

"SUPER NEO 29 CANDY" USER'S MANUAL





- Be sure to read this user's manual before use.
- Keep this manual nearby when operating this cabinet.



# INTRODUCTION

This user's manual contains information on operating the SUPER NEO 29 CANDY cabinets. Before use, please carefully read through the manual for proper usage methods.

#### Models

Super Neo 29 Candy Standard model Super Neo 29 Candy Pop-card model

When reading through this manual, be sure to follow the instructions for the particular model you have bought.



Super Neo 29 Candy Standard model



Super Neo 29 Candy Pop-card model



Printed sheet pocket

#### Index

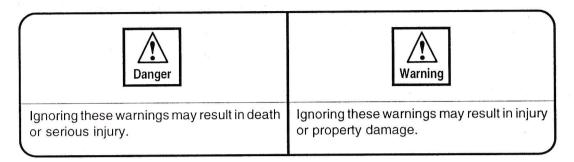
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Design and specifications are subject to change for product improvement without notice.

## Precautions for safe operation

The procedures listed herein must be carefully followed to ensure both safe operation and to prevent personal injury and property damage. Before use, please carefully read through the manual for proper usage methods. After reading it, be sure to keep the manual in a safe place for later reference.

### ■ Display Explanations





- Should any of the following occur, immediately turn the power switch off and unplug the cabinet.
   Continued use may cause fire or electric shock.
  - Emissions of smoke, unusual odors, or strange noises
  - Operation irregularities
  - Water or foreign materials in the cabinet
  - Damage to the cabinet
- Do not place the cabinet in areas prone to leaking or flooding; do not allow the place objects containing liquid (like drinks) or metal objects on the cabinet.

Should liquids or metallic objects fall into the cabinet, it may cause fire or electric shock.

· Be sure to tightly join all cabinet connectors.

Loose connections may cause fire or shock.

• Before changing game PCBs and conducting cabinet checks, turn the power switch off and unplug the cabinet.

Changing PCBs with the switch on and the cabinet plugged in may cause fire or electric shock.

· Do not touch the back of the monitor.

Because there are high-voltage areas, touching it even after the machine is unplugged may cause severe electric shock.

- If the cabinet should break due to a fall, immediately turn the power switch off and unplug it.

  Continued use may cause fire or electric shock.
- · Do not conduct repairs or modifications.

These may cause fire or electric shock.

• This cabinet is designed for use with an AC 110 V to 240 V current; be sure to connect its power plug to a specialized outlet.

Connecting a number of appliances that consume a lot of power to the same electric outlet (like air conditioners and other cabinets) may cause fire or electric shock.

- Do not place this cabinet on unstable surfaces like wobbly stands and inclined surfaces. Should the console fall or tip over, it may cause injury.
- Place the cabinet as close as possible to the outlet and ground connections. Keep electric cords
  out of sight from customers. If exposing cables cannot be avoided, be sure to place a protective
  cover over them for protection.

Should wiring be exposed in aisles, etc., cords may be damaged and cause fire and electric shock. They may also cause direct injury if tripped over.

• Do not forcefully bend, pull, or place heavy objects on the power cord.

If the cord is damaged, it may cause fire and electric shock.

• When moving the cabinet, carefully do it with 2 or more people.

If the cabinet tips over or falls on someone, it may result in injury.

- Before moving the cabinet, unplug the power cord and place it in the rear power cord box.

  Failing to do so will not only result in fire and electric shock but will cause injury if someone trips on the cord.
- While moving the cabinet with the casters, tip the cabinet to a 40° angle and grab the hand grip in the front. Move it slowly and be careful of people around you and guide the machine carefully. If the cabinet tips over or falls on someone, it may result in personal injury.
- When moving the cabinet on stairs or inclines, gently lift the machine with a sufficient number of people present.





Do not mount the cabinet or place heavy objects on it.

This will not only cause injury should it become unbalanced and tip over or fall, but it may cause damage to the cabinet.

• Under no circumstances place the cabinet outside.

This will cause damage or breakdowns.

- Never place the cabinet in the following locations as it may cause breakdowns.
  - Indoor pools or areas near a shower where humidity is high and there is a danger of internal condensation.
  - In areas exposed to direct sunlight.
  - Near areas of excessive heat, like next to a heater, and around dangerous materials.
  - In places that are excessively dusty.
- When unused for long periods, turn the cabinet off and unplug it for safe storage.
- Place the cabinet where room temperature is between 5°C, and 40°C.

Breakdowns may result with operation outside the given temperature range.

During shipping or moving, avoid serious jolts to the cabinet.

This may cause damage or breakdown.

Always use a Logic tester when checking IC port circuitry.

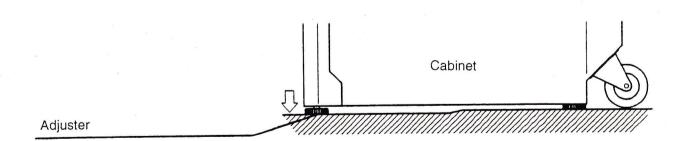
Using a normal tester may cause damage or breakdown.

 Be sure to use specified fuses set to proper standards (6A [amperes] models; see p. 5 for further details).

Using fuses not matched to standards will cause damage or breakdown.

When installing the cabinet, be sure to calibrate the 4 lower adjusters to bring the cabinet level.
 Moving the adjusters right will raise the cabinet, moving them left will lower it.

Should the cabinet tip over or fall, it may cause injury.



- · Be sure to connect an earth cable to the earth terminal.
- Service outlets at the rear of the cabinet are to be used only when servicing the cabinet. Do not use it to power other cabinets.
- Because the CRT monitor is calibrated at the factory, do not carry out any unnecessary adjustments on your own.
- Do not apply volatile liquid cleaners like benzene, alcohol, thinner, and insecticides to the cabinet.

  This may cause paint to peel and ruin the luster of the finish.
- When plugging or unplugging the power cord into/from an outlet, make sure the cabinet's power switch is turned off. Leaving the power on may result in breakdowns.
- The monitor used in the Super Neo 29 Candy is set to a horizontal frequency of 15.75 kHz when shipped from the factory. When using a PCB with a 24.8 kHz horizontal frequency, be sure to switch the monitor's horizontal frequency to 24.8 kHz. Using the monitor when not properly matched to PCBs will fail to display a picture and may result in monitor breakdowns. For further details, refer to the horizontal frequency switching method on p. 24.
- This cabinet is built to JAMMA specifications. For NEO GEO games, be sure to insert a 1-slot NEO GEO PCB. Using 2-slot or 4-slot NEO GEO PCBs may result in breakdowns.

### **Requests for Use**

Under no circumstances place this machine near emergency facilities like emergency exits or fire extinguishers. At times of fire or accidents, the cabinet may impede escape and fire fighting activities.

### **Cabinet Upkeep**

- When the cabinet is dirty, use a dry or damp soft cloth to wipe it. If really dirty, use a neutral detergent.
- Because the monitor screen is covered with an anti-discharge coating, do not forcefully rub, but gently wipe the surface to preserve the coating.

## Specifications

#### Super Neo 29 Candy

1. Power supply: AC 100 V to 240 V (50/60 Hz)

2. Power Consumption: 130 W

3. Dimensions: 710 (W)  $\times$  890 (D)  $\times$  1717 (H)

4. Weight: 94 kg

5. Compatible PC Board: JAMMA-specification-compatible PCB

6. Monitor: 29-inch CRT color monitor

(anti-electrification coating. Factory-set in horizontal position;

vertical position setting is also possible)

7. Fuse rating: 6A (anti-surge, alternating regulator type)

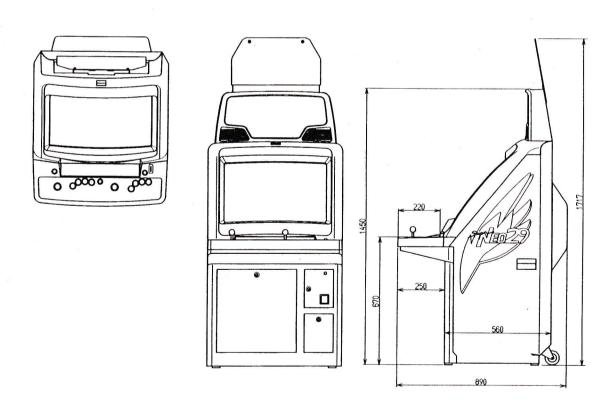
6A (main harness, DC +5 V)

8. Coin selector: Asahi Seiko AD-81P2

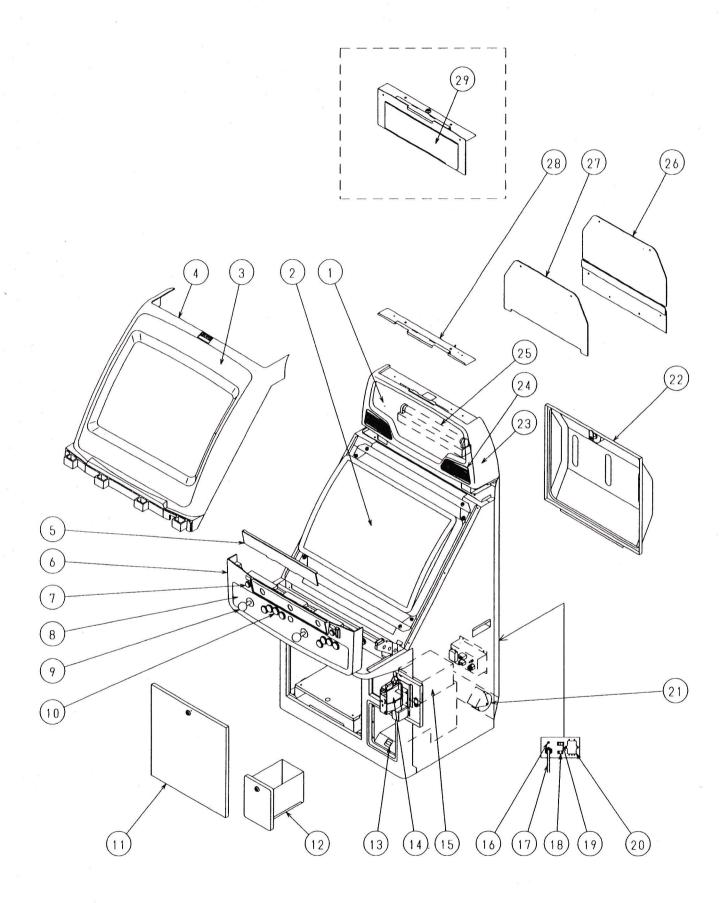
9. Fittings: Master keys . . . . . . . . . 3

Cash box keys . . . . 2
Instruction handbook . . . 1
Screwdriver . . . . 1
Warning seal . . . . . 1
Signboard . . . . . . 1

All specifications are subject to change without notice.



# ■ Major components diagram



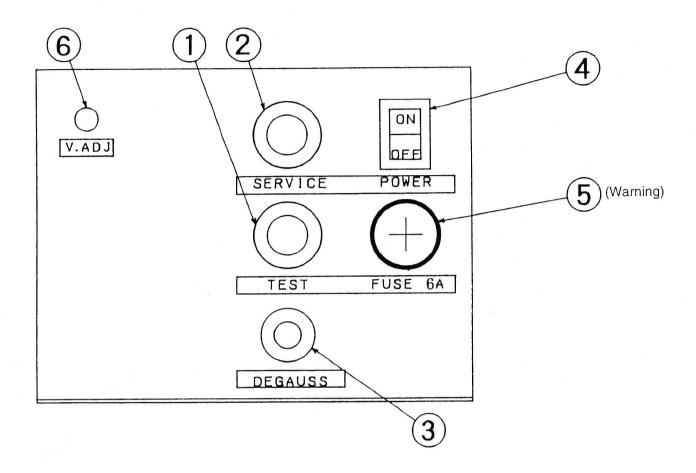
## ■ Parts names

1	Monitor head box panel	NX29-P710 (Pop-card model: NX29-P750)
2	CRT monitor	
3	Monitor cover panel	NX29-P200
4	Monitor cover door	NX29-P100
5	Playing instructions sticker panel	NX29-P800A
6	Control panel	NX29-P500B
7	24 mm (diameter) push button switch	PS-14-DN
8	Control panel decal	NX29-P900A
9	Joystick	LS-40-01
10	30 mm (diameter) push button switch	XW6Z-0011-R/Y/G/B
11	Front door	NX29-2000A
12	Cash box	FCGV-S900
13	Coin counter	E660
14	Coin selector	AD-81P2
15	Power supply unit	S8XA-500
16	Ground terminal	
17	AC power cord	FCGTU-WH03-01
18	AC outlet	CR-01-FB04
19	Power switch	HLS208K
20	Noise filter	ZCB2206-11
21	Caster	SK-75-N
22	Rear cover	NX29-2200C
23	Top cover	NX29-P600
24	Speaker	CS1208T7047-8
25	Fluorescent light	10 W
26	Signboard	NX29-P1200
27	Signboard cover	NX29-P1100
28	Top cover fastener fittings	NX29-6600B (Standard model)
29	Printed sheet pocket	NX29-P1050 (Pop-card model)

Part 28 comes only with the standard model; part 29 is included only with the pop-card model.

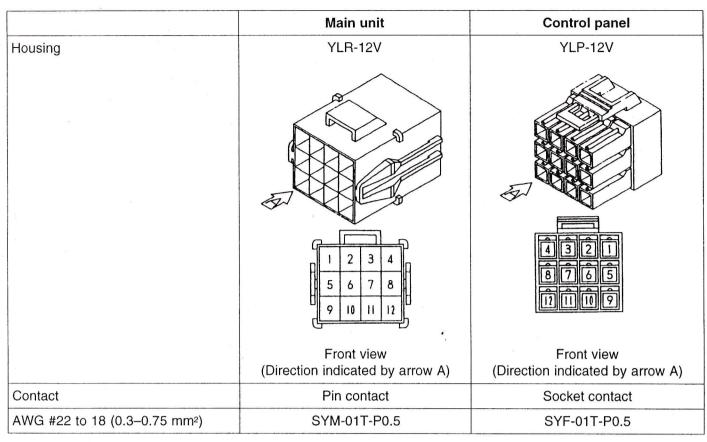
## ■ Control unit switches

Functions for each switch and the adjuster located on the control unit are indicated below.



① Test switch	to enter test mode
② Service switch	service credit switch (Not for operating the coin counter but for raising credits.)
③ Demagnetizing switch	to remove monitor color irregularities (Only effective when used at 20-min. intervals.)
Power switch	secondary power switch (The main power switch is located in the rear of the cabinet.)
⑤ Fuse Holder	contains 6A anti-surge fuse. Because there is a momentary power surge when the cabinet is turned on, a normal fuse cannot be used. Be sure to use an anti-surge fuse.  (Warning: There is a fuse on the DC 5 V line of the main harness as well.)
Voltage adjuster	Adjusts DC 5 V direct flow power source. Use only when necessary.

## ■ Control panel wiring



(JST manufacture)

No.	Wire color	Player 1	Wire color	Player 2
1	Brown	1P 1 UP	Brown	2P 1 UP
2	Red	1P 2 DOWN	Red	2P 2 DOWN
3	Orange	1P 3 LEFT	Orange	2P 3 LEFT
4	Yellow	1P 4 RIGHT	Yellow	2P 4 RIGHT
5	Green	1P 5 PUSH 1	Green	2P 5 PUSH 1
6	Blue	1P 6 PUSH 2	Blue	2P 6 PUSH 2
7	Purple	1P 7 PUSH 3	Purple	2P 7 PUSH 3
8	Grey	1P 8 PUSH 4	Grey	2P 8 PUSH 4
9	White	1P START	White	1P 9 SPARE
10	Peach	2P START	White	2P 9 SPARE
11	Black	GND (27)	Black	GND (e)
12	Green	Ground		

<sup>\*</sup> The connector housing color for the Player 1 side is white; the Player 2 side is red.

# ■ JAMMA edge connector terminal wiring

Solder points		ninal nber	Part name
GND	Α	1	GND
GND	В	2	GND
+5 V	С	3	+5 V
+5 V	D	4	+5 V
-5 V	E	5	–5 V
+12 V	F	6	+12 V
(Key to prevent incorrect insertion)	Н	7	(Key to prevent incorrect insertion)
(COIN COUNTER 2)	J	8	COIN COUNTER 1
(COIN LOCK OUT 2)	K	9	(COIN LOCK OUT 1)
SPEAKER (-)	L	10	SPEAKER (+)
(Audio [GND])	М	11	(Audio [+])
VIDEO GREEN	N	12	VIDEO RED
VIDEO SYNC	Р	13	VIDEO BLUE
SERVICE SWITCH	R	14	· VIDEO GND
(Tilt switch)	S	15	TEST SWITCH
(COIN SWITCH 2)	Т	16	COIN SWITCH 1
START SWITCH 2	U	17	START SWITCH 1
2P CONTROL 1 UP	V	18	1P CONTROL 1 UP
2P CONTROL 2 DOWN	W	19	1P CONTROL 2 DOWN
2P CONTROL 3 LEFT	Х	20	1P CONTROL 3 LEFT
2P CONTROL 4 RIGHT	Υ	21	1P CONTROL 4 RIGHT
2P CONTROL 5 PUSH 1	Z	22	1P CONTROL 5 PUSH 1
2P CONTROL 6 PUSH 2	а	23	1P CONTROL 6 PUSH 2
2P CONTROL 7 PUSH 3	b	24	1P CONTROL 7 PUSH 3
2P CONTROL 8 SPARE	С	25	1P CONTROL 8 SPARE
2P CONTROL 9 SPARE	d	26	1P CONTROL 9 SPARE
* GND	е	27	* GND
* GND	f	28	* GND

<sup>\*</sup> e27 and f28 ground cables are separately wired.

## ■ Warnings for installing various PCBs

### 1. Installing Mahjong PCBs

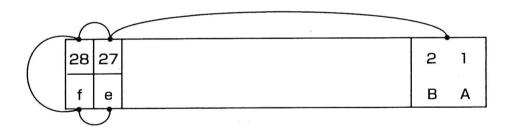
Referring to the diagram below, wire the wires from the Royal Kee-Shashee (JB-20: Seimitsu Kogyo) through the Player 1 side connector to the JAMMA edge connector terminal as shown.

Control	panel	9	Main unit		
Royal Kee-Shashee	1P con	nector	JAMMA connector		
Wiring	YLP-12V	YLR-12V			
Brown	1	1 .	18	1P UP	
Red	2	2	19	1P DOWN	
Orange	3	3	20	1P LEFT	
Yellow	4	4	21	1P RIGHT	
Green	5	5	22	1P PUSH 1	
Blue	6	6	23	1P PUSH 2	
Purple	7	7	24	1P PUSH 3	
Grey	8	8	25	1P SPARE (4)	
White	9	9	17	1P START	
Black	10	10	· U	2P START	
Peach	11	11	27	GND	

<sup>\*</sup> Royal Kee-Shashee (JB-20, Seimitsu Kogyo) wire colors are listed above.

### 2. Installing non-JAMMA specification PCBs

When connecting non-JAMMA PCBs to the edge connector terminal area, this cabinet's JAMMA edge connector ground wire is mutually connected to 1, A, 2, and B, but because 27, e, 28, and f must be wired separately, connect 1, A, 2, and B mutually to the middle harness.



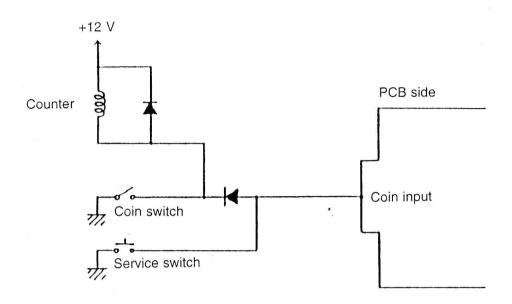
<sup>\*</sup> Remove the wiring from the main unit's START button.

## 3. Using PCBs not equipped with counter circuits and service input

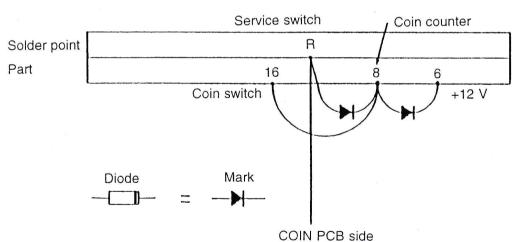
Using PCBs of this type, attach the circuit shown below to the middle harness.

#### **Necessary part**

Diode 10D1 (or equivalent) .....2 pieces

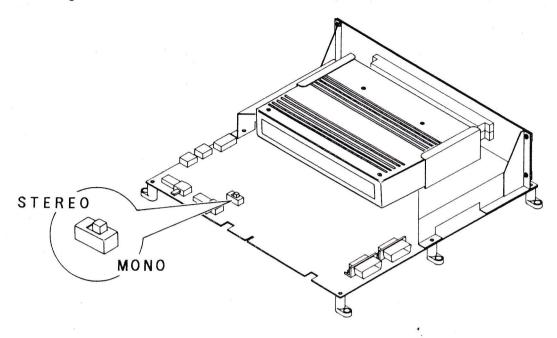


#### JAMMA slot (main unit)



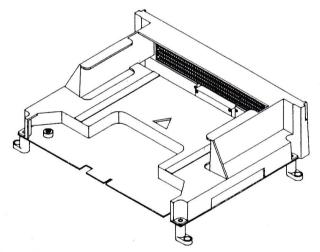
## 4. Using NEO GEO 1-slot PCBs

When using PCBs with mono/stereo selector switches (like the NEO-MVH MV1F):



Be absolutely sure to set the switch to MONO! Setting the switch to stereo may result in damage to the cabinet.

When using PCBs without mono/stereo selector switches (like the NEO-MVH MV1FZ):



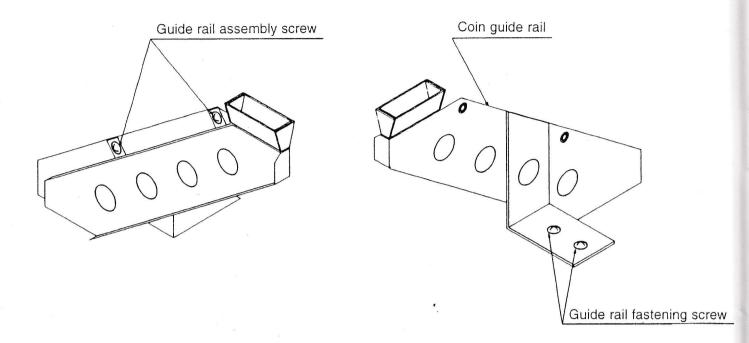
As with JAMMA PCBs, the PCB can be used as is.



NEO GEO 2-slot and 4-slot PCBs cannot be used.

### Maintenance

#### **Fixing Coin Jams**



Open the Control Panel to find the coin guide rail shown above. It is located on the right side. Jams may result when coins catch on the holes on both sides of the rail or the loosened guide rail assembly screw. Remove the coin and make repairs as necessary.

If this does not fix the jam, remove the coin guide rail. (Fastening screws are shown in the diagram above.)



When coins are jammed, do not forcefully open the selector door. Doing so may break parts inside the door.

## **Cabinet Care**

When the cabinet is dirty, wipe clean with a soft cloth (either dry or slightly moistened). When it is extremely dirty, use a neutral detergent.



Never use NEO GEO Glass Cleaner (alkaline solvent) to clean the cabinet. Never use volatile liquids, such as alcohol, paint thinner, benzene, or insecticides. Doing so may cause the paint to peel or lose its luster.

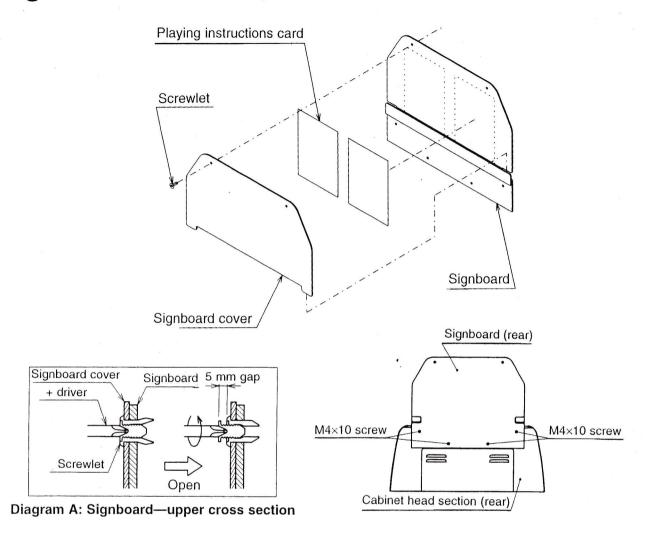
## **■** Changing parts

### **Precautions during work**



- Be sure to turn the power OFF and unplug the cabinet before beginning work.
- Absolutely do not touch the back of the monitor while working on the inside of the cabinet. The monitor has high-voltage parts, and even after the cabinet has been turned off, there is a danger of electric shock.
- Do not drop assembly screws into the cabinet. There is a danger this may cause electric shock and fire.

## Signboard assembly



Because the signboard is not installed when shipped from the factory, install it according to the directions below. Signboard components are all packed inside the front door.

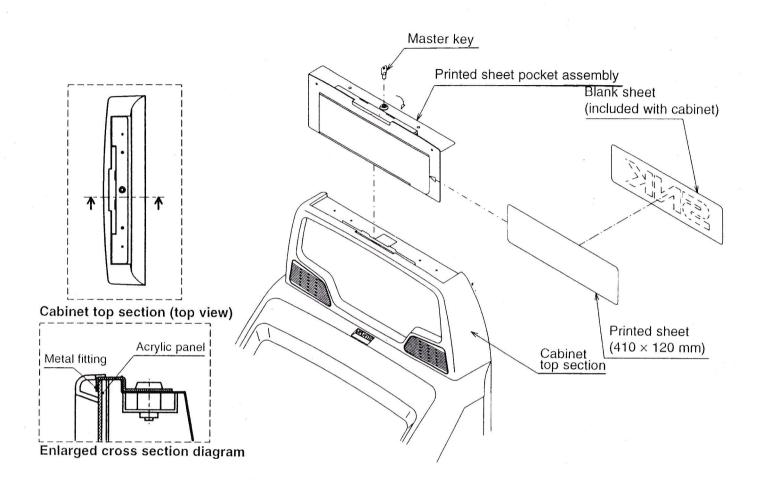
- ① Attach the signboard to the cabinet's head section with the four M4×10 screws.
- When attaching the signboard to the signboard cover, insert the playing instructions cards included with game cartridges between them and insert the screwlets into the holes. Turn screwlets right with a philips screwdriver to secure.
- ③ When changing playing instructions cards, turn the screwlets with the philips screwdriver to the left until the head of the screw protrudes about 5 mm from the hole. Tilt the signboard forward and insert the cards. (Diagram A)



When shipping the cabinet, remove the four M4×10 screws and take off the signboard.

## Switching printed sheets

\* This page applies only to pop-card model cabinets.

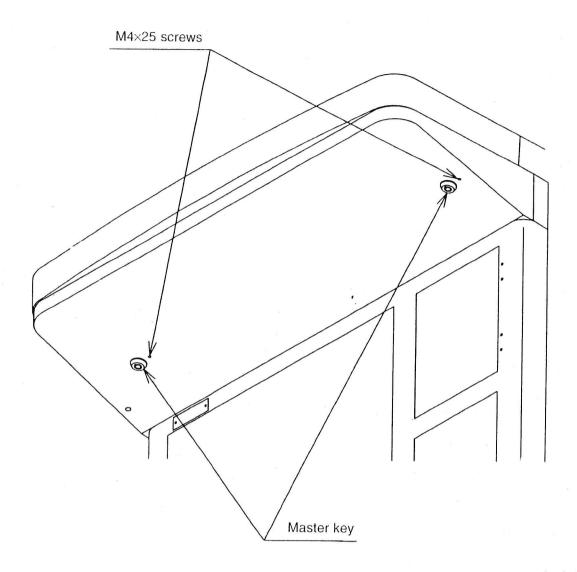


- ① Insert the master key (not the coin box key) into the key hole atop the cabinet top section and turn it 90° to the right.
- ② Raise the cabinet top section and remove the printed sheet pocket assembly.
- ③ Insert your own printed sheets into the printed sheet pocket. If you choose not to illuminate the printed sheets, insert the top section's blank sheet behind the printed sheet.



- When inserting the printed sheet pocket assembly into the top section of the cabinet, be sure to include the acrylic panels in the metal fittings, as shown in the enlarged cross section diagram above.
- Install the printed sheet pocket assembly perpendicularly so the lower edge does not touch the fluorescent light.

## Opening and closing the control panel

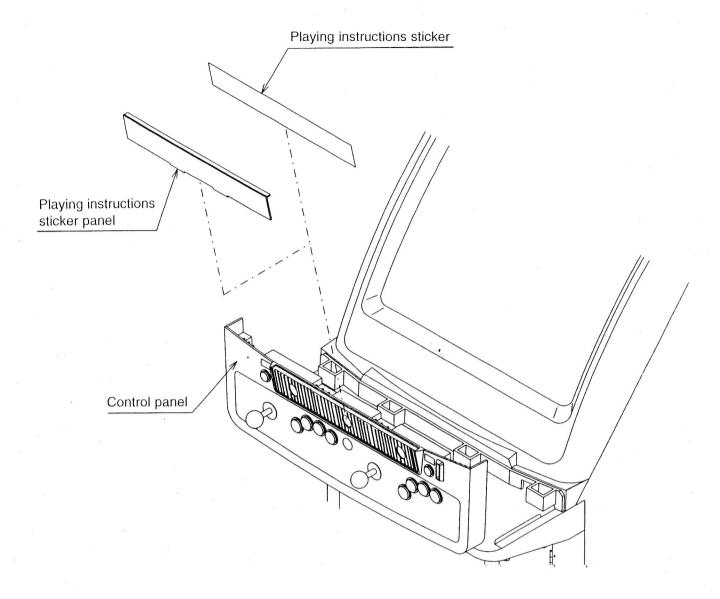


There are 2 screw holes underneath the control panel. Insert the master key (not the coin box key) in these and, looking up from below the cabinet, turn the key clockwise to open the control panel.



The two locks (locations shown in the illustration above) are secured with screws when shipped from the factory. Loosen these before opening the locks.

## Switching playing instructions stickers



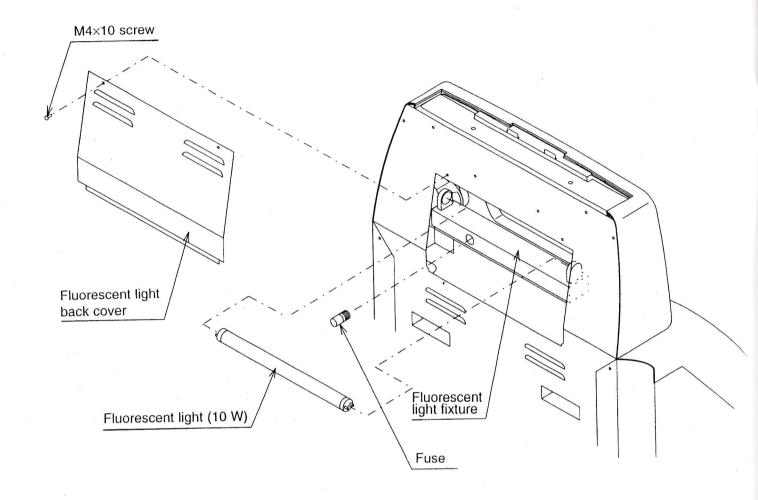
The area (Instructions space) shown in the diagonal-view diagram above has been designed to install the playing instructions sticker (included with game cartridges).

- ① Open the control panel with the master key (not the coin box key).
- ② Remove the playing instructions sticker panel.
- ③ Slide the sticker between the playing instructions panel and the cabinet. (Do not remove the sticker's backing!)



When closing the control panel, make sure the playing instructions sticker panel is inserted all the way into its slot and gently set down the control panel. If the playing instructions sticker panel is not sufficiently inserted, there is a danger of damaging both the playing instructions sticker panel and the control panel.

## ■ Replacing the fluorescent light

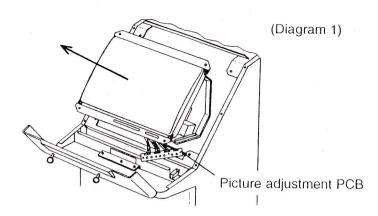


- ① Remove the screws of the rear panel of the cabinet's head section and open the fluorescent light back cover.
- ② Push the fluorescent light back and forth to work it free from the fluorescent light fixture.
- ③ Turn the fuse to the left to remove it from the fluorescent light fixture.



- Be sure to use 10 W fluorescent bulbs and fuses only.
- Even if the power has been switched off, do not touch the fluorescent bulb carelessly. If the power has just been turned off, the bulb may still be exceedingly hot and may cause a burn. Check that the bulb sufficiently cooled before attempting to change it.

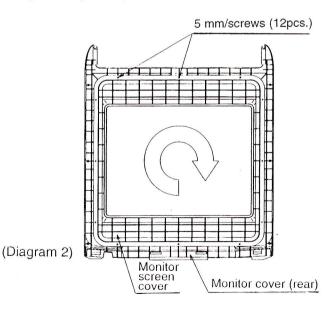
## Changing vertical/horizontal monitor position



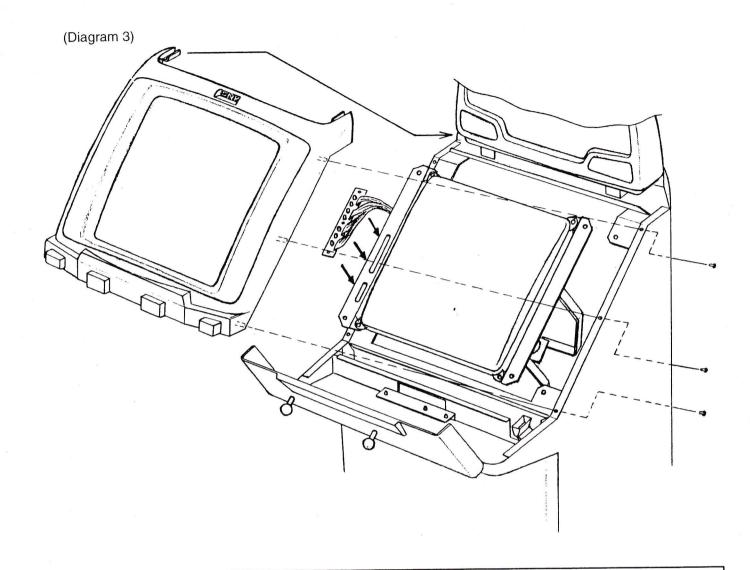
- ① Open the rear cover, selector door, and control panel.
- 2 Remove the 6 attaching screws (M5  $\times$  16) from the monitor cover from the rear door opening. Remove the monitor cover. Refer to screw locations on p. 22.
- 3 Remove the picture adjustment PCB attached to the control panel's lower box, the CRT monitor's AC cable connected to the upper section of the power switching unit, and the RGB cable connected to the front of the monitor and the demagnetizing harness.
- ④ Remove the 4 attaching bolts set in the monitor.
- (5) With the necessary number of people, gently raise the monitor and, when sufficiently raised, turn it around 90° clockwise. (To change the monitor to a horizontal position, turn in the opposite direction.) After that, attach the monitor bolts to station the monitor in its new position. (See diagram 1.)

#### **Monitor PCB locations**

- Horizontal—Place the monitor PCB at the bottom.
- Vertical—Place the monitor PCB at the lower left side.
- ® Remove the 12 screws on the inside of the removed monitor door and turn the monitor screen cover 90° to match the monitor position. (See diagram 2.)



② Lastly, attach the picture adjustment PCB to the CRT monitor position shown below. Connect the cables removed in step 3 and attach the monitor cover. Close all doors to complete operations.





When removing the attachment screws of the monitor door, do not carelessly touch the back of the CRT monitor. There is danger of damaging the cone or receiving a severe electric shock.



Based on game PCB makers and types, it may be necessary to adjust the monitor PCB in ways other than specified. (See Adjuster Function Explanations on p. 26.)

# ■ Monitor specifications and adjustment methods

## 1. Specifications

Item		Specifications
Input signal level	Video Synchronization	RGB analog signal 2.5–5.0 V (Positive) Composite and separate synchronization 1 to 5 V (Negative)
Scanning method	Horizontal  Vertical	15.75 kHz ± 500 Hz 24.83 kHz ± 500 Hz 60 Hz ± 5 Hz
Voltage	AC 110 V to 240 V	
Frequency	50/60 Hz	
Operation temperature	0°C to 40°C	
Storage temperature	-10°C to 60°C	
Humidity	Below 70% (below 90%	in storage)
Reception band	10 MHz (±3 dB)	
Polarized distortion	Trapezoid-, barrel-, spo	ol-shaped within 3 %
Picture tube	29-inch, 110°-polarized (anti-combustible, anti-e	
Power consumption	110 W ± 20% (29-inch)	
Weight	38.5 kg (29-inch)	
Accessory	Adjuster screwdriver	

#### 2. Notes on Usage

(1) High-voltage parts

Inside this cabinet there are certain areas like the flyback transformer that carry voltage in excess of 25 kilovolts when the power is on. Therefore, be absolutely sure the cabinet is turned off when touching internal parts.

(2) Connecting the CRT to the PCB

When installing and removing the anode cap, be sure to discharge the CRT ground cable. Electric charges may accumulate in the anode.

# 3. Changing horizontal size to normal (N) and wide (W) (1P connector [red])

- (1) Be sure to change normal and wide settings after turning the cabinet off.
- (2) Be sure to switch the normal/wide connector to the (N) or (W) indicator marks on the PCB. (Warning: You cannot switch in this function when operating at 24 kHz.)

#### 4. Horizontal/vertical inversion function

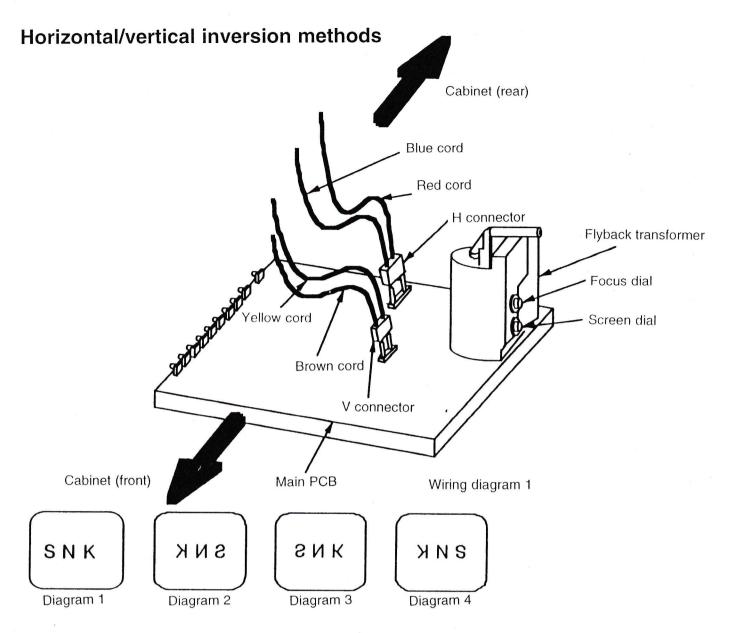
- (1) When making both horizontal and vertical inversions, be sure to turn the cabinet off before beginning the procedure.
- (2) Follow the switching method shown in the diagram on p.26.

### 5. Changing between 15 and 24 kHz

- (1) When changing horizontal frequency, be sure to switch the monitor off.
- (2) Make FH connector switch-overs as shown in the table below.

Horizontal Frequency	Connector
15 kHz	Switch to the FH15K side
24 kHz	Switch to the FH24K side

For more details on connector positioning, refer to the diagram on p.28.



Wiring diagram 1 represents horizontal and vertical connections in their normal state. (Image in diagram 1.)

Simply reversing the H connector at insertion will produce a left/right mirror inversion. (Image in diagram 2.)

Simply reversing the V connector at insertion will produce an up/down inversion. (Image in diagram 3.)

Reversing both H and V connectors at insertion inverts the image 180°. (Image in diagram 4.)

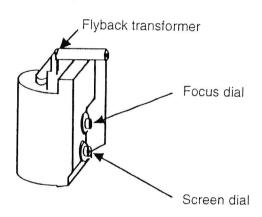
## 6. Adjuster Function Explanations

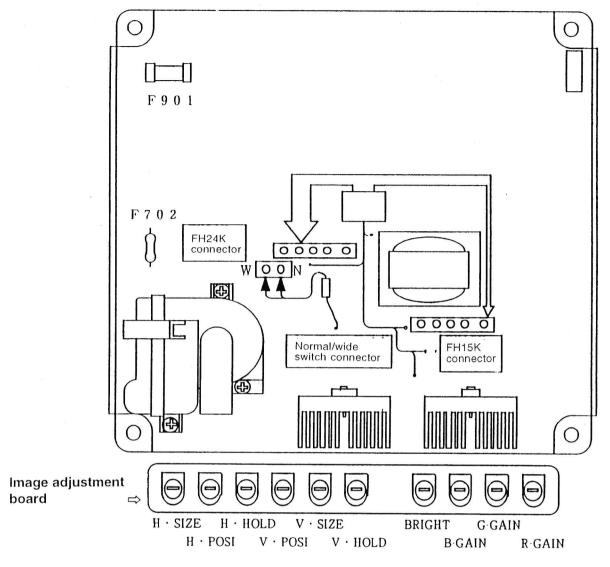
(1) Part Adjustment Function List

		Item No.	Name		Operation	on
	1 /	1	R-GAIN	Red signal amplitude	Adjusts red signal amp	litude
	//	2	G-GAIN	Green signal amplitude	Adjusts green signal an	nplitude
nH1	R-GAIN	3	B-GAIN	Blue signal amplitude	Adjusts blue signal amp	olitude
	//,	4	BRIGHT	Brightness	Adjusts image brightnes	ss
	G-GAIN'	5	V. HOLD	Vertical hold	Use when the screen runs up and down	
	BRIGHIT' V. HOLD- V. SIZE-	6	V. SIZE	Vertical size	Adjusts vertical image size	
	V. POSI—	7	V. POSI	Vertical positioning	Adjusts vertical image position	
	H. POSI-	8	H. HOLD	Horizontal hold	Adjusts image running right to left	
	H. SIZE	9	H. POSI	Horizontal positioning	Adjusts horizontal image position	
		10	H. SIZE	Horizontal size	Adjusts horizontal image size	
0	J					

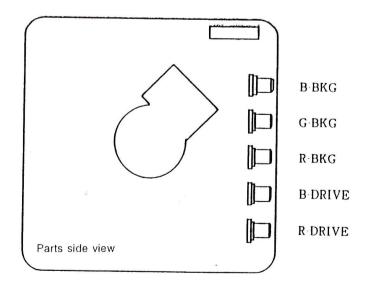
### 7. Adjusting picture tube cut-off (white balance)

- ① Input the signal (CRT TEST color bar).
- ② On the CRT PCB,
  - 1. Move the R-BKG, G-BKG, B-BKG dials all the way to the left.
  - 2. R-DRIV and B-DRIV dials are mechanically centered.
- 3 Move the screen dial on the flyback transformer all the way left.
- ④ Pull out the yellow 2P connector on the CRT PCB and insert the 2P connector near the vertical radiator on the main PCB to convert the image to a single side bar.
- ⑤ Turn the screen dial gradually clockwise, and note the image's right edge or left edge. Stop the screen dial where color first appears in these locations.
- With R-BKG, G-BKG, and B-BKG dials on the CRT PCB, turn color dials not appearing on the screen clockwise to slightly bring out the alignment with the 3 main colors.
- Turn the screen dial counterclockwise until the screen's right or left edge side portion begins to flash lightly.
- ® Return the yellow 2P connector inserted on the main PCB to the CRT PCB, and return parts to the initial set-up.
- Be aware of the white portion of the color bar signal and when the white balance is substantially deviated, turn the
   R-DRIV or B-DRIV dials on the CRT PCB for fine adjustments.





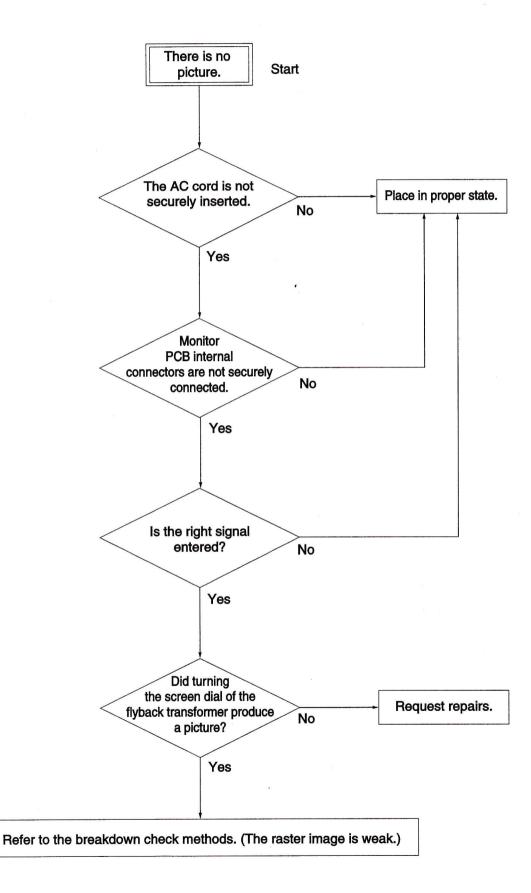
\* The image adjustment board shown above is located within the control panel.

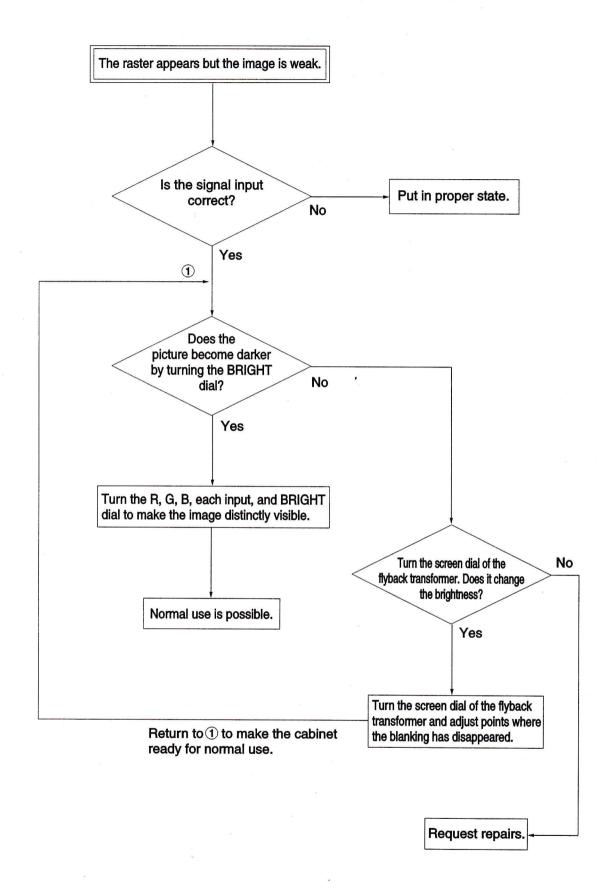


## ■ Before requesting repairs

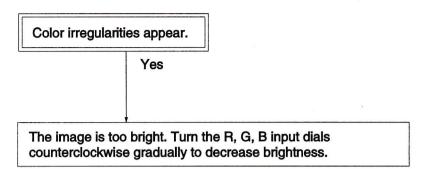
Before requesting for repairs, double-check the items below.

1.

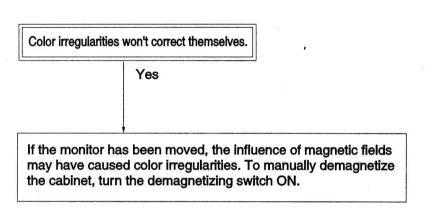




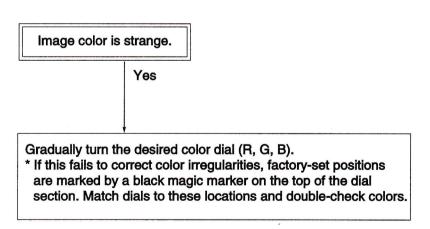
3.



4.



5.



Screens move and size fluctuates when changing the game board from 15 kHz to 24 kHz.

Yes

With this monitor, it is necessary to input switch-over frequencies on the monitor board.

• Switch the FH connector to the 24 kHz position. (For details, refer to pp. 24, 28.)

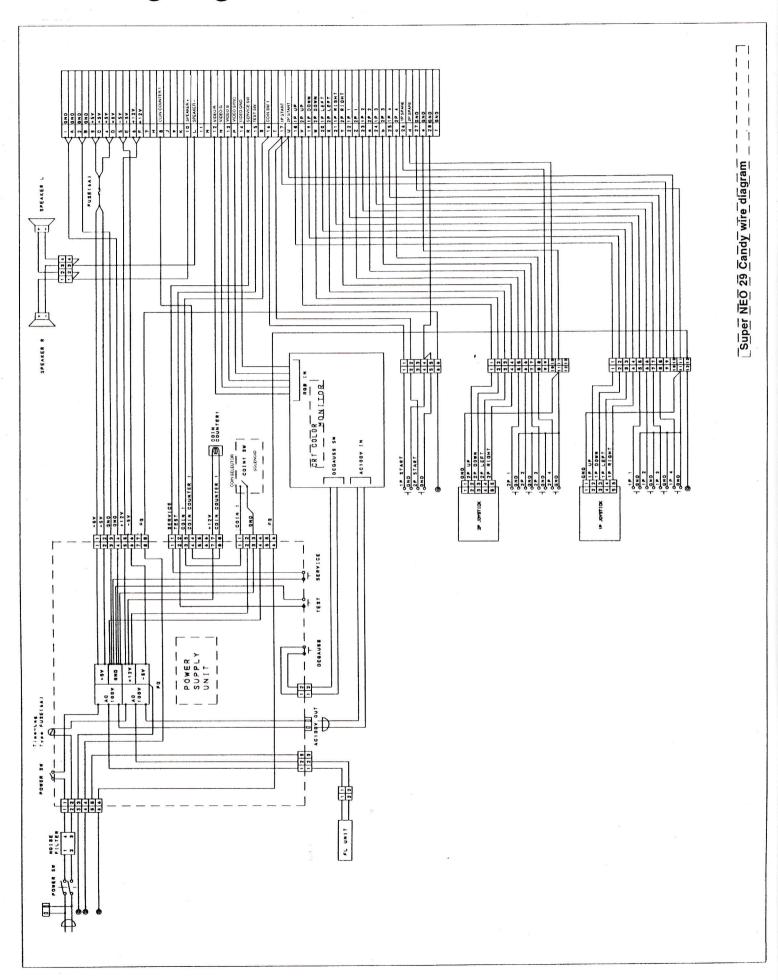
## ■ Points to check before concluding the cabinet is out of order

- 1. Under the conditions described below, the voltage may go above or below these limits, in which case the voltage fluctuates and could cause the cabinet to break down or function improperly:
- Using a number high-voltage machines on the same line (i.e., air conditioners, large cabinets, etc.).
- Connecting a number of cabinets to the rear service outlet (for repairs).
- 2. If the cabinet does not run even after the power has been turned on, double-check the outlet, the power switch, and the fuse.

(This cabinet has two power switches, one at the bottom of the rear side of the control unit, the other inside the front service door. They must both be on for the machine to run.)

- 3. When objects are placed on the main PCB or dust and objects accumulate on it, the main PCB may break down or function improperly. Always keep the main PCB clean and free from obstructions.
- 4. When the joystick or buttons do not work, check to see if the connector have become loose.
  - If the problem has nothing to do with the measures listed above, or these corrective measures do not improve
    the situation, contact the place of purchase or SNK CORPORATION Osaka, Japan, directly.
  - Repairs for each PCB are done at SNK. Do not check circuits with a conventional tester as the internal voltage of the tester will damage the IC.
  - When sending in items for service, describe the breakdown in detail and include it safely within the parcel. PCBs should be wrapped in a soft material to cushion them, and packed within a cardboard box to protect them from direct external impact.

# Wiring diagram



# M E M O

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# M E M O

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#### SNK CORPORATION

SNK BLDG., 18-12 TOYOTSU-CHO, SUITA-SHI, OSAKA, 564, JAPAN TELEPHONE: (81) 6-339-5577 FAX: (81) 6-338-7175