

FINAL LAP R

OPERATION MANUAL

- S D -

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Read the manual thoroughly before using the game machine. At installation, adjustments are required according the manual.

1. Specifications

- (1) Line voltage: AC90-130V or AC200-240V
- (2) Power consumption: 300W
- (3) Game fees: 1 coin per credit through 9 coins per 9 credits (81 combinations)
- (4) Coin box capacity: Up to 2,000 100-yen coins
- (5) Monitor: 26-inch color motor x 2
- (6) Dimensions:
 - o When installed: 1,230 (W) x 1,660 (D) x 1,900 (H) (mm)
 - o When separated:
 - Body Assy - 1,230 (W) x 840 (D) x 1,900 (H) (mm)
 - Seat Assy - 430 (W) x 890 (D) x 1,270 (H) (mm)

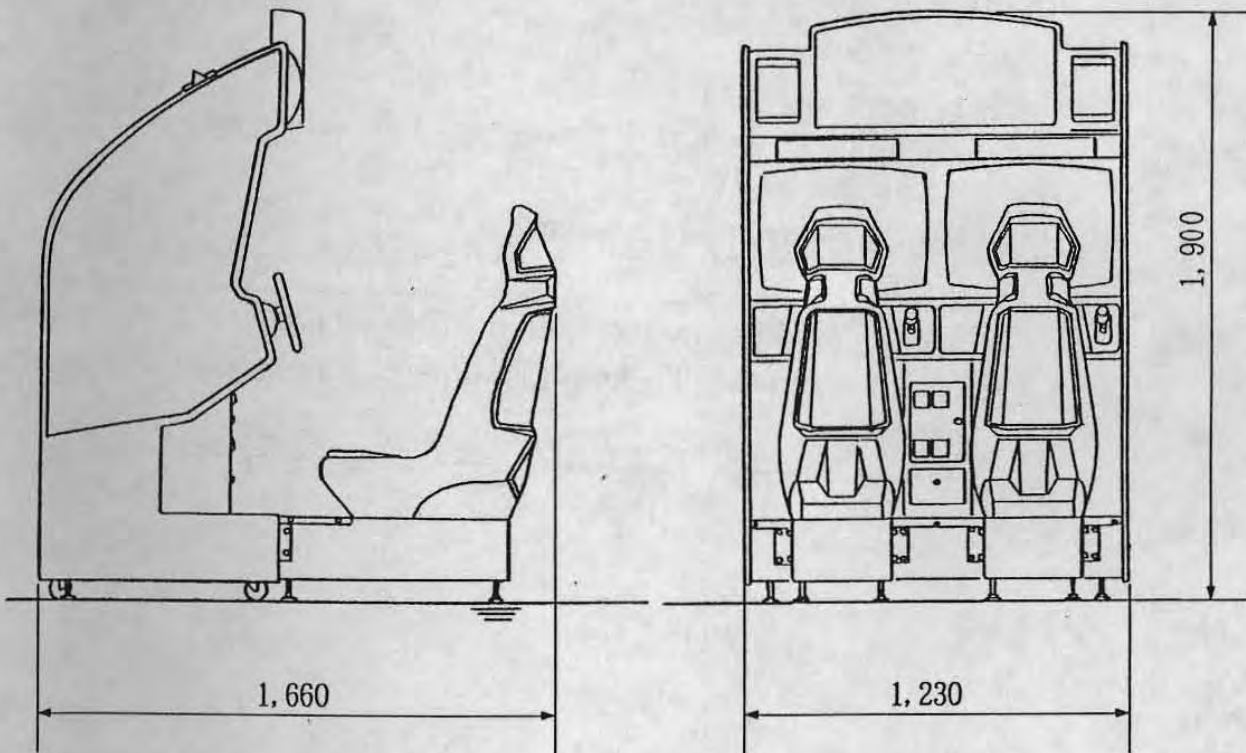


Fig. 1

- (7) Weight: When installed: 252kg
When separated: Body Assy - 210kg, Seat Assy - 21kg

x controls misure .

(8) Accessories

Key (for coin box) -----	2
Key (for coin door and rear door) -----	2
Hexagonal wrench (6mm hex. wrench for M8) -----	1
Seat joint -----	4
Flange socket (M8 x 25) -----	16
Glass tube fuse (5A) -----	1
Lamp (15W, 110V) -----	1
Communication cable (3.5m) -----	1
Number for seat (1 - 8) -----	1 set
Number panel (3 - 8) -----	1 set
Car sticker A (2 types) -----	1 set
Torque wrench (M8) -----	1
Operation manual -----	1

* This is a multi-play racing game machine which allows multiple players to play a game simultaneously.

Up to 4 sets (8 players) can be connected.

Note: The specifications are subject to change without prior notice. We will not take our responsibility for any modifications of this machine without approval.

2. Cautions

Be sure to read the cautions before work.

2-1 When installing

The machine is for indoor use only. Do not install the machine at the following places:

- (1) Outdoor
- (2) A place exposed to sunshine, humidity, dust, raindrops, leaking water, heat or extreme cold.
- (3) A place where emergency facilities such as an emergency exit or fire facilities are installed.
- (4) An unstable place or a floor which vibrates.

2-2 When handling

- (1) The available supply voltage ranges from AC90V to 130V or from AC200 to 240V. For use, match the working supply voltage with the input terminal of transformer.
- (2) Be sure to connect a ground wire to the grounding terminal of the machine.
- (3) The monitor or switching regulator contains the parts where high voltage is being applied. Be extremely careful in adjustment and inspection.
- (4) When disconnecting the power cord, be sure to hold the plug without pulling out the cord.
- (5) Be sure to turn the power off whenever replacing any parts or connecting/disconnecting connectors.
- (6) Please return PC board to your distributor for any repairs. Particularly, never test any PC board for conductivity with a multi-meter or similar device; otherwise, the internal voltage of such a device may destroy the ICs on the PC board.
- (7) Adjustment is required whenever replacing the game PC board, ROM, steering Assy, pedal Assy and volumes. For more information on adjustment, see "5-4 Adjustment (Initialization) at replacement of parts. (on page 16).

2-3 When transporting

- (1) Take care not to apply a big impact to the game machine during transportation.
- (2) Place the level adjuster at the top position whenever moving the game machine.
- (3) Separate the game machine into body Assy and seat Assy during transportation.
- (4) Be sure not to rope any molded parts (plastic parts) or signboard during transportation by truck.

3. Names of Components

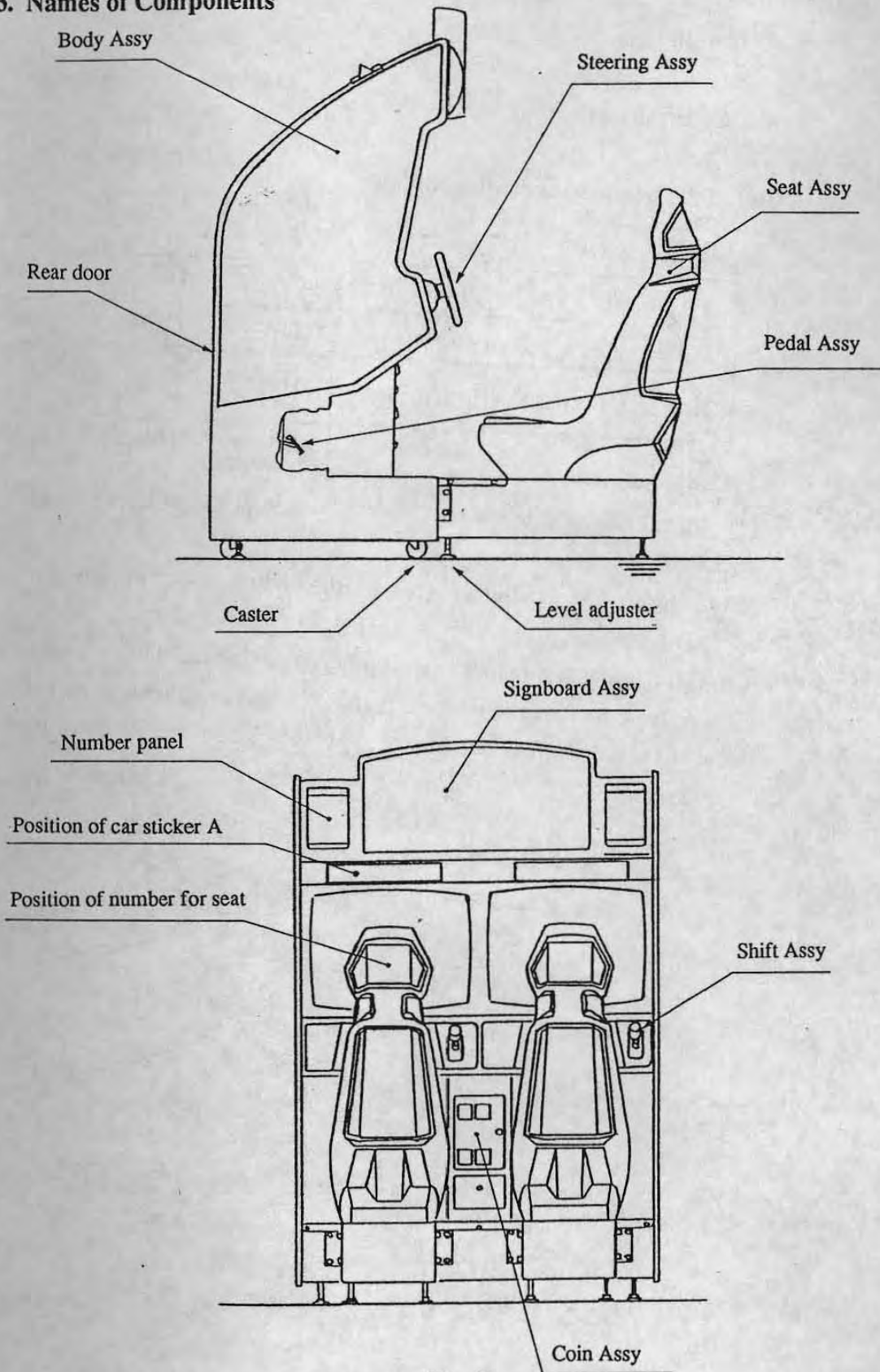


Fig. 2

4. Installation

4-1 Connecting the seat Assy to the body Assy

Install the seat Assy according to Table 1.

Table 1

Type	A type		B type	
Set position	Left	Right	Left	Right
Color of chair Assy	Red/white	Yellow/green	Red	White/ yellow/blue
Car type	McLaren	Benetton	Ferrari	Williams

- (1) Install two seat joints on the seat base with the hexagon wrench and four flange sockets (M8x25).
- (2) Adjust the level adjusters (two for the body and four for the chair) to level the body Assy and seat Assy.
- (3) Get the seat Assy close to the body Assy. Connect the connector (each).
- (4) Tighten the four flange sockets (M8x25) to install both of two seat Assys.

Note: At installation, take care not to put any connectors or wires between the body and seat Assys.

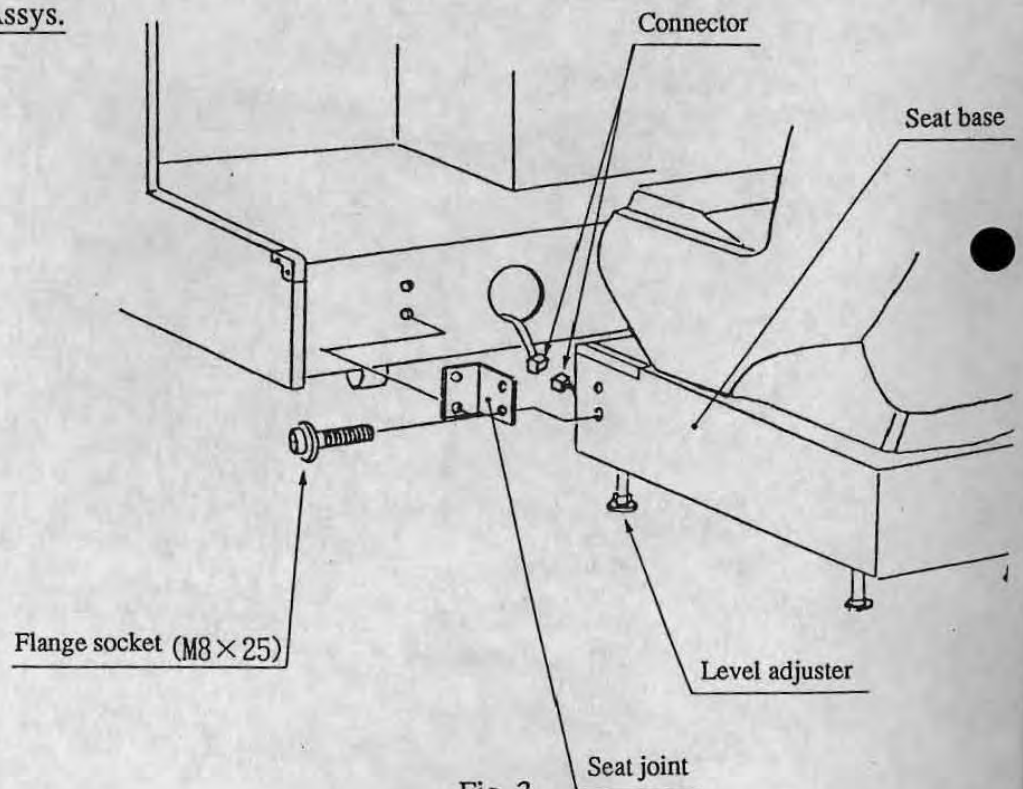


Fig. 3

- (5) According to the seat Assy, put car sticker A on the top of monitor mask.
- (6) If the game machine is used with two or more sets connected, switch the number panel to the accessory number panel (3-8) so that seat Assy No.1 is located on the leftmost side to the monitor.
- (7) Put the accessory number for seat on the rear of each seat according to the number panel.

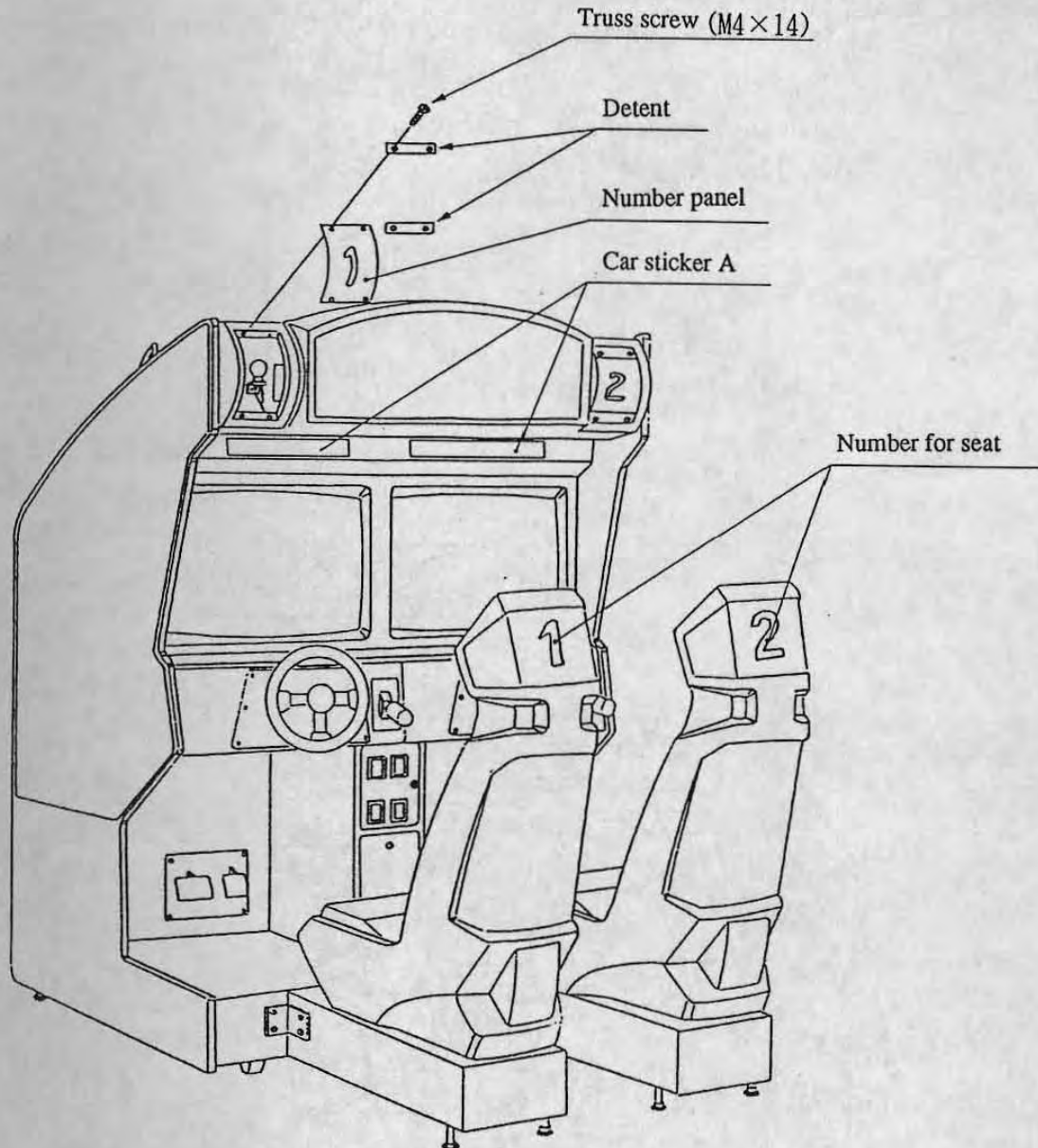


Fig. 4

4-2 Removing the signboard Assy

The signboard Assy can be removed as required during transportation.

- (1) Remove the eight truss screws (M5x16) in total (four on top and four on bottom). Remove the signboard cover.
- (2) Disconnect the one connector.
- (3) Remove the eight pan head screws (M6x30). Remove the signboard base.

* Install the signboard Assy in the reverse order of removal.

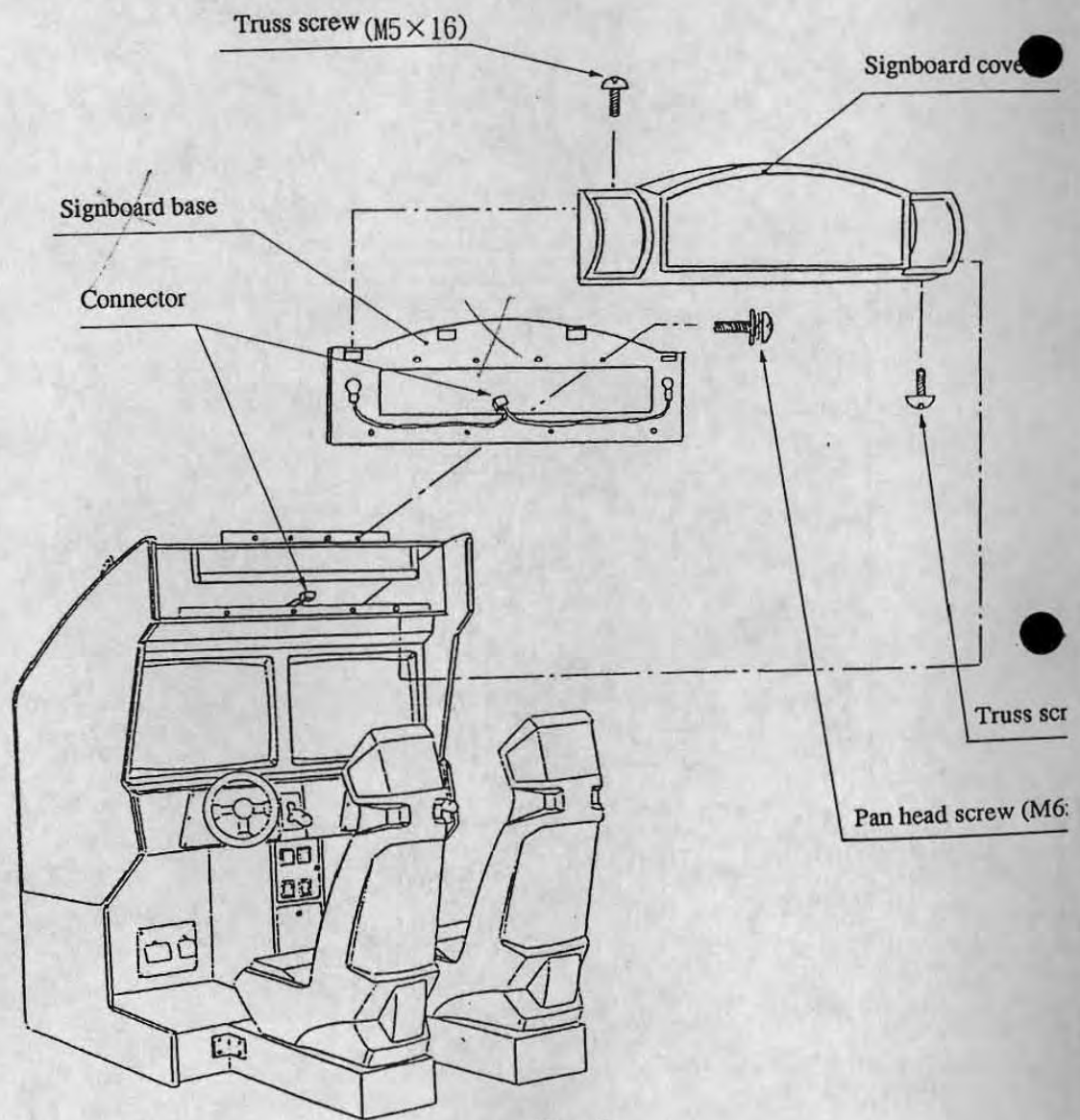


Fig. 5

4-3 How to connect two or more sets

The game machine is designed to allow connection of up to four sets (8 seats).

Note: Be sure to use a different outlet to supply power to each set.

4-3-1 Removing the connector cover

- (1) Remove the rear cover of each set.
- (2) Turn off the power switch on the cord box.
- (3) Remove the one pan head screw fixing the connector cover under the game machine.
- (4) Loosen the two remaining pan head screw. Slide the connector cover to the left and remove it.

Lightly tighten the two pan head screws so that they will not be lost.

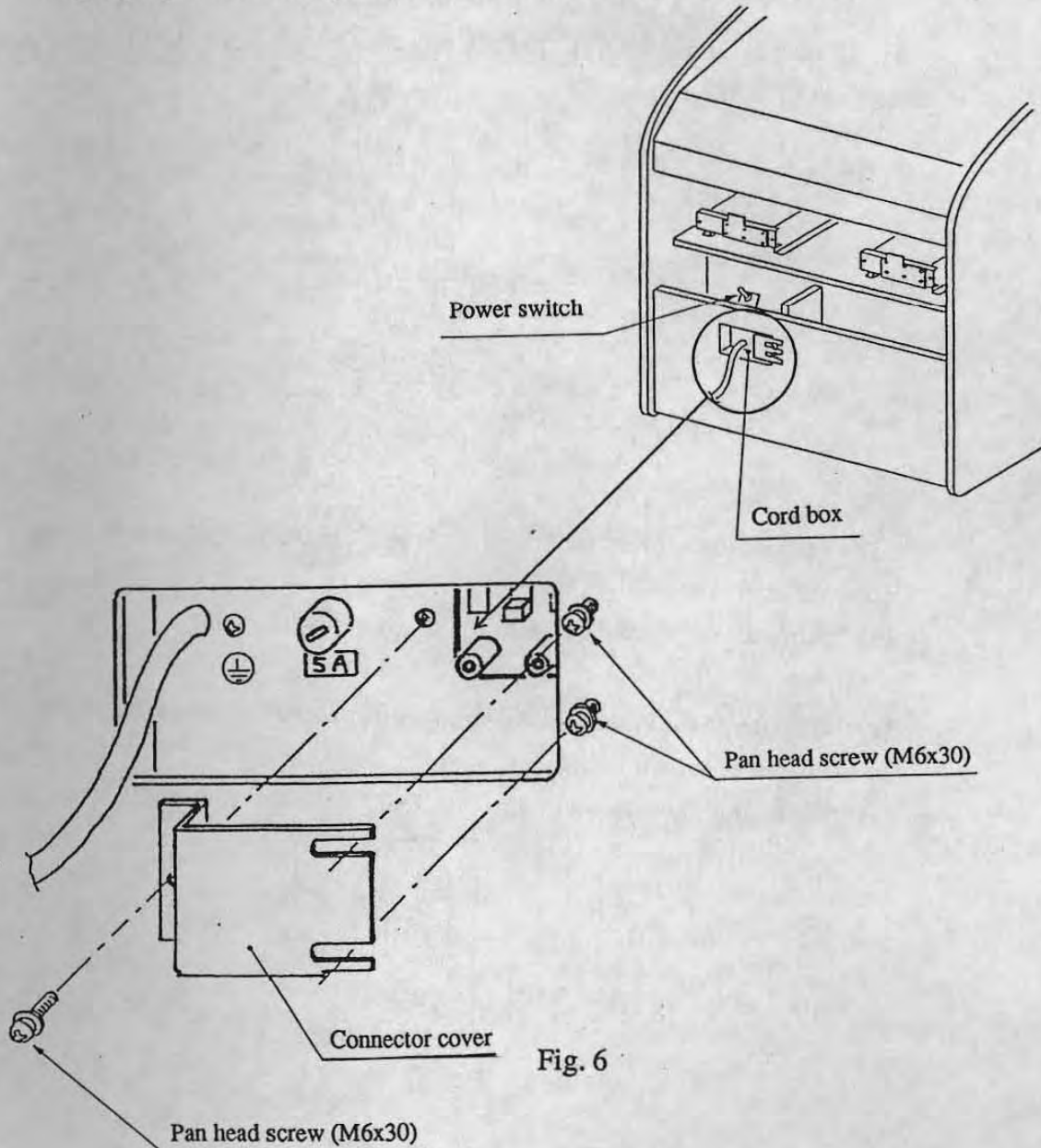


Fig. 6

4-3-2 Connecting the final lap R between cabinets

- (1) Place the middle one of three slide switches in the "EXT" position as shown in Fig. 7. Place the other slide switches in the "ON" position.

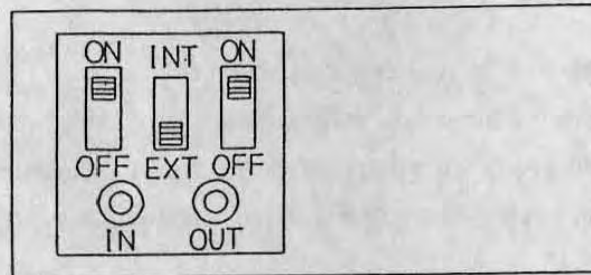


Fig. 7

- (2) Connect "IN" and "OUT" to each other between the sets through the accessory communication cable.

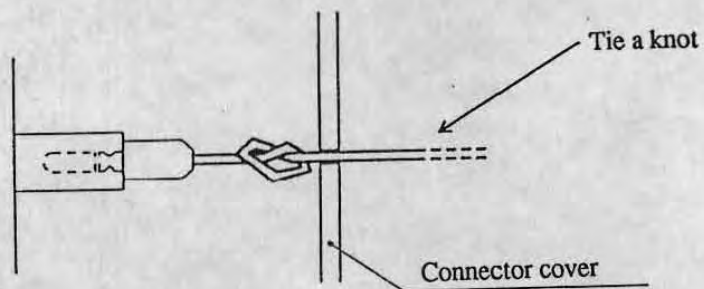


Fig. 8

- (3) Turn on the power switch of each set. Perform self-testing to check for non-communication.
- (4) Install the connector cover in the original position.

(Note) Separate the communication cable from other cables as far as possible. Tie a knot in the cable as shown in Fig. 8 so that the cable cannot be disconnected from the jack.

* Place the middle slide switch in the "INT" position whenever installing only one set.

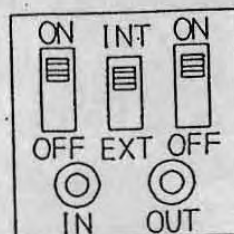
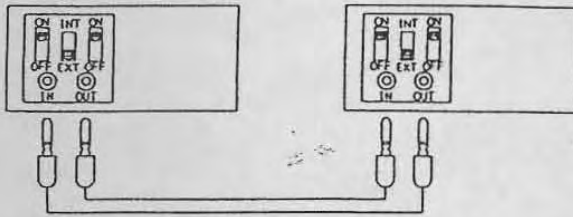


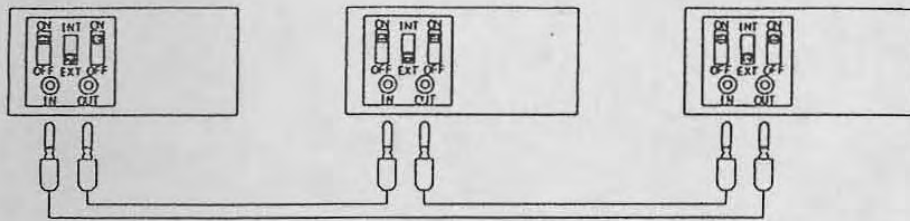
Fig. 9

(Example of connection between game machines)

(a) When connecting 2 sets



(b) When connecting 3 sets



(c) When connecting 4 sets

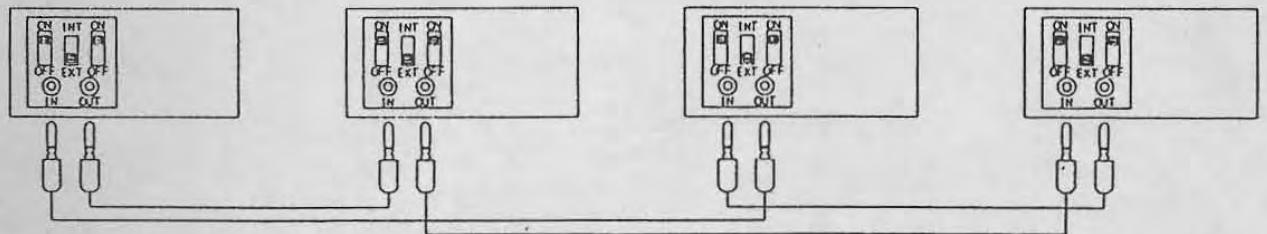


Fig. 10

4-3-3 Connecting the final lap (old) cabinet to a new cabinet

An exclusive communication cable (option) is required.

- (1) Place the middle one of three slide switches of a new cabinet in the "EXT" position. Place the other slide switches in the "ON" position (See Fig. 7 on page 9).
- (2) Place the slide switch of the old cabinet in the "EXT" position as shown in Fig. 11.

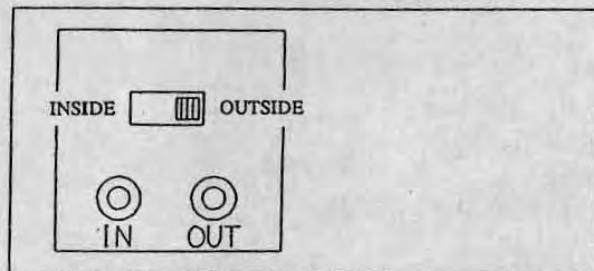


Fig. 11

- (3) Connect "IN" and "OUT" to each other between the sets through the communication cable (option).
- (4) Turn on the power switch of each set. Perform self-testing to check for normal communication.

[Example of connection]

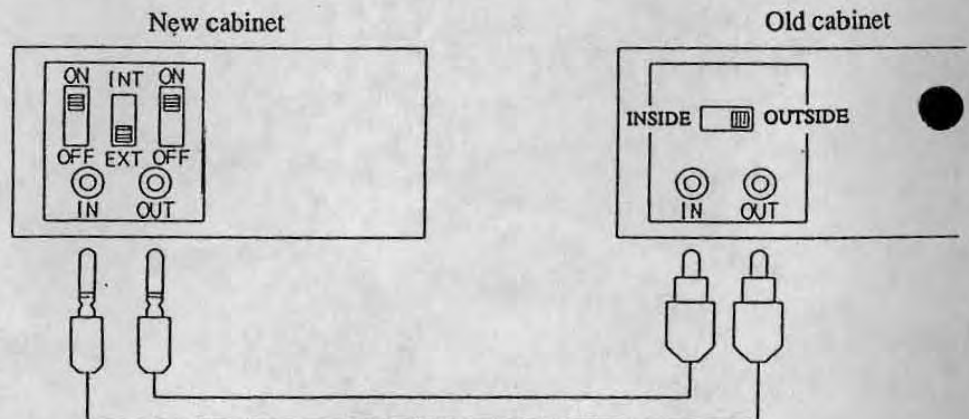


Fig. 12

5. Adjustments

5-1 Power-on sequence

After the end of installation, turn on the power to the machine. The power switch is located inside the maintenance door.

5-2 Control switches

When the coin door is opened, the control switches can be seen.

(1) Test switch

When this switch is turned "ON", the game machine enters the test mode. The test mode provides various tests and changing game fees (See "5-3 Test mode" on page 13).

(2) Sound control L/R

This control is used to control the sound volume of the left and right speakers individually.

(3) Demagnetizing switch

Depending on a machine layout or building condition, the effect of earth magnetism may cause the color phase irregularity of the monitor. In such a case, press this switch to demagnetize the monitor.

(4) Service switch

When this switch is pressed, a credit count can be increased without operating the coin counter.

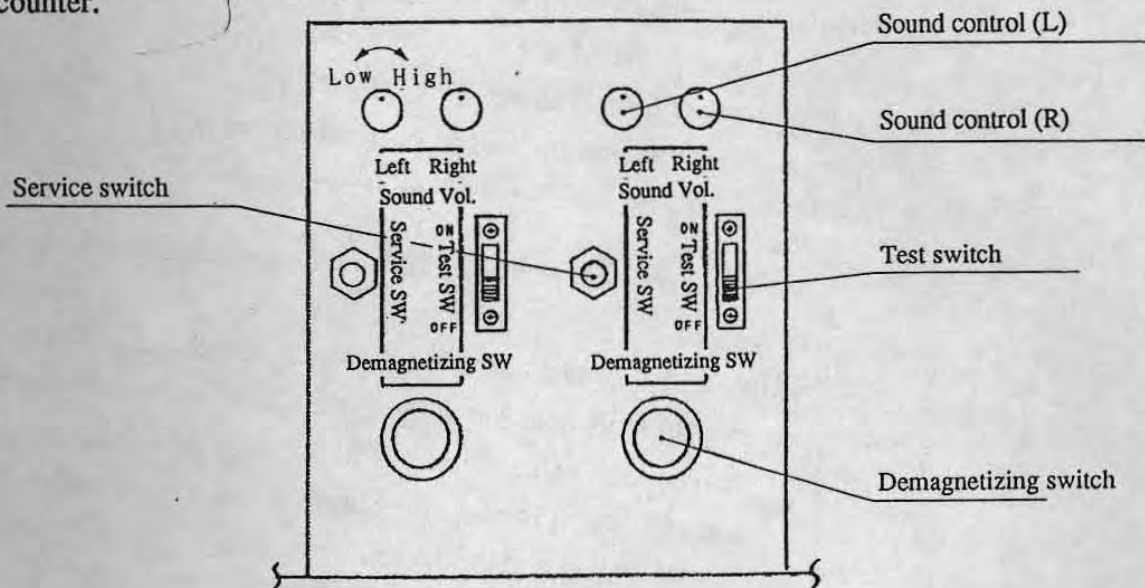


Fig. 13

5-3 Test mode

Open the coin door and turn the test switch "ON". The "game option screen" is displayed on the monitor to allow changing of game fees and so on.

If the service switch is pressed while the "game option screen" is being displayed, various test screens are displayed in sequence.

After the end of testing, turn the test switch "OFF". Any screen returns to the game screen. Normally, place the test switch in the "OFF" position.

* The lamp beside the signboard is operating normally if blinking in the test mode.

5-3-1 Self-test

When the game machine is switched on, self-testing begins a few seconds automatically. If the game machine is normal, the game screen is displayed.

5-3-2 Changing of game settings (game option screen)

The "game option screen" is used to change the game setting such as game fees.

Turn the test switch "ON" to display the "game option screen".

The items displayed in red can be changed on the "game option screen".

The item to be changed can be selected by turning the steering wheel. Its contents can be changed by stepping on the accelerator pedal. Change game settings according to the table of game option settings.

After finishing the setting changes, turn the test switch "OFF".

Notes:

- o Set the same values of rank (difficulty level) and lap count for all the cabinets connected.
- o Give seat No.1 to the leftmost cabinet to the monitor. Continuously number the seats in sequence. Do not give the same seat number to another cabinet.
- o Otherwise, the game machine will not work normally.
- o If a wrong setting is made, the setting status is displayed on the monitor screen. Seeing the screen, correct the setting properly.

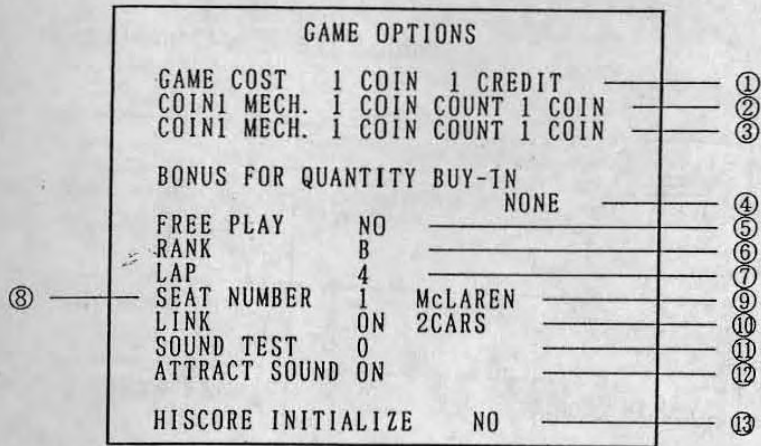


Fig. 14 Game Option Screen

Table 2 Table of Game Option Settings

[◁ Original setting

Item		Contents	
(1) Game fees		No. of coins required for one game (one credit)	1 COIN ◁ } 9 COINS
(2) Coin counter 1		A count per coin	1 - 9 [Original setting: 1◁
(3) Coin counter 2		A count per coin	1 - 9 [Original setting: 1◁
(4) Bonus coin		One coin added when the specified number of coins is entered.	NONE ◁ 2 COINS GIVE 1 COIN } 9 COINS GIVE 3 COINS
(5) Free play		NO ◁ YES	
(6) Rank		A (Easy) - D (Hard)	[Original setting: B◁]
(7) Lap		3 - 6	[Original setting: 4◁]
(8) Seat number		1 - 8 (Give seat No. 1 to the leftmost cabinet the monitor. Continuously number all the seat sequence. Do not give the same seat number to another cabinet.)	
(9) Car type		Set a car type according to the seat type (See Table 3).	
(10) No. of communicatable cars		The game machine is normal if ON and the number of seats connected (including the own one) are displayed.	
(11) Sound test		Operate the shift lever to display "BUSY". E sounds can be heard. No. 0 allows a stereo channel check.	
(12) Attract sound		ON (with sound) ◁ OFF (without sound)	
(13) Initialization of high score		NO (not initialize) ◁ YES (initialize)	
Example of game fees	(1) Setting of game fee	(2) Setting of coin counter 1	(4) Setting of bonus coin
	1 COIN 1 CREDIT	1 COIN COUNT 1 COIN	NONE
	2 COINS 1 CREDIT	1 COIN COUNT 1 COIN	NONE
	1 COIN 1 CREDIT	1 COIN COUNT 2 COINS	NONE

D

Table 3 Table of Seat Assy Settings

Color of seat Assy	Red/white	Yellow/green	Red	White/yellow/blue
Setting of car type	McLAREN	BENETTON	FERRARI	WILLIAMS

5-3-3 Test screens

The test screens are used to test the switches.

(1) Switch test screen

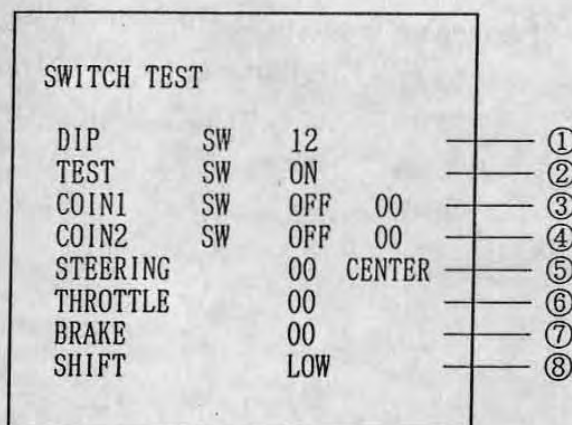


Fig. 15 Switch Test Screen

- 1) The status of option switches on the game PC board (CPU-PCB) is displayed. When it is ON, the number corresponding to the option switch is displayed in red.
- 2) If "ON" is displayed in red, the game machine is normal.
- 3) If "ON" is displayed in red when the coin 1 switch is turned "ON", the game machine is normal.
- 4) If "ON" is displayed in red when the coin 2 switch is turned "ON", the game machine is normal.
- 5) If the following value is displayed when the steering wheel is operated, the game machine is normal:
 - o With your hands off the steering wheel, "00 CENTER" is displayed.
 - o With the steering wheel turned to the left, "LEFT" is displayed and the value changes.
 - o With the steering wheel turned to the right, "RIGHT" is displayed and the value changes.
- 6) If the value changes and "OK" is displayed when the accelerator pedal is stepped on, the game machine is normal.

7) If the value changes and "OK" is displayed when the brake pedal is stepped on, the game machine is normal.

8) If the display changes to "HIGH" or "LOW" when the shift lever is operated, the game machine is normal.

(2)/(3) Cross hatch pattern: Used to adjust the monitor.

Adjust the cross hatch pattern so that the outmost side of white grid-like frame can be on the screen end.

(4) Color bar test screen: Used to adjust the monitor.

(5) ADS mode screen: Game play data is displayed. The data is saved even when power is turned off. To initialize the data, step on the accelerator pedal and change display "ADS CLEAR?" to "YES".

5-4 Adjustment (Initialization) at replacement of parts

Make the following operations whenever installing the game machine or replacing the game PC board, ROM, steering Assy, pedal Assy and volumes:

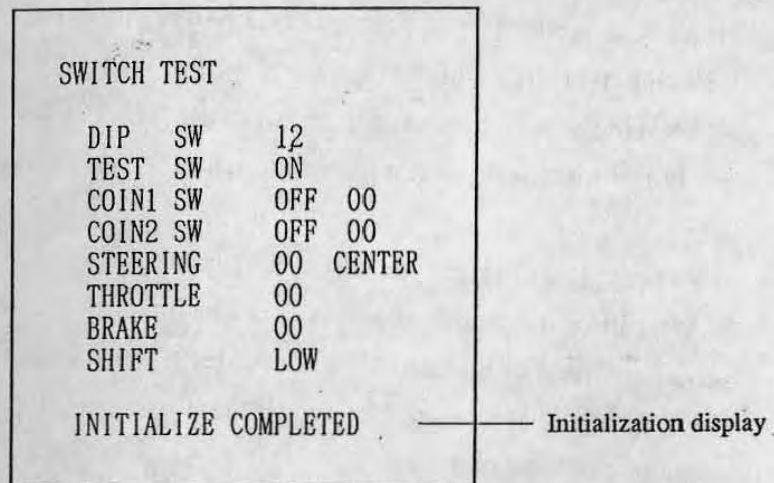


Fig. 16 Initialization Screen

- (1) Open the coin door.
- (2) Release your hands and foot from the steering wheel, accelerator pedal and brake pedal.
- (3) With the game screen displayed on the monitor screen, set the test switch to "ON" while keeping on pressing the service switch.
- (4) If "INITIALIZE COMPLETED" is displayed on the monitor screen, the adjustment is finished.
- (5) Set the test switch to "OFF".

6. How to Play A Game

o This is a multi-play racing game machine designed for multiple players to enjoy playing a game.

Up to four sets can be connected and up to eight players can enjoy playing a game.

o Each player drives his/her car displayed in the middle of the monitor screen, operating its steering wheel, accelerator pedal, brake pedal and shift lever, and taking care not to get out of the course or not to collide with the other cars or computer car.

o The player can select one of the four courses.

o After inserting a coin into the game machine, the player selects a course by turning the steering wheel of his/her car, and decides it by stepping on the pedal.

o One of the courses selected by all the players joining the game is decided in the principle of majority rule.

o Once a coin is inserted, the entry prompt (participation) is displayed on the other vacant monitors.

Another player can join the race by inserting a coin into the game machine within seconds (varying with the number of seats connected).

Even if the race has already begun, the players on the other vacant seats can enjoy other race. Of course, even one player can play a game.

o When all the vacant seats connected are reserved for a game entry or when 20 seconds passed, a signal is displayed. The race will start when the signal changes from red (red signal) into blue (blue signal).

o The race can continue until the timer goes to "0". The timer is extended each time of the players joining the race runs one lap.

o When one of the players runs four laps (changeable on game option screen) or course, the checkered flag is waved to indicate that the player has reached the goal.

o When one player reaches the goal first or the game is over, the race data of all players are displayed, such as positions and time.

o One player wins the race and is given the first prize in the ceremony if reaching the first in a multi-player race.

o Any player can register his/her initials in the game machine if getting good result. Pick up initial letters by turning the steering wheel, and set them by stepping on the accelerator pedal.

7. Daily Maintenance

For safety, be sure to unplug the game machine before maintenance work.

7-1 Replacing the fuses

(1) The fuse is located in the cord box at the rear side of the game machine. Make sure that the power is turned off. Replace the fuse with a new one. Be sure to use the specified fuse (125V 5A slow-blow) only.

220V 4A

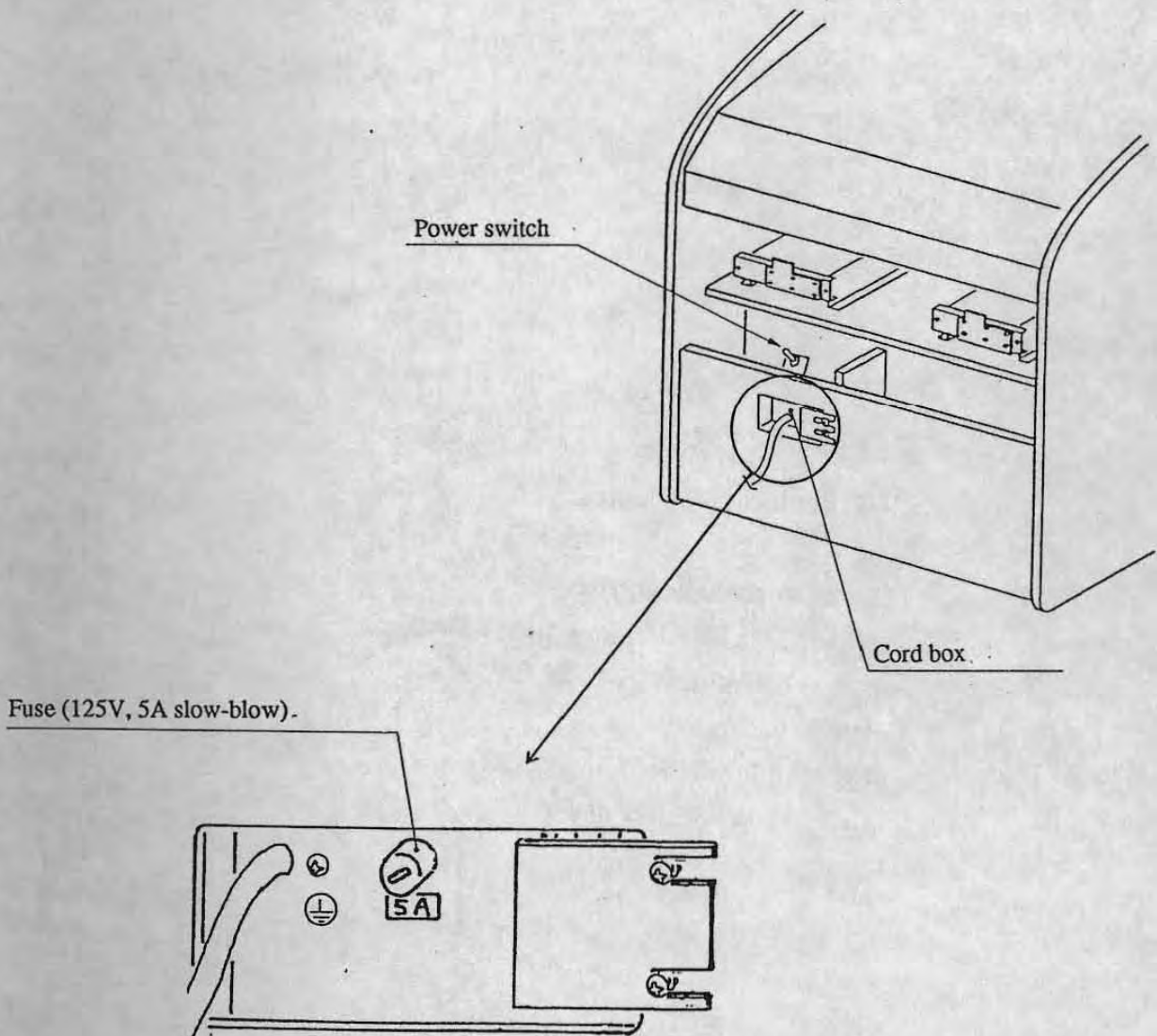


Fig. 17

7-2 Replacing the fluorescent lamps

- (1) Remove the six truss screws (M4x14). Remove the signboard panel.
- (2) Replace the fluorescent lamp (32W) with a new one. (220V.)

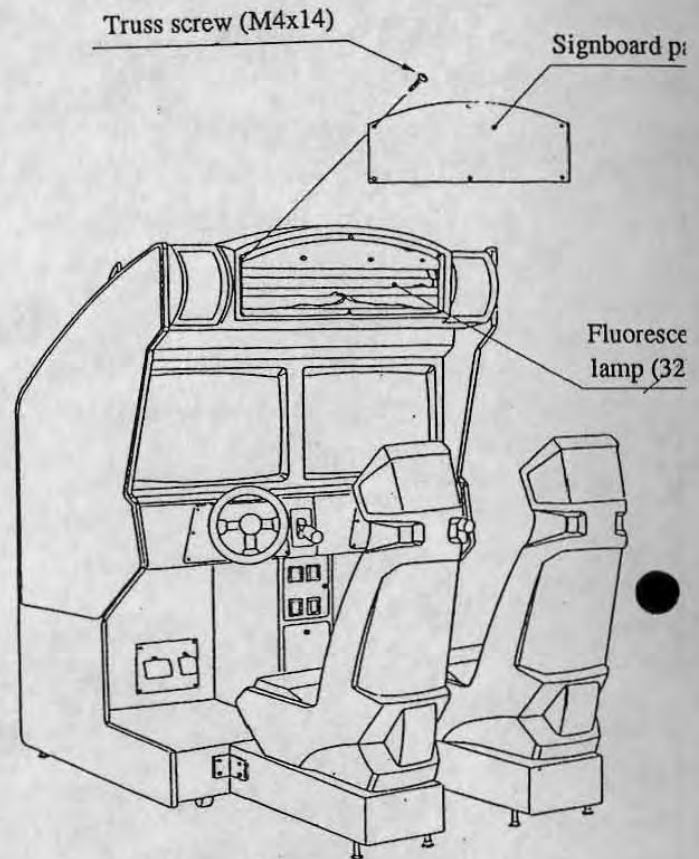


Fig. 18

7-3 Replacing the lamps

- (1) Remove the four truss screws (M4x14). Remove the two detents and the number panel.
- (2) Replace the lamp (15W, 110V) with a new one.

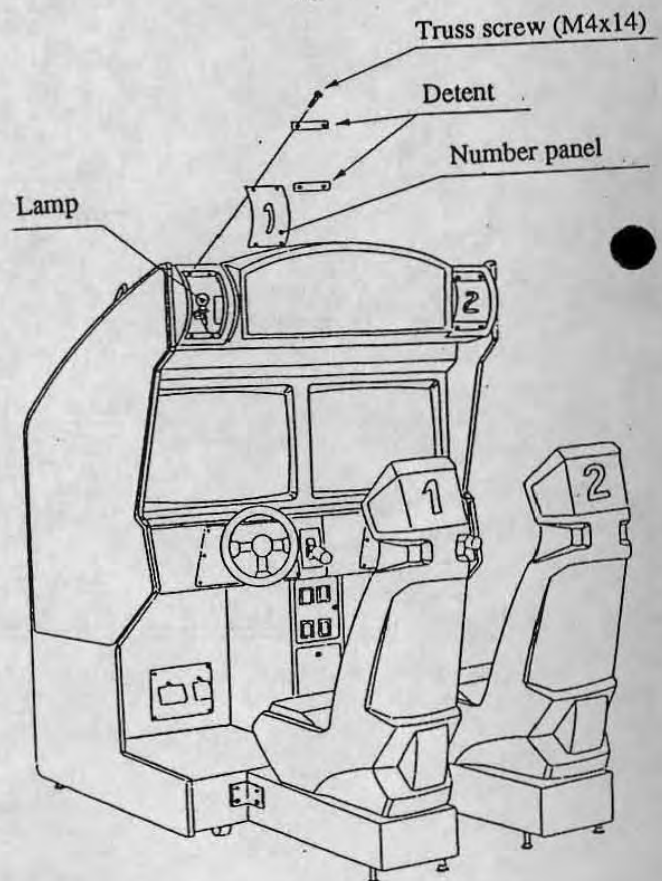


Fig. 19

7-4 Removing the game PC board

- (1) Open the rear door of the game machine.
- (2) Disconnect all the connectors from the game PC board.
- (3) Remove the two mount screws fixing the game PC board on the control box.
- (4) Pull out and remove the game PC board.

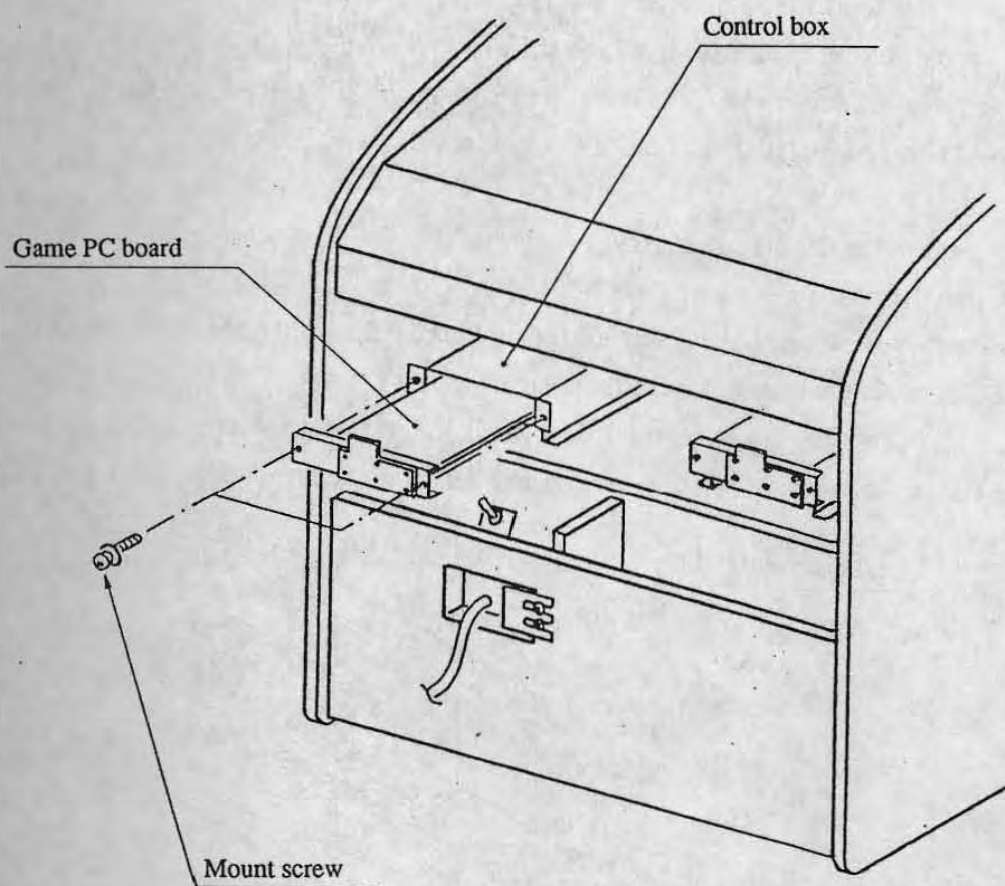


Fig. 20

7-5 Controller Panel (Shift Assy, steering Assy)

7-5-1 How to open the controller panel

Remove the two bolts (M6x16) from either side of the controller panel (four bolts in total). The controller panel can be opened downward.

Note: Close the coin door before opening the controller panel.

7-5-2 Removing the shift Assy

(1) Open the controller panel (See 7-5-1).

(2) Disconnect the connector from the shift Assy.

(3) Remove the four nylon nuts from the shift Assy. The shift Assy can be removed to the front side (At installation, turn "LOW" upward).

Separate the plastic vacuum from the control panel and remove the four screws.

7-5-3 Removing the steering Assy

(1) Open the controller panel (See 7-5-1).

(2) Remove the seven bolts (M6x16) fixing the plastic dashboard of the steering.

(3) Disconnect the connector from the steering Assy.

(4) While pressing the hexagonal bolt (M6x16), remove the six hexagon flange nuts (M6) fixing the steering Assy. The steering Assy can be removed to the front side.

Separate and remove screw

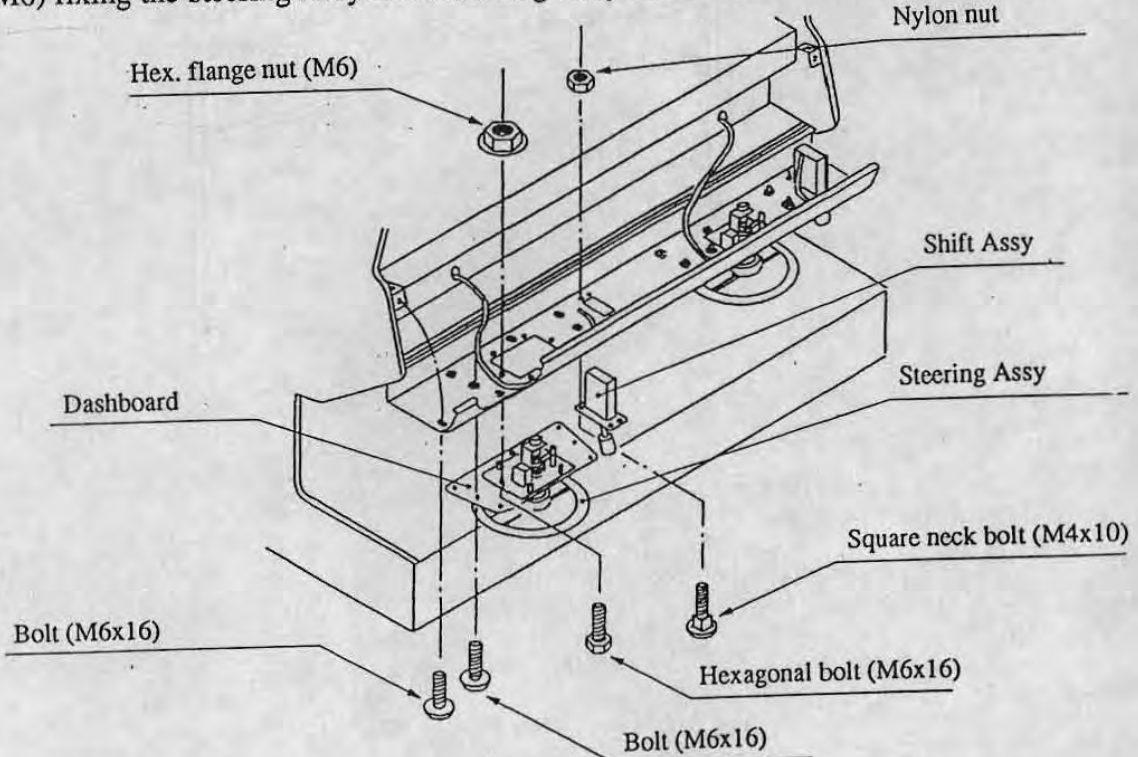


Fig. 21

7-5-4 Replacing the controls

- (1) Remove the steering Assy (See 7-5-3).
- (2) Remove the ~~two~~ ^{three} cap screws (M4x8). Remove the control together with the volume bracket.
- (3) Replace the control with a new one.
- (4) At installation, mount the volume bracket with the gear set screw fit to the direction of control terminal.

* After replacement, be sure to initialize the game machine (See 5-4 on page 16).

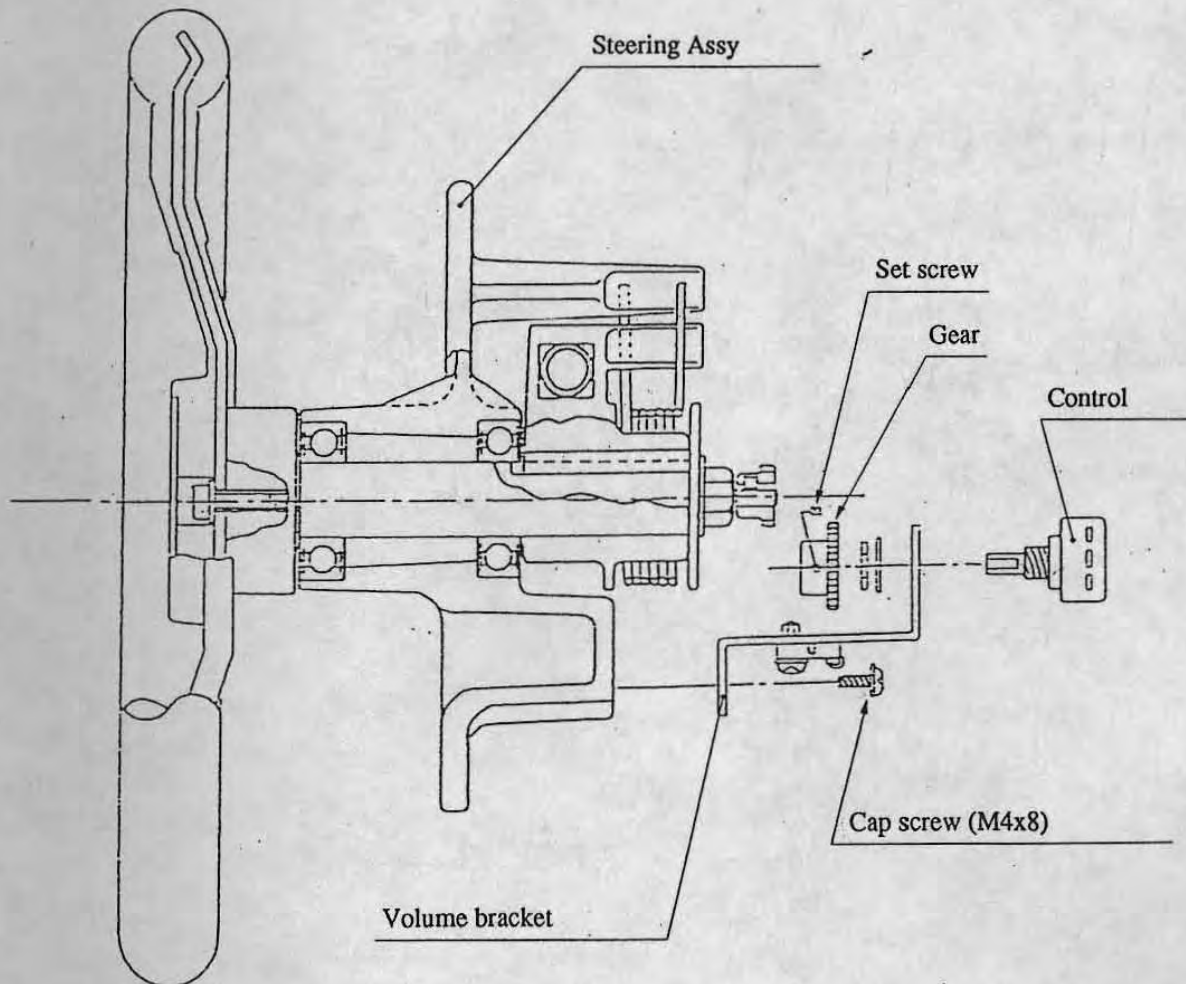


Fig. 22

7-6 Pedal Assy

7-6-1 Removing the pedal Assy

- (1) Open the rear door.
- (2) Disconnect a connector from the pedal Assy.
- (3) Remove the four bolts (M6x16) from the pedal Assy with the accessory wrench.
- (4) Pull out and remove the pedal Assy.
- (5) Install the pedal Assy in the reverse order of removal.

* After replacement, be sure to initialize the game machine (See 5-4 on page 16).

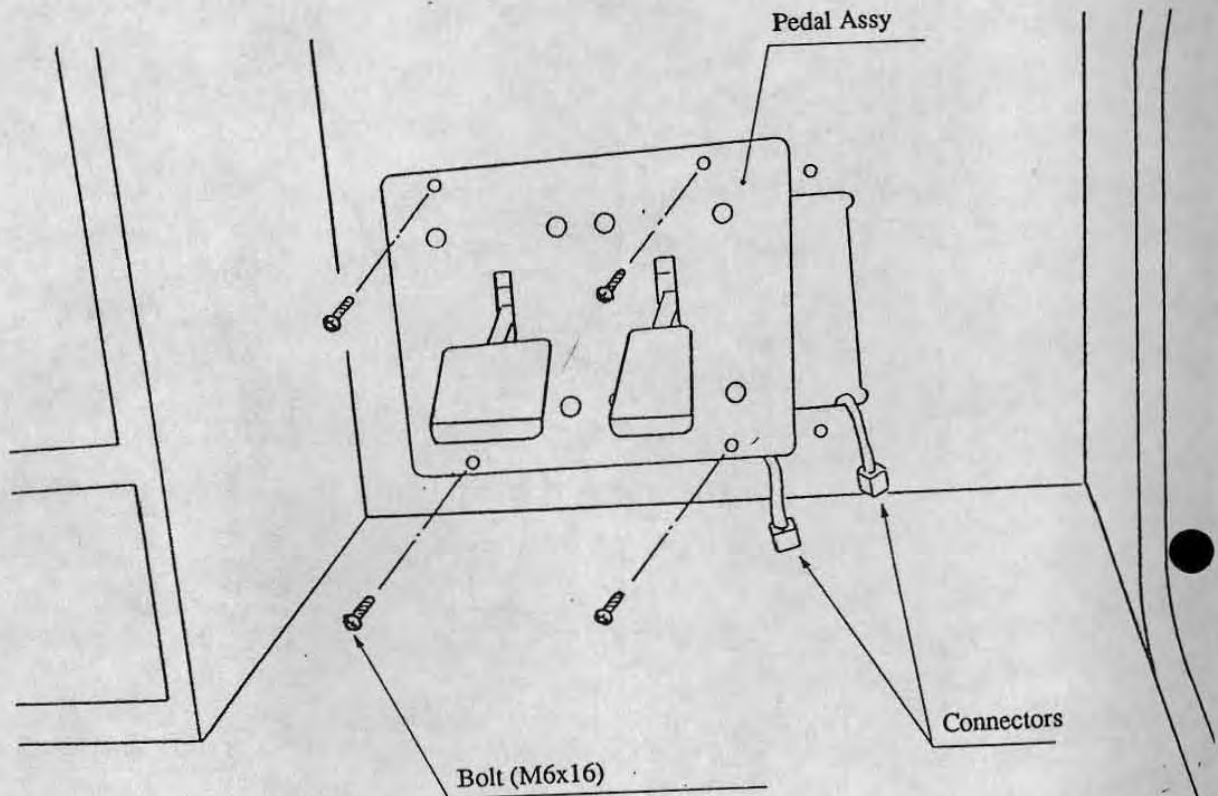


Fig. 23

7-6-2 Replacing the controls (potentiometers)

(1) Remove the gear. Replace the control with a new one.

(2) At installation, pay attention so that the slot of the control becomes vertical as shown in Fig. 24.

Vertical

* After replacement, be sure to initialize the game machine (See 5-4 on page 16).

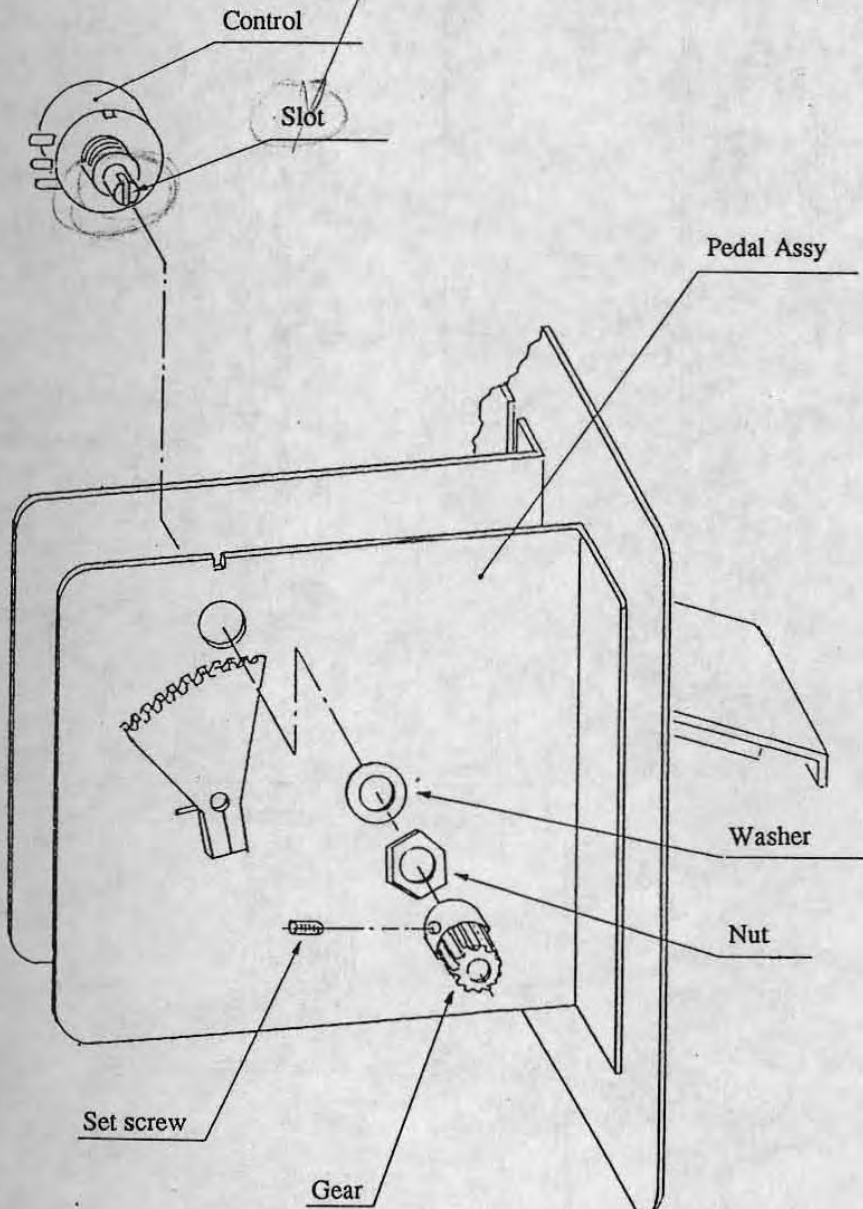
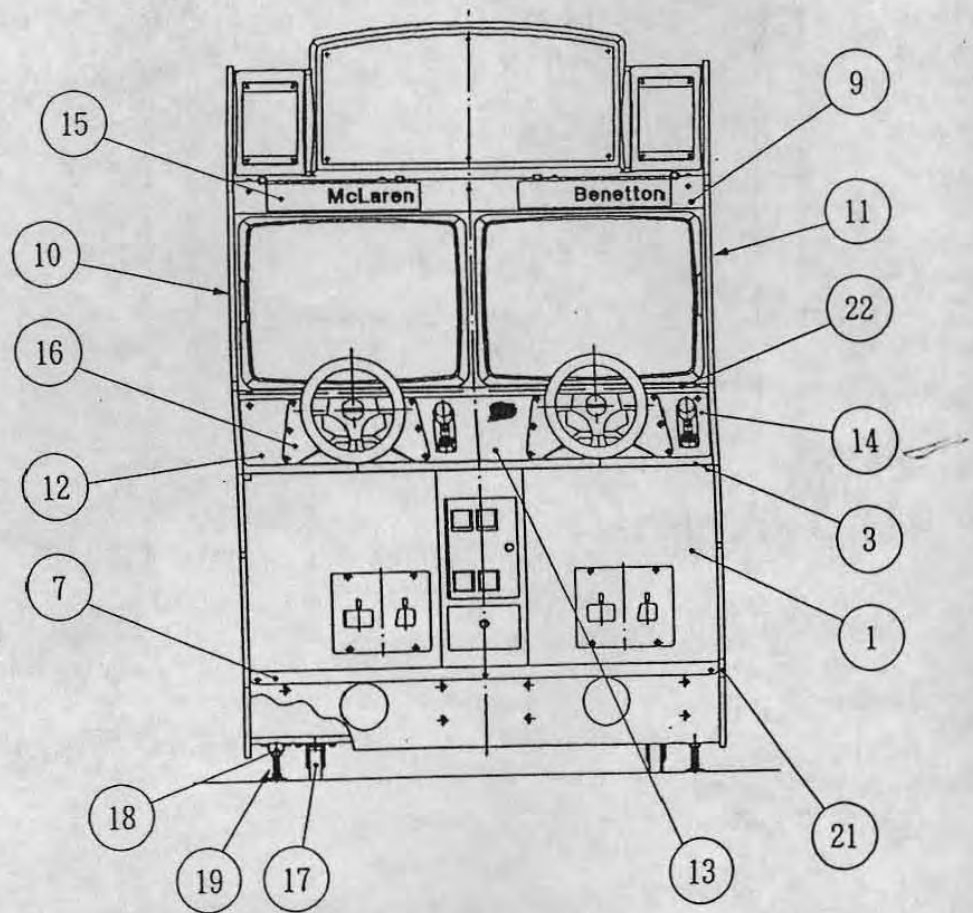
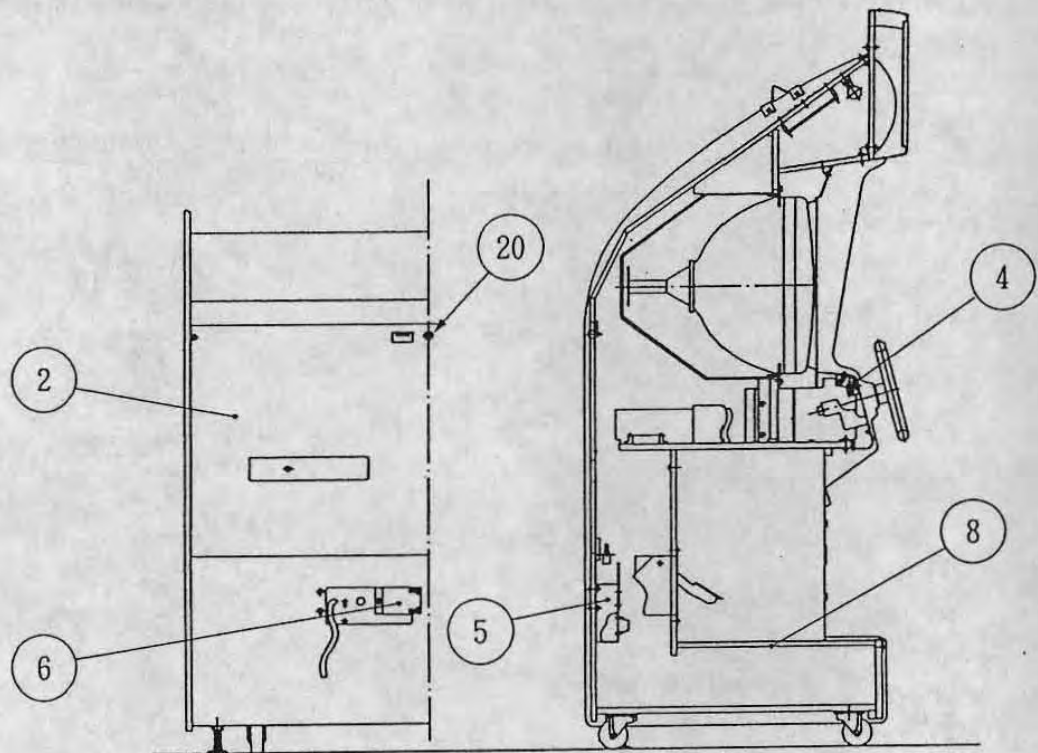


Fig. 24

8. Parts List

8-1 Body Assy



o Body Assy

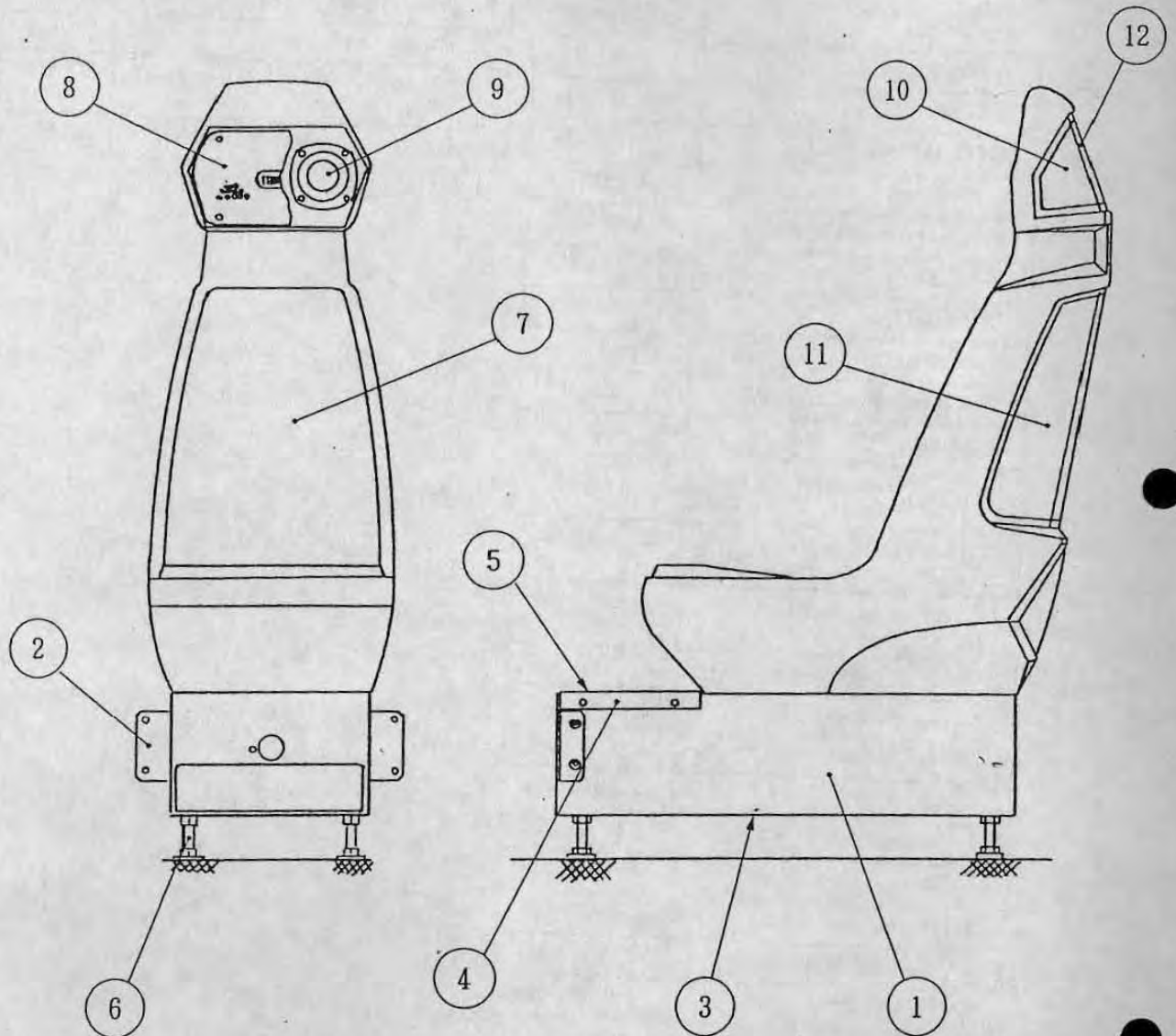
No.	Names of Parts	Q'ty	Parts No.
1	Cabinet	1	281-011
2	Rear door	1	281-012
3	Controller panel	1	281-014
4	CP bracket HOOK	2	281-015
5	Cord box	1	281-020
6	Connector cover	1	281-021
7	Mat mole	1	281-023
8	Mat (L)	1	281-024
9	Monitor mask	1	281-026
10	Sideboard sticker (L)	1	281-027
11	Sideboard sticker (R)	1	281-087
12	Controller panel sticker (L) (Cover plastic)	1	281-029
13	Controller panel sticker (C) (Cover plastic)	1	281-028
14 13	Controller panel sticker (R) cover plastic	1	281-030
15	Car sticker A (M)	1	281-080
	Car sticker A (B)	1	281-081
	Car sticker A (F)	1	281-082
	Car sticker A (W)	1	281-083
16	Dashboard	2	229-023
17	Caster	4	102-049
18	Plastic part base	2	281-022
19	Adjuster KYW16-75	2	102-045
20	Coin lock	2	101-011

No.	Names of Parts	Q'ty	Parts No.
21	Corner cover	2	460-013
22	Cover	1	271-515
-	Communication cable (N) 3.5m	1	281-091
-	Conversion cable (option)	1	281-092

~~CP bracket~~ NOT USED

~~Dashboard~~ NOT USED

8-2 Seat Assy

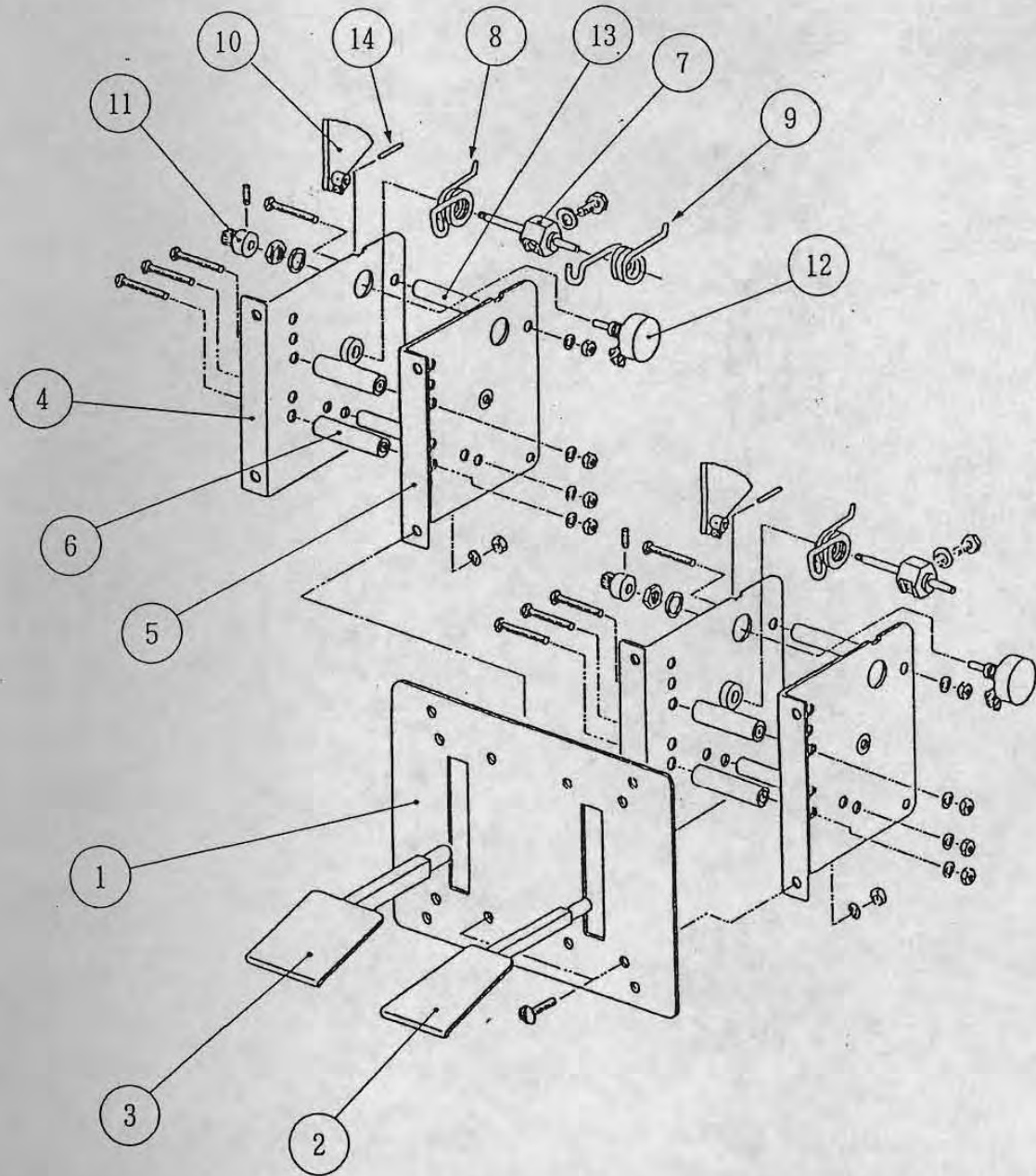


No.	Names of Parts	Q'ty	Parts No.
1	Seat base	1	281-201
2	Seat joint	1	281-202
3	Bottom cover	1	281-203
4	Sidemole	2	281-204
5	Mat (S)	1	281-205
6	Adjuster KYW16-75	4	102-045
7	Seat 5 (white)	1	450-004
8	Speaker cover	1	450-015
9	Speaker	1	006-083

No.	Names of Parts	Q'ty	Parts No.
10	Car sticker B (M)	1	281-260
	Car sticker B (B)	1	281-261
	Car sticker B (F)	1	281-262
	Car sticker B (W)	1	281-263
11	Car sticker C (M)	1	281-270
	Car sticker C (B)	1	281-271
	Car sticker C (F)	1	281-272
	Car sticker C (W)	1	281-273
12	Number for seat	1 set	281-218

A
B
C

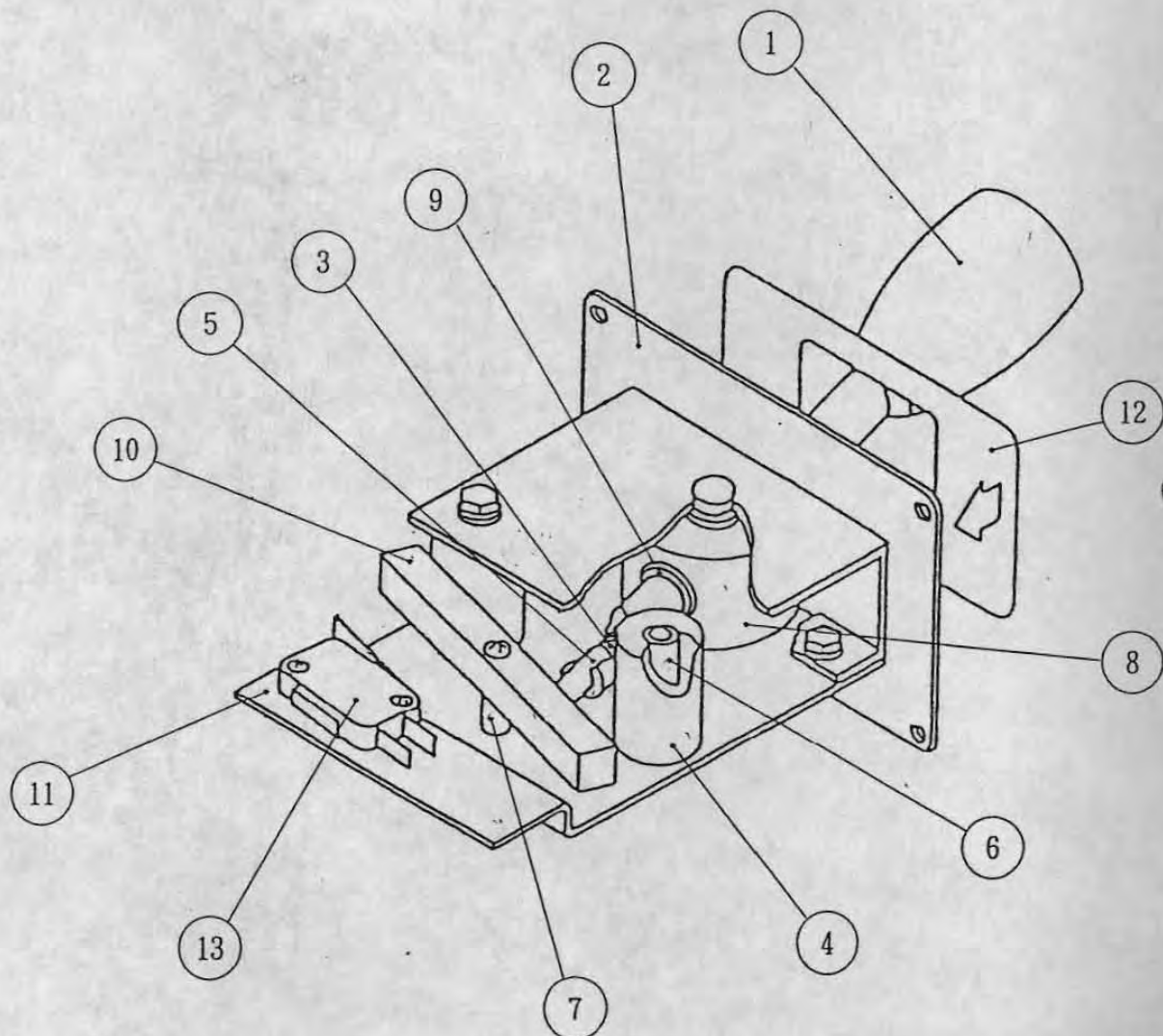
8-3 Pedal Assy



No.	Names of Parts	Q'ty	Parts No.
1	Front plate 50-8372-00	1	350-001
2	Gas pedal 50-8371-00	1	350-002
3	Brake pedal 50-8373-00	1	350-003
4	Plate (L) 50-8169-00	2	350-004
5	Plate (R) 50-8168-00	2	350-005
6	Bumper 50-8171-00	4	350-006
7	Pivot shaft 50-8159-00	2	350-007

No.	Names of Parts	Q'ty	Parts No.
8	Spring (L) 50-8049-00	2	350-008
9	Spring (R) 50-8042-00	1	350-009
10	Gear segment 50-8014-00	2	350-010
11	Pot gear 50-8069-00	2	350-011
12	Potentiometer 50-8026-00	2	350-012
13	Spacer tube 50-8170-00	8	350-013
14	Roll pin 43-0124-00	2	350-014

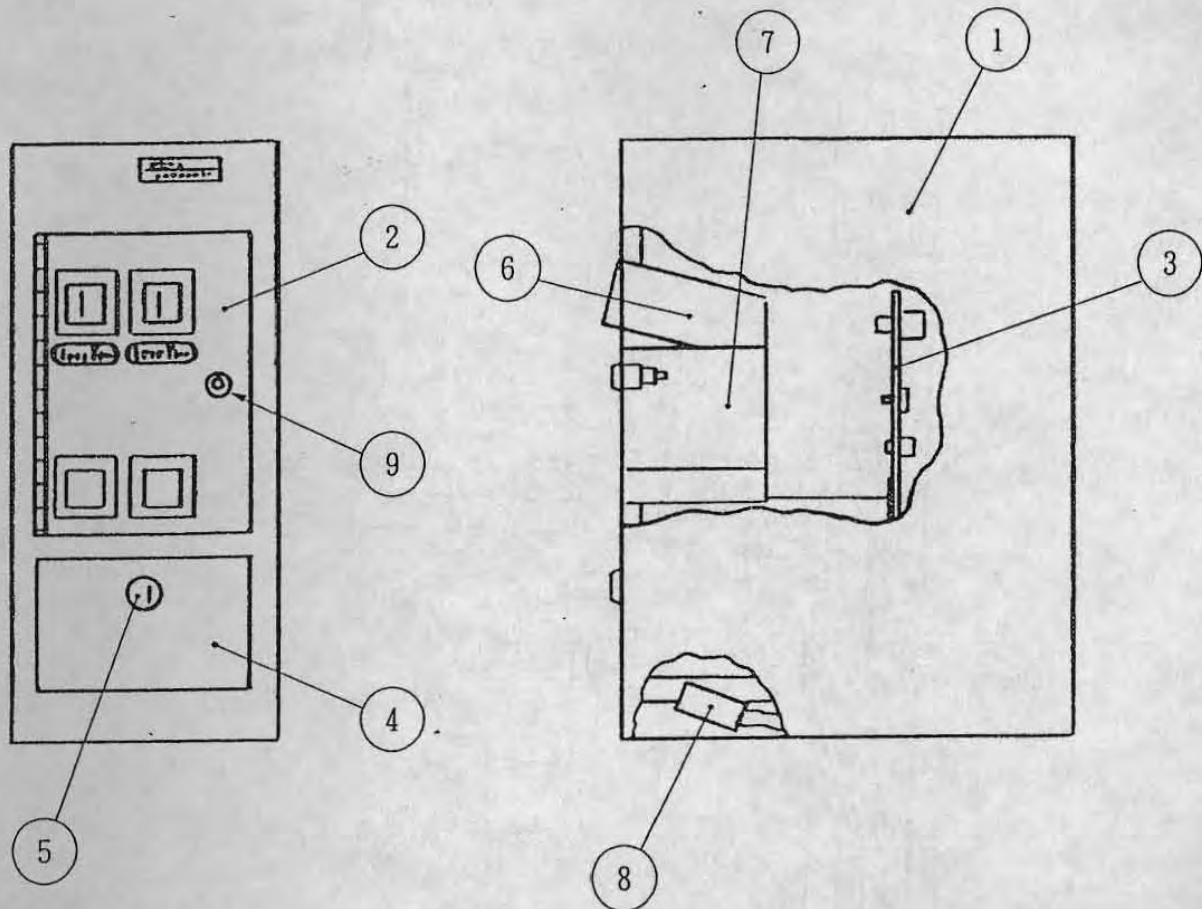
8-4 Shift Assy



No.	Names of Parts	Q'ty	Parts No.
1	Shift lever	1	229-020
2	Shift panel	1	229-021
3	Spring STOP RING	1	211-116
4	Stopper rubber	2	211-119
5	Slider NOT USED	1	211-120
6	Spacer	2	211-121
7	Lever pin NOT USED	1	211-122

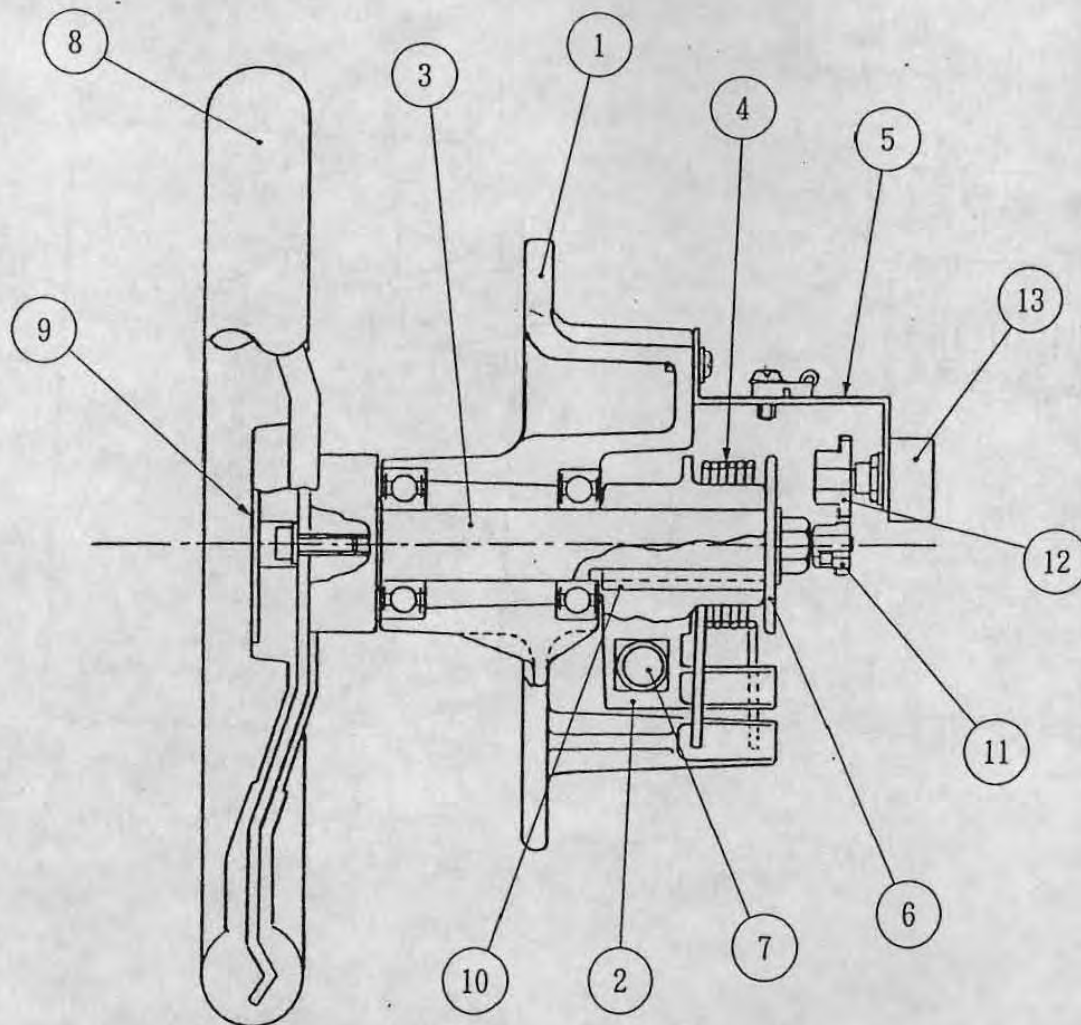
No.	Names of Parts	Q'ty	Parts No.
8	Center boss	1	211-123
9	Stop ring SPRING	1	211-125
10	Lever BALL	1	211-126
11	Bracket NOT USED	1	211-127
12	Shift sticker	1	229-022
13	Micro switch D2MV-01L-1C3	1	000-021

8-5 Coin Assy



No.	Names of Parts	Q'ty	Parts No.
1	Coin frame	1	281-121
2	Coin door	1	281-122
3	Service bracket	1	240-304
4	Coin box	1	246-204
5	Electronic lock	1	101-031
6	Coin FT bracket ADD-FT	2	100-053
7	Coin selector AD-81P	2	100-015
8	Coin counter	1	-
9	Lock C-88	1	101-011
10	INSERT sticker (A)	2	100-101

8-6 Steering Assy

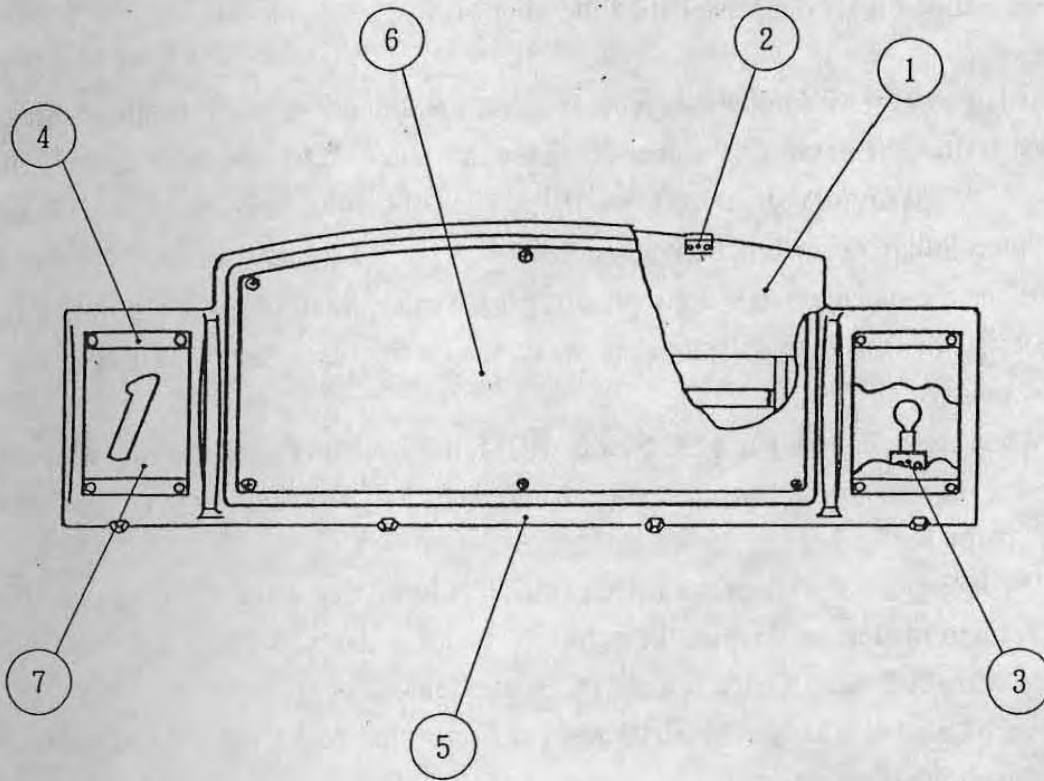


No.	Names of Parts	Q'ty	Parts No.
1	Housing	1	455-011
2	Stopper arm	1	455-012
3	Shaft	1	455-013
4	Spring	1	455-014
5	Volume bracket	1	455-015
6	Washer	1	455-016
7	Stopper rubber	2	455-017

No.	Names of Parts	Q'ty	Parts No.
8	Steering	1	229-024
9	Nameplate	1	229-025
10	Parallel key 6 x 6 x 45	1	455-010
11	Spur gear S75B20B+0306	1	257-225
12	Spur gear S75B30B+0306	1	108-002
13	Control EWS-UOA-F20-E13	1	008-019

Note: The steering Assy has a different structure from "FINAL LAP 3". Be extremely careful in making an order for parts (same as RIDGE RACER SD).

8-7 Signboard Assy



No.	Names of Parts	Q'ty	Parts No.
1	Signboard base	1	281-131
2	Signboard-bracket	4	281-132
3	Lamp bracket	2	281-133
4	Detent	4	281-134
5	Signboard cover	1	281-135
6	Signboard panel	1	281-136
7	Number panel (1)	1	281-180

No.	Names of Parts	Q'ty	Parts No.
7	Number panel (2)	1	281-181
	Number panel (3)	1	281-182
	Number panel (4)	1	281-183
	Number panel (5)	1	281-184
	Number panel (6)	1	281-185
	Number panel (7)	1	281-186
	Number panel (8)	1	281-187

9. Troubleshooting

Before calling for service, check the following:

- (1) If large-capacity equipment (such as an air conditioner, many pinball machines or largesize amusement rides) is connected on the same power line in spite of the set voltage range of AC90 to 110V or AC200 to 240V, the supply voltage may vary over the range and thus a failure or malfunction may occur.
- (2) When the machine does not work after it is switched on, repeat the power-ON sequence. If the machine still does not work, check the fuses (See "7-1 Replacing the fuses" on page 18).
- (3) When replacing the game PC boards, ROM, the gun Assys and the volumes, adjust the game machine for normal game operation. See "5-4 Adjustments at replacement of parts" (page 16).
- (4) The looseness of a connector often causes a failure. Check the wiring connections.
- (5) Foreign matters or dust on the game PC board or monitor PC board will cause a failure or malfunction. Check that the PCBs are clean.
- (6) Electrical checks should be performed confirming the connector No. and wire colors with the wiring diagram.

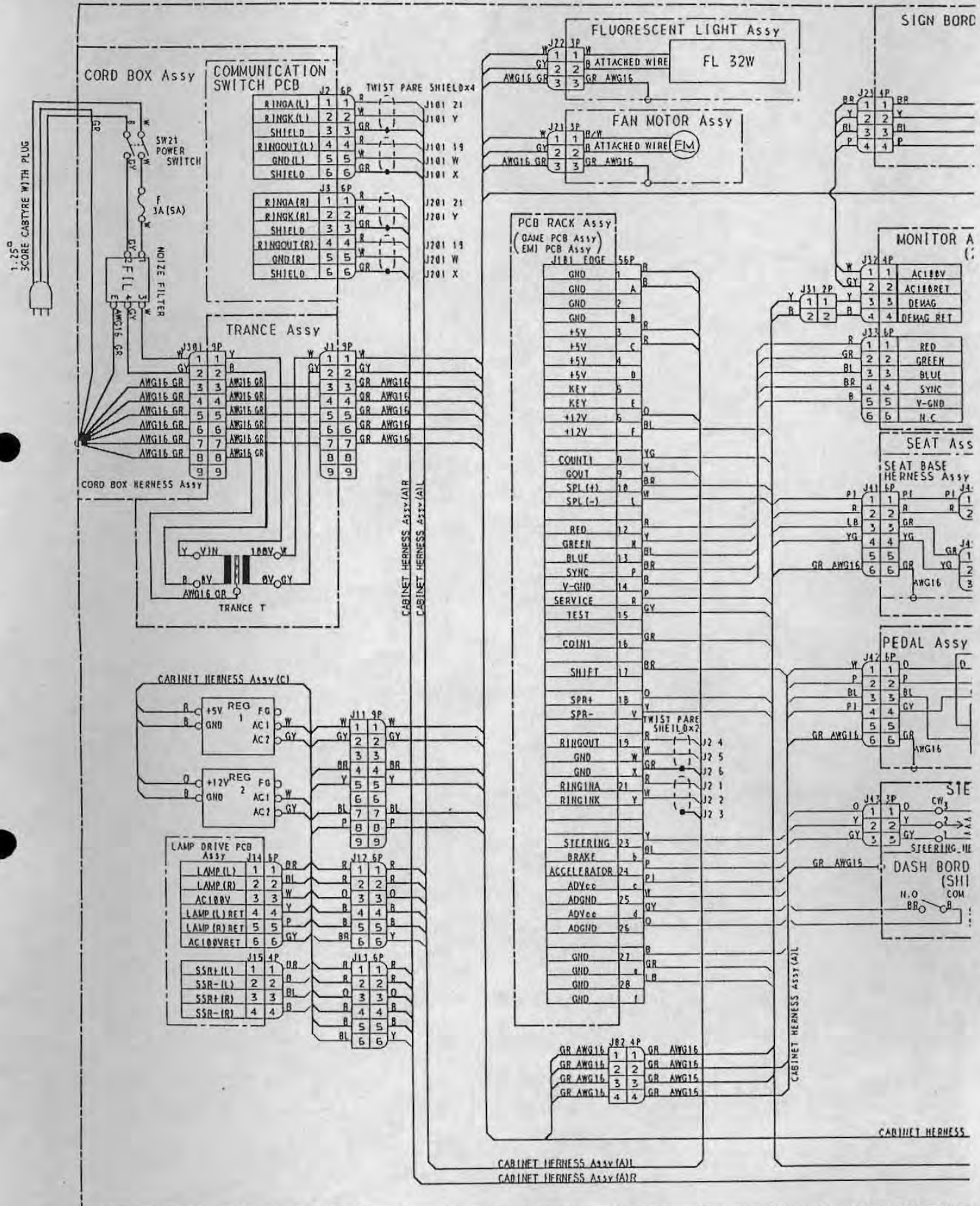
o If the above suggestions are not applicable, or no improvement is observed, contact your distributor or one of the service offices printed on the back cover of this manual.

o Please return PC boards to your distributor for any repairs. Particularly, never test any PC boards for conductivity with a multi-meter or similar device; otherwise, the internal voltage of such a device may destroy the ICs on the PC boards.

o When sending parts to be repaired, make sure to pack them firmly with a complete explanation of the problem. When sending PC boards, especially, wrap with sponges or air caps and pack them in card board boxes so that they can avoid direct impact from outside during shipment.

For the monitor box, use a wood-framed box so that an excessive load is not applied to the CRT or PC boards.

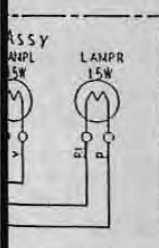
10. Wiring Diagram



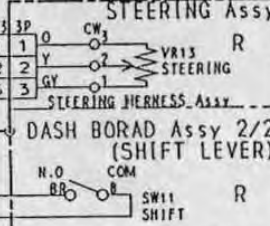
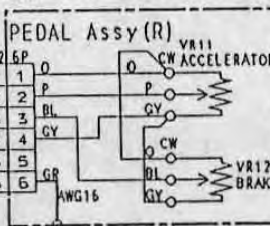
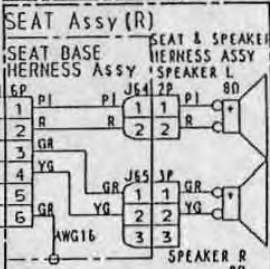
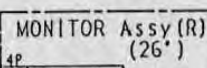
COLOR ABBREVIATION

- | | | | |
|--------|------|------------------|-------|
| BLACK | - B | BROWN | - BR |
| RED | - R | GREEN | - GR |
| BLUE | - BL | WHITE | - W |
| ORANGE | - O | LIGHT BLUE | - LB |
| YELLOW | - Y | YELLOWISH GREEN | - YG |
| PURPLE | - P | PINK | - PI |
| GREY | - GY | BLACK LINE WHITE | - B/W |

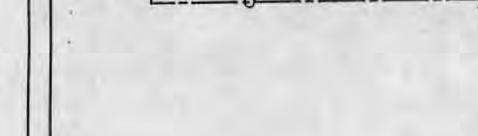
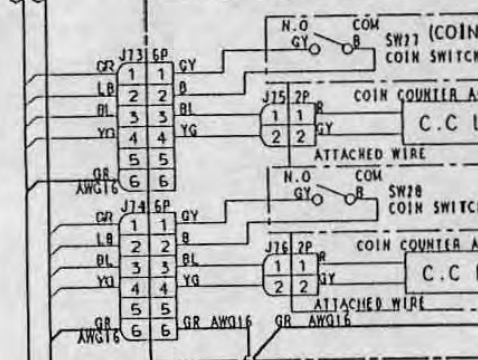
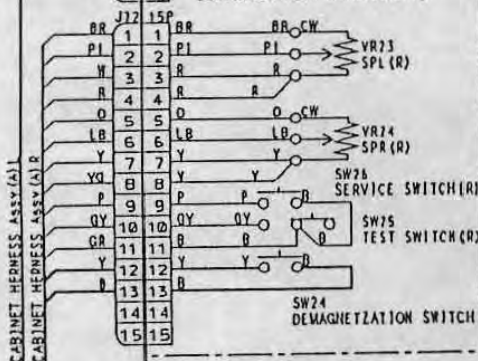
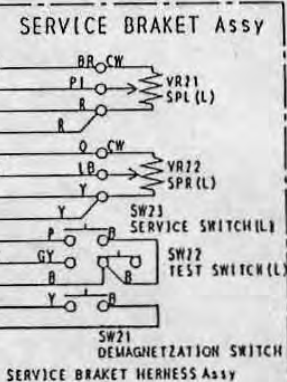
CABINET Assy



CABINET WHERNESS Assy(B)



COIN Assy



CABINET WHERNESS Assy(A)R
CABINET WHERNESS Assy(A)L