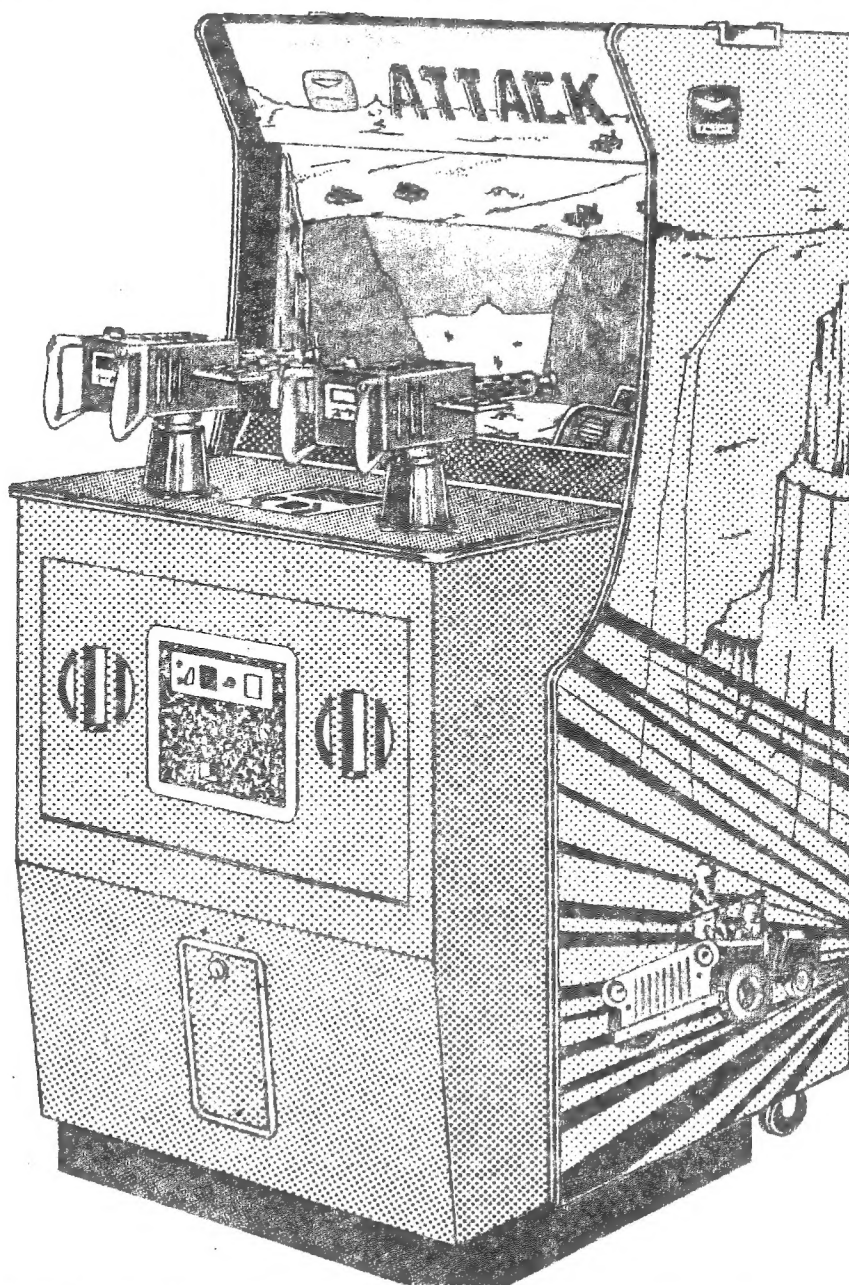


ATTACK



**SERVICE INSTRUCTIONS
AND PARTS CATALOG**



TAITO CORPORATION

AT070021

• Name of Part

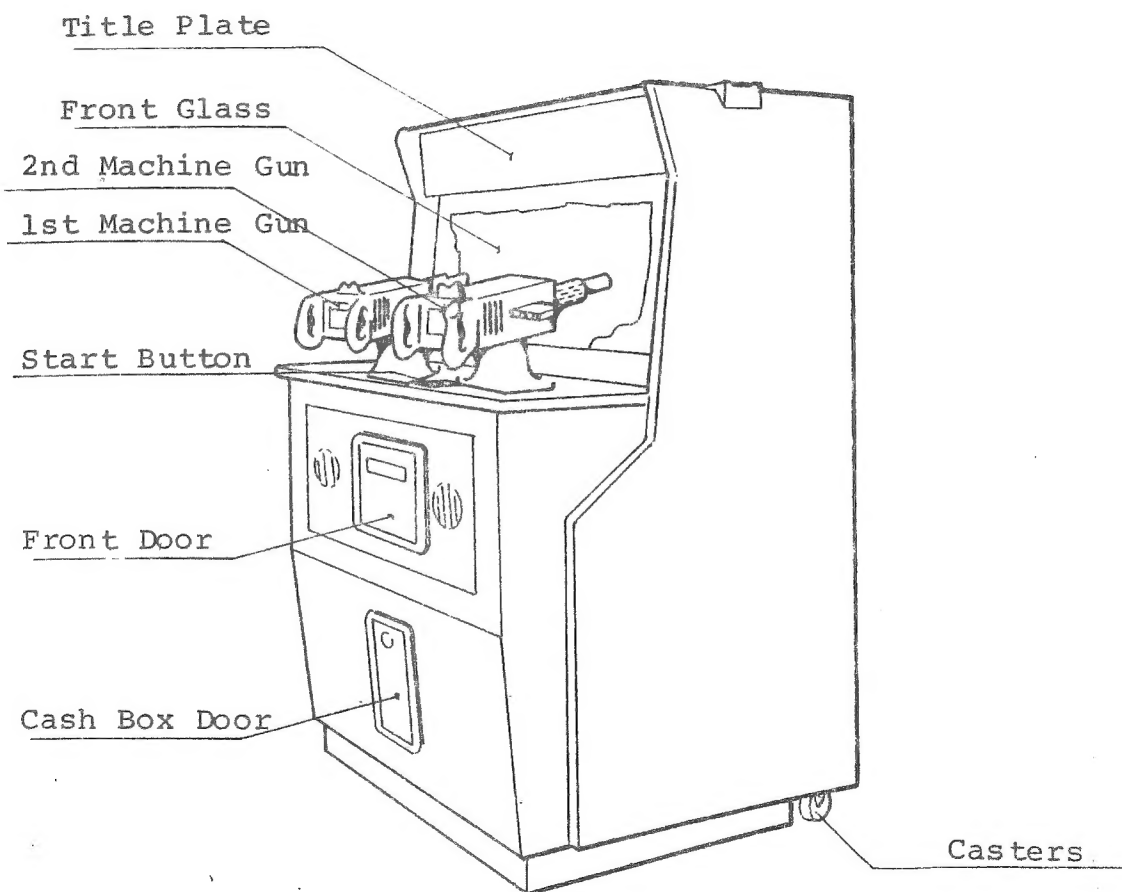


Fig. 1

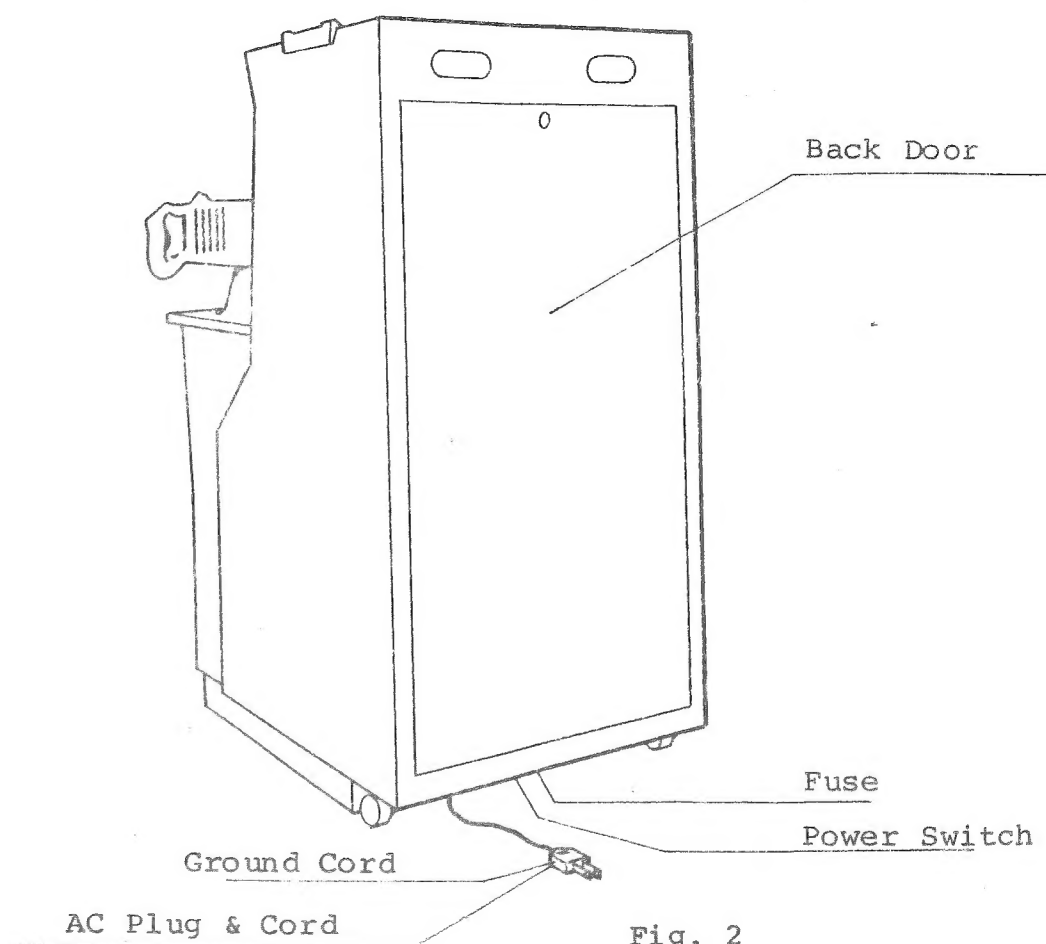


Fig. 2

1. Transportation and Installation

- Avoid rough handling in transportation; the picture tube is fragile.
- Avoid installation in location with exposure to direct sunlight or excessive heat in order to avoid damage from high internal temperatures.
- Connect the ground cord.
- Insert the AC plug into a proper outlet prior to switching on the power.

Note:

- Erroneous or partial scores may appear when the machine is first switched on. This is typical of solid-state circuitry and will correct itself automatically when the first play is started.

Warning:

- Taito ATTACK uses the latest solid-state circuitry for long life, however, as with sophisticated electronic equipment certain precautions must be observed to prevent damage.
 - (1) Do not attempt to service with ordinary test equipment, since the internal voltage of the test equipment may cause damage to the IC's.
 - (2) Assure proper ventilation. Do not expose to temperatures above 60°C.
 - (3) Never connect or disconnect any of the solid-state modules while the power is on.

2. Playing Instructions

One or two players can play.

- ° Standard play pricing is;

One coin one play for one-player game, and

Two coins one play for two-player game.

One-Player game:

- ° When a coin is inserted and the start button is pressed, the score resets to 00, and the game timer resets to 90 and begins counting down.
- ° Fire the first machine gun (left side) to hit targets running on the screen.
- ° If the player hits a car, it will explode giving 10 points.
- ° When the score reaches 300 points, the game time will be extended. In such case, when the game timer counted down to 00, it resets to 90 again and begins counting down this time at a faster rate than before.

Two-Player Game:

- ° Insert two coins and press the start button.
- ° White bullet marks on the screen are for the first player (left side).
- ° Black bullet marks on the screen are for the second player (right side).
- ° Other playing instructions are the same as that of the one-player game mentioned above.

3. Adjustment

Adjustment for TV monitor:

The TV monitor is properly adjusted before shipping, however, if necessary, readjust the controls as follows:

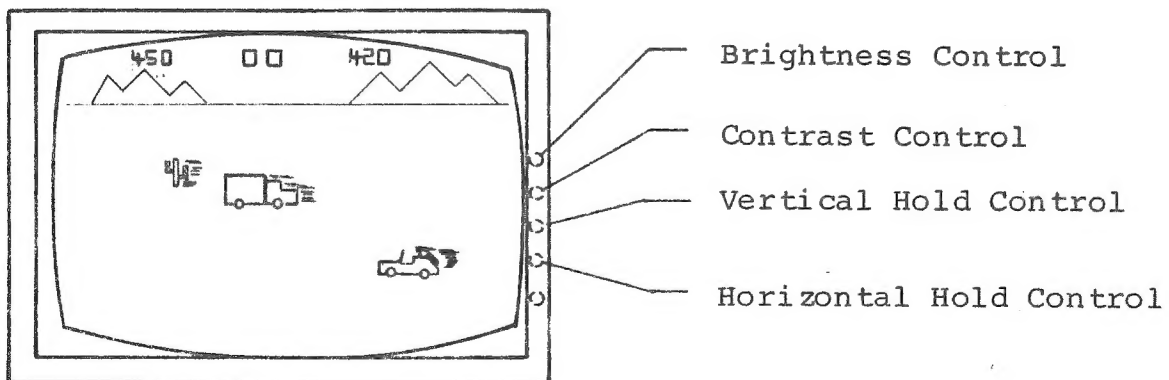


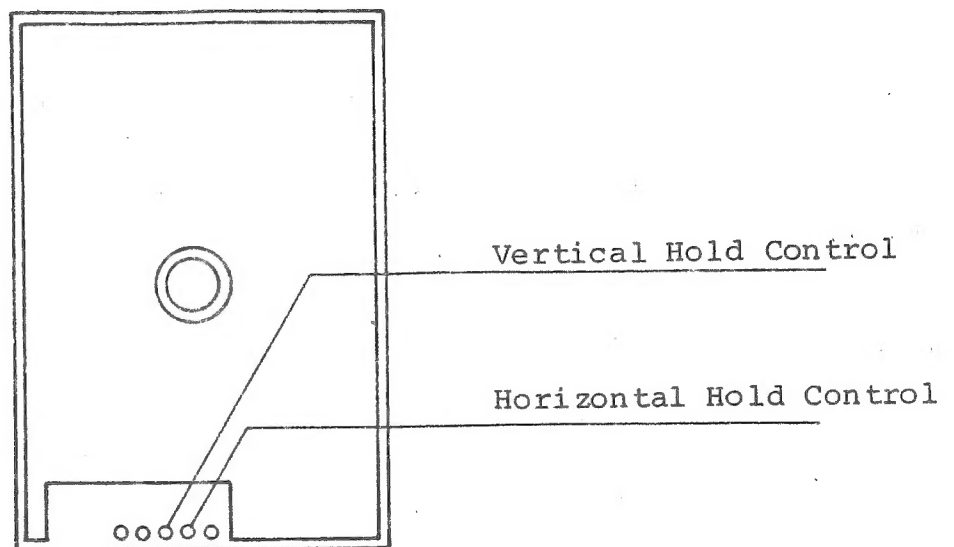
Fig. 3

° Screen Brightness

Adjust the control so that the background (the field on the screen) becomes dark.

° Screen Contrast

If the contrast is intensified, the picture on the screen will be distorted. Therefore, adjust the control so as to keep the picture clear.



If the screen rolls vertically or the picture is broken into diagonal lines, adjust it by turning the control as follows:

- ° Vertical Hold

If the screen rolls vertically, adjust it by turning the control slowly so that the picture-rolling stops on the screen correctly.

- ° Horizontal Hold

If the picture on the screen is broken into diagonal lines, adjust it by turning the control so that the normal picture appears on the screen.

- If the voltage of the power source is low, the images on the screen sometimes flicker. In such case, the vertical width of the screen also shrunken.

Adjustment : Change the terminal of the power transformer in the cabinet according to the supply voltage. This can be done by using the Change-over switch.

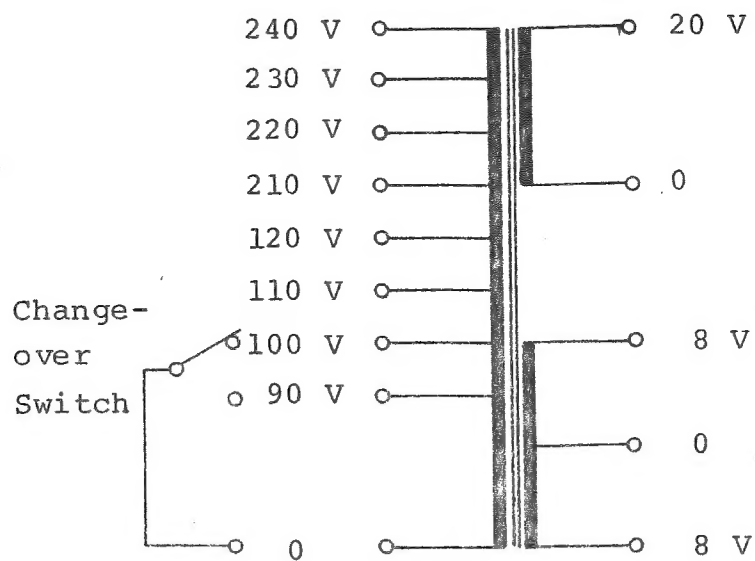


Fig. 5

◦ Adjustment for Main P.C. Board

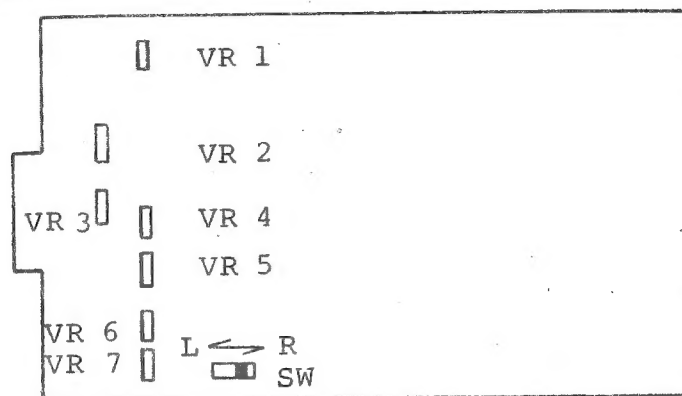


Fig. 6

VR 1 : adjustment for game time

VR 2,3 : adjustment for horizontal positioning of bullet marks (VR 2 ... 1st player, VR 3 ... 2nd player)

VR 4,5 : adjustment for vertical positioning of bullet marks (VR 4 ... 1st player, VR 5 ... 2nd player)

VR 6,7 : adjustment for shooting sound and flashing interval of the machine guns

(VR 7 ... 1st player, VR 6 ... 2nd player)

SW : The game is preset so that the bullet mark disappears when it hits a car. This can be readjusted by setting the switch(SW) to left side (L) so that the bullet mark will not disappear when it hits a car.

(See Fig. 6)

◦ Adjustment for Sound P.C. Board

VR 4 : adjustment for total sound (1st player)

VR 2 : adjustment for total sound (2nd player)

Note : The other two pots (VR 1 and VR 3) located at the right sides of VR 2 and VR 4 are paint-locked. Do not touch them.

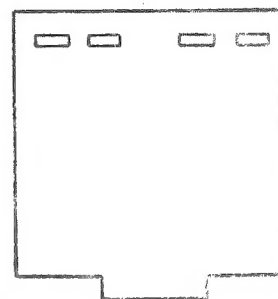
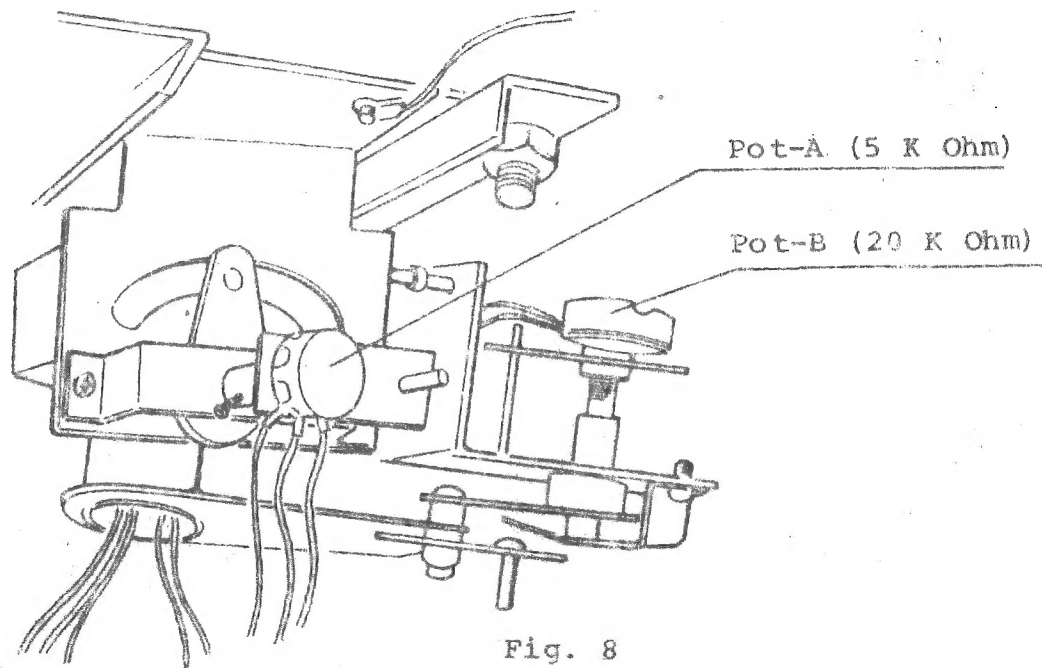


Fig. 7

4. Positioning of Bullet Marks



Adjustment for positioning of bullet marks on the screen can be done by using the two pots located under the machine gun mechanism. (Pot-A ... Vertical Positioning,
Pot-B ... Horizontal Positioning)

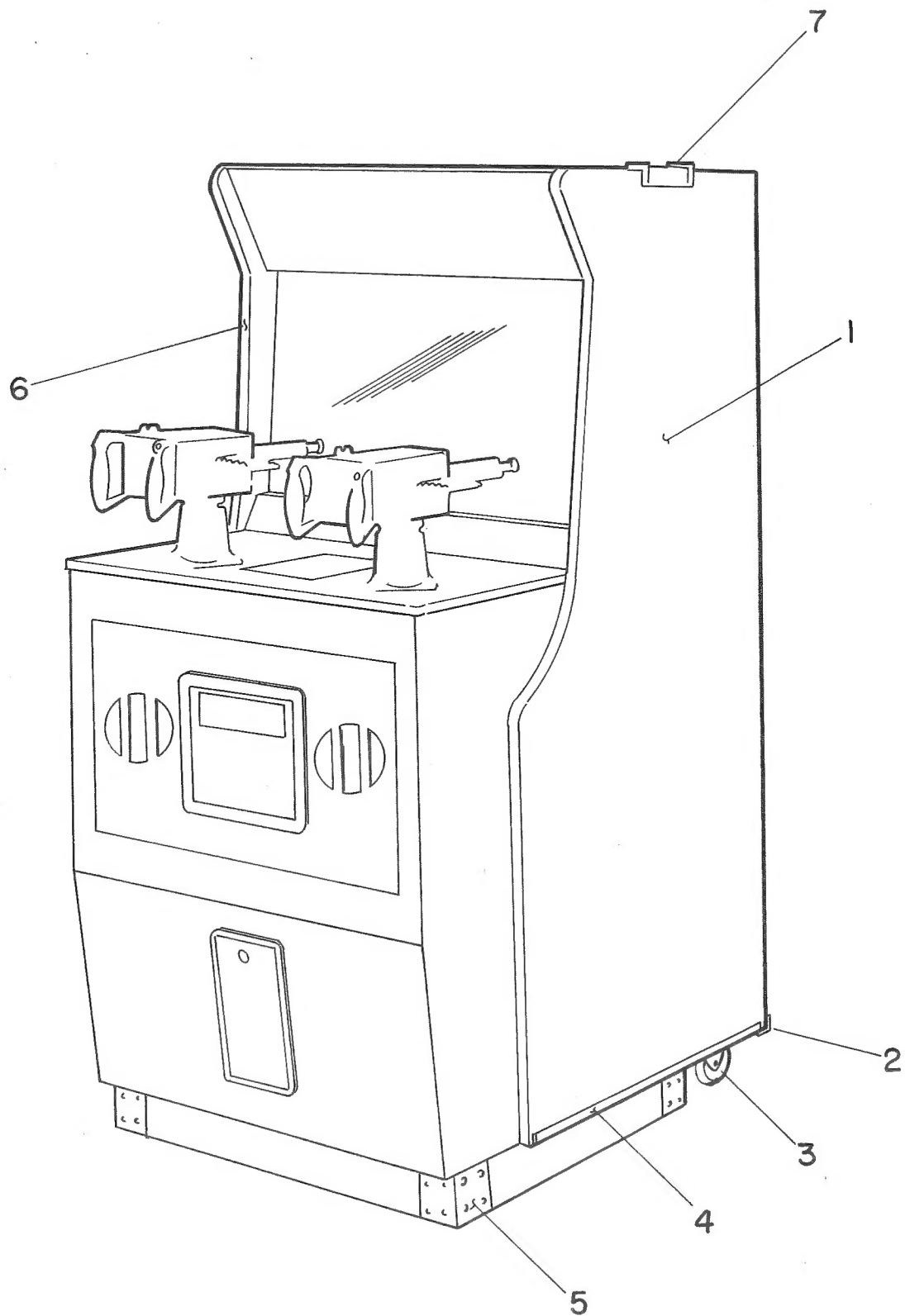
Adjustment for Horizontal Positioning:

- Set the sight of the machine gun on the right side of the screen.
- Turn the pot-B clockwise (viewing from the shaft side) to the maximum then, turn it back until the sight sets at bullet marks. After the adjustment, lock the pot-B.
- Fine adjustment for horizontal positioning of bullet marks on the screen can be done by using the pots (VR2 and VR 3) located on the Main P.C. Board.

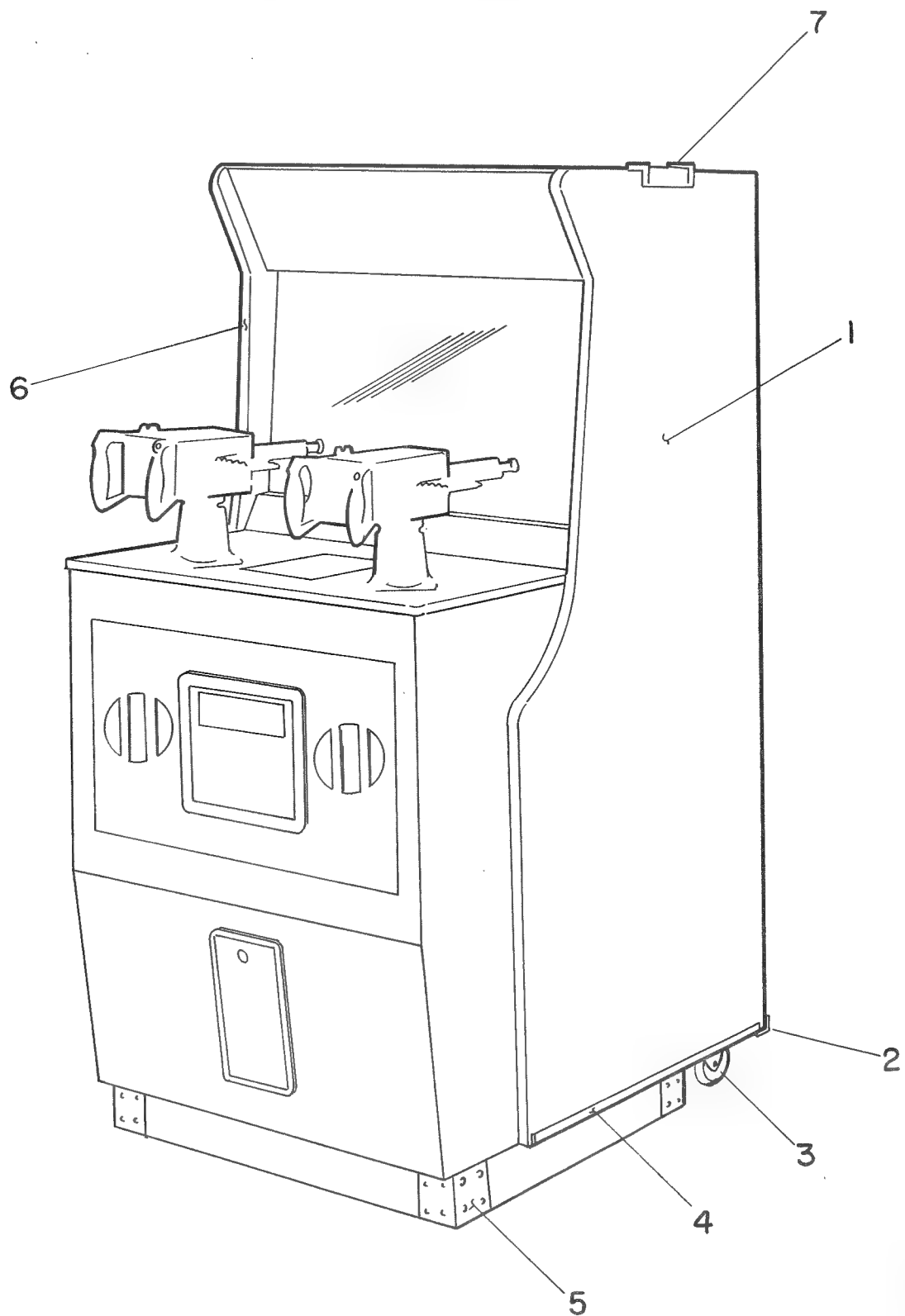
Adjustment for Vertical Positioning:

- Slant up the machine gun barrel to the highest level.
- Turn the pot-A clockwise (viewing from the shaft side) to the maximum, then, turn it back until the machine gun can hit the upper side targets. After the adjustment, lock the pot-A.
- Fine adjustment for vertical positioning of bullet marks on the screen can be done by using the pots (VR 4 and VR 5) located on the Main P.C. Board.

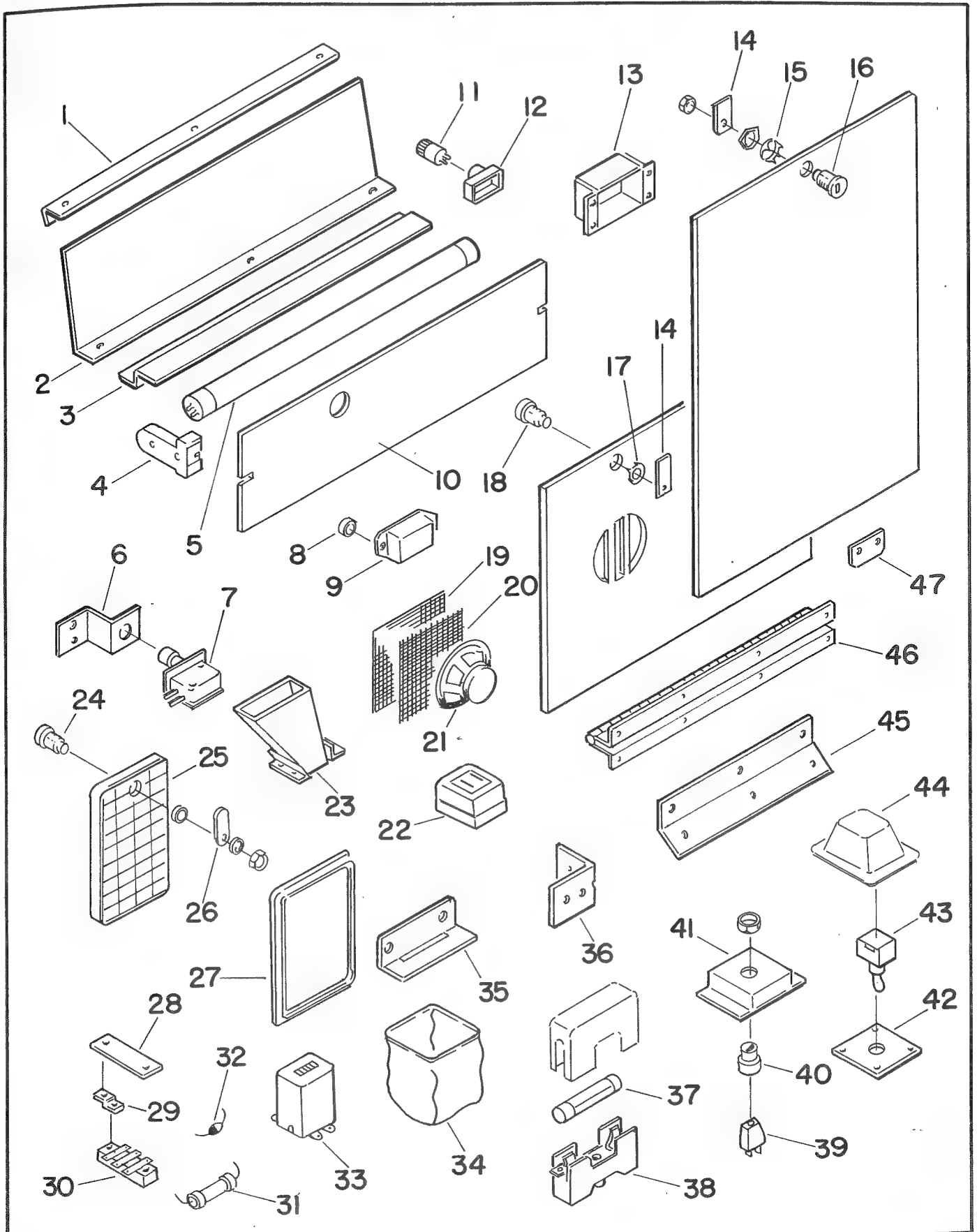
CABINET ACCESSORY ASS'Y



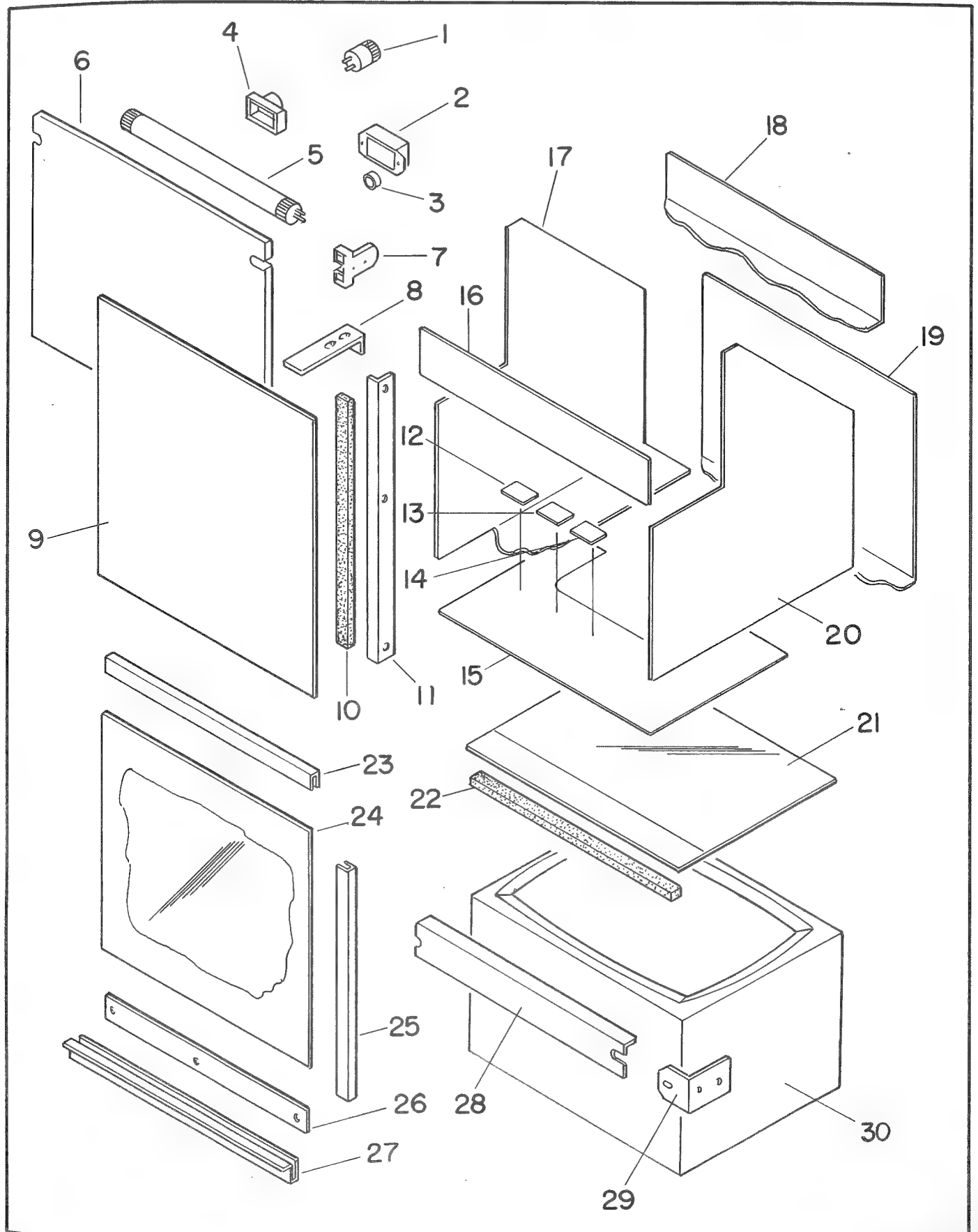
CABINET ACCESSORY ASS'Y



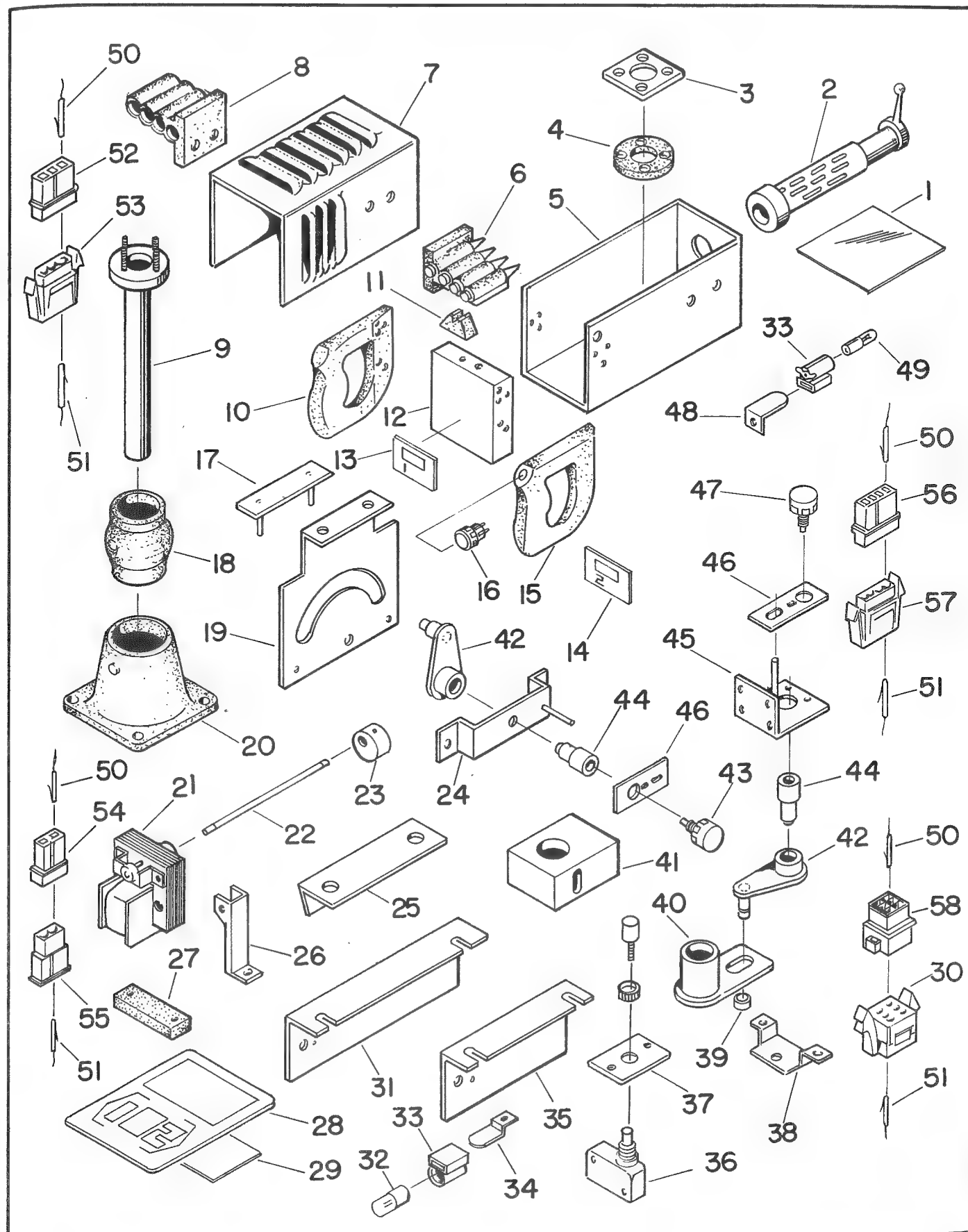
CABINET AND FLUORESCENT LAMP ASS'Y



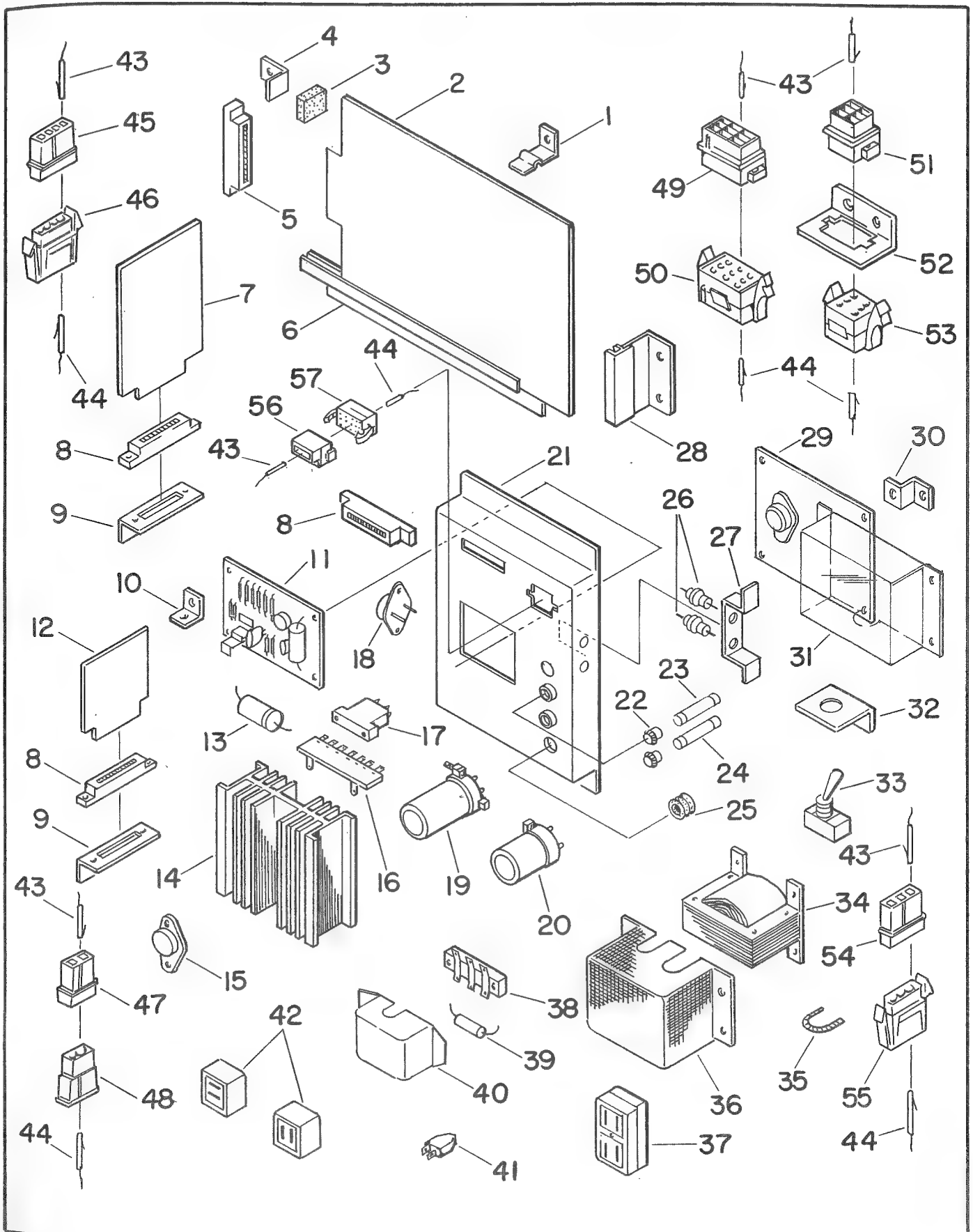
VIDEO AND PLAYFIELD ASS'Y



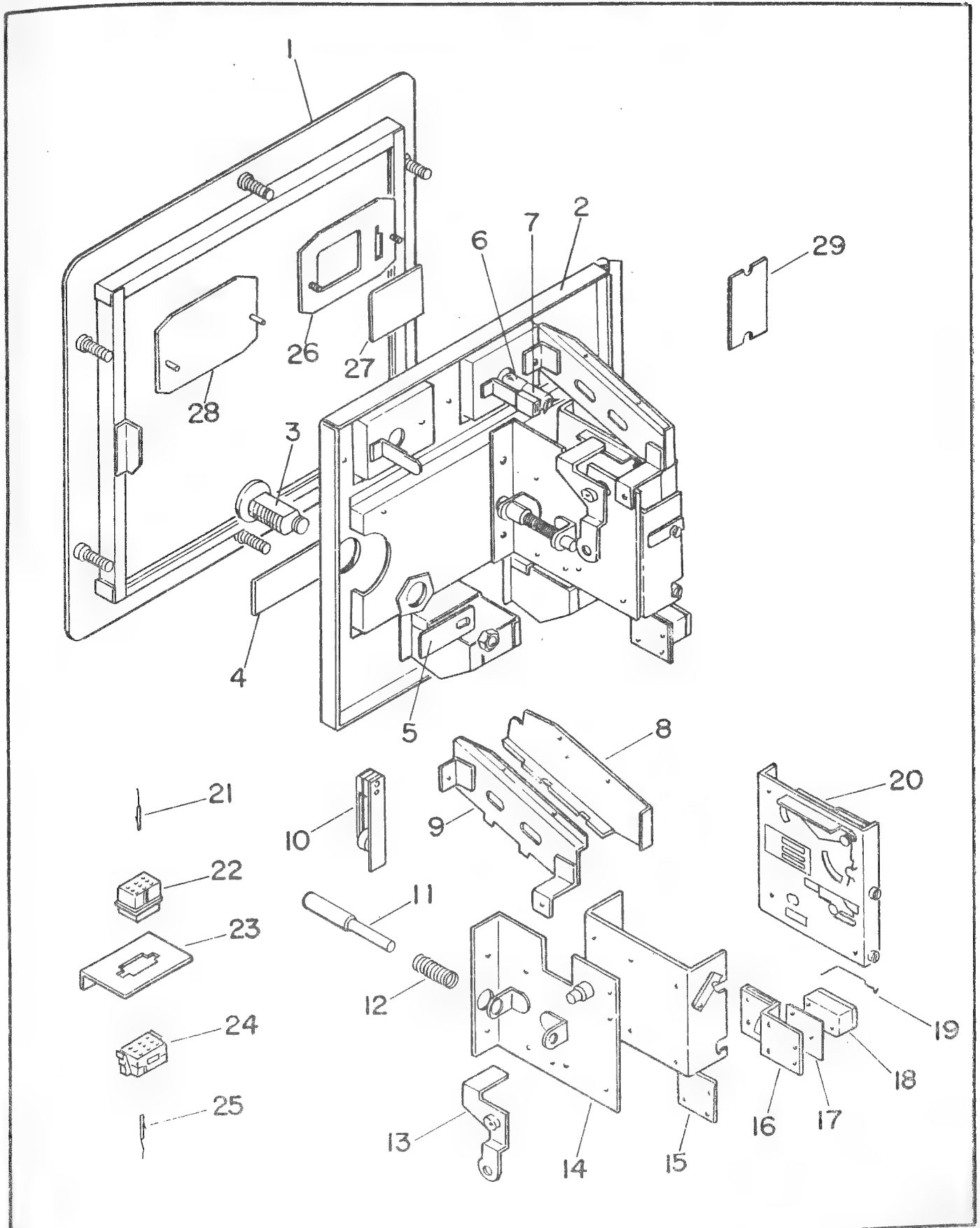
GUN MECHANISM ASS'Y



REGULATOR ASS'Y



FRONT DOOR AND COIN -MECHANISM ASS'Y



CABINET ACCESSORY ASS'Y

Item	Part #	Description
1	ATO10001	Cabinet
2	ATO40001	Corner Protector
3	AAO18518	Caster
4	BPO40002	Corner Protector A
5	AAO18519	Corner Bracket
6	AAO19524	Edge
7	AAO14511	Molding

CABINET AND FLUORESCENT LAMP ASS'Y

Item	Part #	Description
1	ATO80029	Edge
2	ATO70006	Title Plate
3	ATO80024	Title Plate Bracket
4	AAO55694	F•L• Socket
5	AAO54712	Fluorescent Lamp 20W
6	AAO18552	Switch Bracket
7	AAO52511	Switch
8	AAO12510	Spacer
9	AAO51505	Ballast
10	ATO10008	F•L• Board

11	AAO54720	Glow Lamp
12	AAO55695	Glow Socket
13	AAO18512	Cover
14	AAO18510	Lock Plate
15	AAO18524	Lock Washer
16	AAO18588	Lock & Key #7600
17	AAO18546	Lock Washer
18	AAO18587	Lock & Key
19	WNC80015	Ventilator
20	WNO90007	Net
21	AAT71010	Speaker
22	AAO55715	A.C. Socket
23	ATO80028	Coin Shute
24	AAO18501	Lock & Key
25	AAO20505	Cash Box Door
26	AAO18511	Lock Plate
27	AAO20506	Cash Box Door Frame
28	AAO19509	Cover
29	AAO18518	Cover Bracket
30	AAO56511	Contact Strip Assy
31	AAT55038	Resistor 8Ω 2W
32	AAT12002	Diode V08C
33	AAO51615	Counter
34	AAO28501	Cash Page
35	AAO18501	Lock Guide

36	EPO80005	Support Bracket
37	AAO58505	Fuse 5A
38	AAO55702	Fuse Holder
39	AAO62501	A*C* Cable & Plug Ass'y
40	AAO69580	Mold. Cord Bush
41	AAO18558	Bracket
42	ATO80081	Switch Plate
43	AAO52501	Switch
44	AAO19528	Switch Cover
45	BPO80026	Support Plate
46	ATO80027	Hinge
47	AAO13523	Door Stopper

VIDEO AND PLAYFIELD ASS'Y

Item	Part #	Description
1	AAO54720	Glow Lamp
2	AAO57505	Ballast
3	AAO12510	Spacer
4	AAO55695	Glow Socket
5	AAO54716	Fluorescent Lamp 20W 20BL
6	ATO10002	P * G * Board
7	AAO57004	F * L * Socket
8	ATO80029	Lock Plate

- 9 ATO80002 Mirror
- 10 EPO20001 Spong Rubber
- 11 ATO80018 Glass Retaining Plate
- 12 ATO70016 1st PLAYER Sticker
- 13 ATO70018 Time Sticker
- 14 ATO70017 2nd PLAYER Sticker
- 15 ATO70012 Decoration Board Top (A)
- 16 ATO70012 Decoration Board Top (B)
- 17 ATO70009 Decoration Plate Left
- 18 ATO70015 Decoration Board Bottom (B)
- 19 ATO70014 Decoration Board Bottom (A)
- 20 ATO70008 Decoration Board Right
- 21 ATO80004 Color Plate
- 22 ATO80003 Rubber
- 23 ATO80022 Glass Retaining Top
- 24 ATO70007 Front Glass
- 25 ATO80023 Glass Retaining Side
- 26 ATO80019 Glass Stop Plate
- 27 ATO80021 Glass Retaining Bottom
- 28 ATO80080 Angle
- 29 ATO80017 Bracket
- 30 AAO68535 Video

GUN MECHANISM ASS'Y

Item	Part #	Description
1	ATO00003	Pilger
2	ATO20005	Barrel
3	ATO30002	Washer
4	ATO80001	Robber
5	ATO30015	Gun Body
6	ATO40002	Bullet Ass'y A
7	ATO30010	Gun Cover
8	ATO40003	Bullet Ass'y B
9	ATO20003	Shaft
10	ATO40006	Handle B
11	ATO40004	Aim
12	ATO30009	Rear Cover
13	ATO70004	Bullet Mark Plate A
14	ATO70003	Bullet Mark Plate B
15	ATO40001	Handle A
16	AA052575	Switch
17	ATO80005	Lock Plate
18	ATO40007	Universal
19	ATO80014	Vertical Adjustable Guide
20	ATO40008	Gun Base
21	AA050575	Induction Motor
22	ATO20006	Universal Shaft

23	ATO20001	Weight
24	ATO80012	Guide Bracket B
25	ATO80008	Stopper
26	ATO80007	Motor Mounting Bracket
27	ATO80002	Motor Mounting Rubber
28	ATO70011	Instruction Plate
29	ATO70010	Instruction
30	AAO55562	Male - N - Lok Plug 6P
31	ATO80025	Gun Base Bracket (A)
32	AAO54704	Lamp
33	AAO55608	Lamp Socket
34	AAO18517	Lamp Bracket
35	ATO80026	Gun Base Bracket (B)
36	AAO52511	Switch
37	ATO20028	Switch Plate
38	ATO30011	Guide Bracket A
39	ATO20004	Collor
40	ATO30001	Arm (A)
41	ATO90001	Holder
42	ATO30013	Arm (B)
43	AAE58029	Potation Meter
44	ATO20002	Volume Shaft
45	ATO80003	Volume Mounting Bracket
46	ATO30004	Volume Plate
47	AAE58028	Potation Meter

48	AT080406	Socket Bracket
49	AA054744	Lamp
50	AA055789	Mate--N--Lok Plug Pin
51	AA055790	Mate--N--Lok Socket Pin
52	AA055521	Mate--N--Lok Cap 3P
53	AA055522	Mate--N--Lok Plug 3P
54	AA055501	Mate--N--Lok Cap 2P
55	AA055502	Mate--N--Lok Plug 2P
56	AA055541	Mate--N--Lok Cap 4P
57	AA055542	Mate--N--Lok Plug 4P
58	AA055561	Mate--N--Lok Cap 6P

REGULATOR ASS'Y

Item	Part No	Description
1	EKO50001	Stopper
2	ATN00001	Main P.C. Board Assy
3	SPO80004	Rubber
4	SPO30027	Stopper
5	AA055774	Connector
6	AT060018	P.C. Board Guide
7	ATN60002	Sound P.C. Board Assy
8	AA055521	Connector 14P
9	SPO80026	Connector Bracket

10	DAC080046	Bracket
11	DAN00010	Regulator P.C. Board Ass'y
12	AAM50000	Credit P.C. Board Ass'y
13	AAT41189	Capacitor
14	AA069519	Heat Sink
15	AAT11036	Transistor
16	AA050126	Contact Strip Ass'y
17	AAT14002	Rectifier
18	AAT31012	Regulator
19	AAT41166	Capacitor
20	AAT41162	Capacitor
21	SEO30024	Chassis
22	AA055700	Fuse Holder
23	AA068507	Fuse 10A
24	AA068501	Fuse 05A
25	AA018508	Grommet
26	AAT12024	Diode 120V12
27	SEO30027	Mounting Bracket
28	A1090019	P.C. Board Guide
29	ATN00008	Motor Drive P.C. Board Ass'y
30	PPO30030	Bracket
31	ATO90017	Cover
32	SEO30028	Switch Bracket
33	AA052536	Switch
34	AA057538	Transformer

35	AAO69525	Grommet	
36	WNO30010	Transformer Cover	
37	AAO55716	A•C•Socket	
38	AAO55511	Contact Strip Ass'y	8P
39	AAT41194	Capacitor	
40	AAO19520	Cover	
41	AAO55718	A•C•Plug	
42	AAO55715	A•C•Socket	
43	AAO55789	Mate—N—Lok Plug Pin	
44	AAO55790	Mate—N—Lok Socket Pin	
45	AAO55545	Mate—N—Lok Cap	4P
46	AAO55546	Mate—N—Lok Plug	4P
47	AAO55505	Mate—N—Lok Cap	2P
48	AAO55506	Mate—N—Lok Plug	2P
49	AAO55581	Mate—N—Lok Cap	9P
50	AAO55582	Mate—N—Lok Plug	9P
51	AAO55561	Mate—N—Lok Cap	6P
52	AAO18526	Socket Bracket	
53	AAO55562	Mate—N—Lok Plug	6P
54	AAO55525	Mate—N—Lok Cap	3P
55	AAO55526	Mate—N—Lok Plug	3P
56	AAO55621	Mate—N—Lok Cap	15P
57	AAO55622	Mate—N—Lok Plug	15P

FRONT DOOR AND COIN MECHANISM ASS'Y

Item	Part #	Description
1	AAO28502	Door Frame
2	AAO28509	Front Door
3	AAO18586	Lock & Key #7600
4	AAO17705	Name Plate
5	AAO18510	Lock Plate
6	AAO54704	Lamp 12V 150mA
7	AAO55898	Lamp Socket
8	AAO25508	Coin Guide B
9	AAO25507	Coin Guide A
10	AAO88717	Blade Switch
11	AAO27504	Push Button
12	AAO15504	Spring
13	AAO18557	Scavenger
14	AAO18554	Mounting Bracket
15	AAO28501	Slug Rejector Mounting Bracket Ass'y
16	AAO25503	Coin Guide
17	AAO19502	Insulator
18	AAO52512	Switch C-502-3
19	AAO52501	Actuator
20	AAO55789	Slug Rejector #100
21	AAO55789	Male N-Lok Plug Pin

- 22 AAO55581 Mate—N—Lok Cap 9P
- 23 AAO13527 Socket Bracket
- 24 AAO55582 Mate—N—Lok Plug 9P
- 25 AAO55790 Mate—N—Lok Socket Pin
- 26 AAO21583 Coin Entry Plate
- 27 AAO29508 Price Label ¥100
- 28 AAO21580 Coin Shield Plate
- 29 AAO19522 Cover Plate



ATTACK

