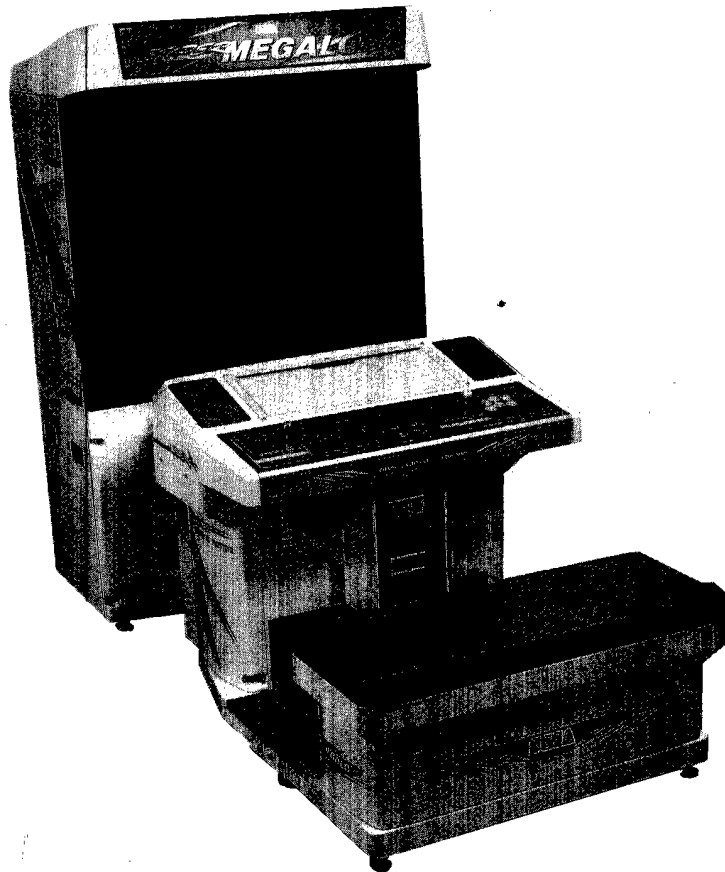


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SEGA

SUPER **MEGALO 2**

OWNER'S MANUAL



SEGA ENTERPRISES, LTD.

MANUAL NO. 420 - 6131 - 01

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SPECIFICATIONS

Installation space	: 1,140 mm (W) × 2,200~3,100 mm (D) (44.9 in. × 86.6 in. ~122.0 in.)
Height	: 1,867 mm (73.5 in.)
Weight	: Approx. 330 kg. (726.8 lbs.)
Power, maximum current	: 375W 4.4A (AC 110V 50 Hz AREA) 360W 4.3A (AC 110V 60 Hz AREA) 360W 4.0A (AC 120V 60 Hz AREA) 380W 2.3A (AC 220V 50 Hz AREA) 370W 2.2A (AC 220V 60 Hz AREA) 380W 2.1A (AC 240V 50 Hz AREA) 370W 2.0A (AC 240V 60 Hz AREA)
For TAIWAN (HITACHI PROJECTION DISPLAY TYPE)	
Power, current	: 385W 4.5A (MAX.) 365W 4.2A (MIN.)
For TAIWAN (MITSUBISHI PROJECTION DISPLAY TYPE)	
Power, current	: 345W 4.1A (MAX.) 335W 3.9A (MIN.)
MONITOR	: 50 INCH PROJECTION DISPLAY

NOTE: Descriptions in this manual are subject to change without prior notice.

INTRODUCTION OF THE OWNER'S MANUAL

SEGA ENTERPRISES, LTD., supported by its high electronic technology of LSIs, microprocessors, etc. and a wealth of experience, has for more than 30 years been supplying various innovative and popular game machines to the world market. This Owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards SUPER MEGALO 2, a new SEGA product.

This manual is intended for those who have knowledge of electricity and technical expertise especially in ICs, CRTs, microprocessors, etc. Carefully read this manual to acquire sufficient knowledge before working on the machine. Should there be a malfunction, non-technical personnel should under no circumstances touch the interior system. Should such a case arise, contact our Main Office or the closest branch office listed as follows:

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45133 Industrial Drive, Fremont, California 94538, U.S.A.
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Calle Vallellano, 19-23, 1° A, 37008-Salamanca, Spain
Phone : (923) 265893
Fax : (923) 265913

1. HANDLING PRECAUTIONS

When installing or inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.

- Be sure to turn the power off before working on the machine.
- To insert or pull out the plug quickly is dangerous.
- It is necessary to make sure that the power cord or the grounding wire is not exposed on the road, etc. in a manner so as to be dangerous. Make sure that grounding connections are made safely at the position where so specified.
- Do not use any fuse that does not meet specified rating.
- Make complete connections for the IC board and other connectors. Insufficient insertion is very dangerous.
- The operating (ambient) temperature range is from 5°C to 40°C.
- When cleaning the CRT surfaces, use a soft, dry cloth. Do not apply chemicals such as thinner, benzine, etc.

Also, for the IC board circuit inspections, only the logic tester is allowed. The use of a tester is not permitted, so be careful in this regard. After confirming that there are no irregularities, turn the power ON.

CONCERNING THE PROJECTION DISPLAY:

A PROJECTION DISPLAY is used for this machine. The PROJECTION DISPLAY's screen is susceptible to damage and therefore, when cleaning it, pay careful attention. For details, refer to Section 10.

2. PRECAUTIONS CONCERNING INSTALLATION LOCATION

The SUPER MEGALO 2 is an indoor game machine. Absolutely do not install it outside. Even indoors, avoid installing in places mentioned below so as to ensure proper usage:

- Places subject to rain or water leakage, or condensation due to humidity.
- In the proximity of an indoor swimming pool and/or shower.
- Places subject to direct sunlight.
- Places subject to heat sources from heating units, etc., or hot air.
- Vicinity of highly inflammable/volatile chemicals or hazardous matter.
- Sloped surfaces.
- Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
- Places subject to any type of violent impact.
- Dusty places.

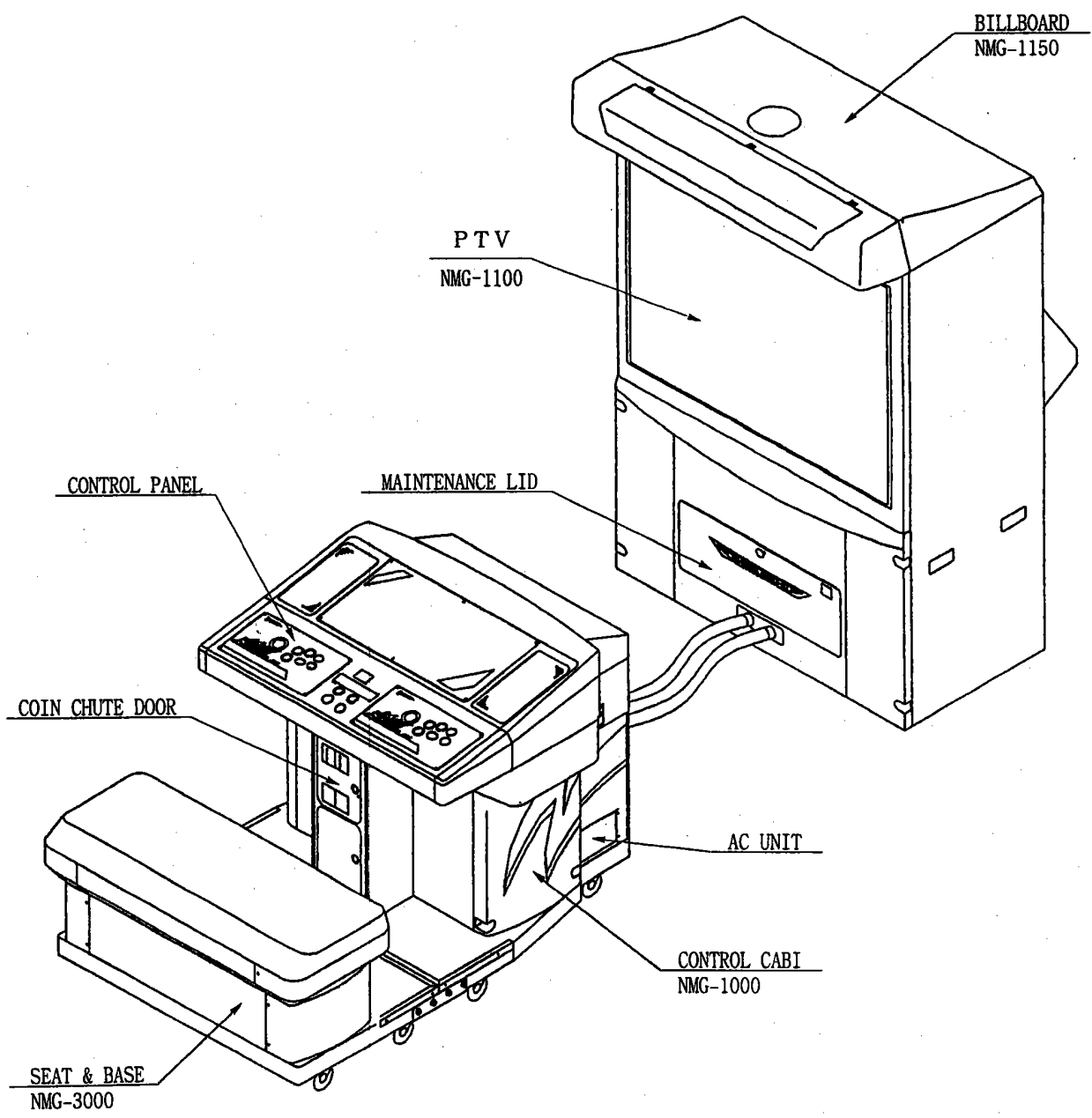
INSTALLATION PRECAUTIONS

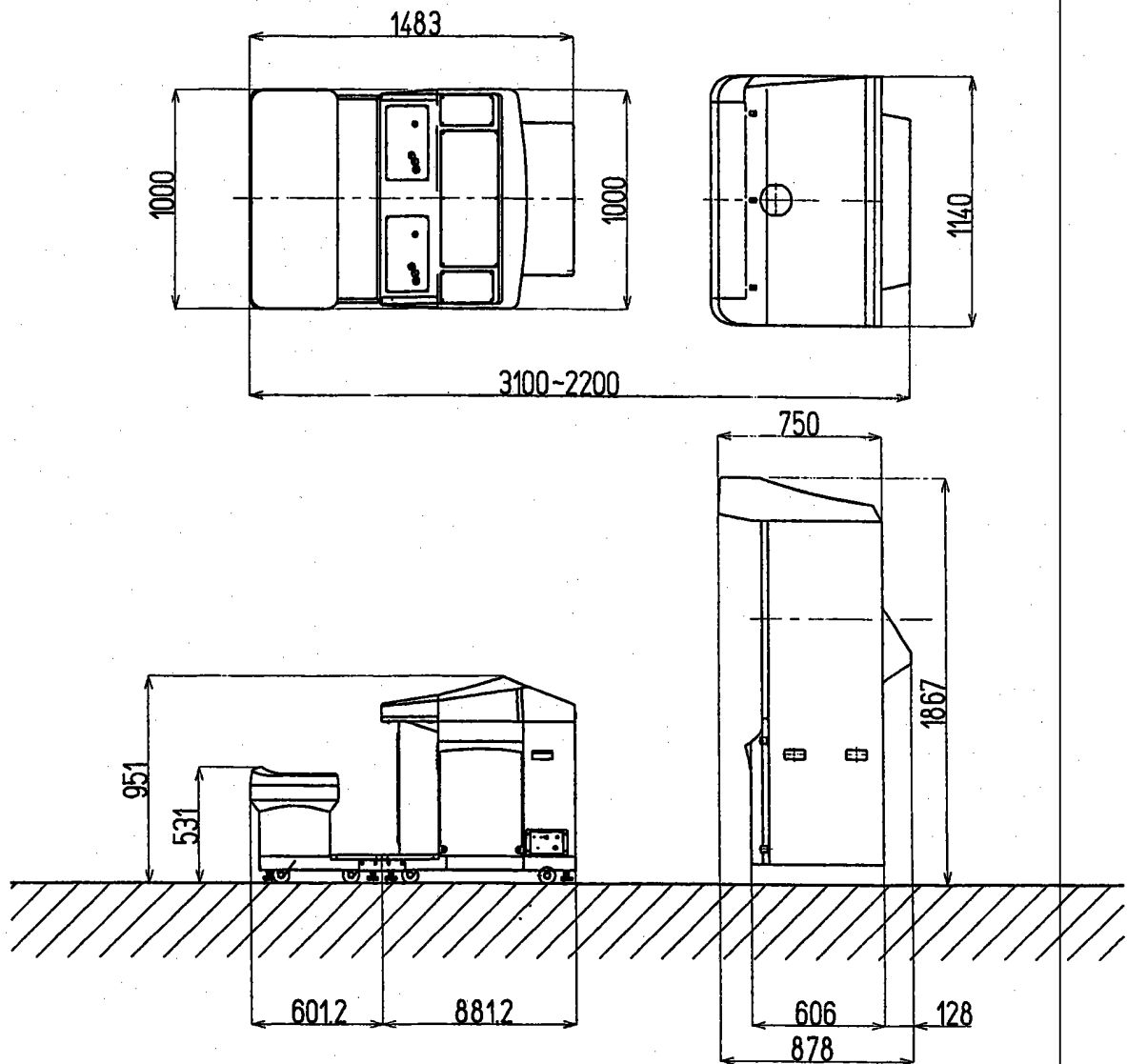
- Do not insert more than one electrical plug into the power plug socket.
- The per unit standard voltage/amperage is 100~120V/15A and 200~240V/7A.
- If an extension cord is to be used, use a cord of 15A or higher rating.
- A minimum width of 90 cm. is required for the opening through which this machine is to be transported.

Electric current consumption

MAX. 4.4A	(AC 110V 50 Hz AREA)
MAX. 4.3A	(AC 110V 60 Hz AREA)
MAX. 4.0A	(AC 120V 60 Hz AREA)
MAX. 2.3A	(AC 220V 50 Hz AREA)
MAX. 2.2A	(AC 220V 60 Hz AREA)
MAX. 2.1A	(AC 240V 50 Hz AREA)
MAX. 2.0A	(AC 240V 60 Hz AREA)
MAX. 4.5A	(For TAIWAN, HITACHI projection display)
MAX. 4.1A	(For TAIWAN, MITSUBISHI projection display)

3. NAME OF PARTS





OUTER DIMENSIONS (in mm)

Width : 1140
 Depth : 2200~3100 (adjustable)
 Height : 1867

WEIGHT OF COMPONENTS (in kg.)

CONTROL CABI : 134
 SEAT & BASE : 53
 TV CABI : 125
 BILLBOARD : 15

TOTAL WEIGHT : 330 kg.

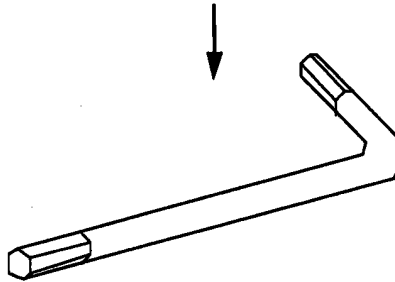
4. ACCESSORIES

When transporting the machine, make sure that the following parts are supplied.

PART No.	Qty	DESCRIPTION	REMARKS
200-5297	1	REMOTE CONTROLLER H	For adjustment, refer to Section 10.
200-5298		REMOTE CONTROLLER M	
253-5185	10	CAP SW 30	
420-6131-01	1	OWNERS MANUAL SUPER MEGALO 2 ENG	SUPER MEGALO 2 OWNER'S MANUAL, ENG.
514-5036-6000	1	FUSE 6.4 ϕ X30 6000mA 125V	For spare
540-0006-01	1	WRENCH FOR TAMP PRF SCR DUAL TYPE M4	Tool
220-5381	2	MASTER KEY	For opening/closing the doors
	2	KEY	For the CASHBOX DOOR

TOOL

TAMPERPROOF WRENCH
M4 540-0006-01



5. METHOD OF INSTALLATION AND ASSEMBLY

CAUTION!

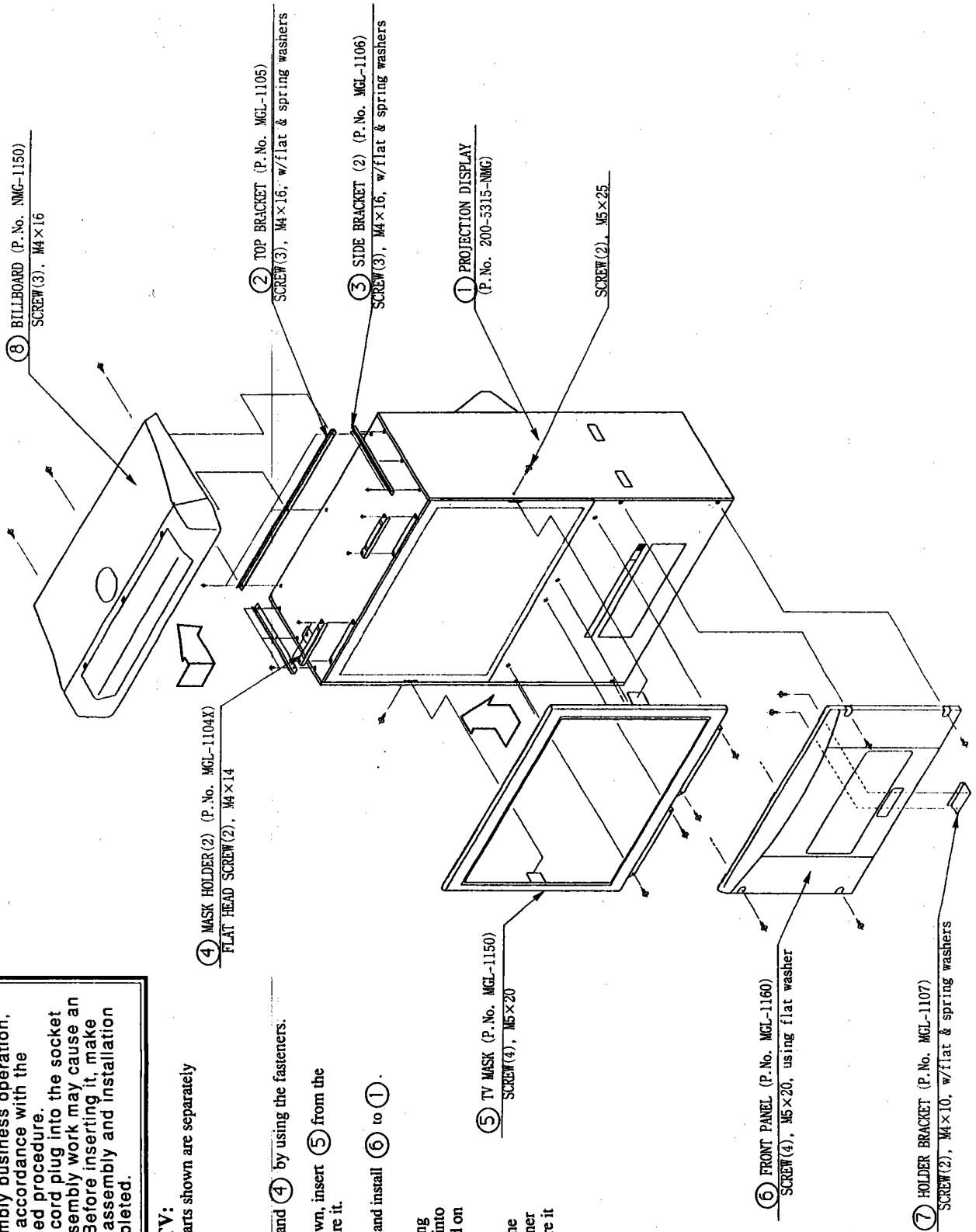
In order to ensure safety during assembly work and post-assembly business operation, perform the work in accordance with the sequentially explained procedure. Inserting the power cord plug into the socket outlet during the assembly work may cause an accident to occur. Before inserting it, make sure that the entire assembly and installation work has been completed.

ASSEMBLING THE PTV:

At the time of shipment, the parts shown are separately packed.

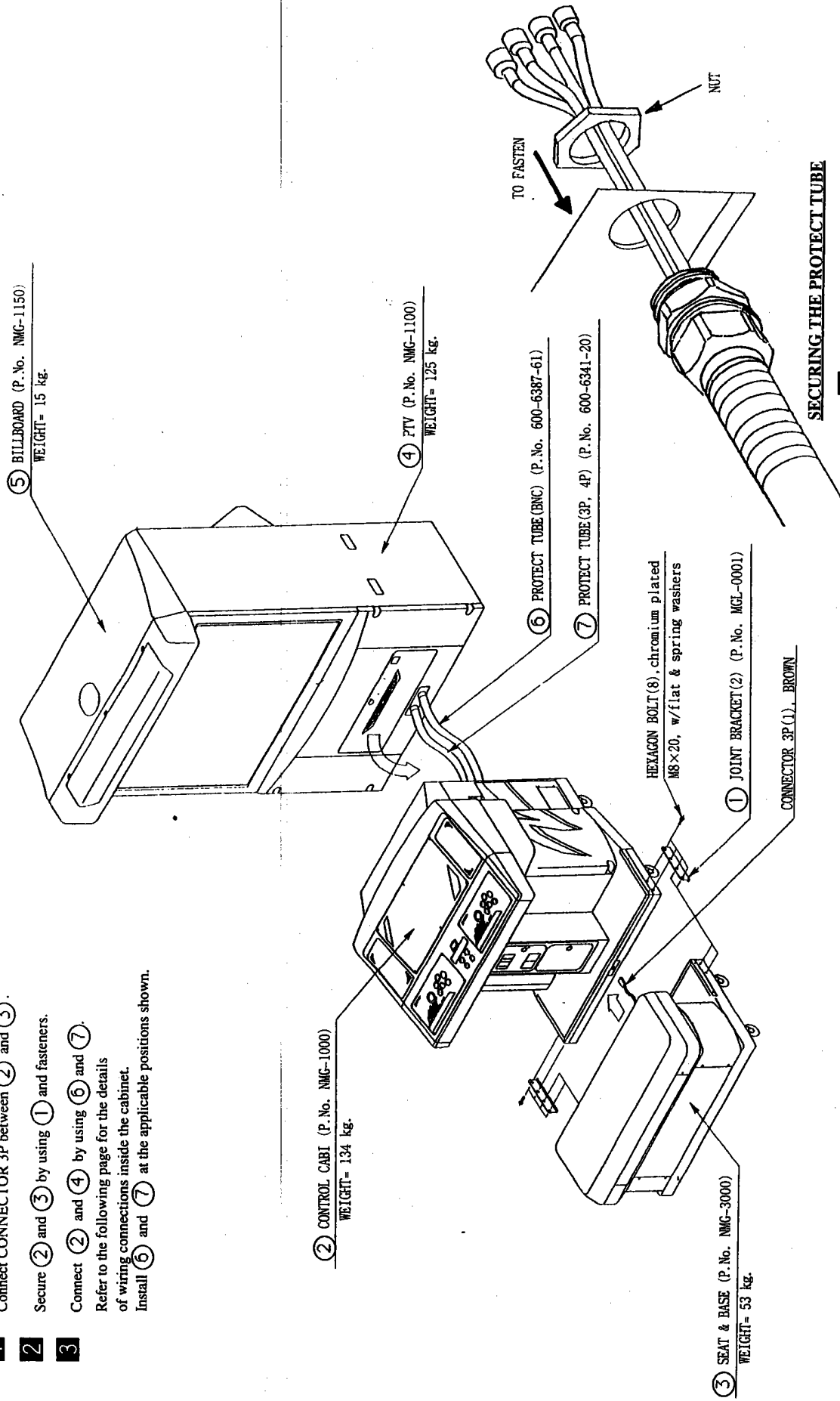
ASSEMBLY PROCEDURE:

- 1 Secure 2, 3 and 4 by using the fasteners.
- 2 In a manner as shown, insert 5 from the underside and secure it.
- 3 Secure 7 to 6 and install 6 to 1.
- 4 Insert the two wiring connectors of 8 into the Terminal Board on top of 1 shown.
- 5 Insert 8 from the front side in a manner as shown and secure it by using 3 screws.



ASSEMBLING THE ENTIRE UNIT

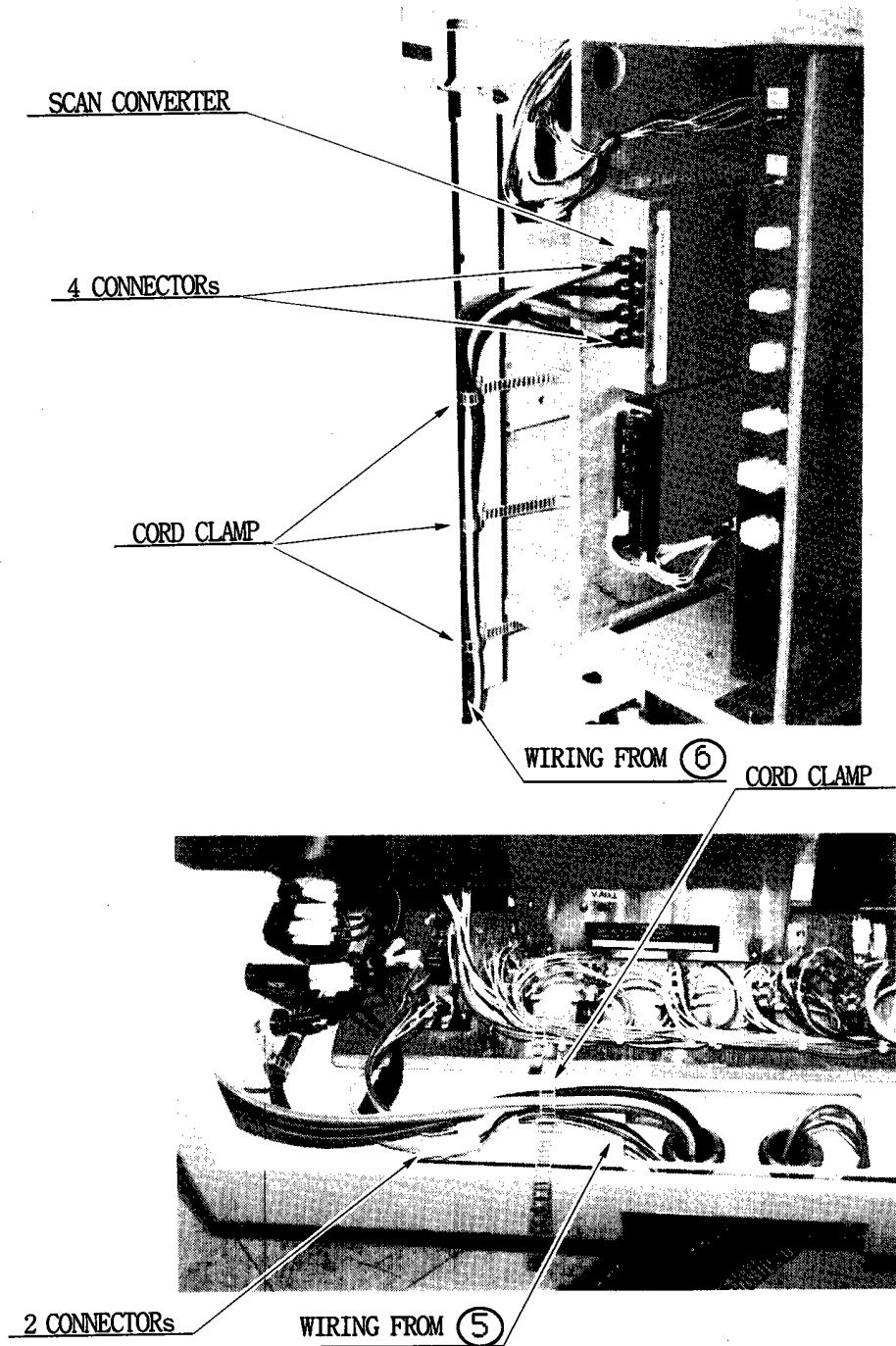
- 1** Connect CONNECTOR 3P between **2** and **3**.
- 2** Secure **2** and **3** by using **1** and fasteners.
- 3** Connect **2** and **4** by using **6** and **7**.
Refer to the following page for the details of wiring connections inside the cabinet.
Install **6** and **7** at the applicable positions shown.



SECURING THE PROTECT TUBE

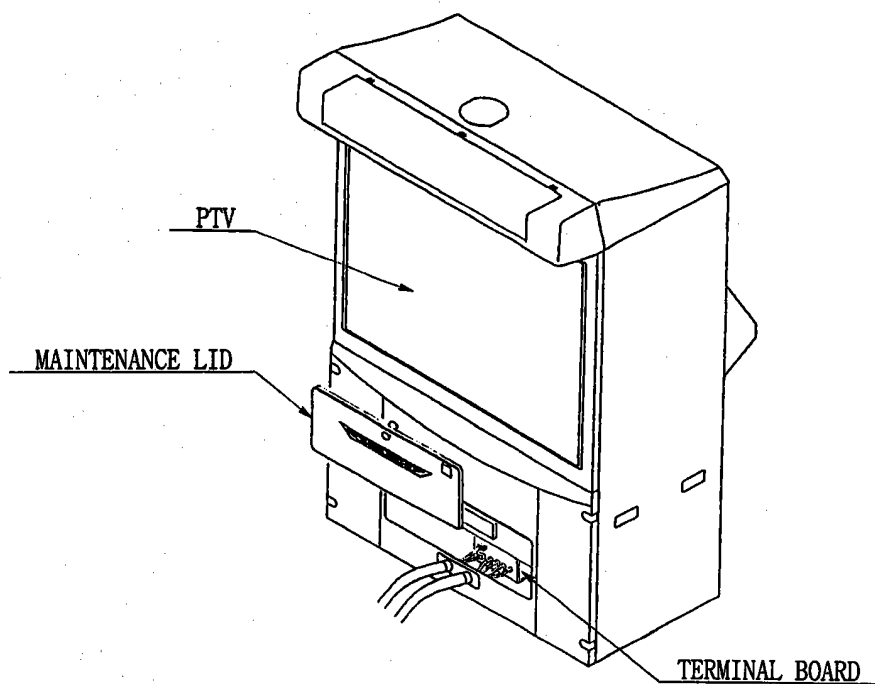
- 1** First, remove the NUT which comes with the PROTECT TUBE.
- 2** Put the PROTECT TUBE wiring into the cabinet.
- 3** Fit the NUT (which was removed) to the PROTECT TUBE and firmly tighten it from the inside of the cabinet.

WIRING CONNECTIONS INSIDE THE CONTROL CABINET



- 1** Insert the 4 CONNECTORs of the wiring from ⑥ into the SCAN CONVERTER in a manner that the wire color corresponds with the applicable symbol of R. G. B. (the yellow wire connector should correspond to SYNC).
- 2** Connect the 2 CONNECTORs (3P, 4P) of the wires from ⑤.
- 3** After connecting the CONNECTORs, secure the wires with the CORD CLAMPs.

PTV WIRING CONNECTION



1
2

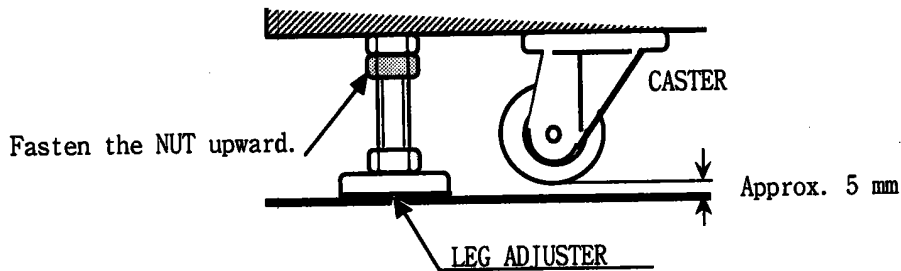
Remove the MAINTENANCE LID from the PTV.

Insert all of the 6 CONNECTORs into the TERMINAL BOARD inside the PTV. Make sure that the wire color (red, green, blue and yellow) corresponds to the applicable one of R. G. B. and SYNC terminals.

CAUTION!

Make sure that the LEG ADJUSTERS are all in contact with the floor ground.

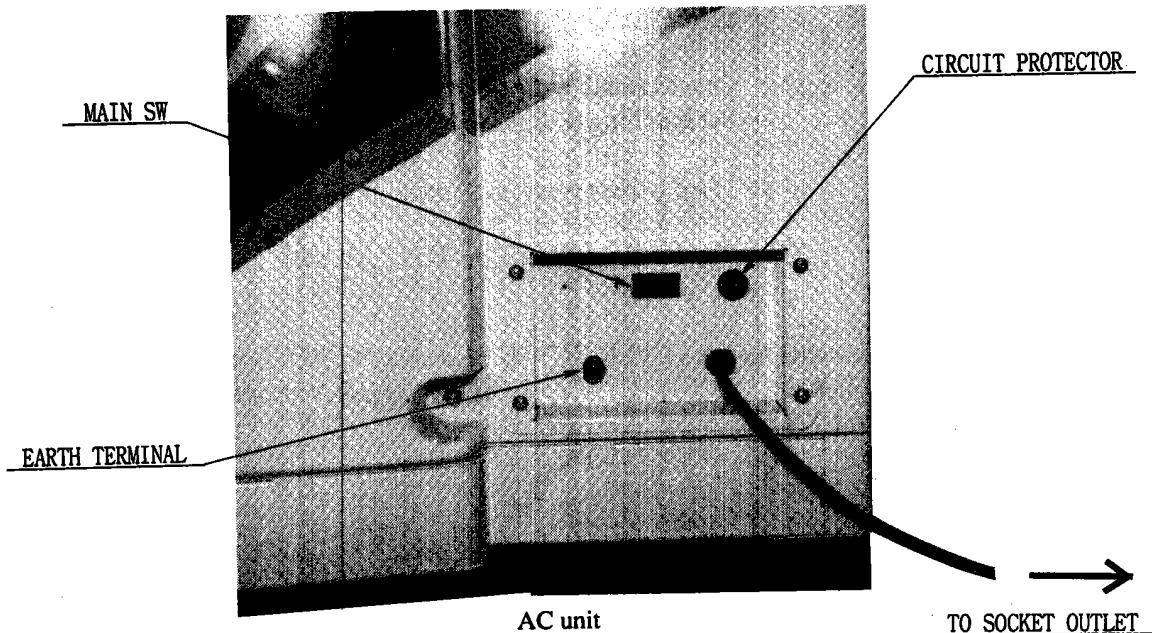
After completely finishing the wiring work, secure both of PTV and the unit comprised of ② & ③ in place. Adjust the LEG ADJUSTERS in a manner so that the CASTERS are raised approximately 5 mm. above the floor level. After the adjustments, fasten the LEG ADJUSTER NUT upward and secure the height of the LEG ADJUSTER.



LEG ADJUSTER ADJUSTMENT

CAUTION!

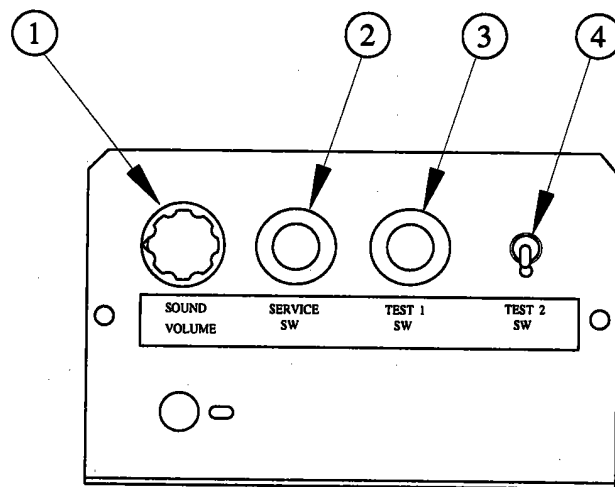
Be sure to perform grounding connection. If the power cord plug has an earth terminal provided, insert the power cord plug into the grounded socket outlet having appropriate wiring with correct poles. In this case, the work as per the following Item 1 is not required. Also, check to see if any power cord or earth wire is exposed on the passage, etc. in a manner so as to be dangerous.



The AC unit is located on one side of the CONTROL CABI.

- 1 Ground the EARTH TERMINAL (this, however, is not required in the case where a power cord plug with earth is used).
- 2 Insert the power cord plug into the socket outlet.
- 3 Turn the MAIN SW on.

6. SW UNIT



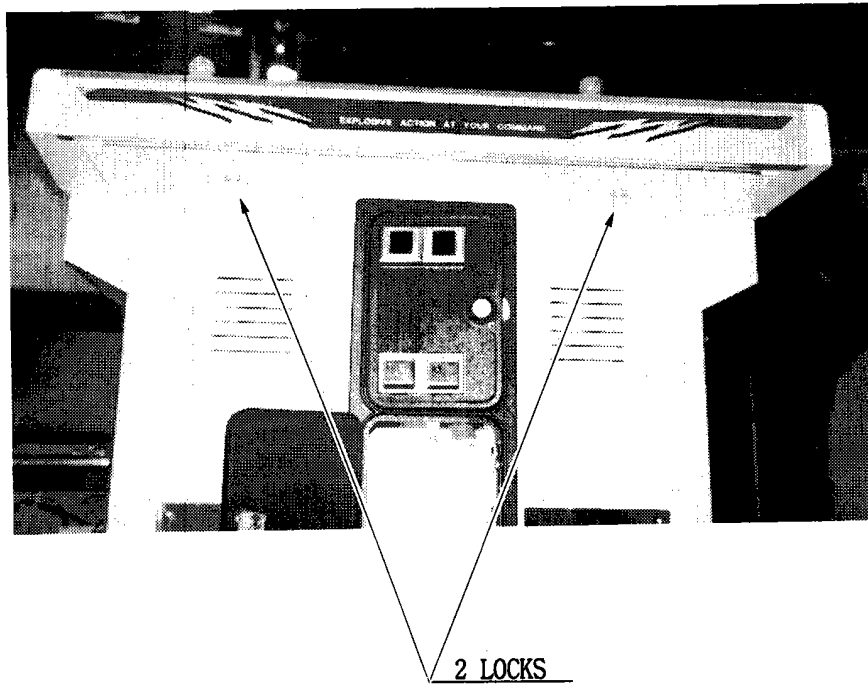
Open the COIN CHUTE DOOR, and the SW UNIT shown will appear. The functioning of each SW is as follows:

- ① **SOUND VOLUME:** Controls the speaker volume. Simultaneously adjusts both the CONTROL PANEL's SPEAKERS and the SUPER WOOFER inside the SEAT.
- ② **SERVICE SW:** Gives credits without registering on the coin meter. Regarding the handling of this switch, refer to 15. DIP SW SETTING.
- ③ **TEST SW 1:** Used when testing this machine and each game BD.
- ④ **TEST SW 2:** For details, refer to 14. TEST MODE.

Volume adjustments for the SUPER WOOFER inside the SEAT can be made by using the volume control on the MIXER EQ. AMP FOR S. WOOFER inside the CONTROL CABI (refer to Section 12).

7. OPENING THE CONTROL PANEL BASE

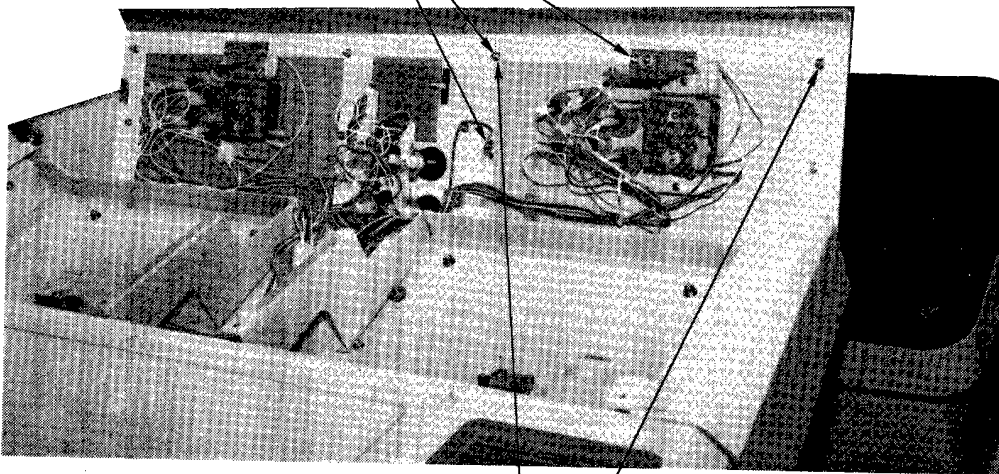
Unlock the 2 locks on the backside of the CONTROL BOX to open the CONTROL PANEL BOX. Since the 2 keys are secured with screws at the time of shipment, be sure to loosen the screws before unlocking them.



8. REPLACING THE CONTROL PANEL

To replace the CONTROL PANEL, open the CONTROL PANEL BASE, and remove 8 M4 FLANGE NUTs (including 4 CARRIAGE BOLTS) per CONTROL PANEL.

FLANGE NUTs, 8 per CONTROL PANEL
M4



CARRIAGE BOLTS, 4 per CONTROL PANEL
M4x16, stainless

9. COIN SELECTOR

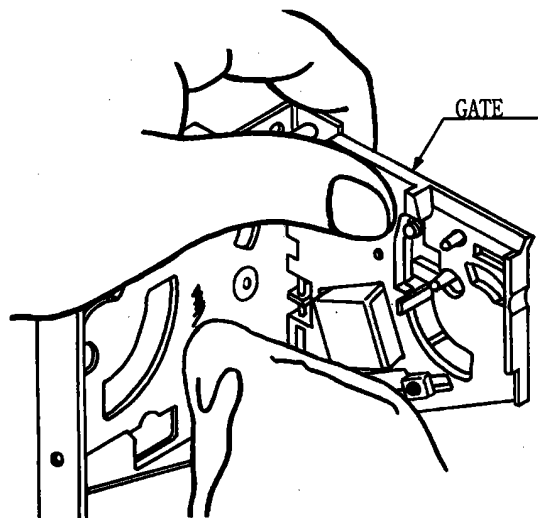
HANDLING THE COIN JAM

Even when the REJECT button is pressed, if the coin is not rejected, open the coin chute door and open the selector gate. After removing the jammed coin, put a normal coin in and check to see that the selector correctly functions.

CLEANING THE COIN SELECTOR

The coin selector should be cleaned once every 3 months. When cleaning, follow the procedure below:

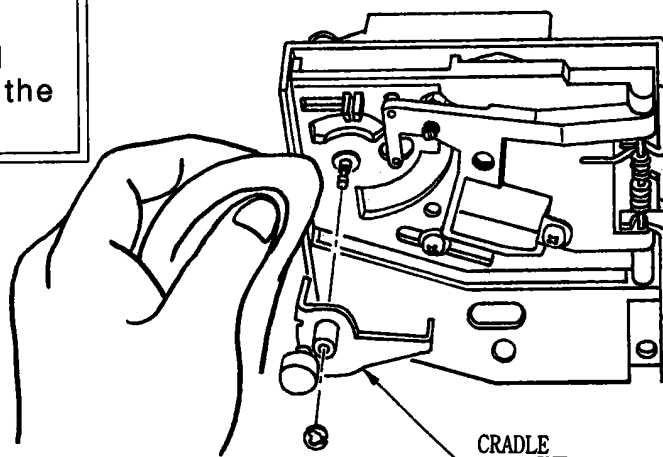
- ① Turn the power for the machine OFF.
Open the coin chute door.
- ② Open the gate and dust off by using a soft brush (made of wool, etc.).
- ③ Remove stain by wiping with a soft cloth which contains water or chemical detergent.
- ④ Remove the CRADLE.
When removing the retaining ring (E ring), be very careful so as not to bend the shaft.
- ⑤ Remove stain from the shaft and pillow portions by wiping off with a soft cloth, etc.
- ⑥ After wiping off as per 5 above, further apply a dry cloth, etc. to cause the coin selector to dry completely.



NOTE:

Absolutely do not apply machine oil, etc. to the coin selector.

After cleaning the coin selector, insert a regular coin in the normal working status and ascertain that the selector correctly functions.



10. PROJECTOR

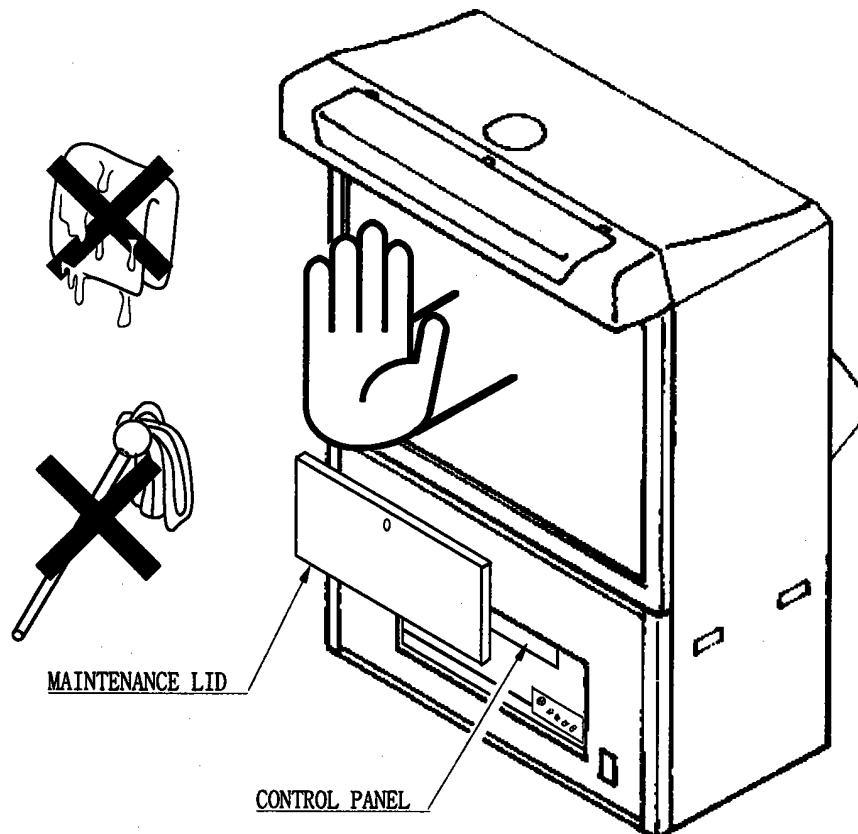
CAUTION!

- Since the Projector screen is susceptible to damage, pay careful attention to its handling. When cleaning, refrain from using water or volatile chemicals.
- Since the Projector has been adjusted at the time of shipment, Avoid making further adjustments without good reason.

Fine adjustments are stored in the Projector. Pressing the Fine Adjustment SW (Convergence Adjustment) results in entering the Fine Adjustment mode, and this may cause the stored fine adjustment to be changed. During work other than for adjustment, should you touch the Fine Adjustment SW by mistake, immediately turn the power off by using the main SW and then turn it back on again. If any distortion or color deviation is found in the test mode and adjustments are needed, use the specified Adjustment knob, or perform the adjustment by remote control. Note that there are two PROJECTOR makes (HITACHI & MITSUBISHI) and the adjustment method is different between the two. When checking the Adjustment Control knob, remove the PTV's MAINTENANCE LID. For the HITACHI Projector, open the cover in front of the control panel. For the MITSUBISHI Projector, remove the cover.

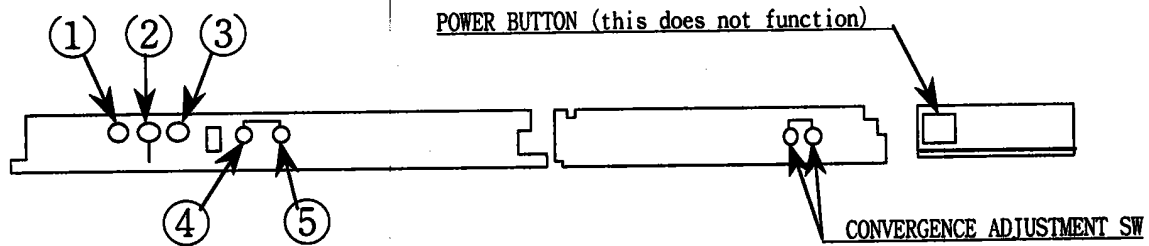
10-1 CLEANING THE SCREEN

When the screen surface becomes dirty with dust, etc., clean it by using a soft cloth such as gauze. When water, and volatile chemicals such as benzine, thinner, etc., spill on the screen surface, it may be subject to damage, therefore, do not use them. Also, since the surfaces are susceptible to damage, refrain from rubbing them with a hard material or using a duster.



10-2 HITACHI PROJECTOR

HITACHI PROJECTOR CONTROL PANEL



- | | |
|---------------|---------------|
| ① V.HOLD | ② BRIGHT |
| ③ CONTRAST | ④ H. POSITION |
| ⑤ V. POSITION | |

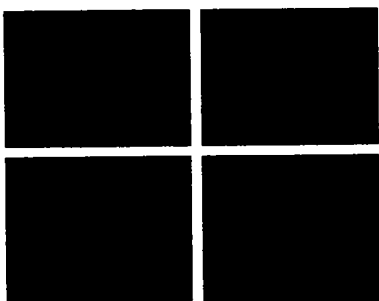
NOTE: Do not touch the right-hand side SW.

STATIC CONVERGENCE ADJUSTMENT

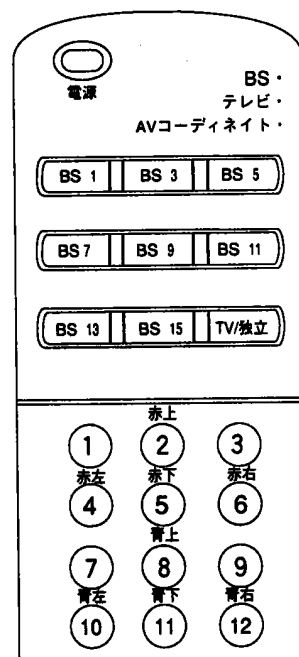
NOTE: Do not touch the right-hand side Convergence Adjustment SW. This SW is used for dynamic convergence adjustment which is rather complicated and the adjustment's visual effect is almost unnoticeable. Therefore, explanations thereof are not given in this manual.

- ① Press the left-hand side Convergence Adjustment SW to cause the cross pattern to appear on to the screen.
- ② Use the remote control to make static adjustment.
 - Remote control [2], [5] Causes the red horizontal line to match with the green horizontal line.
 - Remote control [4], [6] Causes the red vertical line to match with the green vertical line.
 - Remote control [8], [11] Causes the blue horizontal line to match with the green horizontal line.
 - Remote control [10], [12] Causes the blue vertical line to match with the green vertical line.
- ③ Press the left-hand side Convergence Adjustment SW. At this time, static adjustment results are written and the PTV screen will return to the original screen mode.

CROSS PATTERN



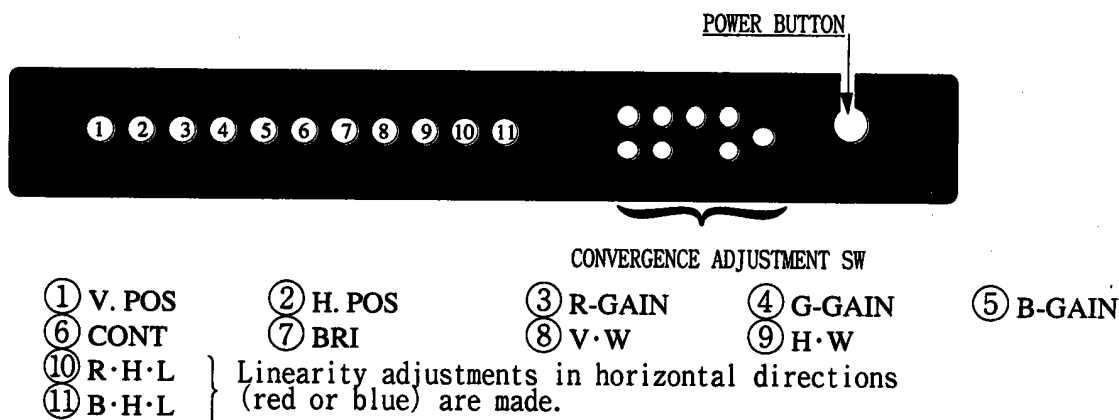
REMOTE CONTROL



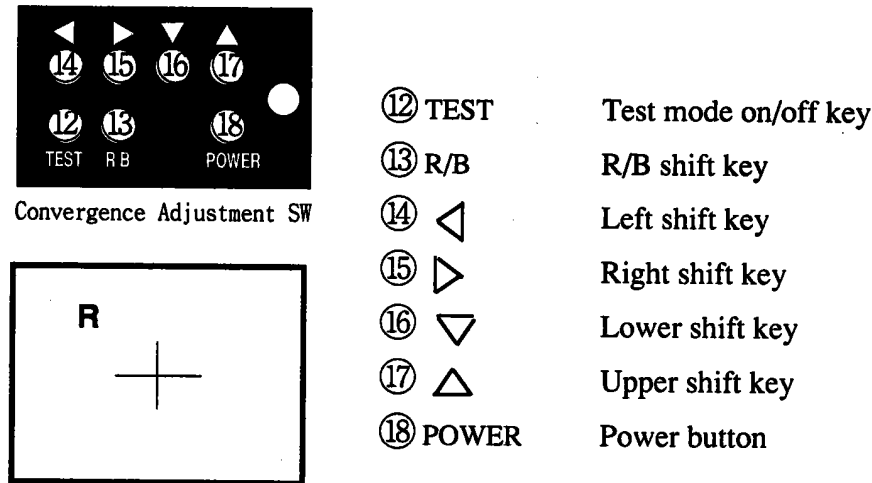
Slide this portion and make adjustment after obtaining the status as shown.

10-3 MITSUBISHI PROJECTOR

□ MITSUBISHI PROJECTOR CONTROL PANEL



STATIC CONVERGENCE ADJUSTMENT



- ① For the Convergence adjustment mode, press the test mode on/off key ⑫.
- ② Ascertain that "R" is displayed on the screen.
- ③ Make adjustment so as to cause the red cross pattern to match with the green cross pattern by using Left Shift key ⑭, Right shift key ⑮, Lower shift key ⑯ and Upper shift key ⑰.
- ④ By using R/B shift key ⑬, cause the red adjustment "R" to shift to blue adjustment "B" and make sure that "B" is displayed on the screen.
- ⑤ In the same manner as in ③ above, cause the blue cross pattern to match with the green cross pattern.
- ⑥ After making adjustment, press the test mode on/off key ⑫ to cancel the Convergence adjustment mode.

STATIC CONVERGENCE ADJUSTMENT WITH REMOTE CONTROL

CAUTION!

- Although the remote control buttons other than the following do not function during convergence adjustment even if they are pressed, do not press them during the adjustment work.
- When operating the remote control, direct it on to the PTV screen.

BEFORE USING THE REMOTE CONTROL: First make sure that the main SW on the Projector's control panel is ON (the LED adjacent to the main SW is lit).

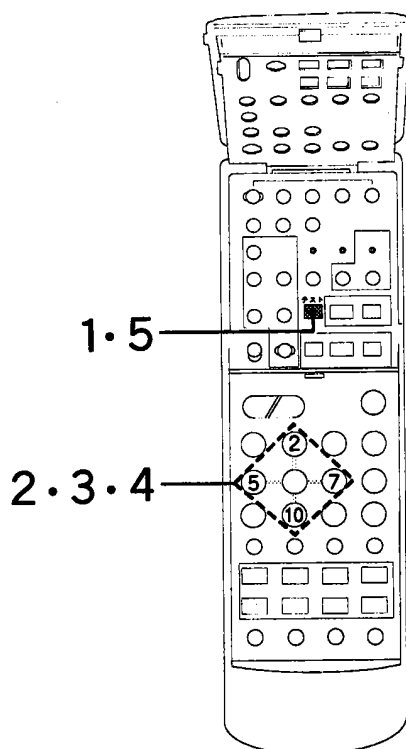
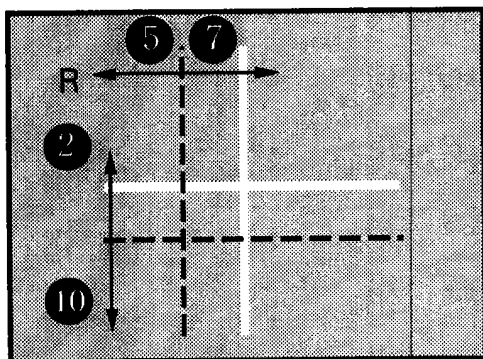
- ① For the Convergence Adjustment mode, press the test button (FIG. 1 · 5 below). Ascertain that "R" is displayed on the screen.
- ② Make adjustment so as to cause the red cross pattern to match with the green cross pattern. When the red cross matches the green cross, the green cross turns yellow or white (FIG. 2 · 3 · 4 below).

Use remote control buttons shown below to move the red cross as follows:

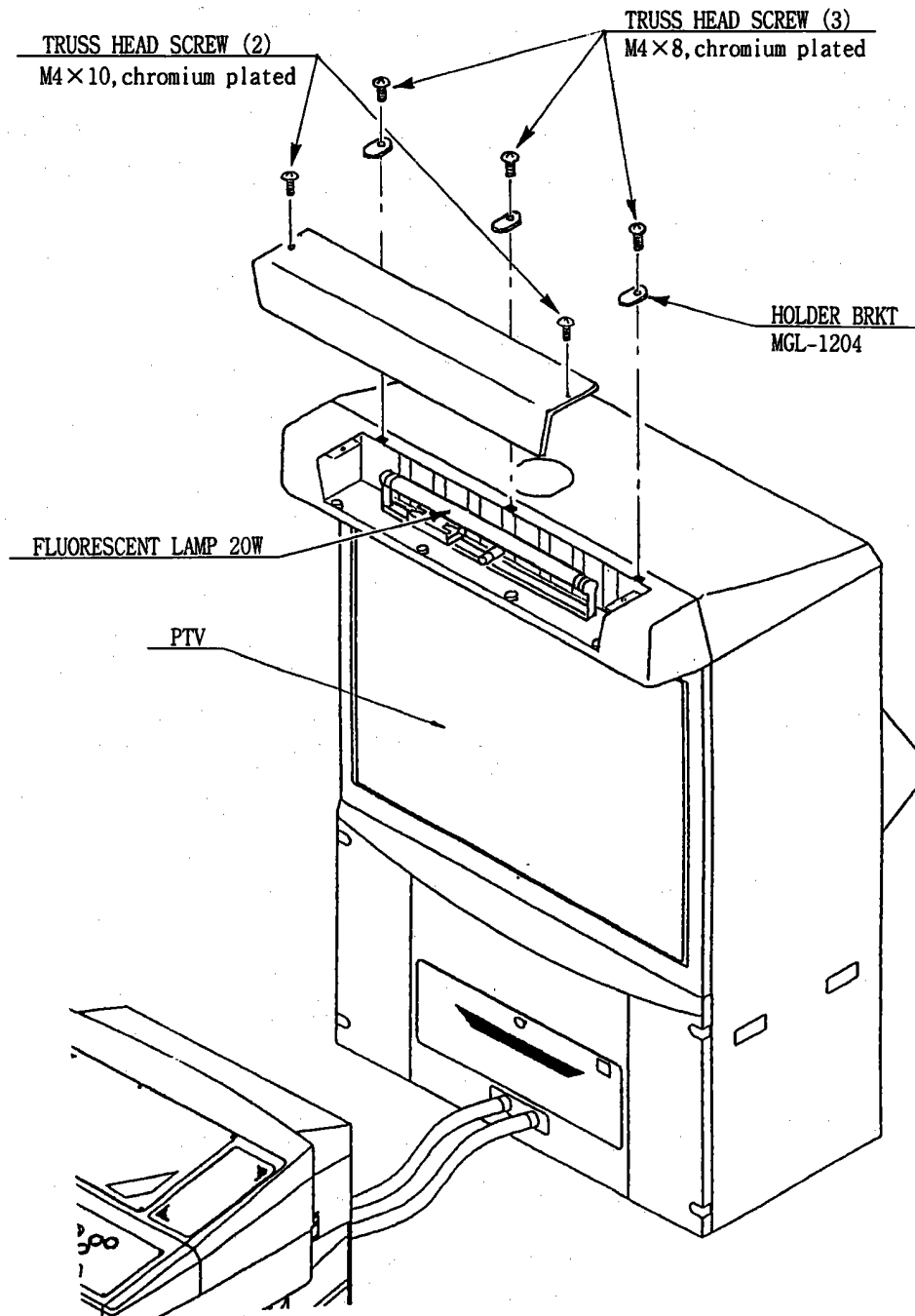
- Button ⑤ to the left.
⑦ to the right.
② Upward.
⑩ Downward.

- ③ Use Remote Control button ⑥ to shift "R" to "B." Make sure that "B" is displayed on the screen. Each time Button ⑥ is pressed, red and blue adjustments are shifted.
- ④ In the same manner as in ② above, cause the blue cross to match with the green cross. When the blue cross matches with the green cross, the green cross turns white.
- ⑤ After adjustment is made, press the test button (FIG. 1 · 5 below) to cancel the Convergence Adjustment mode.

Note: When 2 minutes or more elapses in the Convergence mode screen without taking any action, the on-screen adjustment mode will disappear.



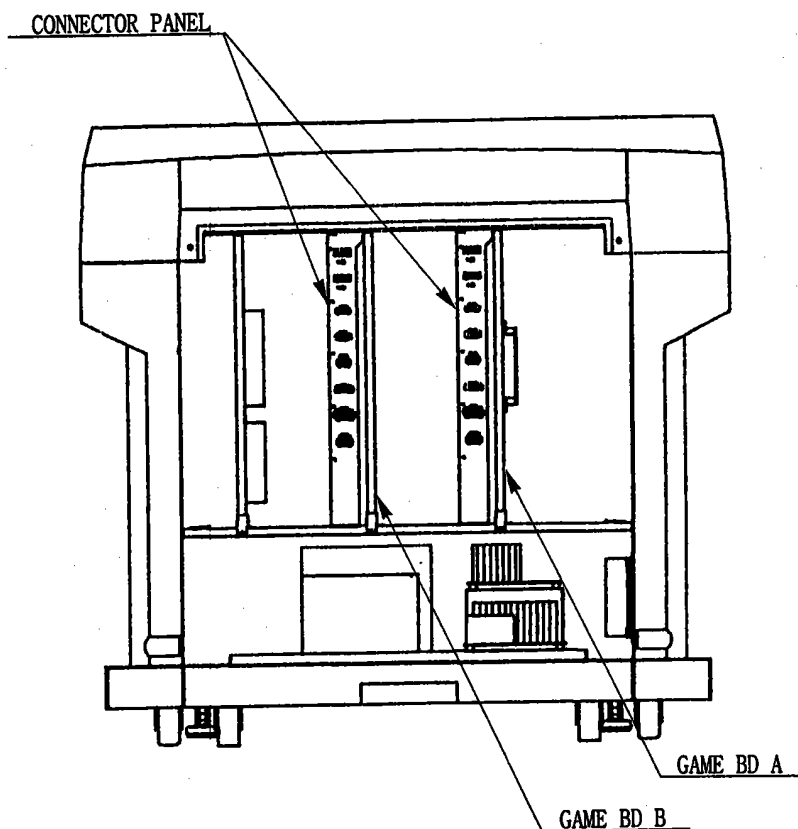
11. REPLACING THE FLUORESCENT LAMP



12. GAME BOARD REPLACEMENT

12-1 REPLACING THE GAME BD

When replacing the GAME BD, open the BACK LID of the CONTROL CABI.



At the time of shipment, two JAMMA harnesses (accessory) are provided for this cabinet. When installing a game BD of JAMMA Standard, connect the JAMMA harness to the 6 connectors of the connector panel on the left-hand side of the game BD. When installing a game BD which is not of the JAMMA Standard, (e.g. SYSTEM 24), follow each applicable OWNER'S MANUAL.

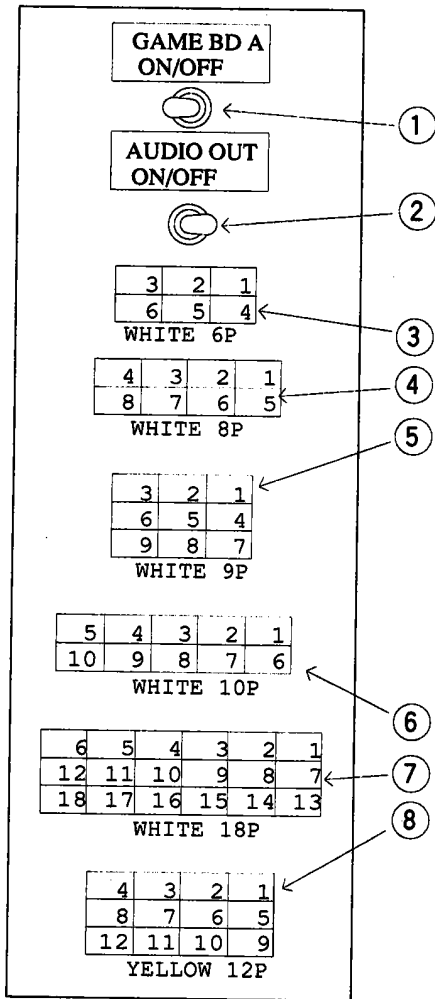
Also, note that other harnesses (accessory) which come with the cabinet are used for the GAME BDs that utilize 6 buttons. Connect this harness with the accessory harness of the GAME BD (which use 6 buttons) by referring to the following page. Then, insert to the 10P connector of the connector panel (to which the GAME BD is to be connected).

Make sure that the GAME BD ON/OFF SW of the connector panel (to which the GAME BD is connected) is on. Also, ensure that the GAME BD ON/OFF SW of the connector panel (to which the GAME BD is not connected) is off. When the SW setting is changed, first turn the power off and then turn it back on again.

The AUDIO OUT ON /OFF SW is used for the game BD with AUDIO OUT in addition to SPEAKER OUTPUT (e.g. SYSTEM 32, etc.). In the case of a game BD which has only the speaker output, make sure that the AUDIO OUT ON/OFF SW is off.

After installing the GAME BD, be sure to perform SCAN CONVERTER SETTING as per Section 13.

CONNECTOR PANEL



⑥ WHITE 10P connector

1. 1P PUSH4
2. 1P PUSH5
3. 1P PUSH6
4. NOT USED
5. 2P PUSH4
6. 2P PUSH5
7. 2P PUSH6
8. NOT USED
9. Vcc
10. RET

⑧ YELLOW 12P connector

1. -5V
2. -5V
3. +5V
4. +5V
5. +5V
6. +5V
7. GND
8. GND
9. GND
10. GND
11. +12V
12. +12V

① **GAME BD switch**
Select connection of a GAME BD. If a GAME BD is connected, set this switch ON. If not, set it to OFF.

② **AUDIO OUT switch**
Set this switch to ON if some equipment is connected to the audio output terminal. Set it to OFF if the speaker output only is used.

③ **WHITE 6P connector**

1. VIDEO RED
2. VIDEO GREEN
3. VIDEO BLUE
4. VIDEO SYNC
5. VIDEO GND
6. NOT USED

④ **WHITE 8P connector**

1. AUDIO LEFT (+)
2. AUDIO LEFT GND
3. AUDIO RIGHT (+)
4. AUDIO RIGHT GND
5. NOT USED
6. NOT USED
7. GND
8. GND

⑤ **WHITE 9P connector**

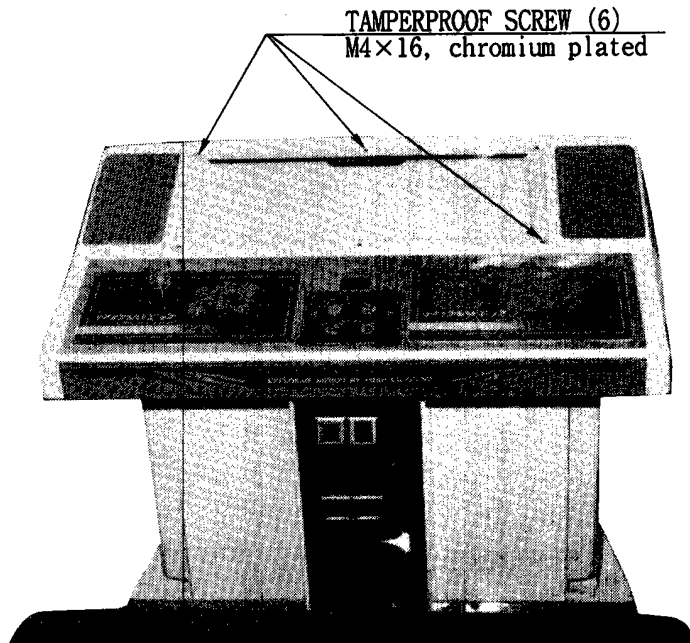
1. SERVICE SW
2. TEST SW
3. TILT SW
4. COIN LOCKOUT 1
5. COIN LOCKOUT 2
6. COIN METER
7. COIN METER +5V
8. SPEAKER +
9. SPEAKER -

⑦ WHITE 18P connector

1. 1P UP
2. 1P DOWN
3. 1P LEFT
4. 1P RIGHT
5. 1P PUSH 1
6. 1P PUSH 2
7. 1P PUSH 3
8. 2P UP
9. 2P DOWN
10. 2P LEFT
11. 2P RIGHT
12. 2P PUSH 1
13. 2P PUSH 2
14. 2P PUSH 3
15. 1P START SW
16. 2P START SW
17. COIN SW #1
18. COIN SW #2

12-2 REPLACING THE PLAY INSTRUCTION

Remove the PLAY INSTRUCTION by taking off the 6 TAMPERPROOF SCREWS using the accessory WRENCH.



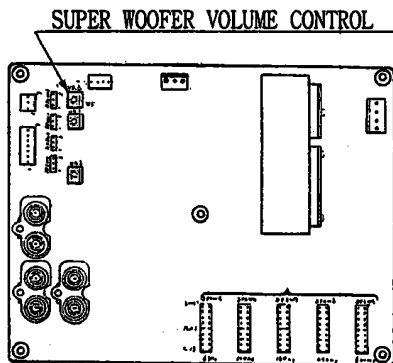
12-3 EQUALIZER SETTING

The EQUALIZER is located on the MIXER & EQ. AMP FOR S. WOOFER inside the CONTROL CABI.

When the game BD is changed, EQUALIZER setting can be made in a manner most appropriate for the game. Should the EQUALIZER setting change cause the sounds to become irregular, be sure to restore the setting to the following:

JUMPER SWITCHES

	1	3
JPSW1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
JPSW2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
JPSW3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
JPSW4	<input type="checkbox"/>	<input checked="" type="checkbox"/>

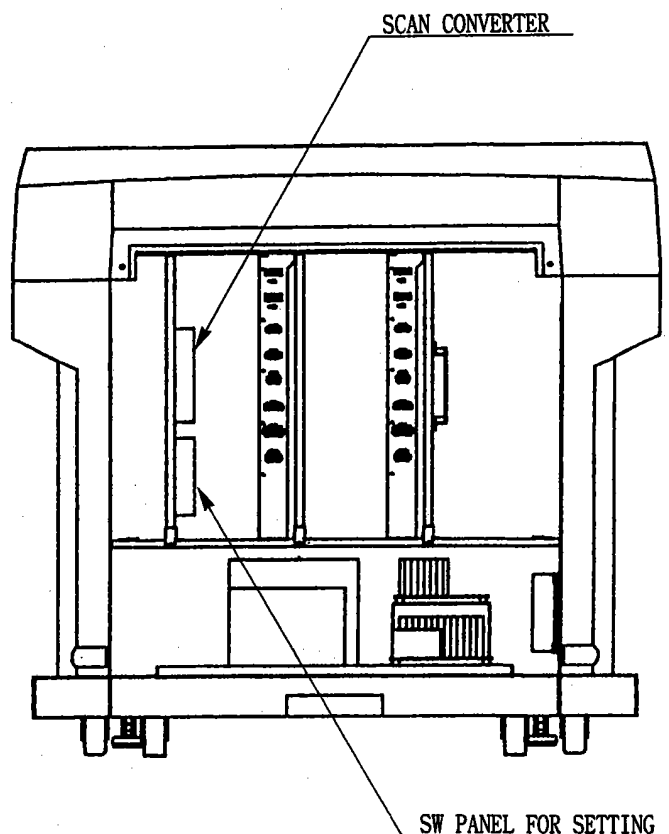


MIXER & EQ. AMP FOR S. WOOFER

BOOST	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FLAT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CUT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	JPSW5	JPSW6	JPSW7	JPSW8	JPSW9
	60HZ	100HZ	160HZ	250HZ	500HZ

13. SCAN CONVERTER SETTING

To perform SCAN CONVERTER setting, open the BACK LID of the control cabinet.



In the SUPER MEGALO 2, since the GAME BD (which outputs video signal of a 15 kHz horizontal frequency) is used for the PTV of a 24 kHz horizontal frequency, the SCAN CONVERTER (for signal conversion) is utilized.

The currently used scan converter measures the input signal's horizontal frequency. In the case of 24 kHz horizontal frequency video signal input, the scan converter outputs the input signal as is. In the case of 15 kHz horizontal frequency video signal input, it is converted to 24 kHz horizontal frequency video signal output. For this reason, GAME BDs of a 15 kHz or 24 kHz video output can be used simultaneously.

At this time, in order to perform signal conversion accurately for various 15 kHz output, settings need to be changed in the following procedure. After replacing the game BD, be sure to perform the following operation. Since this setting is made for each of GAME BD A and GAME BD B, redo the setting even in the case where the same game BD is moved from B to A.

Note that this setting is not required for the GAME BD of 24 kHz output.

13-1 AUTOMATIC SETTING ADJUSTMENT

Automatically measures and determines the settings of video frequency and screen size for each game BD.

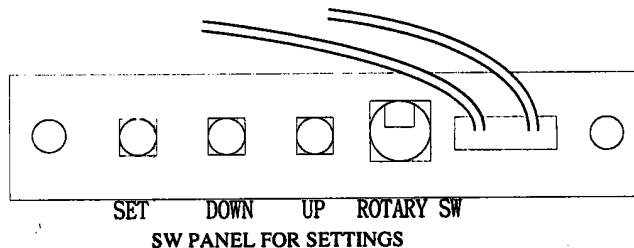
- ① After turning the power on, choose the replaced GAME BD by using the SELECT button.
- ② Display the images that indicate the beginning and end of the display period on the screen (via images such as crosshatches in the test mode, images showing the entire screen's display area, etc.).
- ③ Ensure that 0 is indicated for the ROTARY SW on the ASSY UP CONVERTER, and press the SET SW. This allows the setting for the selected game BD to be measured and stored.
- ④ If the display in ② above is incorrect, the measurement may not be performed correctly. In that case, check the work per ② above and then redo the operation mentioned in ③ above.

13-2 MANUAL ADJUSTMENT

Fine adjustments of the settings measured and stored as per 13-1 above can be made to a certain extent. Make adjustments as required.

- ① Select the game BD whose settings are to be changed.
- ② Cause the ROTARY SW to match the menu in which the settings are desired to be changed.
- ③ While watching the screen, press UP and DOWN SWes so as to meet the desired settings.
- ④ To change settings, press the SET SW before returning the ROTARY SW to 0. Settings will not be changed by merely returning the ROTARY SW to 0 without pressing the SET SW.

NOTE: When settings are changed, the images may not be displayed on the screen in full, or the screen conversion may not be performed correctly. In such a case, if the screen can not be reinstated to original status by using the "UP" and "DOWN" SWes, then redo all over again starting with 13-1 above.



SCAN CONVERTER SETTING MENU

ROTARY SW	MENU
0	AUTO ADJUSTMENT MODE
1	BRIGHTNESS
2	VERTICAL POSITION
3	-
4	HORIZONTAL POSITION
5	-
6	-
7	-
8	-
9	-

14. TEST MODE

14-1 HOW TO ENTER TEST MODE

- ① Select a game board to be used in the test mode with the select switch on the control panel.
- ② Set the test switch 2 to ON.
"CH" is displayed on the indicator displaying the number of coins put in, in the center of the control panel.
- ③ Press the test switch 1 to start a test.
- ④ On completion of the test mode, set the test switch 2 to OFF.
The number of coins put in is displayed, instead of "CH," and the normal game mode is restored.

14-2 CLEARING THE NUMBER OF COINS PUT IN

- ① The test switch 2 shall be set to OFF.
Press test switch 1.
"CL" is displayed on the indicator displaying the number of coins put in, in the center of the control panel.
- ② Press the service switch while pressing test switch 1.
A sound of clearing is heard, "00" is displayed, and the number of coins put in is cleared.

14-3 ERROR CODES

If an error occurs in the process of operation, an error code is displayed on the indicator displaying the number of coins put in, in the center of the control panel.

Errors of GAME SELECT BD([E1]~[E4])

[E1] ROM error of the GAME SELECT BD

[E2] RAM error of the GAME SELECT BD

[E3] GATE ARRAY 1 error of the GAME SELECT BD

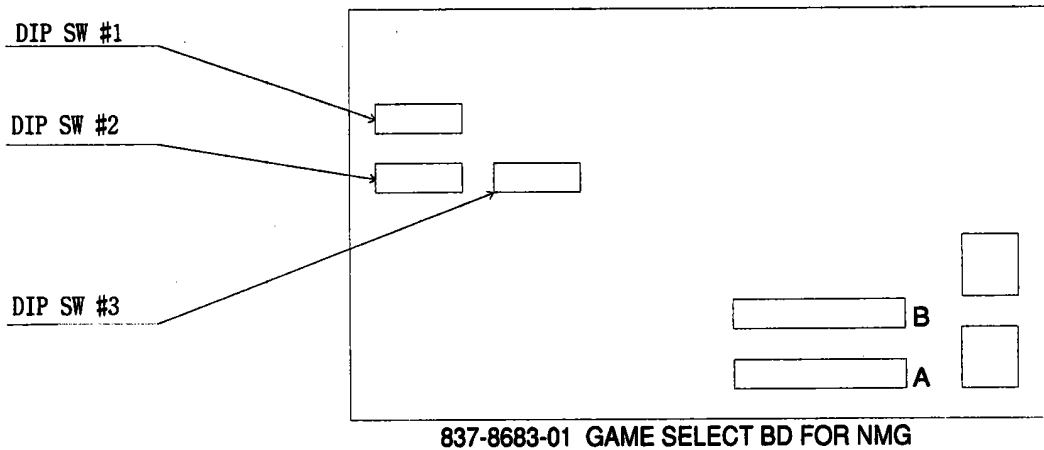
[E4] GATE ARRAY 2 error of the GAME SELECT BD

[E5] No GAME BDs are set at all.

Check to see whether the GAME BD ON/OFF switch on the CONNECTOR PANEL on the left-hand side of each GAME BD is set properly.

15. DIP SW SETTING

Take off the 6 tamperproof screws by using the same procedure as INSTRUCTION replacement and remove INSTR COVER and INSTR BASE. At this time, disconnect 1P connector, and the GAME SELECT BD FOR NMG appears inside.



15-1 DIP SW #1

COIN OPTION SETTING

FUNCTION		1	2	3	4	5	6	7	8
1COIN	1CREDIT	OFF	OFF	OFF	OFF				
1COIN	2CREDITS	ON	OFF	OFF	OFF				
1COIN	3CREDITS	OFF	ON	OFF	OFF				
1COIN	4CREDITS	ON	ON	OFF	OFF				
1COIN	5CREDITS	OFF	OFF	ON	OFF				
1COIN	6CREDITS	ON	OFF	ON	OFF				
2COINS	1CREDIT	OFF	ON	ON	OFF				
3COINS	1CREDIT	ON	ON	ON	OFF				
4COINS	1CREDIT	OFF	OFF	OFF	ON				
2COINS	3CREDITS	ON	OFF	OFF	ON				
	FREE PLAY	ON	ON	ON	ON				
COIN PULSE	100 msec					OFF	OFF		
	50 msec					ON	OFF		
	150 msec					OFF	ON		
	200 msec					ON	ON		
NOT USED								OFF	OFF

- ① Select the rates of the coins and credit.
 The number displayed on the 7-segment indicator is the number of coins put in and is not the number of credits.
 If the START button is pressed, the signals corresponding to preset credits are transmitted to the GAME BD, and the number displayed on the 7-segment indicator is decreased by a preset number.

When setting is made to JAPAN/EXPORT by using DIP SW #2, a maximum of 9 coins may be put in this machine. When set to USA, the maximum number of coins that can be put in is 24 (refer to 15-2). Excess coins are invalid and not returnable.

SETTING EXAMPLES

1 COIN 1 CREDIT

If the START button is pressed, 1 credit worth of signal is transmitted to the GAME BD and the number of coins is decreased by 1.

1 COIN 3 CREDITS

If the START button is pressed, 3 credit worth of signal is transmitted to the GAME BD and the number of coins is decreased by 1.

2 COINS 1 CREDIT

If the START button is pressed, 1 credit worth of signal is transmitted to the GAME BD and the number of coins is decreased by 2.

- ② Specify the width of coin signal pulses.
Specify the period of time in which the coin switch signal transmitted by the GAME SELECT BD to each GAME BD is kept ON.
It is factory set to 100 msec before shipment. Change it only if the credit is not used for the GAME BD.

15-2 DIP SW #2

OPTION SETTING

FUNCTION	1	2	3	4	5	6	7	8
NOT USED	OFF							
ADVERTISE OFF 1M 2M 3M		OFF ON OFF ON	OFF OFF ON ON					
JAPAN/EXPORT U. S. A.				OFF ON				
2P START COIN #1 COIN #2					OFF ON			
CONTROL HALF DIRECT DIRECT						- OFF ON	OFF ON ON	
DOTTORIKUNN OFF ON								OFF ON

- ① Specify "advertise" ON/OFF and start time.
If no game is being played, this machine advertises the game in it in images and audible information, which are changed at an interval of approx. one minute. Advertise starts when the preset time has passed after the number of coins put in reaches 0 and the operation of the control panel stops. If advertise is set to OFF, no advertise is made.

② Other than for the U. S., set to OFF.

③ CREDIT SIGNAL SETTING IN THE CASE WHERE THE 2P START BUTTON IS PRESSED.

When set to CONTROL MODE or HALF DIRECT MODE as per ④ below, CREDIT SIGNAL SETTING (in the case where the 2P START button is pressed):

OFF allows credit signal to be handled by COIN #1.

ON allows credit signal to be handled by COIN #2.

When set to ON, depending on the GAME BD, the coin meter may not count the value correctly. Set to OFF as much as possible.

④ Specify a GAME SELECT MODE.

1) CONTROL MODE

The number of coins put in is stored by this machine first, then it is displayed on the indicator in the center of the control panel.

When the START button is pressed, signals of credits, the number of which is specified with DIP SW #1, are transmitted to a selected GAME BD to start a game.

In 10 seconds after the START button is pressed, no games may be selected. Even if the START button is pressed again in this period, only the start signal is transmitted to the GAME BD. The credit signal is not transmitted to it.

Pressing the SERVICE SW results in counting the number of coins inserted (not to be added to the total coin meter), and at the time the START button is pressed, the number of coins in terms of credits are transmitted to the GAME BD. This enables the GAME BD (which intrinsically does not have "service" function) to have a "service" function.

However, since credit signal is used, note that even "service" credits are registered on the coin meter.

2) HALF DIRECT MODE

In this mode, the coins inserted are handled in the same manner as in the CONTROL MODE. Pressing the SERVICE SW causes the "service" signal to be sent directly to the presently selected GAME BD. Game selection is not possible until 10 seconds after pressing the SERVICE SW. Also, during this 10 second period, even if the START button is pressed, only the START signal is sent to the GAME BD, but not the credit signal. Note that in the GAME BD which does not have "service" function, the SERVICE SW does not function.

3) DIRECT MODE

In this mode, the signal of coins inserted is sent to the presently selected GAME BD. Therefore, the number of coins inserted is not displayed in the control panel's central display portion and the machine does not retain the number of coins inserted, and in addition, "ADVERTISE" will not be performed.

⑤ Set this switch to OFF.

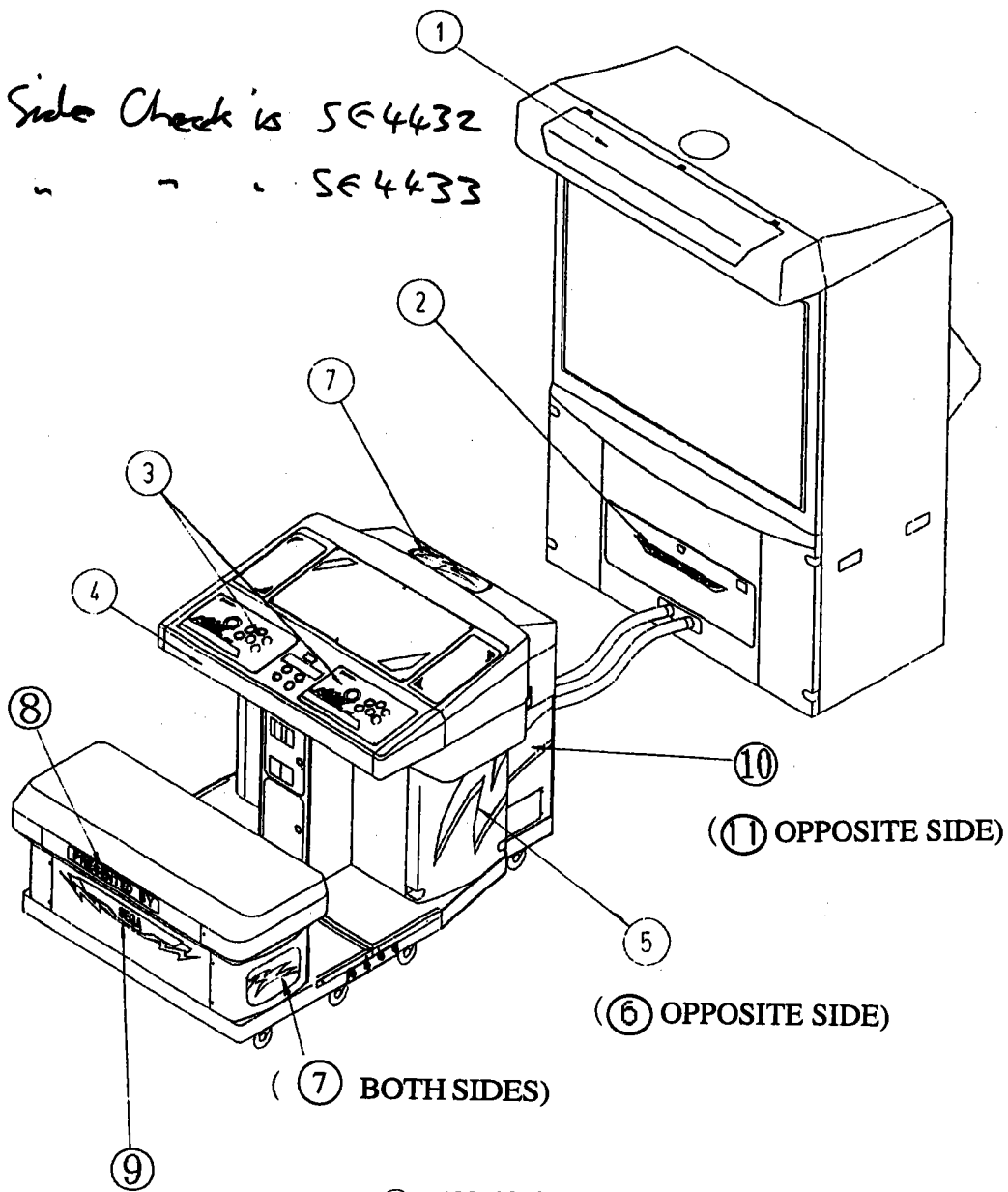
This switch is used to set the SEGA board "DOTTORIKUN (837-7419)" mode. Be sure to set it to OFF if GAME BD other than "DOTTORIKUN" are used.

15-3 DIP SW #3

Set all switches to OFF.

16. DESIGN RELATED PARTS

Left Side Check is SE4432
 RIGHT " " " SE4433



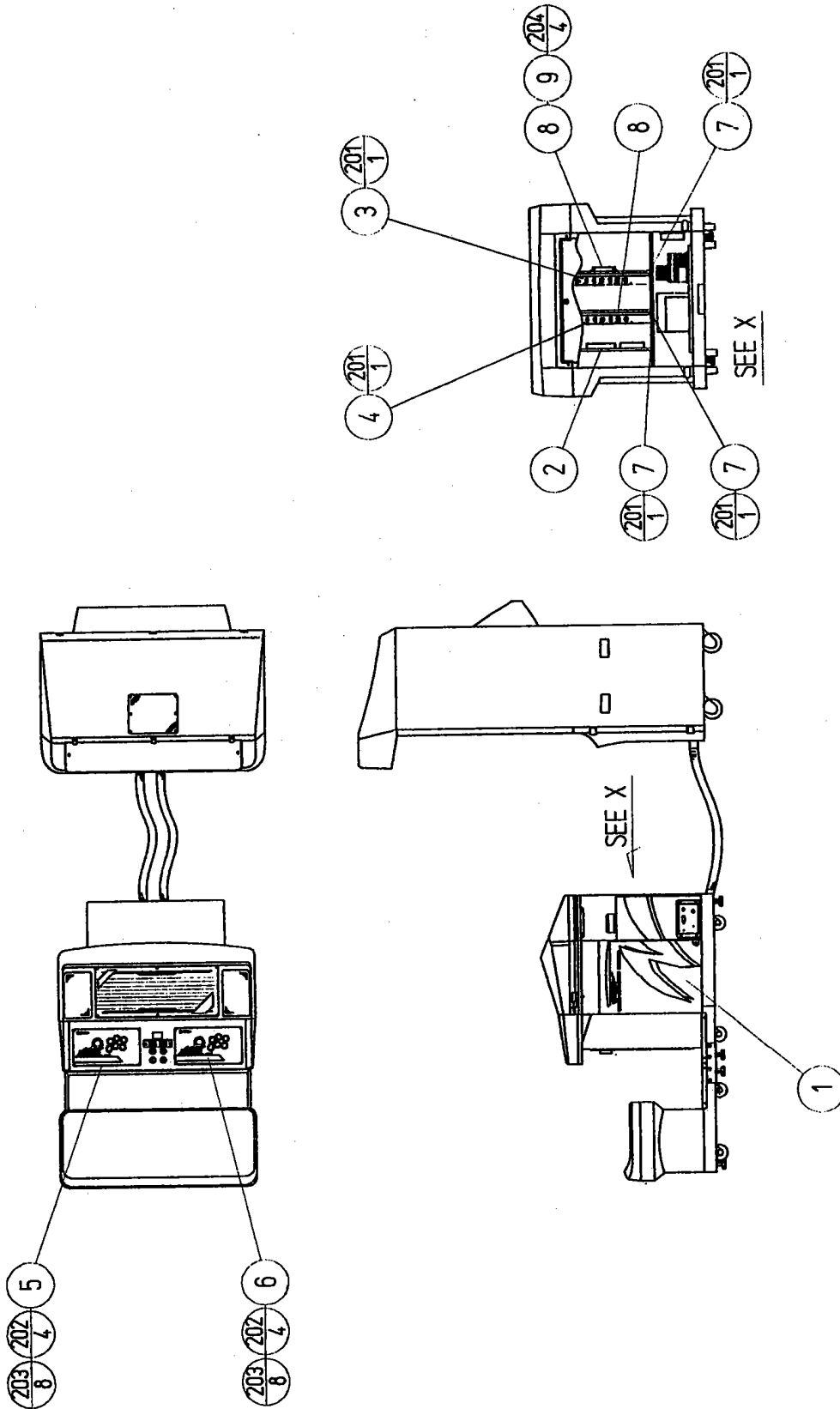
NMG-2001-D
 (NMG-2001-B is
 Japanese)

- ① 423-0212 BILLBOARD SH NMG
- ② MGL-1161-B STICKER FRONT PANEL
- ③ NMG-2101 PANEL PLATE 1L6B
- ④ ~~NMG-2001-B~~ DESIGN SHEET CONT PNL BASE
- ⑤ NMG-1003-A STICKER SIDE COV R
- ⑥ NMG-1004-A STICKER SIDE COV L
- ⑦ NMG-1051-A STICKER SUPER MEGALO 2
- ⑧ NMG-3001-B STICKER SEAT UPPER
- ⑨ NMG-3001-A STICKER SEAT LOWER
- ⑩ NMG-1002-B STICKER SIDE PNL R
- ⑪ NMG-1002-C STICKER SIDE PNL L

17. PARTS LIST

① TOP ASSY DOTTORIKUN(2L12B)

(D-1/2)



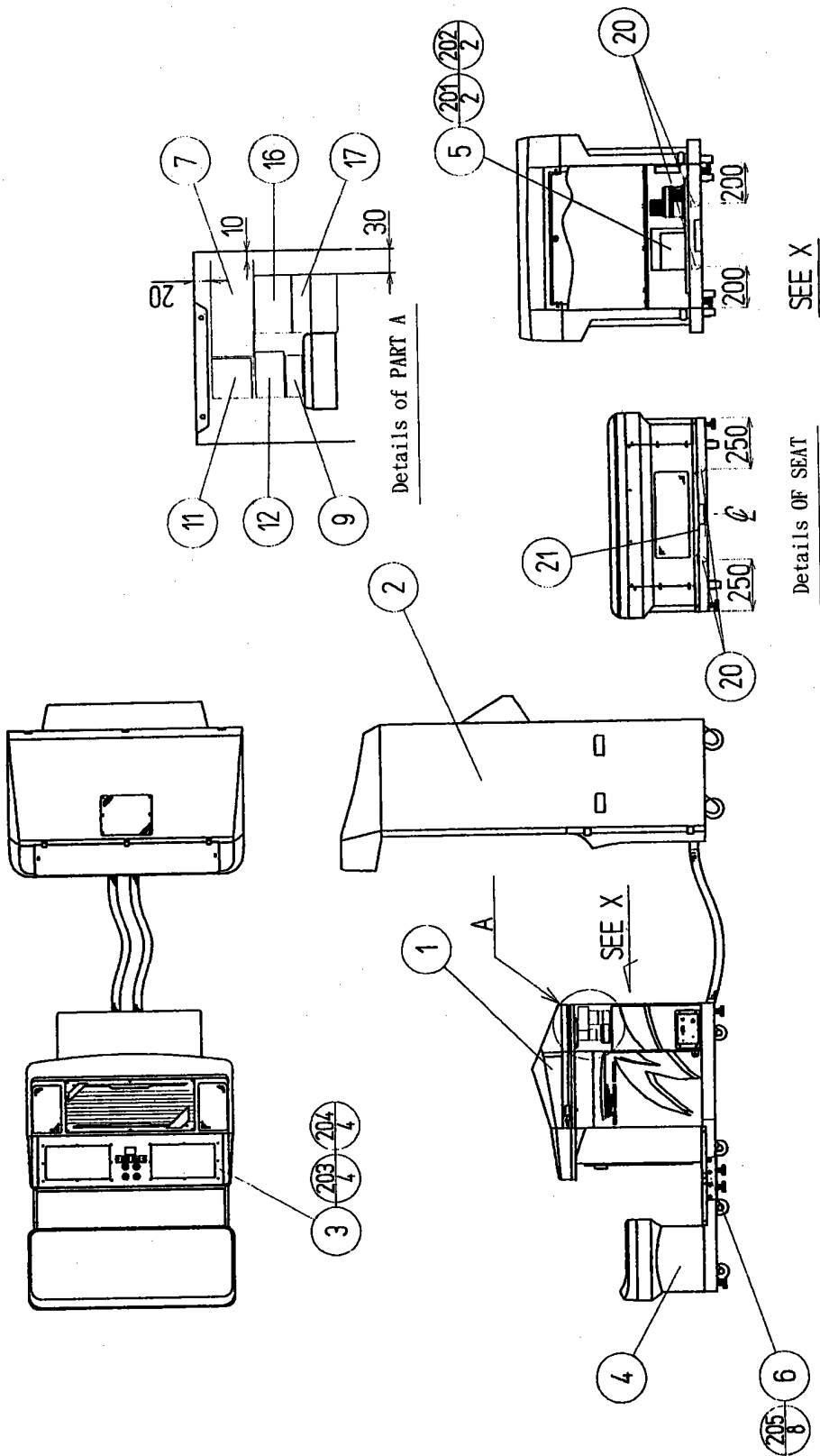
① TOP ASSY DOTTORIKUN(2L12B)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-0000	TOP ASSY SUPER MEGALO 2 COM	
2	NMG-0100	ASSY UP CONVERTER	
3	NMG-1070	ASSY CONNECTOR BRACKET A	
4	NMG-1080	ASSY CONNECTOR BRACKET B	
5	NMG-2100	ASSY CONT PNL 1P	
6	NMG-2200	ASSY CONT PNL 2P	
7	NMG-1005	BASE STOPPER BRACKET	
8	NMG-1006	WOODEN BASE	
201	000-P00408-W	M SCR PH W/FS M4×8	
202	031-0S0416	CRG BLT STN M4×16	
203	050-F00400	FLG NUT M4	
204	011-F00312	TAP SCR FH 3×12	
301	600-6153-15	WIRE HARN EXT JAMMA	
302	600-6387-63	WIRE HARN EXT PUSH SW	

② TOP ASSY SUPER MEGALO 2 COM (NMG-0000)

(D-1/2)

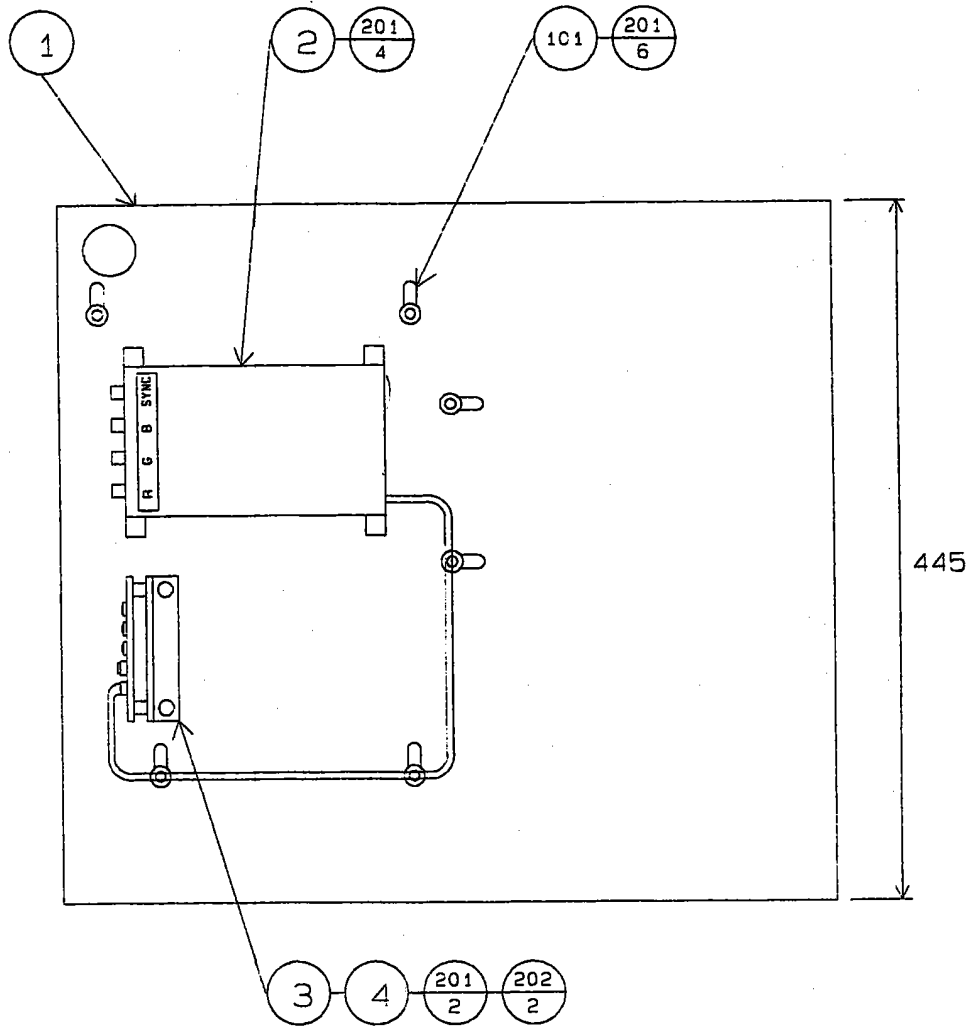


② TOP ASSY SUPER MEGALO 2 COM (NMG-0000)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1000	ASSY CTRL CABI	
2	NMG-1100	ASSY PTV	
3	NMG-2000	ASSY CONT PNL BASE	
4	NMG-3000	ASSY SEAT & BASE	
5	NMG-4000	ASSY POWER SUPPLY	
6	MGL-0001	JOINT BRKT	
9	421-6594-91	STICKER CERTIFICATE	
14	SGM-4111	KEY BAG	
15	220-5381	KEY MASTER FOR 220-5380	
16	421-7987	STICKER ELEC SPEC	
17	421-7988-91	STICKER SERIAL NUMBER	
18	SGM-3791	POLYETHYLENE COVER 900×1100×1000	
19	SGM-4162	POLYETHYLENE COVER 700×1100×600	
20	421-7020	STICKER CAUTION FORK	
21	421-7948-01	STICKER CAUTION D ENG	
23	421-6709	STICKER SERVICE INSTR ENG	
24	421-8479-01	STICKER INSTR SUNLIGHT ENG	
201	032-000425	WING BLT M4×25	
202	068-441616	FLT WSHR 4, 4-16×1, 6	
203	031-000514-0C	CRG BLT CRM M5×14	
204	050-F00500	FLG NUT M5	
205	FAS-300001	HEX BLT CRM W/FS M8×20	
301	600-6341-20	WIRE HARN FOR PTV	
302	600-6387-61	WIRE HARN R G B(BNC)	
401	601-6604-30	CARTON BOX 30	
402	SGM-2675	POLYETHYLENE BAG 240×370	
403	540-0006-01	WRENCH FOR TAMP PRF SCR DUAL TYPE M4	
404	514-5036-6000	FUSE 6.4φ×30 6000mA 125V	
405	253-5185	CAP SW 30	
406	420-6131-01	OWNERS MANUAL SUPBR MEGALO 2 ENG	
409	601-6604-70	CARTON BOX 70	
410	200-5297	REMOTE CONTROLLER H	
410	200-5298	REMOTE CONTROLLER M	
/	MGL-0001	SHIPPING BRKT	
/	008-T00408-0C	TMP PRF SCR TH CRM M4×8	
/	421-6690~	STICKER ~V	

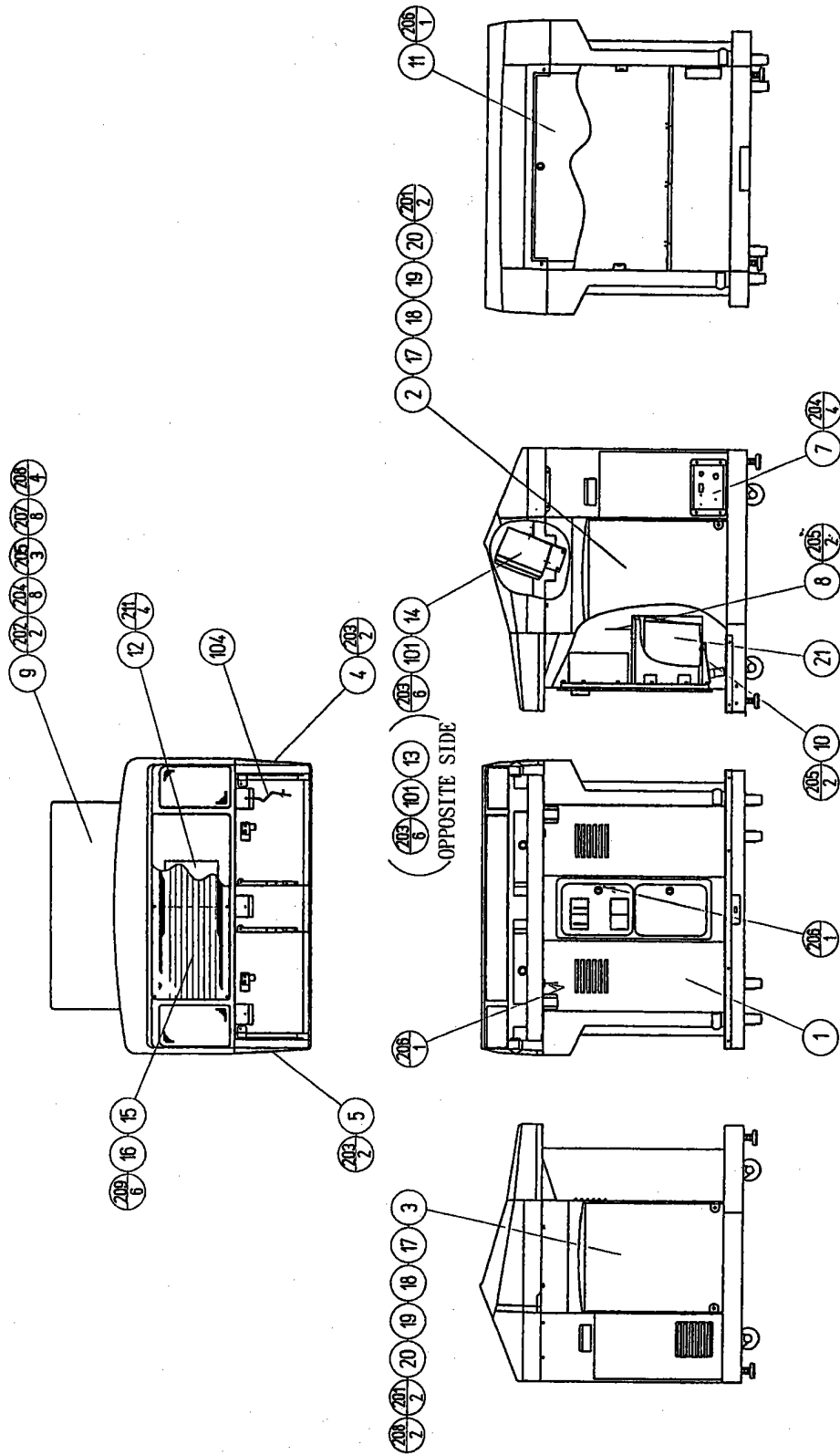
③ ASSY UP CONVERTOR (NMG-0100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1006	WOODEN BASE	
2	601-7528	SCAN CONVERTOR	
3	NMG-0101	BRACKET	
4	280-5183	ONE TOUCH COLLAR M3 L=10	
101	280-0419	HARNESS LUG	
102	601-0460	PLASTIC TIE BELT 100mm	
201	011-T00312	TAP SCR TH 3×12	
202	000-P00316-W	M SCR PH W/FS M3×16	
301	600-6387-50	WIRE HARN RGB SCAN CON	
302	600-6387-51	WIRE HARN PWR SCAN CON	

④ ASSY CTRL CABI (NMG-1000)

(D-1/2)



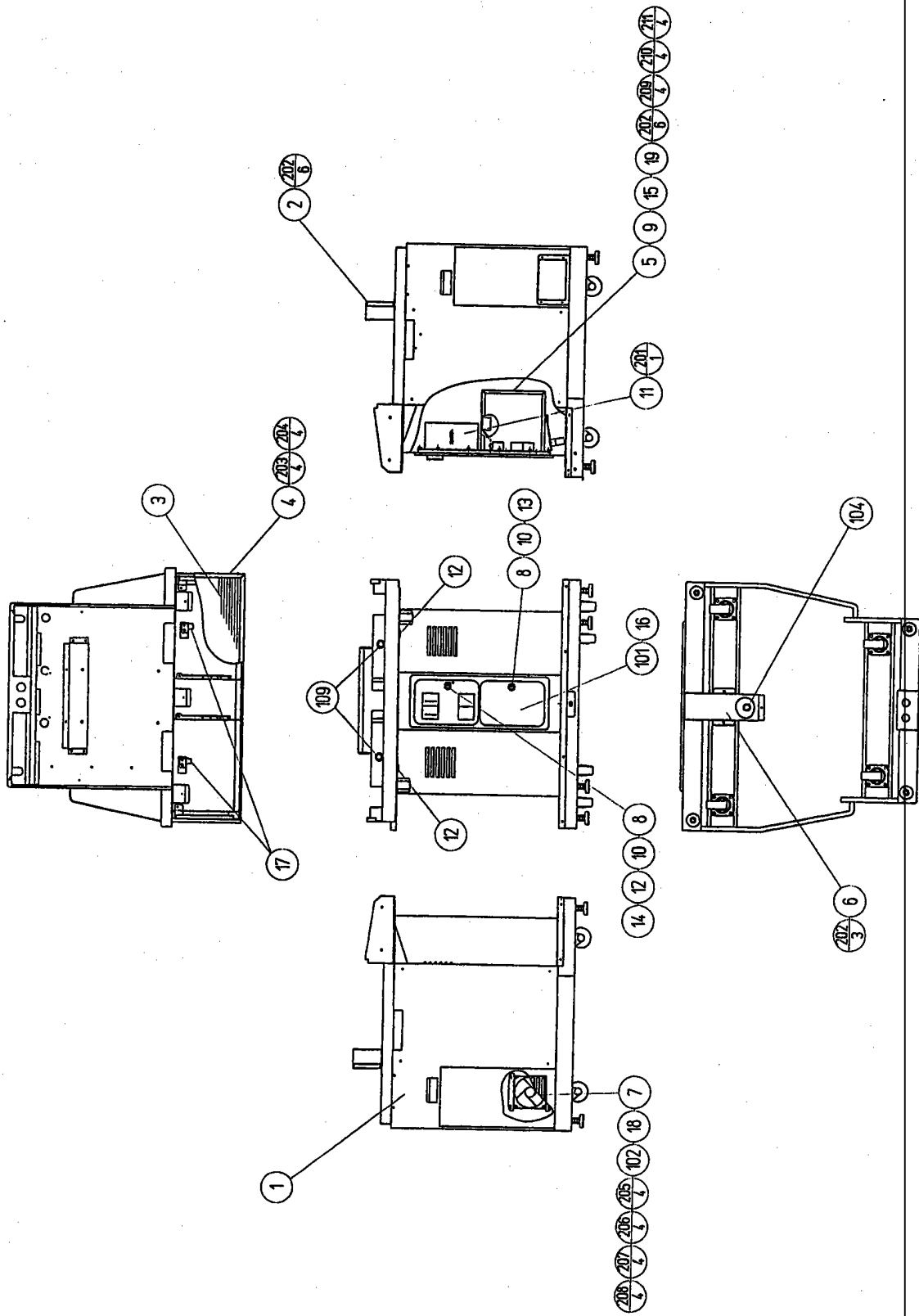
④ ASSY CTRL CABI (NMG-1000)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1001	ASSY SUBCABI CTRL	
2	NMG-1003	SIDE COVER R	
3	NMG-1004	SIDE COVER L	
4	MGL-1006	CP SIDE COVER R	
5	MGL-1007	CP SIDE COVER L	
6	NMG-1020	ASSY WIRE	
7	NMG-1030	AC UNIT	
8	NMG-1040	SW UNIT	
9	NMG-1050	ASSY TOP PANEL	
10	NMG-1060	METER UNIT	
11	MGL-1060	ASSY BACK LID	
12	837-8683-01	GAME SELECT BD FOR NMG	
13	MGL-1008	SPEAKER HOLDER L	
14	MGL-1009	SPEAKER HOLDER R	
15	MGL-1015X	INSTR BASE	
16	MGL-1016	INSTR COVER	
17	MGL-1023	SHOULDER BLT	
18	MGL-1024	HOLDER BUTTON	
19	MGL-1025	BUSH	
20	MGL-1026	FLT WSHR 5.2-11×2.0	
21	253-5366	CASH BOX	
101	130-5096	ASSY SERVO SPEAKER BOX	
102	280-5008	CORD CLAMP ϕ 15	
103	601-0460	PLASTIC TIE BELT 100mm	
104	601-7365-320	BALL CHAIN L=320	
201	000-T00512-0C	M SCR TH CRM M5×12	
202	000-T00525-0C	M SCR TH CRM M5×25	
203	000-P00512-W	M SCR PH W/FS M5×12	
204	000-T00416-0C	M SCR TH CRM M4×16	
205	000-P00410-W	M SCR PH W/FS M4×10	
206	000-T00430-0C	M SCR TH CRM M4×30	
207	068-441616-0C	FLT WSHR CRM 4.4-16×1.6	
208	050-F00400	FLG NUT M4	
209	008-T00416-0C	TMP PRF SCR TH CRM M4×16	
210	010-P00408-F	S-TITE SCR PH W/F M4×8	
211	000-F00308	M SCR FH M3×8	
301	600-6341-42	WIRE HARN FAN1	
302	600-6341-44	WIRE HARN RIGHT SPEAKER	
303	600-6341-45	WIRE HARN LEFT SPEAKER	
304	600-6387-55	WIRE HARN EARTH A	
305	600-6387-56	WIRE HARN EARTH B	

⑤ ASSY SUBCABI CTRL (NMG-1001)

(D-1/3)



⑤ ASSY SUBCABI CTRL (NMG-1001)

(D-2/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1002	CTRL CABI	
2	MGL-1022	TOP SPACER	
3	MGL-1013	FLOOR MAT CTRL	
4	MGL-1014	EDGE GUARD	
5	MGL-1017	CASH BOX COVER	OTHERS
	MGL-1027	CASH BOX COVER FOR MARS	MARS TYPE
6	MGL-1018	WIRE COVER CTRL	
7	HN-1042X	FAN BRKT	
8	HN-1050	SPACER RING	OTHERS
		NOT USED	MARS TYPE
9	105-5107	CHUTE	OTHERS
	105-5110	LOWER COIN CHUTE MARS	MARS TYPE
10	DP-1167	TNG LKG	OTHERS
		NOT USED	MARS TYPE
11	109-0045-91	KEY HOLDER	OTHERS
		NOT USED	MARS TYPE
12	220-5380	MAG LOCK MASTER W/O KEY	
13	220-5046-91	MAGNETIC LOCK W/KEYS	OTHERS
		NOT USED	MARS TYPE
15	105-5170	LOCK BRACKET S	
16	421-7501-02	STICKER 6.3V 0.15A	OTHERS
		NOT USED	MARS TYPE
17	NCA-1026	LOCKING TONGUE	
18	BVG-2076	AIR VENT INNER	
19	105-5188	HOLE COVER	
101	220-5128~	ASSY COIN CHUTE 2DOOR ~	OTHERS
	220-5404	CC 2DR FOR NRI W/O CC GERMAN	GERMANY
	220-5374	DOUBLE DOOR FRAME W/CASH DOOR	MARS TYPE
102	260-0011-02	AXIAL FLOW FAN AC100V 50-60Hz	
103	280-5169	CORD CLAMP TL-20S	
104	280-5187-26	OPEN LOCK BUSH 26	
105	280-5008	CORD CLAMP ϕ 15	
106	601-5526-084	BUSH 1.6t	
107	601-5526-140	BUSH 1.6t	
108	601-5526-170	BUSH 1.6t	
109	280-5172-15021	STANDARD BUSHING MP15021	
110	601-5526-120	BUSH 1.6t	
111	601-5526-640	BUSH 1.6t	
112	280-5009-01	CORD CLAMP 21	
201	000-P00308-W	M SCR PH W/FS M3 \times 8	
202	000-P00410-W	M SCR PH W/FS M4 \times 10	
203	000-T00410-OC	M SCR TH CRM M4 \times 10	
204	000-F00308	M SCR FH M3 \times 8	
205	000-P00345	M SCR PH M3 \times 45	
206	050-F00400	FLG NUT M4	
207	060-S00300	SPR WSHR M3	
208	060-F00300	FLT WSHR M3	
209	000-P00406	M SCR PH M4 \times 6	
210	060-S00400	SPR WSHR M4	
211	060-F00400	FLT WSHR M4	

⑤ ASSY SUBCABI CTRL (NMG-1001)

(D-3/3)

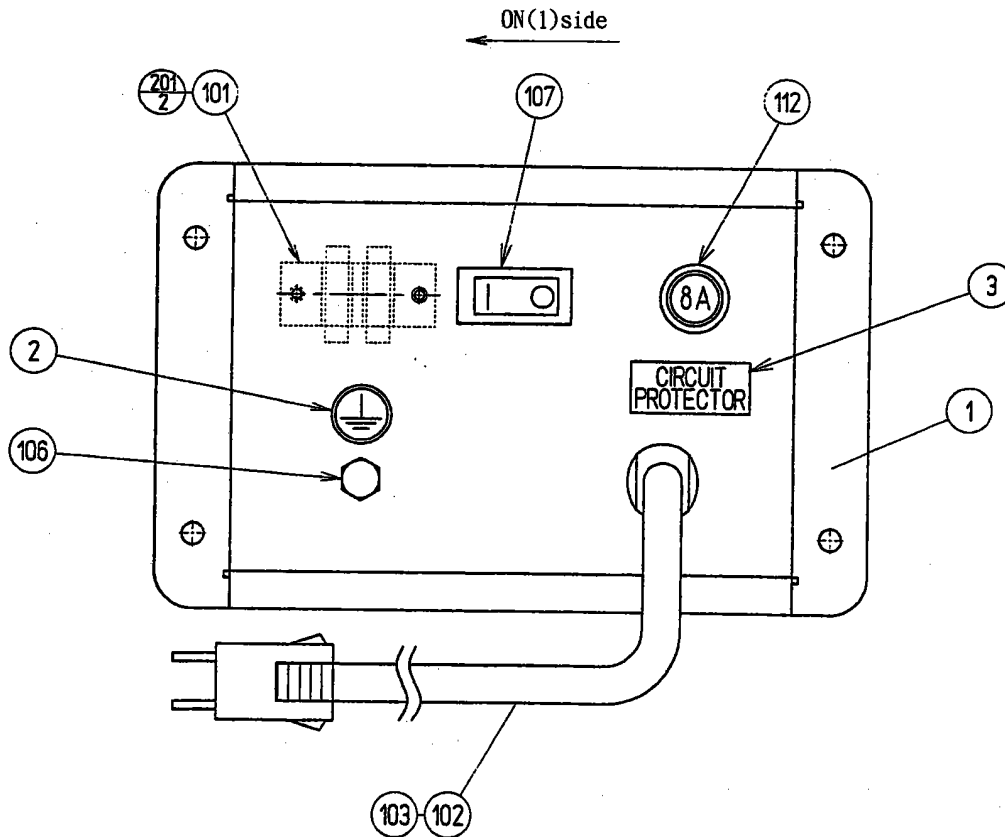
ITEM NO.	PART NO.	DESCRIPTION	NOTE
301	600-4158-19	WIRE HARN COIN SW	OTHERS MARS TYPE
	600-4158-53	WIRE HARN MARS MS-111	
302	600-6341-52	WIRE HARN EARTH COIN CHUTE	MARS TYPE
303	600-6341-53	WIRE HARN SUPER WOOFER EXT1	
/	600-6341-51	WIRE HARN MARS GND	MARS TYPE GERMARY
	600-6341-57	WIRE HARN NRI G13	
	220-5400	ELEC CC REJR W/BD 1DM 2DM 5DM	
	000-P00404	M SCR PH M4×4	
	012-P00408	TAP SCR PH 4×8	
	601-5214	L-LOCK	
	FAS-000003	M SCR PH PORICURVO M3×8	
	010-F00308	S-TITE SCR PH M3×8	

⑥ ASSY WIRE (NMG-1020)

ASSY WIRE (NMG-1020) is comprised of the following wire harnesses.
An ASSY DRG. is unavailable.

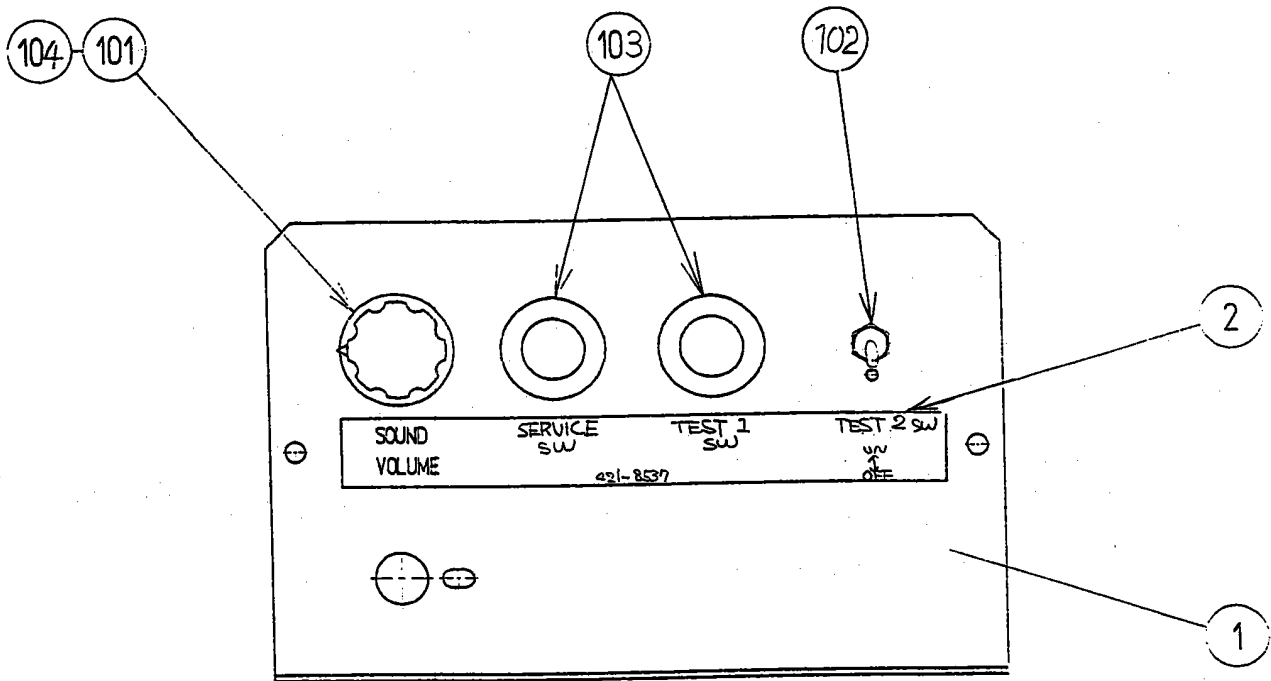
ITEM NO.	PART NO.	DESCRIPTION	NOTE
101	600-6387-30	WIRE HARN PWR BD A	
102	600-6387-31	WIRE HARN PWR BD B	
103	600-6387-32	WIRE HARN PWR SEL. BD	
104	600-6387-33	WIRE HARN GAME BD A	
105	600-6387-34	WIRE HARN GAME BD B	
106	600-6387-35	WIRE HARN CPNL SEL. BD	
107	600-6387-36	WIRE HARN 7SEG SEL. BD	
108	600-6387-37	WIRE HARN CPNL2 SEL. BD	
109	600-6387-38	WIRE HARN ETC SEL. BD	
110	600-6387-39	WIRE HARN RGB SEL. BD	
111	600-6387-40	WIRE HARN SOUND SEL. BD	
112	600-6387-53	WIRE HARN PWR SCAN CON EXT	
113	600-6387-54	WIRE HARN PWR MARS EXT	
114			
115			
116	600-6341-38	WIRE HARN SOUND EXT	
117	600-6341-39	WIRE HARN SUPER WOOFER EXT	
118	600-6341-41	WIRE HARN SPEAKER EXT	
119			
120			
121			
122	601-0460	PLASTIC TIE BELT 100mm	

⑦ AC UNIT (NMG-1030)



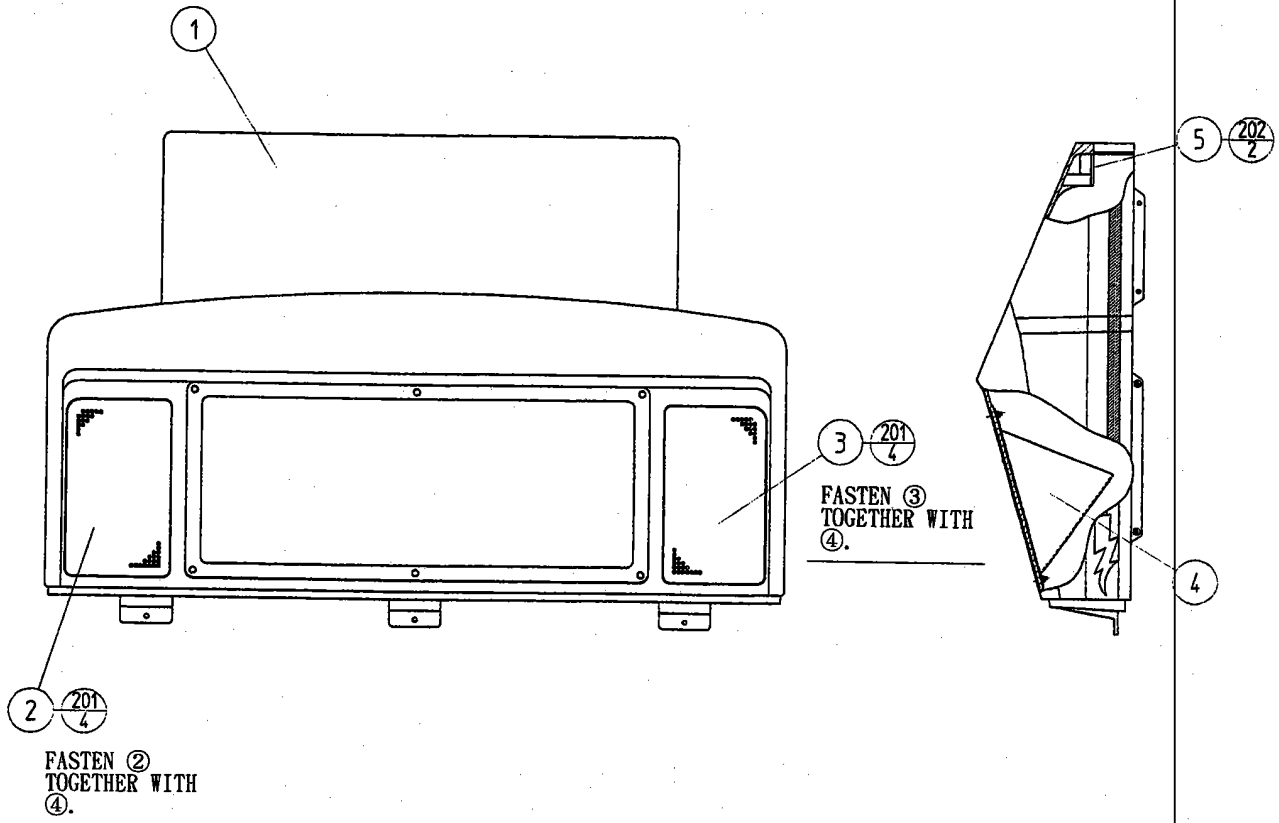
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	MGL-1031X	AC BRKT	
2	421-8202	STICKER EARTH MARK	
3	421-7468	STICKER C. P	
101	117-5182	TERMINAL PLATE 2P	
102	600-5843-25	CA & PLUG ASSY 15A W/-F- L=2.5M	AC100~120V AREA
	600-5007	CABLE & PLUG ASSY W/EARTH	AC220~240V AREA
103	280-5134-6N34	BUSHING STRAIN RELIEF 6N34	AC100~120V AREA
	280-5134-6N4	BUSHING STRAIN RELIEF 6N4	AC220~240V AREA
106	280-0417	TERMINAL BINDING POST BLACK	
107	509-5453-H-B	SW ROCKER J8 H-B	
108	209-0023	CONN CLOSED END	SMALL TYPE
109	601-0460	PLASTIC TIE BELT 100mm	
110	280-5145	RUBBER GROMMET ϕ 24 W/COVER	
111	280-5008	CORD CLAMP ϕ 15	
112	512-5033-8000	CIRCUIT PROTECTOR 8000mA	AC100~120V AREA
	512-5033-5000	CIRCUIT PROTECTOR 5000mA	AC220~240V AREA
201	010-P00312-F	S-TITE SCR PH W/F M3 \times 12	
301	600-6341-01-91	WIRE HARN AC IN	
302	600-6341-02-91	WIRE HARN SW1	
303	310-5029-H20	SUMITUBE F H20mm	ϕ 7.0mm
/	211-0167	TERM LUG RNI	

⑧ SW UNIT (NMG-1040)



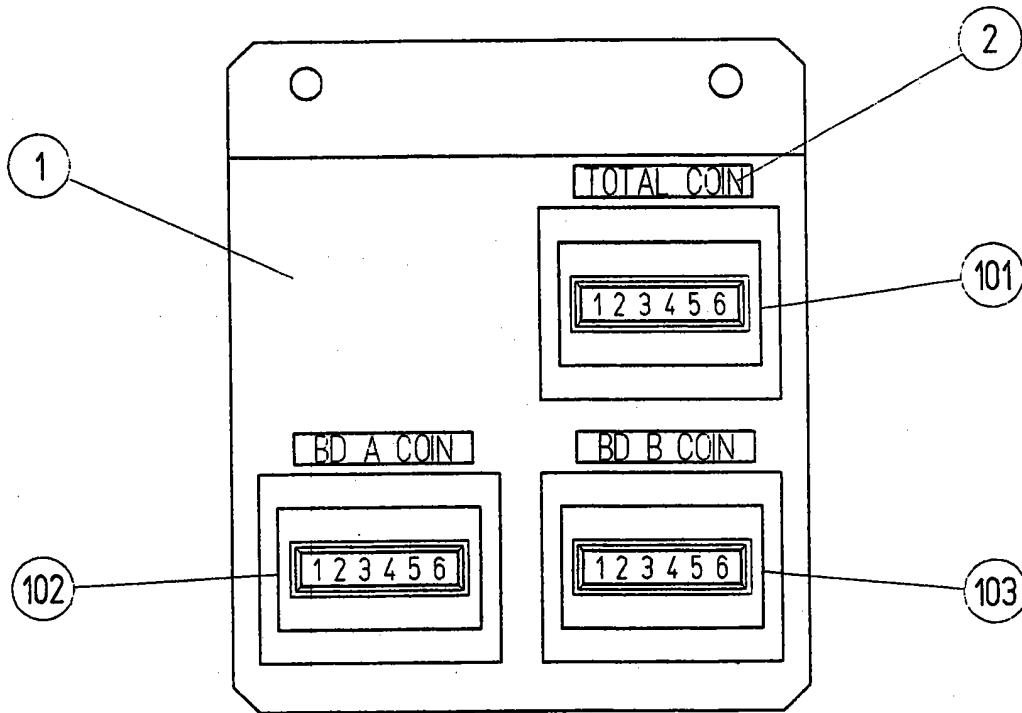
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	BVN-1024	SWITCH BRACKET	
2	421-8537	STICKER SW & VOL	
101	220-5179	VOL CONT B-5K OHM	
102	509-5007	SWITCH TOGGLE (FUJISOKU 8A1011)	
103	509-5028	SW PB, 1M	
104	601-0042	KNOB 22mm	
301	600-6387-52	WIRE HARN SW UNIT	
302	310-5029-D20	SUMITUBE F D20MM	φ 3. 0mm
303	601-0460	PLASTIC TIE BELT 100mm	
304	310-5029-B20	SUMITUBE F B20MM	φ 2. 0mm

⑨ ASSY TOP PANEL (NMG-1050)



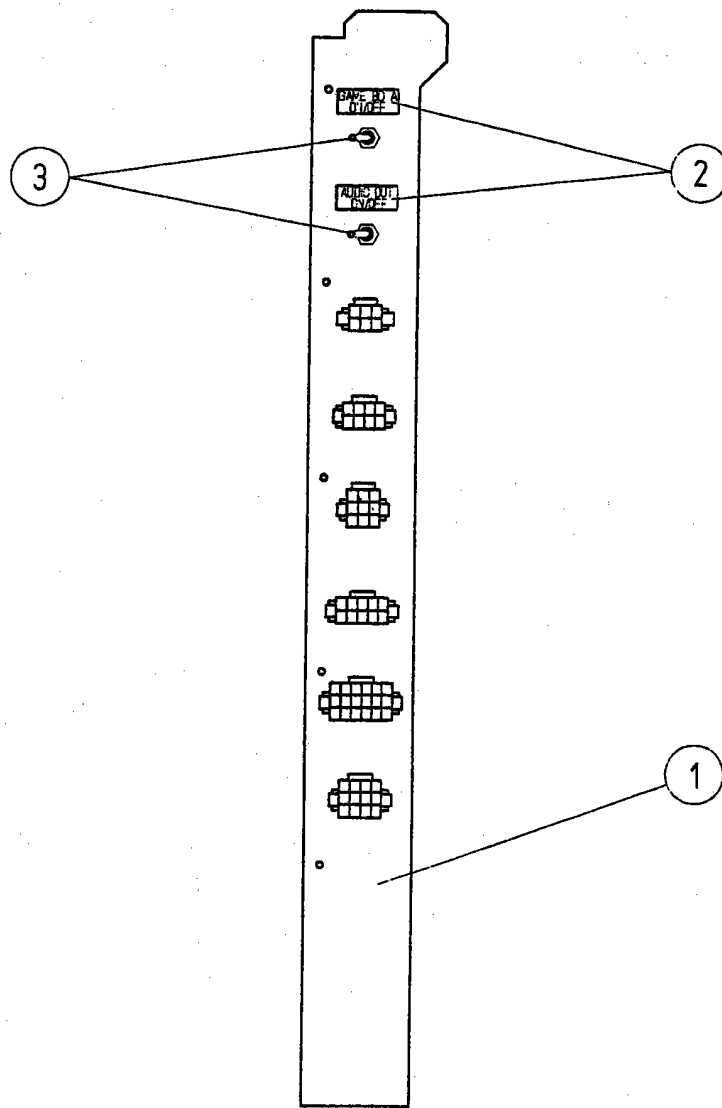
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1051	TOP PANEL	
2	MGL-1051	SPEAKER NET L	
3	MGL-1052	SPEAKER NET R	
4	MGL-1053	DIFFUSER	
5	MGL-1054	LOCK BRKT	
201	050-F00400	FLG NUT M4	
202	012-P00410	TAP SCR PH 4×10	

⑩ METER UNIT (NMG-1060)



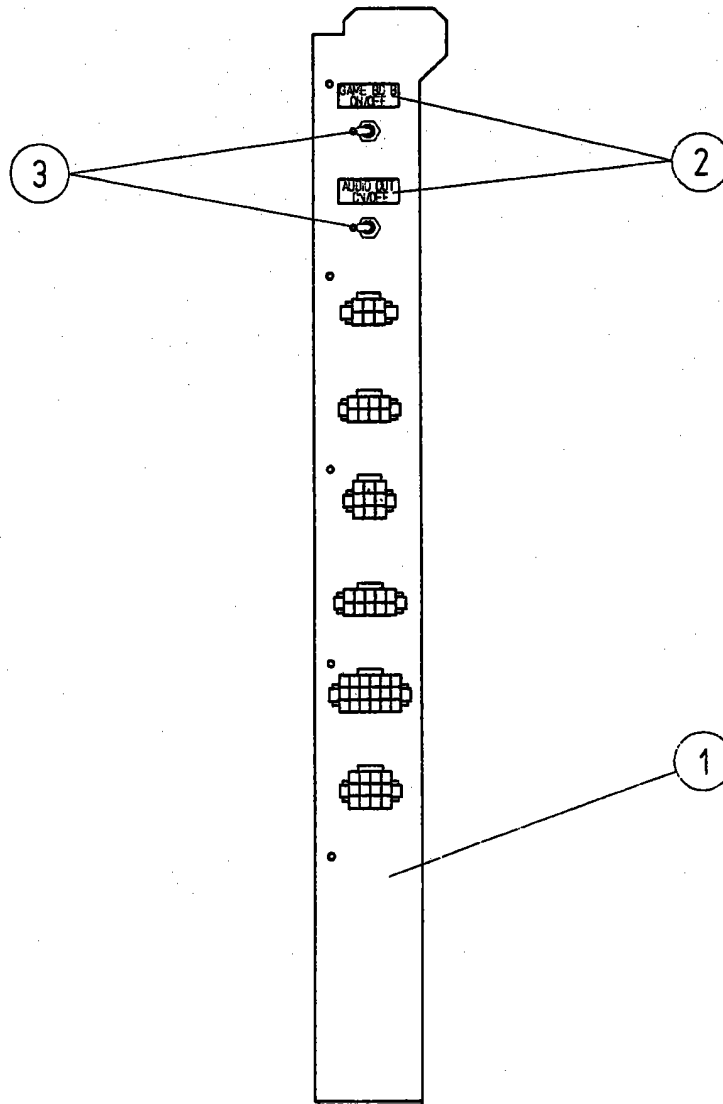
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1061	METER BRACKET 3P	
2	421-8144	STICKER COIN METER × 4	
101	220-5412 220-5217-01	MAG CNTR W/CONN MAG CNTR 6DIG DC 12V	OTHERS MARS TYPE GERMANY
102	220-5412-02	MAG CNTR W/CONN YELLOW	
103	220-5412-01	MAG CNTR W/CONN BLACK	
301	600-6387-49	WIRE HARN COIN METER EXT	
302	601-0460	PLASTIC TIE BELT 100mm	

⑪ ASSY CONNECTOR BRACKET A (NMG-1070)



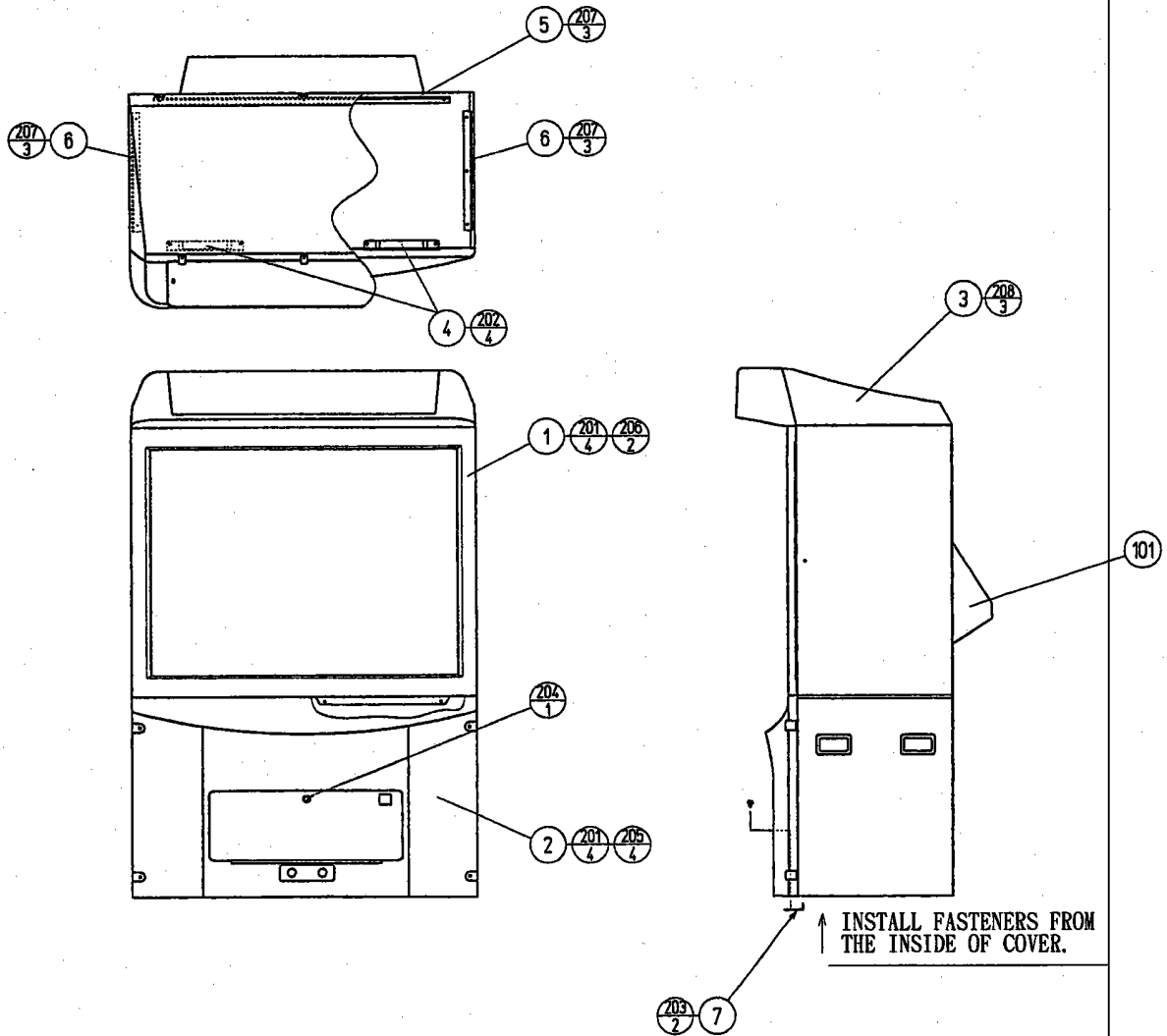
ITEM NO.	PART NO.	DESCRIPTION
1	NMG-1071	CONNECTOR BRACKET
2	421-8538	STICKER BD PNL
3	509-5007	SWITCH TOGGLE (FUJISOKU 8A1011)
4	601-0460	PLASTIC TIE BELT 100mm
301	600-6387-41	WIRE HARN C. PANEL A
302	600-6387-42	WIRE HARN C. PANEL B
303	600-6387-43	WIRE HARN C. PANEL C
304	600-6387-44	WIRE HARN C. PANEL D
305	600-6387-45	WIRE HARN C. PANEL E
306	600-6387-46	WIRE HARN C. PANEL F
307	600-6387-47	WIRE HARN C. PANEL G

⑫ ASSY CONNECTOR BRACKET B (NMG-1080)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-1071	CONNECTOR BRACKET	
2	421-8538	STICKER BD PNL	
3	509-5007	SWITCH TOGGLE(FUJISOKU 8A1011)	
4	601-0460	PLASTIC TIE BELT 100mm	
301	600-6387-41	WIRE HARN C. PANEL A	
302	600-6387-42	WIRE HARN C. PANEL B	
303	600-6387-43	WIRE HARN C. PANEL C	
304	600-6387-44	WIRE HARN C. PANEL D	
305	600-6387-45	WIRE HARN C. PANEL E	
306	600-6387-46	WIRE HARN C. PANEL F	
307	600-6387-48	WIRE HARN C. PANEL H	

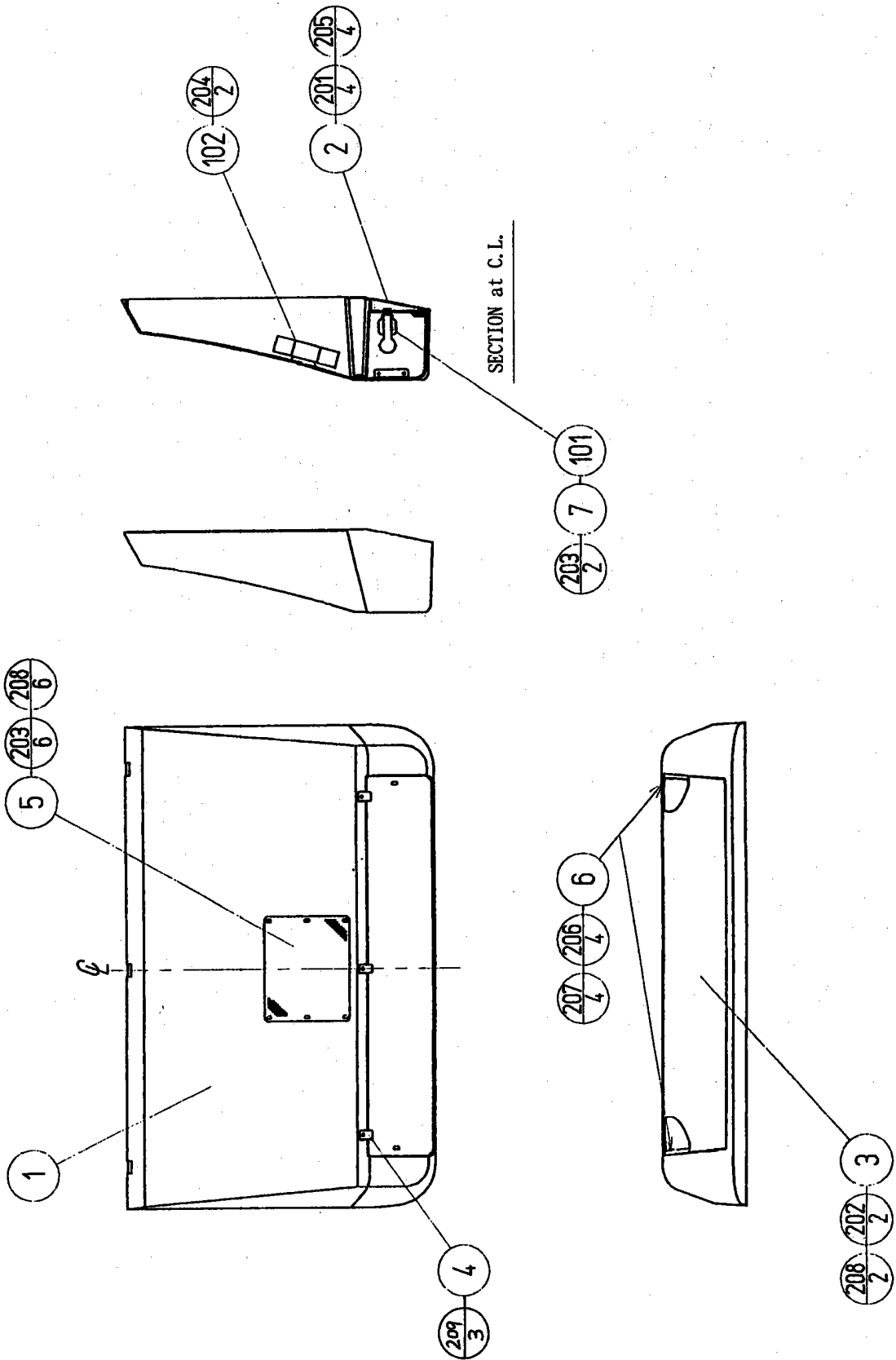
⑬ ASSY PTV (NMG-1100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	MGL-1150	ASSY MASK	
2	MGL-1160	ASSY FRONT PANEL	
3	NMG-1150	ASSY BILLBOARD	
4	MGL-1104X	MASK HOLDER	
5	MGL-1105	TOP BRKT	
6	MGL-1106	SIDE BRKT	
7	MGL-1107	HOLDER BRKT	
101	200-5315-NMG	ASSY PROJECTION DISPLAY NMG	
201	000-T00520-OC	M SCR TH CRM M5×20	
202	000-F00414	M SCR FH M4×14	
203	000-P00410-W	M SCR PH W/FS M4×10	
204	000-T00425-OC	M SCR TH CRM M4×25	
206	000-T00525-OC	M SCR TH CRM M5×25	
207	000-P00516-W	M SCR PH W/FS M5×16	
208	000-T00416-OC	M SCR TH CRM M4×16	
209	068-552016-OC	FLT WSHR CRM 5.5-16×1.6	

14 ASSY BILLBOARD (NMG-1150)

(D-1/2)



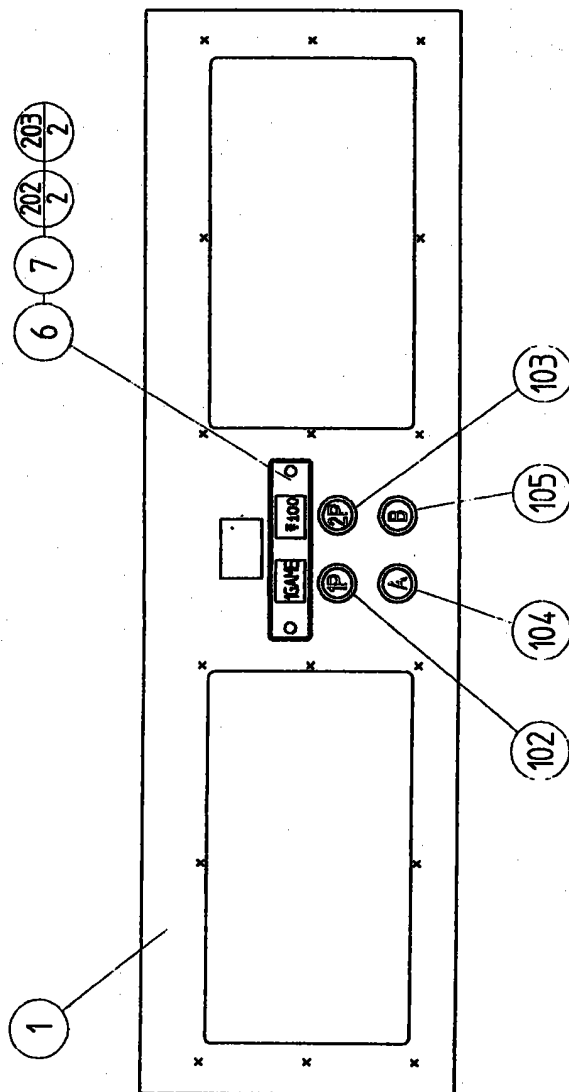
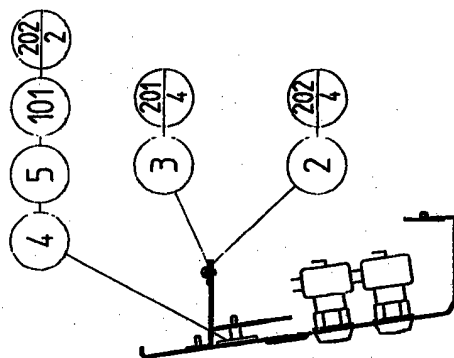
⑭ ASSY BILLBOARD (NMG-1150)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	MGL-1201	BILLBOARD BLANK	
2	MGL-1202X	BOTTOM PLATE	
3	NMG-1151	BILLBOARD PLATE	
4	MGL-1204	HOLDER BRKT	
5	MGL-1205	GUARD PLATE	
6	MGL-1206	PLATE HOLDER	
7	421-7501-17	STICKER FL 20W	
101	390-5276-20-02	ASSY FL UNIT 20W SD	
103	209-0023	CONN CLOSED END	SMALL TYPE
104	280-0425	CORD CLAMP ϕ 10	
105	280-5008	CORD CLAMP ϕ 15	
201	000-P00512-W	M SCR PH W/FS M5 \times 12	
202	000-T00410-0C	M SCR TH CRM M4 \times 10	
203	012-P00416	TAP SCR PH 4 \times 16	
204	FAS-110001	TAP SCR PH 4 \times 50	
205	FAS-120001	TAP SCR BLK 4 \times 10	
206	000-P00416-W	M SCR PH W/FS M4 \times 16	
207	050-F00400	FLG NUT M4	
208	068-441616-0C	FLAT WSHR CRM 4.4-16 \times 1.6	
209	000-T00408-0C	M SCR TH CRM M4 \times 8	
301	600-6341-55	WIRE HARN FL20	

15 ASSY CONT PNL BASE (NMG-2000)

(D-1/2)

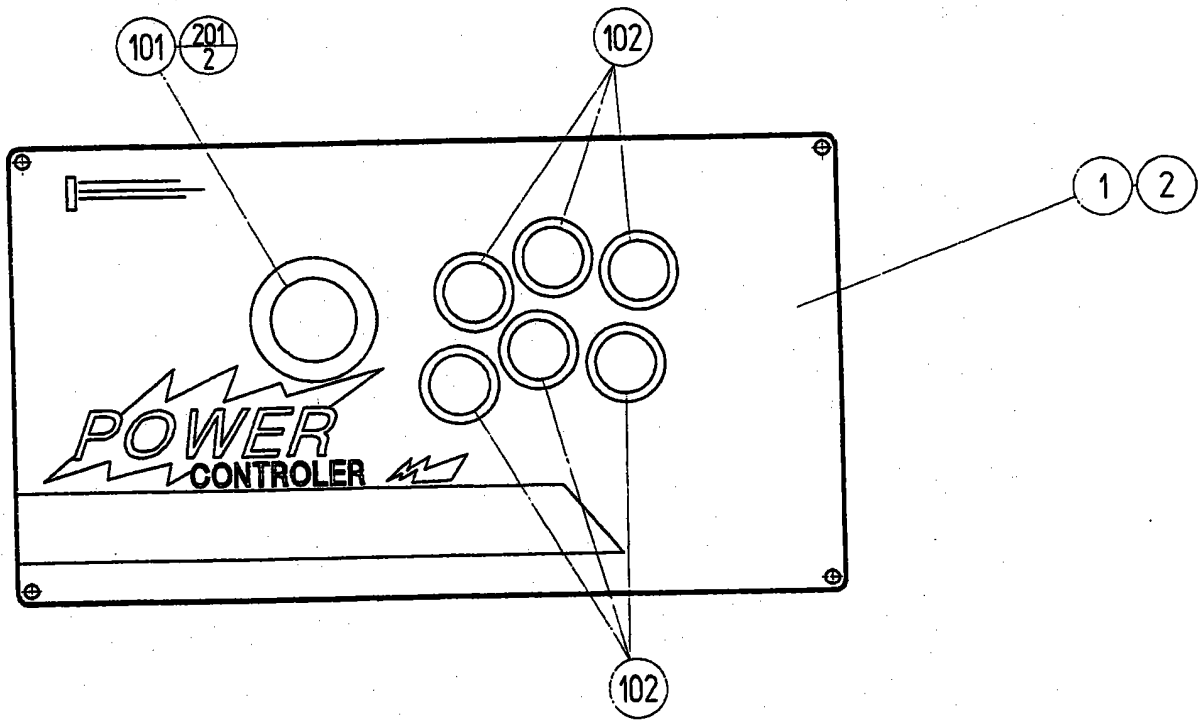


⑮ ASSY CONT PNL BASE (NMG-2000)

(D-2/2)

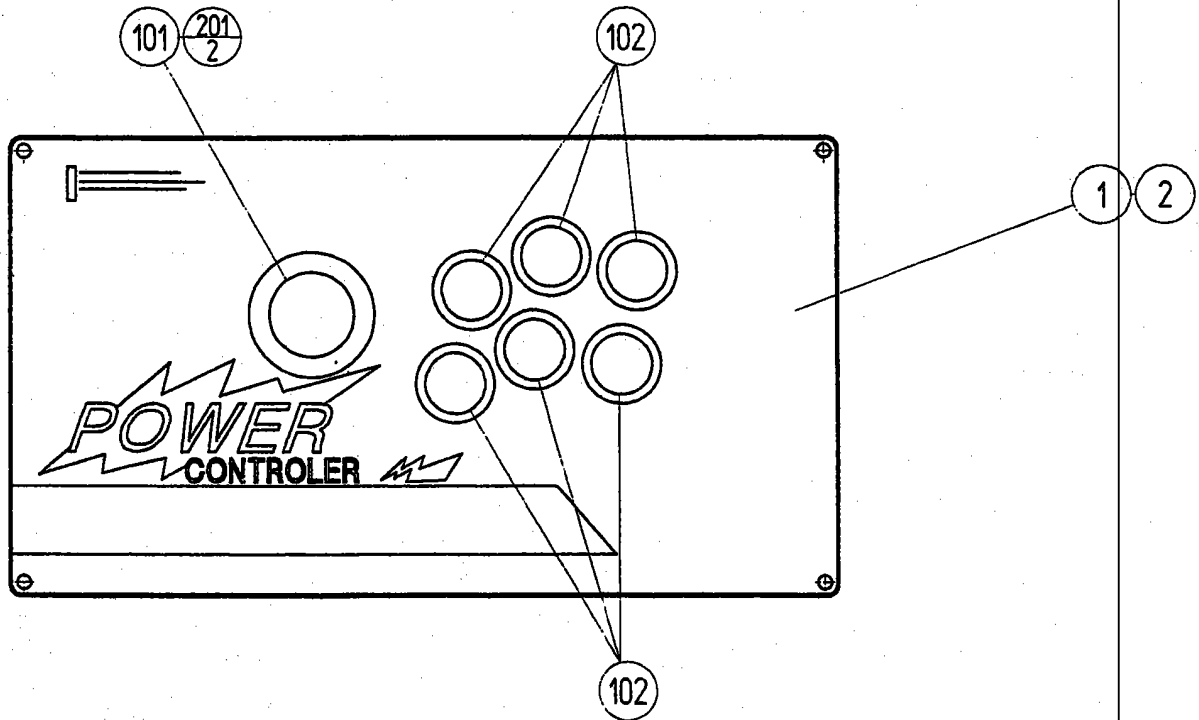
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-2001	CONT PNL BASE	
2	MGL-2002	LOCK BRKT	
3	BVN-2103	ADJUST PLATE	
4	BVN-2104	7-SEG MASK	
5	839-0508-01	7 SEG BD	
6	MGL-2003	DENOMINATION PLATE	
7	421-7907~	DENOMI SH ~	
101	280-5183	ONE TOUCH COLLAR M3 L=10	
102	509-5417-01YE	SW PB SC W/L 12V YE 1P(SANWA OBSA-30M)	
103	509-5417-02YE	SW PB SC W/L 12V YE 2P(SANWA OBSA-30M)	
104	509-5417-03GR	SW PB SC W/L 12V GR A(SANWA OBSA-30M)	
105	509-5417-04GR	SW PB SC W/L 12V GR B(SANWA OBSA-30M)	
106	280-5008	CORD CLAMP ϕ 15	
201	000-P00408-W	M SCR PH W/FS M4 \times 8	
202	050-F00400	FLG NUT M4	
203	031-0S0410	CRG BLT STN M4 \times 10	
301	600-6387-58	WIRE HARN SELECT & START	
302	600-6387-62	WIRE HARN 7 SEG	
303	600-6387-57	WIRE HARN EARTH C	

①⑥ ASSY CONT PNL 1P (1L6B) (NMG-2100)



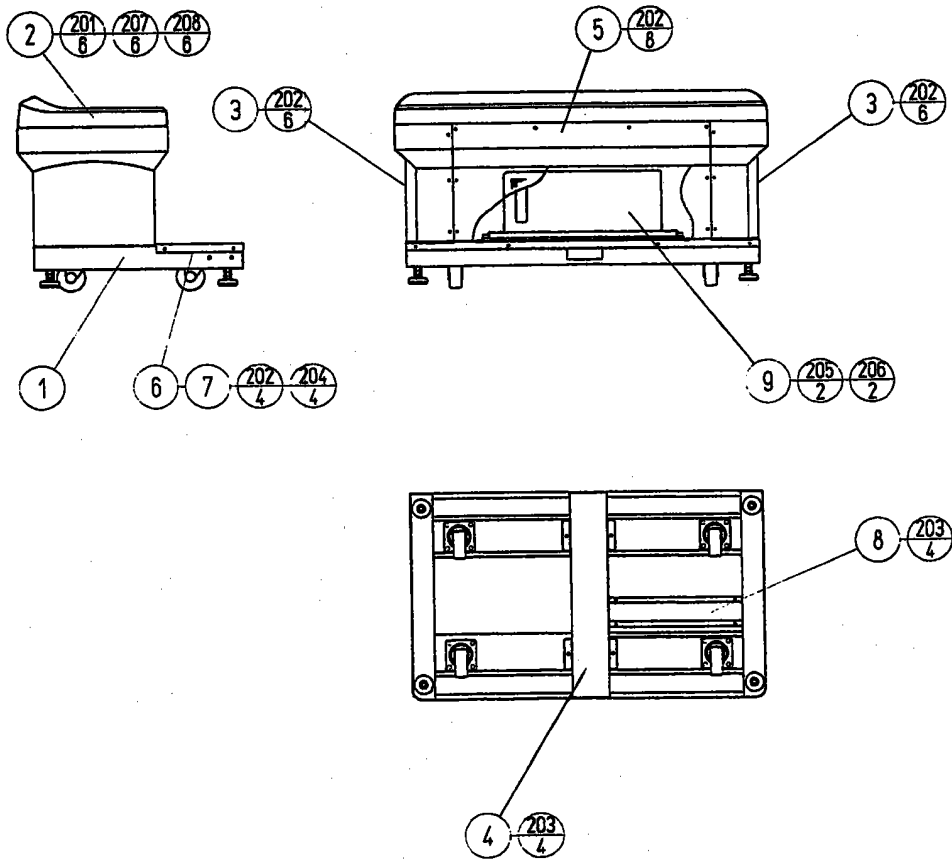
ITEM NO.	PART NO.	DESCRIPTION
1	NMG-2101	PANEL PLATE 1L6B
2	BVN-2202Y	PANEL BASE 1L6B
101	610-0094-05	ASSY 8WAY JOYSTICK GREEN(LS-25)
102	509-5135-09	SW PUSH BUTTON 1M GREEN
103	280-5008	CORD CLAMP ϕ 15
104	601-0460	PLASTIC TIE BELT 100mm
201	000-P00406-S	M SCR PH W/S M4 \times 6
301	600-4158-35	WIRE HARN CONT 1P 1L3B
302	600-6387-59	WIRE HARN 1P PUSH SW

①⑦ ASSY CONT PNL 2P (1L6B) (NMG-2200)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-2101	PANEL 1L6B	
2	BVN-2202Y	PANEL BASE 1L6B	
101	610-0094-04	ASSY 8WAY JOYSTICK PINK(LS-25)	
102	509-5135-08	SW PUSH BUTTON 1M PINK	
103	280-5008	CORD CLAMP ϕ 15	
104	601-0460	PLASTIC TIE BELT 100mm	
201	000-P00406-S	M SCR PH W/S M4 \times 6	
301	600-4158-36	WIRE HARN CONT 2P 1L3B	
302	600-6387-60	WIRE HARN 2P PUSH SW	

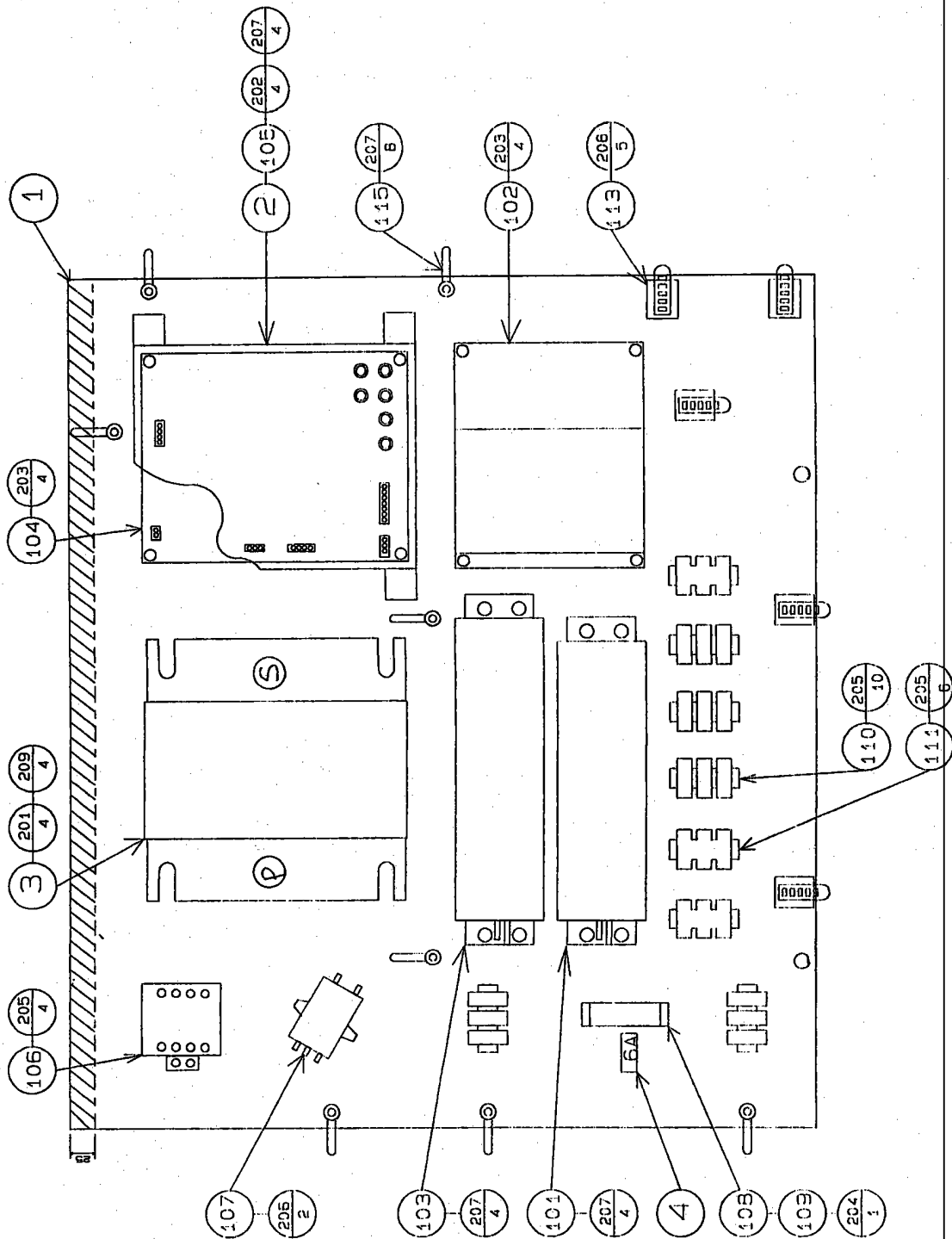
⑱ ASSY SEAT & BASE (NMG-3000)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-3001	BASE	
2	MGL-3002	SEAT	
3	NMG-3002	SEAT SIDE COVER	
4	MGL-3004	WIRE COVER	
5	MGL-3007	SPEAKER LID	
6	MGL-3008	FLOOR MAT REAR	
7	MGL-3009	EDGE GUARD	
8	MGL-3010	WIRE COVER S	
9	GFR-3004	ASSY SUPER WOOFER	
101	280-5187-26	OPEN LOCK BUSH 26	
102	280-5008	CORD CLAMP ϕ 15	
201	000-P00618	M SCR PH M6 \times 18	
202	000-T00410-0C	M SCR TH CRM M4 \times 10	
203	000-P00410-W	M SCR PH W/FS M4 \times 10	
204	000-F00308	M SCR PH M3 \times 8	
205	032-000425	WING BLT M4 \times 25	
206	068-441616	FLT WSHR 4. 4-16 \times 1.6	
207	060-S00600	SPR WSHR M6	
208	068-652016	FLT WSHR 6. 5-20 \times 1.6	
301	600-6341-48	WIRE HARN SUPER WOOFER EXT2	

19 ASSY POWER SUPPLY (NMG-4000)

(D-1/3)



①9 ASSY POWER SUPPLY (NMG-4000)

(D-2/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NMG-4001	WOODEN BASE	
2	NMG-4002	AMP BRACKET	
3	560-5269	XFMR 90-240V 100V7.5A 12.8V6AX2	
4	421-6595-06	STICKER 6A	
101	400-5149	SW REGU 5V7A 12V1.5A -5V0.1A	
102	400-5160	SW REGU 5V3A 12V3A	
103	400-5221	SW REGU 5V12A, 6A12V1.5A-5V.1A	
104	838-10018	AMP BD SERVO	
105	838-10141	MIXER & EQ. AMP FOR S. WOOFER	
106	450-5076	MAGNET CONTACT SC-03 AC100V 1A	AC100V AREA
	450-5092	MAGNET CONTACT SC-03 AC220V 1A	AC220V AREA
	450-5091	MAGNET CONTACT SC-03 AC240V 1A	AC240V AREA
107	270-5022-01	NOISE FILTER 20A (GA1B-20)	
108	514-5028	FUSE HOLDER 1P W/COVER	
109	514-5036-6000	FUSE 6.4 ϕ \times 30 6000mA 125V	
110	117-5172	TERMINAL PLATE 3P	
111	117-5226	TERMINAL PLATE 3P SHORT	
112	601-0460	PLASTIC TIE BELT 100mm	
113	280-5009-01	CORD CLAMP 21	
115	280-0419	HARNESS LUG	
201	000-P00516-W	M SCR PH W/FS M5 \times 16	
202	000-P00320	M SCR PH M3 \times 20	
203	011-P00325	TAP SCR PH 3 \times 25	
204	011-P03516	TAP SCR PH 3.5 \times 16	
205	011-T03516	TAP SCR TH 3.5 \times 16	
206	011-T03510	TAP SCR TH 3.5 \times 10	
207	011-T00312	TAP SCR TH 3 \times 12	
208	011-F00310	TAP SCR FH 3 \times 10	
209	068-552016	FLT WSHR 5.5-20 \times 1.6	
301	600-6387-01	WIRE HARN MAGNET CONTACT	
302	600-6387-02	WIRE HARN NOISE FILTER	
303	600-6387-03	WIRE HARN XFMR IN	
304	600-6387-04	WIRE HARN XFMR 100V OUT	
305	600-6387-05	WIRE HARN XFMR 12.8V OUT	
306	600-6387-06	WIRE HARN SW REGU 5160 IN	
307	600-6387-07	WIRE HARN SW REGU 5149 IN	
308	600-6387-08	WIRE HARN SW REGU 5221 IN	
309	600-6387-09	WIRE HARN FUSE	
310	600-6387-10	WIRE HARN 100V FOR PTV	
311	600-6387-11	WIRE HARN 100V FOR FL & FAN	
312	600-6387-12	WIRE HARN 100V FOR FAN	
313	600-6387-13	WIRE HARN SW REGU 5160 OUT	
314	600-6387-14	WIRE HARN SW REGU 5149 OUT	
315	600-6387-15	WIRE HARN SW REGU 5221 OUT1	
316	600-6387-16	WIRE HARN SW REGU 5221 OUT2	
317	600-6387-17	WIRE HARN PWR FOR SEL. BD	
318	600-6387-18	WIRE HARN PWR FOR BD B	
319	600-6387-19	WIRE HARN PWR FOR BD A	
320	600-6387-20	WIRE HARN PWR FOR CGB	

①9 ASSY POWER SUPPLY (NMG-4000)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
321	600-6387-21	WIRE HARN PWR FOR SCAN_CON	
322	600-6387-22	WIRE HARN PWR FOR MARS	
323	600-6387-23	WIRE HARN SOUND OUT	
324	600-6387-24	WIRE HARN WOOFER OUT	
325	600-6387-25	WIRE HARN VOL. AMP TO AMP	
326	600-6387-26	WIRE HARN SOUND AMP TO AMP	
327	600-6387-27	WIRE HARN SOUND IN	
328	600-6387-28	WIRE HARN VOLUME IN	

18. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

A	PINK
B	SKY BLUE
C	BROWN
D	PURPLE
E	LIGHT GREEN

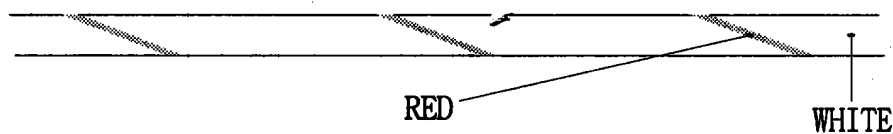
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

1	RED
2	BLUE
3	YELLOW
4	GREEN
5	WHITE
7	ORANGE
8	BLACK
9	GRAY

If the right-hand side numeral of the code is 0, then the wire will be of a single color shown by the left-hand side numeral (see the above).

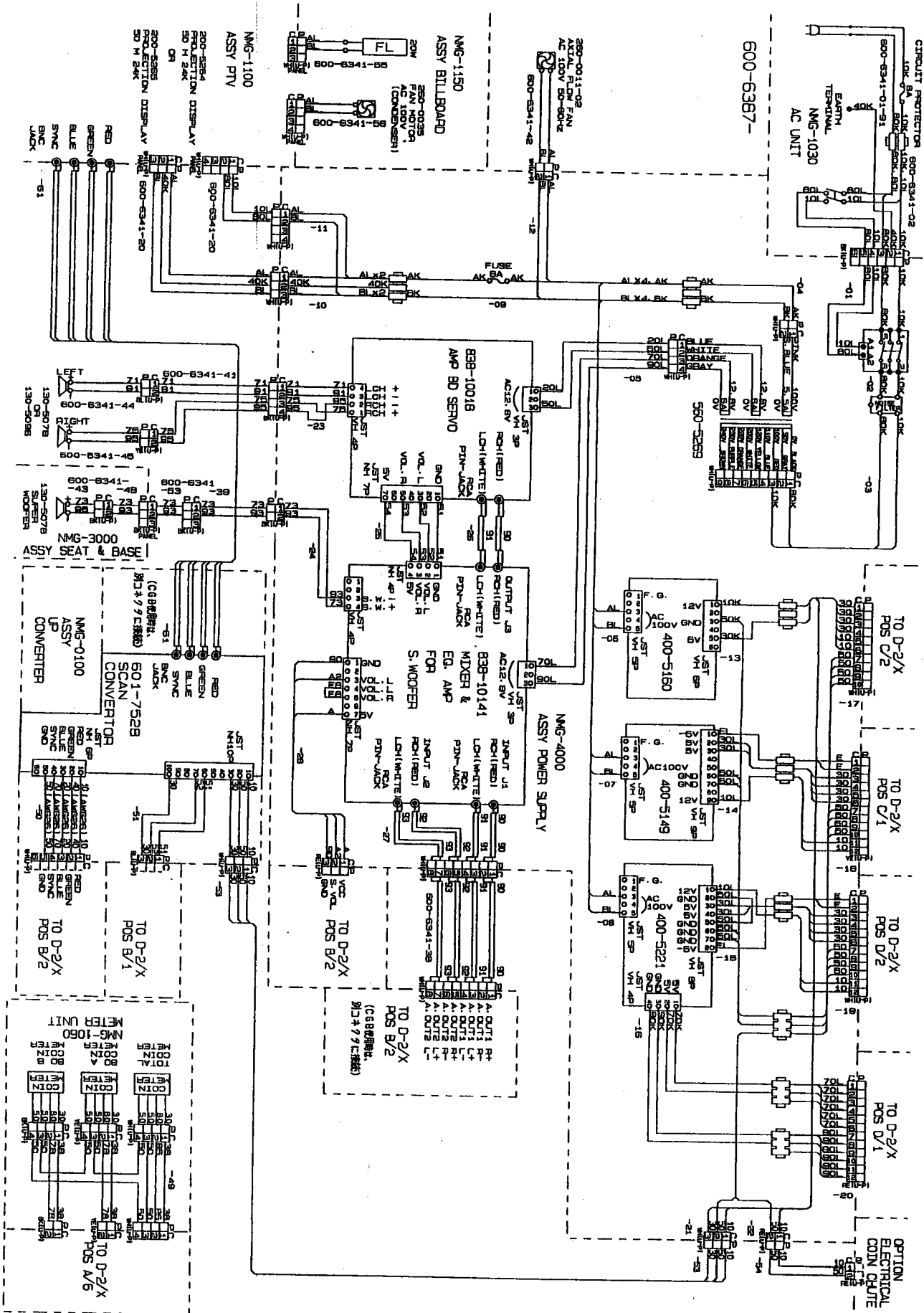
Note 1: If the right-hand side alphanumeric is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

<Example> 51 WHITE / RED

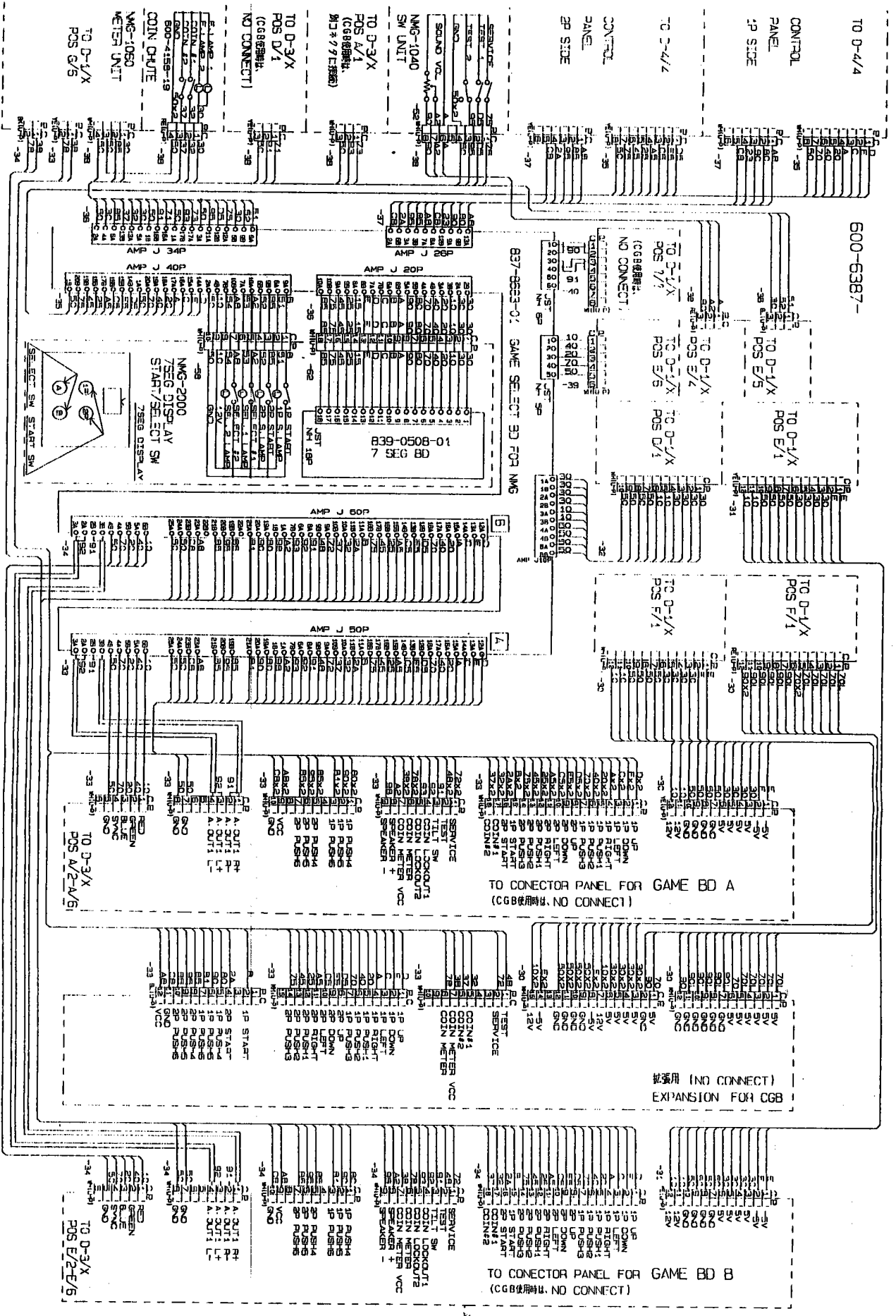


Note 2: The character following the wire color code indicates the size of the wire.

K:	AWG18, UL1015
L:	AWG20, UL1007
None:	AWG22, UL1007



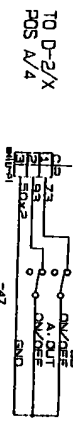
19. WIRING DIAGRAM (D-1/4)



19. WIRING DIAGRAM (D-2/4)

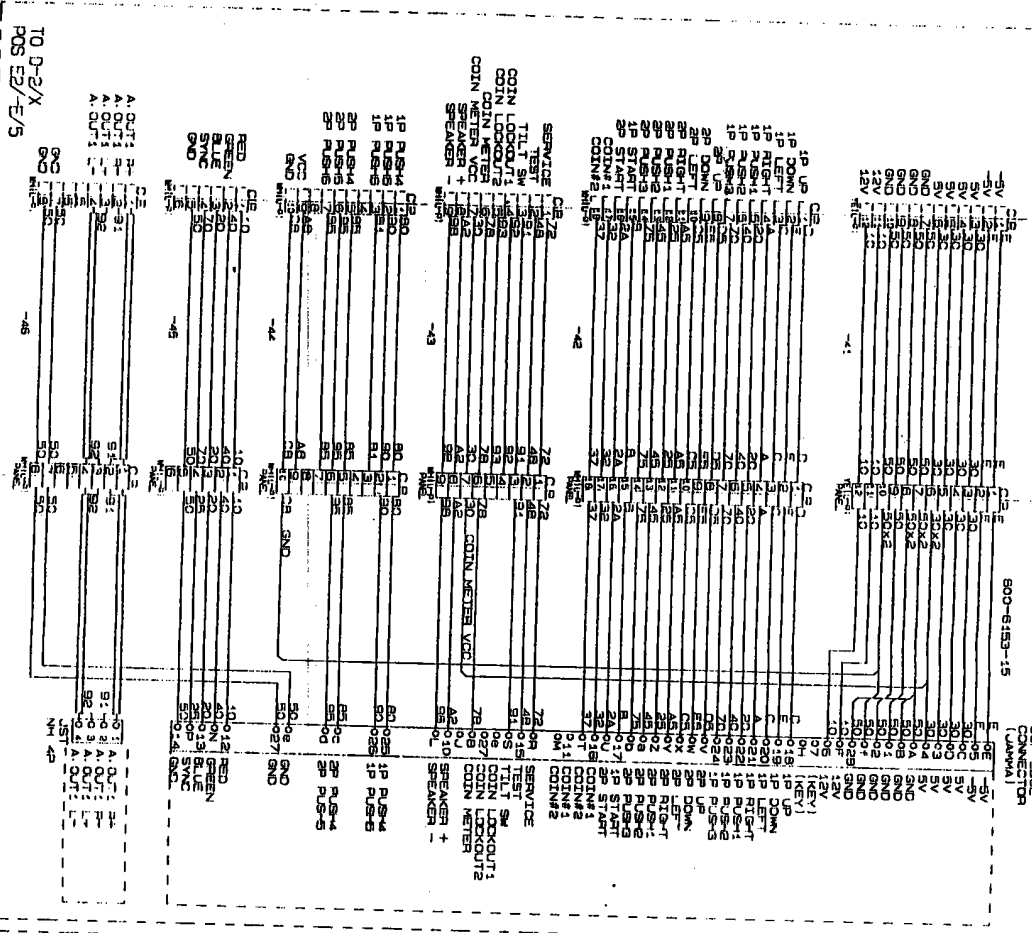
600-6387-

NMG-1070
ASSY CONNECTOR BRACKET A

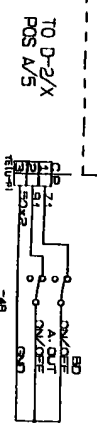


WIRING FOR
TYPE OF 2 JAMMA BD ON

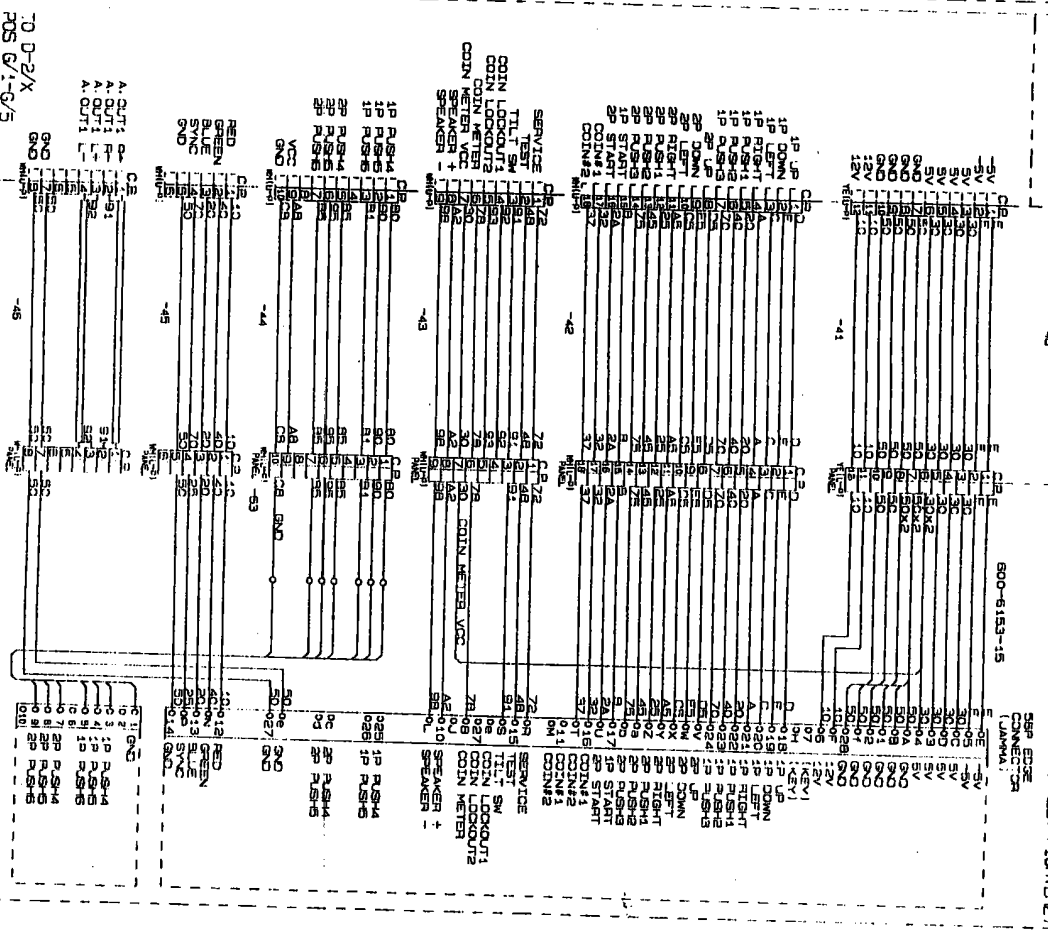
EXTENSION WIRE FOR JAMMA
(SYSTEM 32)



NMG-1080
ASSY CONNECTOR BRACKET B

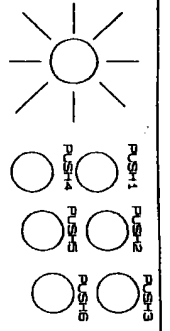


EXTENSION WIRE FOR JAMMA
(SYSTEM 32)

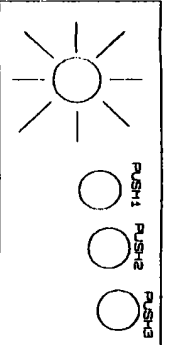


19. WIRING DIAGRAM (D-3/4)

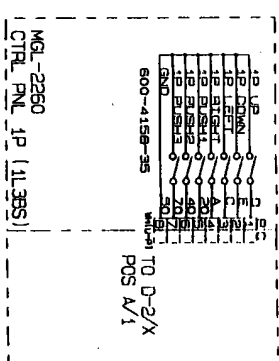
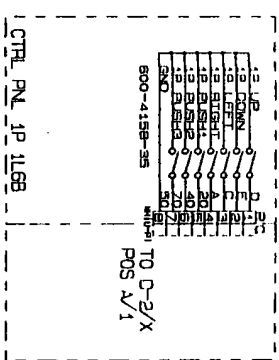
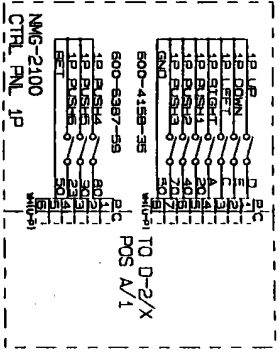
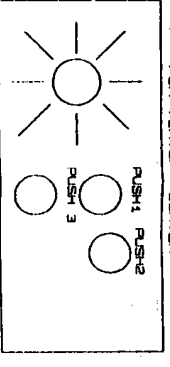
CONTROL PANEL 2L12B



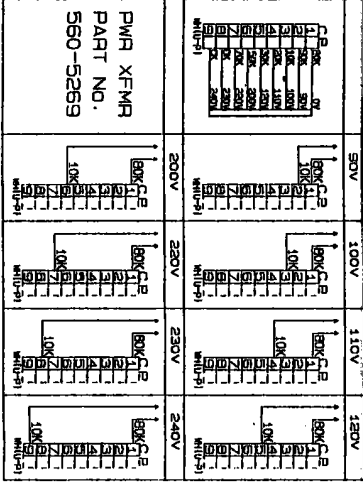
CONTROL PANEL 2L6B



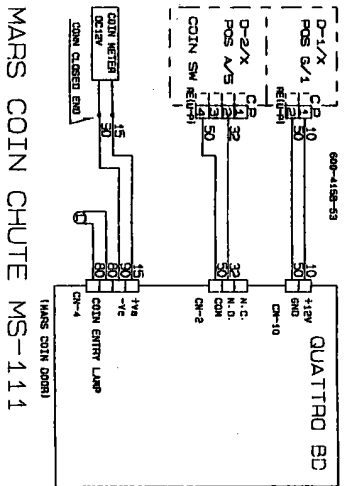
CONTROL PANEL 2L6BS FOR VIRIPIA FIGHTER



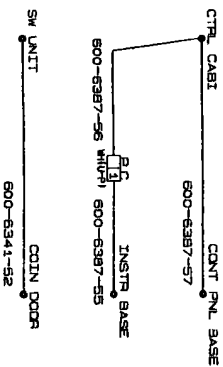
POWER TRANSFORMER WIRING



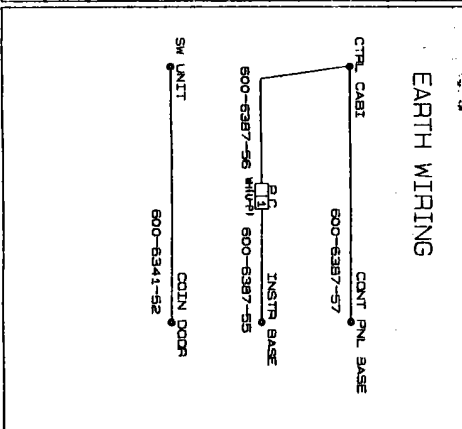
ELECTRICAL COIN CHUTE FOR EXPORT



EARTH WIRING



MARS COIN CHUTE MS-111



19. WIRING DIAGRAM (D-4/4)