K ohm 1/4W | |
| 51 | | 000081 | Res, 3.9K ohm 1/4W | |
| 52 | | 000083 | Res, 4.7K ohm 1/4W | |
| 53 | | 000087 | Res, 6.8K ohm 1/4W | |
| 54 | | 000091 | Res, 10K ohm 1/4W | |
| 55 | | 000099 | Res, 22K ohm 1/4W | |
| 56 | | 000101 | Res, 27K ohm 1/4W | |
| 57 | | 000103 | Res 33K ohm 1/4W | |
| 58 | | 000107 | Res, 47K ohm 1/4W | |
| 59 | | 000109 | Res, 56K ohm 1/4W | |
| 60 | | 000112 | Res, 75K ohm 1/4W | |
| 61 | | 000115 | Res, 100K ohm 1/4W | |
| 62 | | 000117 | Res, 120K ohm 1/4W | |
| 63 | | 000119 | Res, 150K ohm 1/4W | |
| 64 | | 000122 | Res, 200K ohm 1/4W | |
| 65 | | 000123 | Res, 220K ohm 1/4W | |
| 66 | | 000125 | Res, 270K ohm 1/4W | |
| 67 | | 000127 | Res, 330K ohm 1/4W | |
| 68 | | 000131 | Res, 470K ohm 1/4W | |
| 69 | | 000133 | Res, 560K ohm 1/4W | |
| 70 | | 000135 | Res, 680K ohm 1/4W | |
| 71 | | 000139 | Res, 1M ohm 1/4W | |
| 72 | | 000143 | Res, 1.5M ohm 1/4W | |
| 73 | | 000147 | Res, 2.2M ohm 1/4W | |
| 74 | | 000149 | Res, 2.7M ohm 1/4W | |
| 75 | | 000151 | Res, 3.3M ohm 1/4W | |
| 76 | | 000155 | Res, 4.7M ohm 1/4W | |
| 77 | | 000267 | Res, ± 2% 1K ohm 1/4W | |
| 78 | | 000298 | Res, ± 2% 20K ohm 1/4W | |
| 79 | | 000311 | Res, ± 2% 68K ohm 1/4W | |
| 80 | | 000313 | Res, ± 2% 82K ohm 1/4W | |
| 81 | | 000339 | Res, ± 2% 100K ohm 1/4W | |

GAME BOARD

FIGURE 5



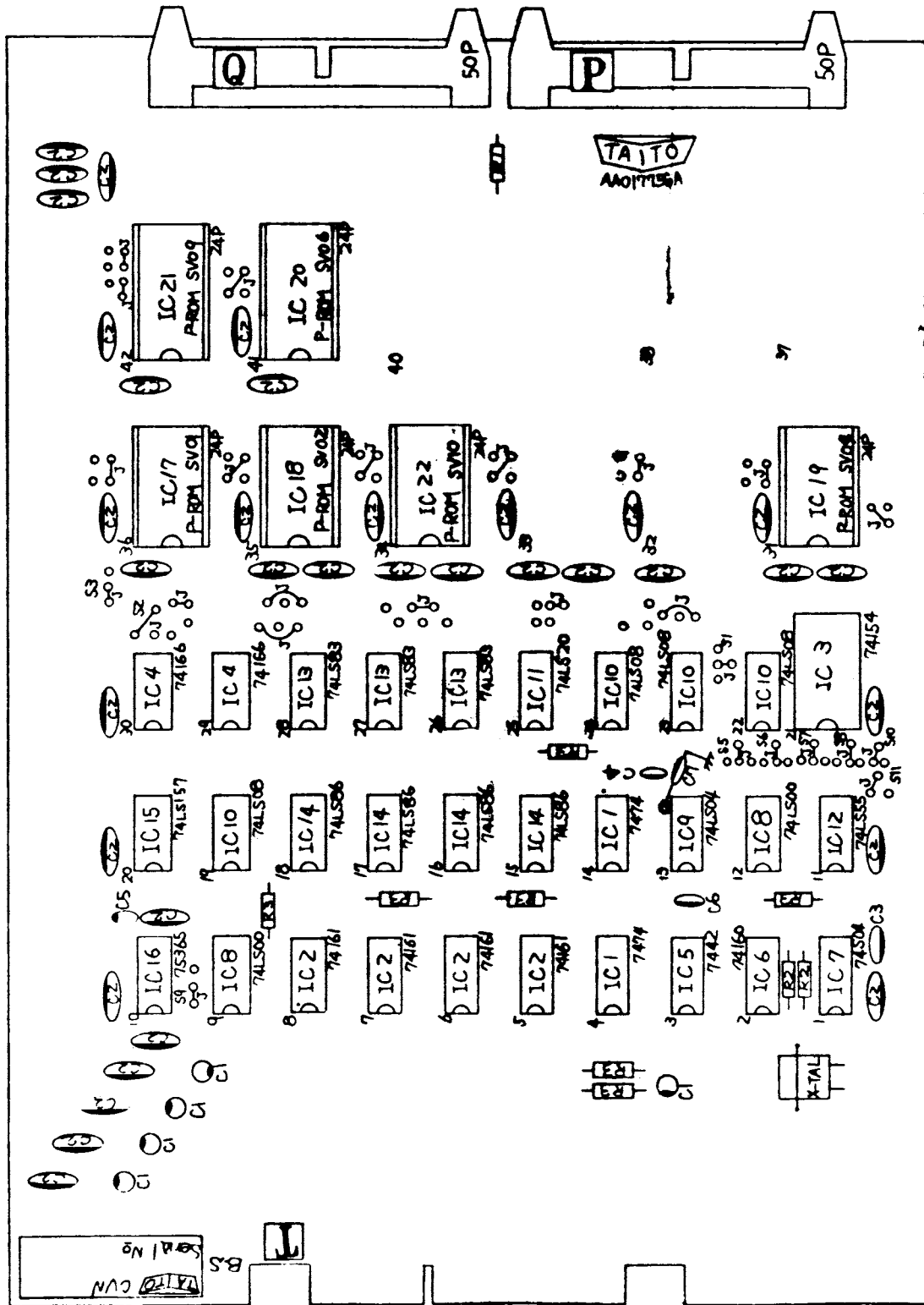
C.P.U. - P.C. BOARD (A) C.V.

FIGURE 6

| ITEM | SYMBOL | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|--------|----------------|---------------------------------|------------|
| 1 | | | | AAO 17756A |
| 2 | P | 122015 | Connector Sticker,P | AAO 17653 |
| 3 | O | 122016 | Connector Sticker,O | AAO 17656 |
| 4 | T | 122019 | Connector Sticker,T | AAO 17665 |
| 5 | 50P | 100000 | Angle Pin Header,PS-50PA | AAO 55154 |
| 6 | 24P | 090009 | IC Socket,24P | AAO 55787 |
| 7 | X-TAL | 049004 | X-TAL,19.968 MH2±10% | AAO 69539 |
| 8 | IC1 | 075045 | TTL IC,7474 | AAT 32011 |
| 9 | IC2 | 075100 | TTL IC,74161 | AAT 32018 |
| 10 | IC3 | 075094 | TTL IC,74154 | AAT 32027 |
| 11 | IC4 | 075105 | TTL IC,74166 | AAT 32028 |
| 12 | IC5 | 075029 | TTL IC,7442 | AAT 32039 |
| 13 | IC6 | 075099 | TTL IC,74160 | AAT 32086 |
| 14 | IC7 | 075703 | TTL IC,74S04 | AAT 32096 |
| 15 | IC8 | 076000 | LS IC,74LS00 | AAT 33001 |
| 16 | IC9 | 076003 | LS IC,74LS04 | AAT 33005 |
| 17 | IC10 | 076005 | LS IC,74LS08 | AAT 33009 |
| 18 | IC11 | 076012 | LS IC,74LS20 | AAT 33019 |
| 19 | IC12 | 076030 | LS IC,74LS55 | AAT 33043 |
| 20 | IC13 | 076035 | LS IC,74LS83A | AAT 33059 |
| 21 | IC14 | 076037 | LS IC,74LS86 | AAT 33062 |
| 22 | IC15 | 076060 | LS IC,74LS157 | |
| 23 | IC16 | 075172 | Clock Driner,SN75365 | AAT 35002 |
| 24 | IC17 | | E-PROM,SV01 | SVO 90001 |
| 25 | IC18 | | E-PROM,SV02 | SVO 90002 |
| 26 | IC19 | | E-PROM,SV04 | SVO 90004 |
| 27 | IC20 | | E-PROM,SV06 | SVO 90006 |
| 28 | IC21 | | E-PROM,SV09 | SVO 90014 |
| 29 | IC22 | | E-PROM,SV09 | SVO 90015 |
| 30 | C1 | 030758 | Cap,Electrolytic 25YB-10 | AAT 41032 |
| 31 | C2 | 040512 | Cap,Film,TDY-1H-104 | AAT 41244 |
| 32 | C3 | 025028 | Cap,Ceramic DT 203-180PF-50V | AAT 41324 |
| 33 | C4 | 025022 | Cap,Ceramic DT 205-330PF-50V | AAT 41330 |
| 34 | C5 | 035512 | Cap,Tantalum,SSG 25-1F-50V | AAT 41425 |
| 35 | R1 | 000035 | Res,Carbon 470HM 1/4W±5% | AAT 51733 |
| 36 | R2 | 000055 | Res,Carbon 330 | AAT 51753 |
| 37 | R3 | 000067 | Res,Carbon 1K ohm 1/4W±5% | AAT 51765 |
| 38 | C6 | 040535 | Cap,Film TDY-1H-102 | AAT 41232 |
| 39 | J | | Tinned Copper Wire 1 0 200mm | |
| 40 | C7 | | Cap,Ceramic 330PF(Repair Parts) | AAT 41330 |

C.P.U. - P.C. BOARD (A) C.V.

FIGURE 6



C.P.U. - BOARD (B) C.V.**FIGURE 7**

| ITEM | SYMBOL | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|--------|----------------|---|-----------|
| 1 | | 802008 | C.P.U.-P.C. BOARD | AAO 17757 |
| 2 | P | 122015 | Connector Sticker, P | AAO 17653 |
| 3 | O | 122016 | Connector Sticker, O | AAO 17656 |
| 4 | R | 122017 | Connector Sticker, R | AAO 17659 |
| 5 | S | 122018 | Connector Sticker, S | AAO 17662 |
| 6 | 50P | 100000 | Angle Pin Header, PS-50PA | AAO 55154 |
| 7 | IS1 | 0960006 | IC Socket, 18P | AAO 55103 |
| 8 | IS2 | 090017 | IC Socket, 40P | AAO 55812 |
| 9 | IC1 | 075004 | TTL IC 7404 | AAT 32003 |
| 10 | IC2 | 075055 | TTL IC 7486 | AAT 32013 |
| 11 | RAM | 078003 | Dynamic Ram, TM4060NL, 4K | AAT 32091 |
| 12 | IC3 | 076000 | LS IC,74LS00 | AAT 33001 |
| 13 | IC4 | 076001 | LS IC,74LS02 | AAT 33003 |
| 14 | IC5 | 076003 | LS IC,74LS04 | AAT 33005 |
| 15 | IC6 | 076005 | LS IC,74LS08 | AAT 33009 |
| 16 | IC7 | 076032 | LS IC,74LS74 | AAT 33051 |
| 17 | IC8 | 076057 | LS IC,74LS153 | AAT 33108 |
| 18 | IC9 | 076060 | LS IC,74LS157 | AAT 33112 |
| 19 | IC10 | 076072 | LS IC,74LS174 | AAT 33127 |
| 20 | CPU | 077006 | C.P.U. | AAT 34001 |
| 21 | DR | 075747 | Bus Driver,74S241 | AAT 35001 |
| 22 | ROM1 | | PROM,PV06,4K | PVO 90007 |
| 23 | ROM2 | | PROM,PV07-4K | PVO 90008 |
| 24 | C1 | 040512 | Cap,Film,TDY-1H-104 | AAT 41244 |
| 25 | C2 | 025325 | Cap,Ceramic,DT201 | AAT 41318 |
| 26 | C3 | 035028 | Cap,Tantalum,SSG16-22F | AAT 41424 |
| 27 | C4 | 035512 | Cap,Tantalum,SS625-1F | AAT 41425 |
| 28 | R1 | 000031 | Res,Carbon,330 ohm $\frac{1}{4}W \pm 5\%$ | AAT 51729 |
| 29 | R2 | 000047 | Res,Carbon,150 ohm $\frac{1}{4}W \pm 5\%$ | AAT 51745 |
| 30 | R3 | 000055 | Res,Carbon,330 ohm $\frac{1}{4}W \pm 5\%$ | AAT 51753 |
| 31 | R4 | 000067 | Res,Carbon,1K ohm $\frac{1}{4}W \pm 5\%$ | AAT 51765 |
| 32 | RB | 006059 | Resistor Block,470 ohm 8 element | AAT 55041 |

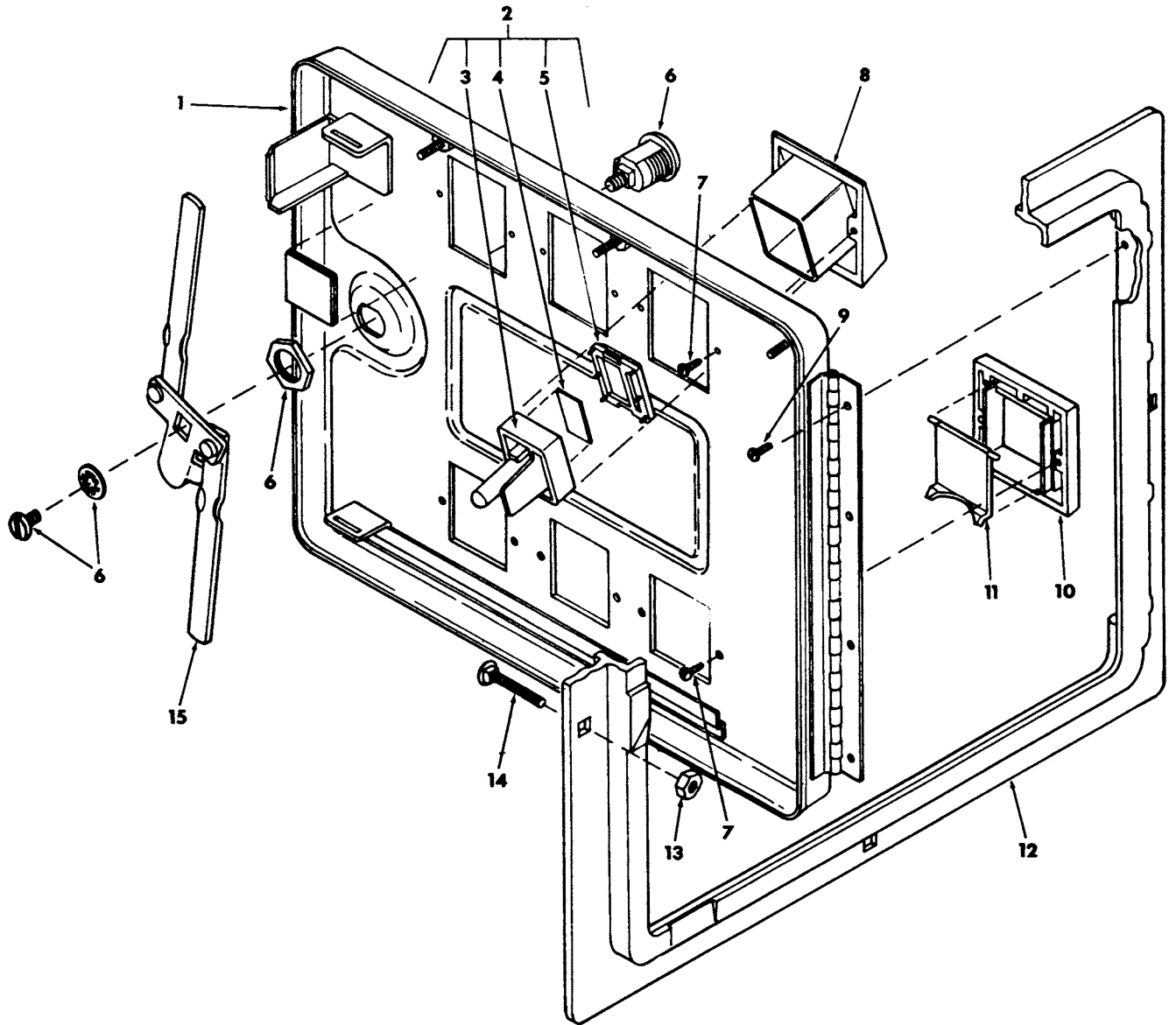
COIN DOOR

FIGURE 8

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|----------------|---|-----------|
| 1 | 500114 | Coin Door Only (2 coin) | 404341 |
| 2 | 500115 | Coin Return Button Assembly for U.S. 25¢ Coin | 404348-1 |
| 3 | 400070 | Coin Return Button | 904591 |
| 4 | 120051 | U.S. 25¢ Price Decal | 904703 |
| 5 | 400071 | Coin Return Button Cover for U.S. 25¢ Coin | 904589-2 |
| 6 | 600013 | Lock Assembly | 904707-1 |
| 6A | 600010 | Lock Assembly | 904707-1 |
| 7 | 600011 | Screw | 345-4-5 |
| 7A | 600012 | Screw | 345-4-5 |
| 8 | 400059 | Coin Button Housing | 904588 |
| 9 | 300001 | Screw#4-40 X ¼ sl ph | 325-4-4 |
| 10 | 400060 | Coin Return Bezel | 904590 |
| 11 | 400061 | Coin Return Cover | 904599 |
| 12 | 904581 | Coin Door Frame 11 $\frac{5}{8}$ " X 13 $\frac{3}{8}$ " Mounts in a 10 $\frac{3}{8}$ " X 12 $\frac{3}{16}$ " Opening | 904581 |
| 13 | 352011 | Hex Nut ¼-20 | 406-416 |
| 14 | 330020 | Carriage Bolt | 904734 |
| 15 | 600009 | Lock Arm Assembly | 404357 |

COIN DOOR

FIGURE 8



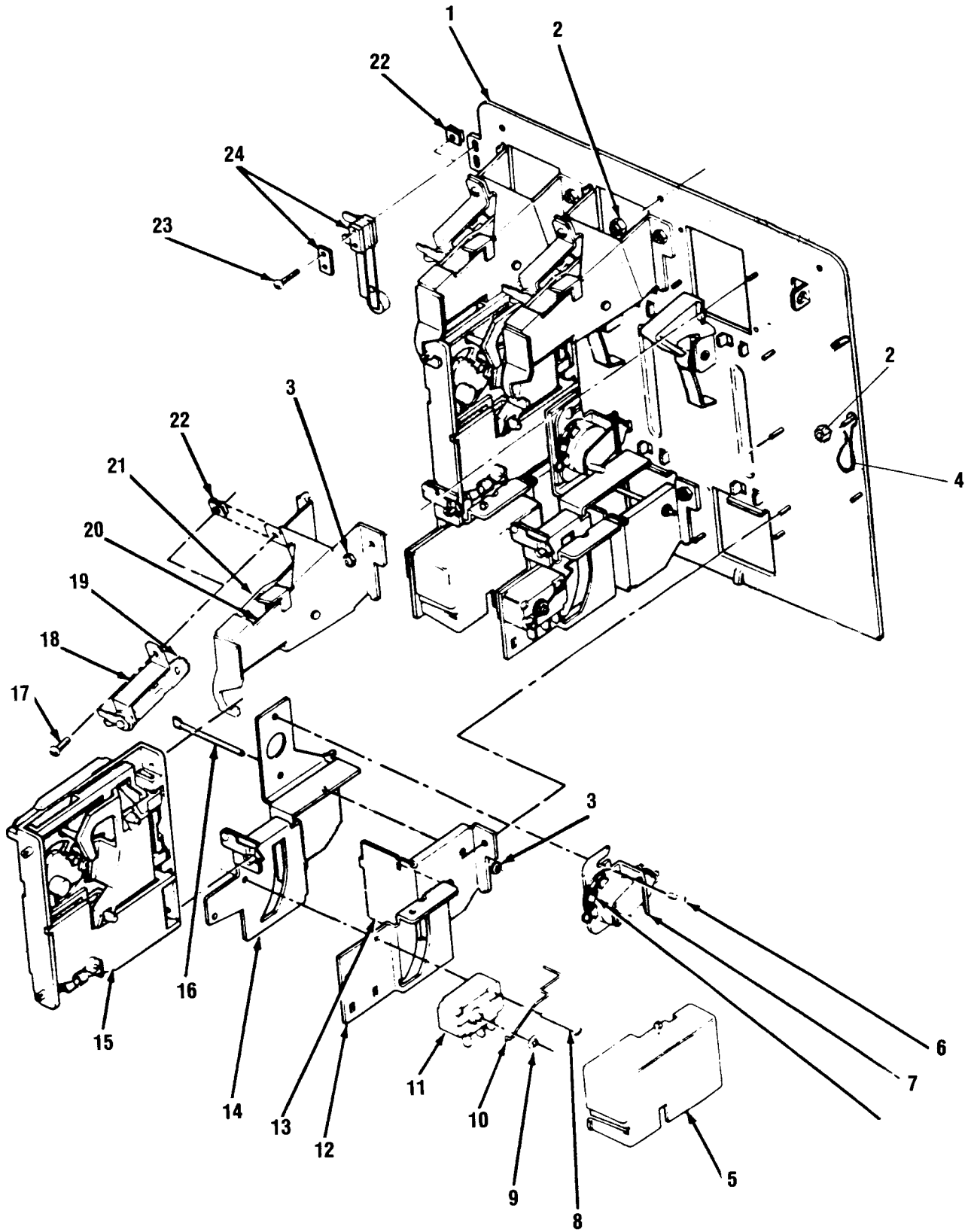
COIN DOOR

FIGURE 9

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|----------------|---|-----------|
| 1 | 500115 | Inner Panel with Levers Sub Ass'y. | 404429 |
| 2 | 354000 | Nut#8-32 | 400-8 |
| | 840043 | Custom Harness Assembly | |
| | 840044 | Custom Harness Assembly | |
| 3 | 354001 | Nut #4-40 | 400-4 |
| 4 | 500117 | Wire Key Holder | 904722 |
| 5 | 400062 | Switch Cover | 904762 |
| 6 | 300040 | Screw #6-32 X ³ / ₁₆ SL PH | 100-6-3 |
| 7 | 015002 | C.R.E.M. Coil Assembly | 404354 |
| 8 | 300040 | Screw #6-32 X ³ / ₁₆ /SL PH | 100-4-12 |
| 9 | 390036 | Retainer | 900651 |
| 10 | 370003 | Silver Switch Wire for US 25¢ | 904710-1 |
| 11 | 020502 | Switch | 904845 |
| 12 | 500118 | Coin Chute | 904701 |
| 13 | 500119 | Coin Return Box | 904598 |
| 14 | 500116 | Switch & C.R.E.M. Coil Bracket Assy. | 404428 |
| 15 | 400077 | 25¢ Acceptor | 5301-10 |
| 16 | 500120 | Bar | 905115 |
| 17 | 300038 | Screw 4-40 X ³ / ₈ sl ph | 110-4-6 |
| 18 | 113002 | Miniature Bayonet Base Lamp Socket | 904717 |
| 19 | 112001 | #47 Lamp (6.3 Volt) | 904716 |
| 20 | 500121 | Coin Inlet Chute Sub Assembly | 404418 |
| 21 | 500122 | Right Half of Coin Inlet Chute | 904594 |
| 22 | 355001 | "U" Type Fastener | 904712 |
| 23 | 300039 | Screw 4-40 X ¹ / ₂ sl ph | 116-4-8 |
| 24 | 024002 | Slam Switch Assembly | 904704 |

COIN DOOR

FIGURE 9



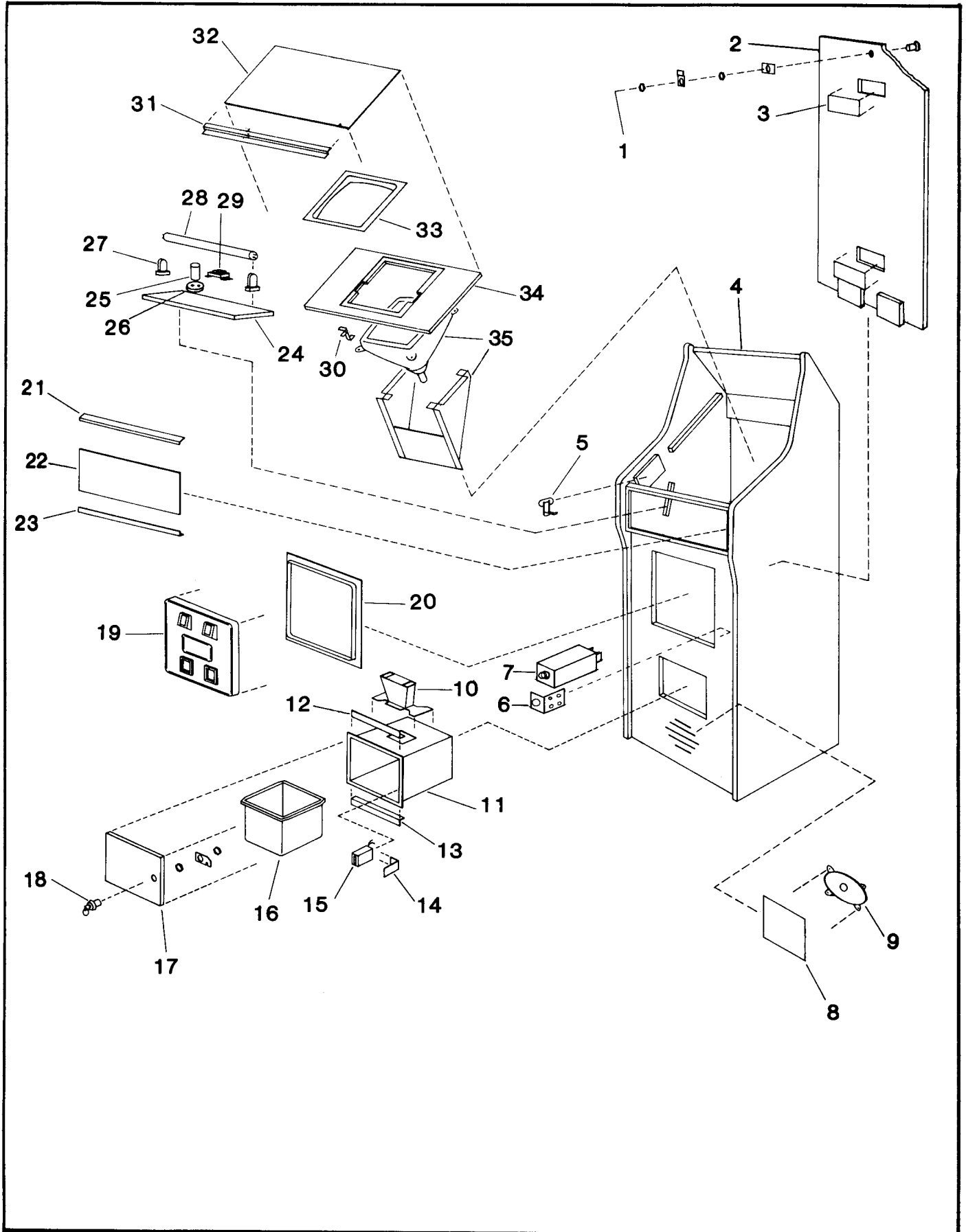
VIDEO AND CABINET ASSEMBLY

FIGURE 10

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|----------------|------------------------------------|-----------|
| 1 | 600005 | Lock Assembly | |
| 2 | 500074 | Back Door | |
| 3 | 500074 | Grill Door | |
| 4 | 860004 | Cabinet Assembly | |
| 5 | 390002 | Clamp | |
| 6 | 500123 | Service Switch Bracket | |
| 7 | 024502 | Service Switch | |
| 8 | 500072 | Speaker Grill | |
| 9 | 014003 | Speaker | |
| 10 | 500112 | Coin Funnel | |
| 11 | 500101 | Cash Case | |
| 12 | 500086 | Cash Box Bracket (Top) | |
| 13 | 500087 | Cash Box Bracket (Bottom) | |
| 14 | 500091 | Counter Bracket | |
| 15 | 115000 | Counter | |
| 16 | 400050 | Cash Box | |
| 17 | 500089 | Cash Box Door | |
| 18 | 600006 | Lock and Key | |
| 19 | 500114 | Coin Door | |
| 20 | 500113 | Coin Door Frame | |
| 21 | 500100 | Marquee Retaining Bracket (Upper) | |
| 22 | 400083 | Marquee | |
| 23 | 500009 | Marquee Retaining Bracket (Lower) | |
| 24 | 140048 | Fluorescent Panel | |
| 25 | 114000 | Starter | |
| 26 | 114001 | Starter Socket | |
| 27 | 113000 | Lamp Socket | |
| 28 | 112000 | Fluorescent Bulb | |
| 29 | 010002 | Transformer, Ballast (220v, 50 Hz) | |
| 29A | 010001 | Transformer, Ballast (120V, 60 Hz) | |
| 30 | 500026 | Monitor Mounting Bracket | |
| 31 | 500107 | Cover Glass Retaining Bracket | |
| 32 | 148014 | Cover Glass | |
| 33 | 400082 | Monitor Shroud | |
| 34 | 140063 | Monitor Mounting Panel | |
| 35 | 620012 | Monitor | |

VIDEO AND CABINET ASSEMBLY

FIGURE 10



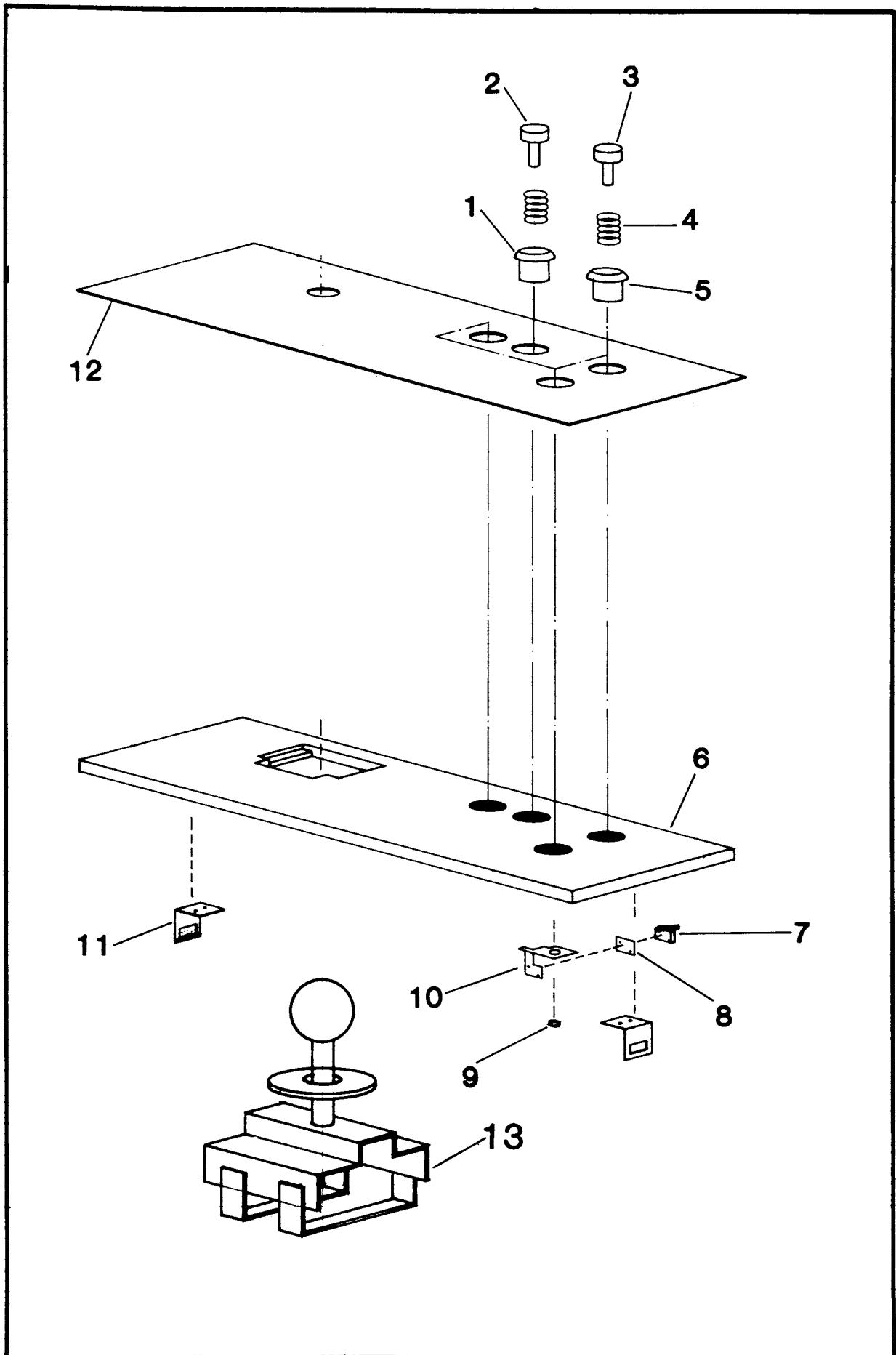
CONTROL PANEL

FIGURE 11

| ITEM | TAITO PART NO. | DESCRIPTION | REFERENCE |
|------|----------------|---------------------------------|-----------|
| 1 | 400013 | Push Button Housing (Red) | AAO 19534 |
| 2 | 400012 | Push Button (Red) | AAO 19533 |
| 3 | 400014 | Push Button (White) | TRO 90012 |
| 4 | 370000 | Spring | BPO 50001 |
| 5 | 400015 | Push Button Housing (White) | TRO 90013 |
| 6 | 140069 | Control Panel - Wood | |
| 7 | 020501 | Micro Switch VL-11L | AAO 52531 |
| 8 | 199010 | Insulator | AAO 19504 |
| 9 | 355000 | Nut | |
| 10 | 500018 | Switch Mounting Plate | WPO 30002 |
| 11 | 390003 | Strike Hook | |
| 12 | 500143 | Control Panel Screened Aluminum | |
| 13 | 850084 | Two-Way Control | |

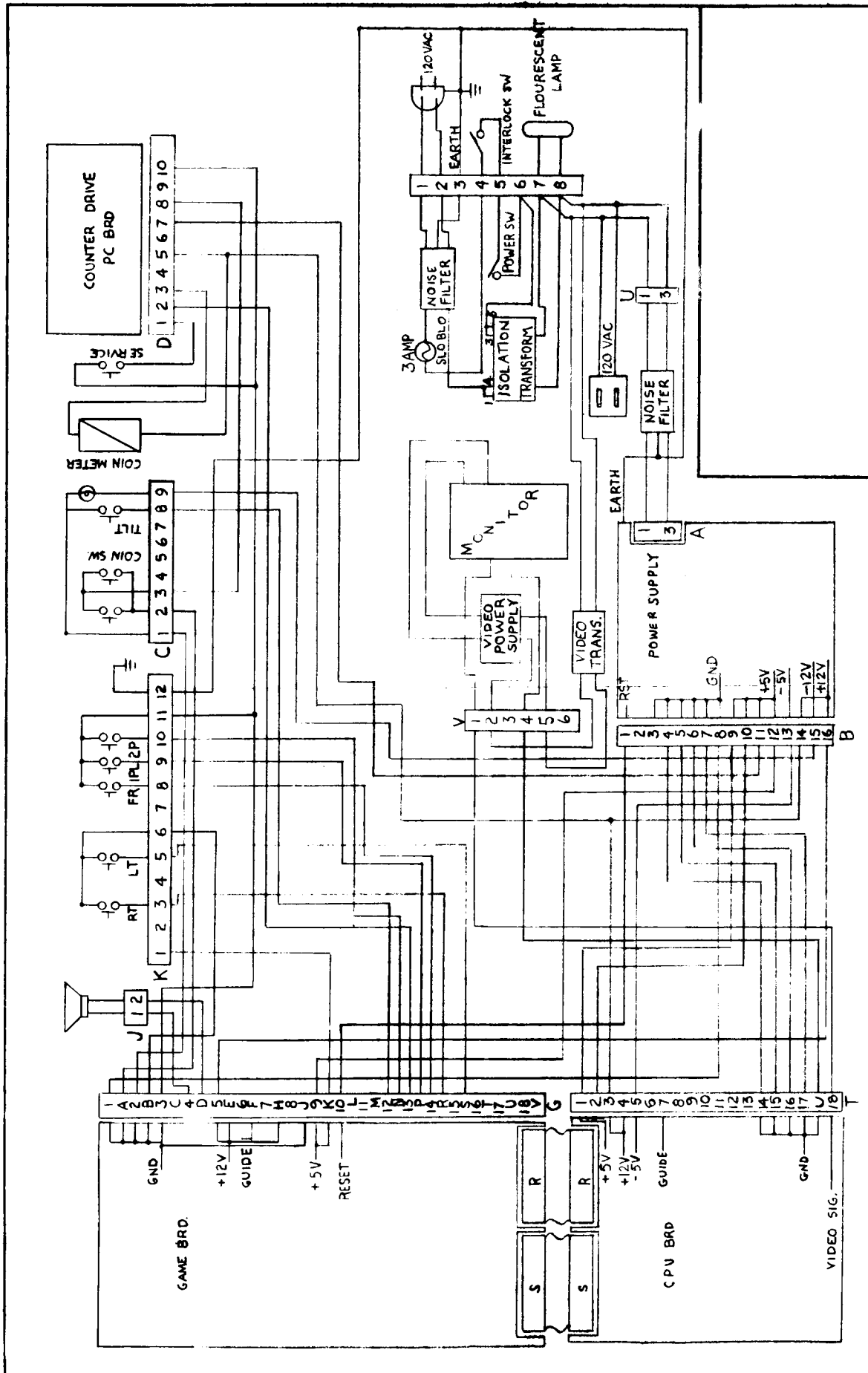
CONTROL PANEL

FIGURE 11



WIRING DIAGRAM

FIGURE 12



NOTES

NOTES



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